ANTHROPOLOGICAL HISTORY OF ANDEAN POLITIES

Edited by
JOHN V. MURRA, NATHAN WACHTEL, and JACQUES REVEL

Cambridge University Press
Editions de la Maison des Sciences de l'Homme

Anthropological History of Andean Polities

This collection of essays by scholars from the Andes, Europe, and the United States was originally published in the French journal *Annales* as a special double issue entitled *The Historical Anthropology of Andean Societies*. It combines the perspectives of archaeology, anthropology, and history to present a complex view of Andean societies over various millennia.

The unique features of the Andean landscape, the impact of the Inka state on different regions and ethnic groups, the transformations wrought through the colonial presence, and the creation of nineteenth-century republics are all analyzed, as are the profound continuities in some aspects of Andean culture and social organization to the present day.

The book reflects some of the most innovative research of the last two decades. Apart from its substantive interest for students of the Andes and American civilizations in general, it shows the possibility of closer collaboration between history and anthropology. Of the three editors, John V. Murra is president of the Institute of Andean Research in New York and Nathan Wachtel and Jacques Revel are each *directeur d'études* at the Ecole des Hautes Etudes en Sciences Sociales in Paris.

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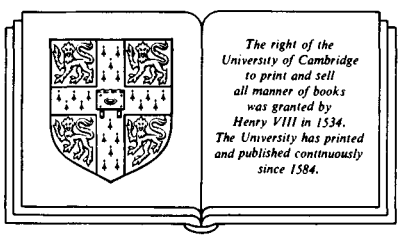

Cambridge University Press

CAMBRIDGE
LONDON NEW YORK NEW ROCHELLE
MELBOURNE SYDNEY

& Editions de la Maison des Sciences de l'Homme

PARIS

CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi

Cambridge University Press
The Edinburgh Building, Cambridge CB2 8RU, UK

With Editions de la Maison des Sciences de l'Homme
54 Boulevard Raspail, 75270 Paris Cedex 06, France

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org
Information on this title: www.cambridge.org/9780521105392

Originally published in French as *Anthropologie historique des sociétés andines,* in *Annales (ESC),* vol. 33, nos. 5–6 (Paris: 1978)

First published in English by the Maison des Sciences de l'Homme and Cambridge University Press, 1986

First published 1986
This digitally printed version 2009

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data
Main entry under title:
Anthropological history of Andean polities.
Bibliography: p.
Includes index.
1. Incas – Social conditions – Addresses, essays, lectures. 2. Indians of South America – Andes Region – Social conditions – Addresses, essays, lectures.
3. Andes Region – Social conditions – Addresses, essays, lectures. I. Murra, John V. II. Wachtel, Nathan.
III. Revel, Jacques, 1942– .
F3429.3.S59A57 1986 980 85–10976

ISBN 978-0-521-24667-5 hardback
ISBN 978-0-521-10539-2 paperback

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Preface

In recent years studies of Andean civilizations by native scholars have flourished in the Andean homelands. Overseas scholars have also lent a hand. Although events in all five Andean republics have warranted curiosity about current developments, the more notable feature of this scholarship has been the growing number of inquiries about the Andean achievement before 1532. The dense populations in a precapitalist society, the remarkable productivity of high-altitude crops and the effect of high-altitude biology, unparalleled textile arts and the vast installations for weaving manufactures, the native perception and use of the southern sky, religious and political symbolism – all of these are privileged topics of current scholarly concern.

Beyond the academic community, many others have become active in defense of the Andean patrimony. Andean camelids and their pastures, the cultivation and use of the coca leaf, the terracing and irrigation of the mountainsides – all these are threatened by foreign intervention. Another expression of this defense is a growing preoccupation with the literary future of the Aymara and Quechua languages, spoken by some 10 million citizens of the five republics, at a time when the mass media have discovered that these speakers are also a market.

In 1984, the Facultad Latino-Americana de Ciencias Sociales of Quito began to offer a two-year program leading to a master's degree in Andean history – an initiative without precedent. Graduates of universities in all five Andean republics, and some from elsewhere, applied; and about thirty received scholarships supporting a year of formal class work with an international faculty drawn from three continents. A second year of thesis research in the field or the archives will follow.

The editors of the special issue of *Annales* in which the essays in this book were originally published in French (in 1978) did not have the Quito group in mind when they assembled this collection of articles, but we welcome them aboard.* A new threshold in Andean history will have been reached once the full participation of Argentinian, Bolivian, Chilean, Ecuadorean, and Peruvian scholars is ensured.

*The translations for this English edition were made by Susan Drucker Brown, J. V. Murra, and Tristan Platt.

Of the seventeen authors represented in this collection, nine are Europeans, four come from the Andes, and four are from the United States. No attempt was made to guarantee coverage of the entire spectrum of Andean studies: Some thirty scholars known for their current contributions to Andean history were invited to contribute essays reflecting ongoing research. Some of the chapters are archaeological; some are based on primary written sources; others draw on contemporary ethnographic fieldwork. All seventeen authors have in common an awareness of the benefits of combining field research, familiarity with Andean languages, and personal experience with the remarkable continuities that link present-day Andean practice and thought with the pre-European past.

We hope the reader will find persuasive our effort to blend anthropological and historical tactics. It is commonplace to deplore the absence of an Andean version of events and institutions by referring to the scarcity of vernacular texts. We try to demonstrate that by combining the several approaches used in the present work, we also intend to share in the Andean vision and to suggest questions that could extend the range of its voice.

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Introduction

John V. Murra & Nathan Wachtel

In an environment of violent contrasts, frequently at the very limits of adaptive possibilities, Andean America is truly a testing ground for human and social disciplines. The societies developed here, numerous and extremely diverse, lived in isolation from the rest of the world for thousands of years, achieving most of what they did on their own. Their history followed an original, pristine course. The culmination of these processes is the emergence of Tawantinsuyu, the Inka state, one of the larger and more powerful preindustrial polities.

If such independent development were to be appreciated for the rare opportunity it provides for comparative inquiry, one could expect Andean studies to flourish. This dimension is not yet the dominant one. Nonetheless, independent of any comparative urge, our understanding of the Andean world has undergone some major changes during the last few decades, a progress not only quantitative, through an accumulation of discoveries, but also qualitative, through changes in the sources used, our methods, and the very object of our inquiry. How do we explain this mutation?

For centuries, historians, both from the Andean republics and from abroad, had centered their fascinated attention on the Inka "empire." Ever since the sixteenth century, Andean precious metals had fed fantasies of El Dorados; Andean institutions also provided "facts" for the utopian needs of writers as diverse as the Inca Garcilaso de la Vega and Marmontel. As recently as 1928, the carefully documented work of Louis Baudin was entitled *L'Empire socialiste des Inkas*. Although it is no longer fashionable to use that adjective when discussing the last Andean state, an ample if discordant bibliography is currently busy documenting "Asiatic," feudal, or slave modes of production in this region. At the third congress devoted to "Andean man and culture," in 1977, each of the above characterizations and many another had its articulate partisans.[1] What hope then for clarifying the puzzle before us?

The newcomer to these debates should note that all of these interpretations, diverse as they may seem, actually draw on the same sources, few in number and by now treated as classic. We have all been reading the letters and other eyewitness accounts of the European invasion, plus the somewhat later "chroniclers." These remain irreplaceable, but one soon becomes aware of the double filter they project between the An-

dean event and us: The first screen was the European observer; the second, his informant, usually a member of the Cusco elite. No doubt, some of these observers, notably Polo de Ondegardo and Cieza de León, tried to get beyond the limitations distorting their queries. Aware of discrepancies among the reports of their informants, they tried to reach those who had been functioning adults before the European invasion. It does not seem too much to claim an ethnological inspiration for their work. Still, the institutions of the Inka state had collapsed with the fall of Cajamarca and the help the Europeans had received from ethnic groups such as the Wanka; whatever information about Tawantinsuyu could still be amassed in the 1540s and 1550s by Pedro Cieza or lawyer Polo was irremediably fragmentary and much of it unverifiable.

A further consideration: In the history of Andean America, the Inka state is a very recent and brief (no more than a century) experience that was itself the heir to many much earlier political formations. Even the most knowledgeable of the European chroniclers confuse these earlier achievements and attribute to the Cusco armies a civilizing mission. In fact, it had taken centuries, if not millennia, to achieve Andean productivity and managerial capacity. Attempts to reconstruct the Andean experience with the aid of such flimsy data, padded out with exotic theoretical models, seem to us to be destined to frustration.

One should mention here another approach to Andean studies: Independent of all of the above, social anthropologists, most of them from the United States but also some others trained under their tutelage, have stressed contemporary monographical research. Asking few questions about the antecedents of present-day Andean populations, they found the *comunidad* a convenient framework for their inquiries. If one ignored even the most recent past, "communities" seemed to be the basic units of the indigenous world.

To treat the community, particularly in its Peruvian context, in that way is a dubious, ahistoric venture; there is no way of projecting seriously from present-day practice to institutions four centuries earlier. Even where these monographs provide interesting information, it is hard to use it to understand the Andean world: There is no way of knowing how these "communities" came to be the heirs of the large polities we know to have been prevalent in the Andes both before and after the Inka. In fact, the communities of today are recent colonial and even republican phenomena. Fortunately, in both Bolivia and Ecuador, ethnic groups are still functioning with their own authorities and federating scores of villages.

Thus both historians and social anthropologists have reached their own dead ends. Both have held on to their particular end of a historical continuum: the macrocosm of the Inka state and the microstructure of contemporary comunidades. These two static approaches, bedeviled also by incompatibilities of scale, have remained without an intelligible link between them.

New questions had to be asked both of the traditional sources and

of the new ones that were emerging. Sometime around 1960, Andean scholars committed themselves to a more interdisciplinary approach, linking, among other fields, archaeology with historical and ethnographic inquiries.

An example – perhaps an obvious one – of the new approaches: a rereading of the sixteenth-century dictionaries of the Andean languages. In 1560, Domingo de Santo Tomas had found himself unable to translate adequately the Quechua kin terminology he was compiling for his dictionary. Aware that he was dealing with new ethnocategories, he decided to place the topic in his grammar, since it was plain to him that he was handling more than just an intractable vocabulary. Beginning with such linguistic hints, it has been possible to connect the sixteenth-century kinship terminology with data from the parochial registers of the seventeenth and eighteenth centuries, and eventually with contemporary practice. With such methods we have begun to formulate a model for the Inka kinship system (for example, in the chapter in this volume by Floyd Lounsbury, written as far back as 1964).

Another dimension of the renewed interest of anthropologists in written sources has been their utilization of colonial administrative archives. Thousands of bundles containing litigation, tax, and census records had been available for four centuries in public and private repositories but had remained unused – perhaps because they did not convey any version of the dynastic oral tradition. When they began to be read, both historians and anthropologists could see that the issue in the Andes, as elsewhere, was not so much the availability of sources as the questions asked.

A clear example is the well-known protocols of inspections, the so-called *visitas*, of ethnic groups such as the Lupaqa near Lake Titicaca or the Chupaychu of the Huallaga Valley, both carried out by European officials in the 1560s. The second, undertaken on Phillip II's orders by Iñigo Ortiz de Zúñiga, was republished in 1967 and 1972. It had already been transcribed and printed by Father Domingo Angulo as far back as 1920: One wonders how it escaped the attention of the investigators and why it took forty years to "rediscover" it. These inspections are true field inquiries: In the case of the Chupaychu we get a thorough door-to-door census of several thousand households. Two detailed questionnaires inquired into overall resources, the kinds of crops cultivated, prestations owed to the Inka as compared to those demanded by the *encomendero*, political organization, matrimonial arrangements, religious beliefs, and so forth. Dozens of witnesses testified, some old enough in 1562 to have known Wayna Qhapaq, who died in 1530. The availability of such sources encouraged the Institute of Andean Research to sponsor in 1963–5 a study of the region covered by the visita.[2] Historians looked for further written sources; ethnologists and archaeologists cooperated in locating the abandoned dwelling units of the local lords. The archaeologists could then attempt to excavate the dwellings of these polygynous households. It was also possible to document his-

torical continuities in ethnic organization between 1562 and 1965 in fifteen communities studied by the field-workers.

Obviously, no one would wish to retroject the present mechanically onto the past. The use of multiple tactics, all of them starting from the same series of historical hints, allows us to uncover a truly Andean link between the pre-European past and the desperate present. The tactics outlined above for the Chupaychu cannot reach beyond the local and regional levels: rather, they reveal the extreme diversity of ethnic groups and polities that both preceded the Inka state and endured long after its destruction, in some cases until today. Between the immense "empire" of the travelogues and the artificially shrunken community of today's countryside, we watch the emergence of a whole new set of intermediary structures, both temporal and spatial. The two separate ends of the missing chain can, possibly, now be joined, and with them the links between history and anthropology.

Beyond regional diversity, such a comparison reveals the profound unity of Andean civilization as well as its originality. We are able to identify an extraordinarily enduring model, which explains the Andean organization of space as a function of ecological complementarity among the diverse tiers of this broken environment. The nuclei crowded in the highlands, at altitudes above 3,500 meters, where the land was used by the bulk of the population for camelid herding and the production of tubers, reached for self-sufficiency by dispatching colonies, known as *mitmaq*, to many warmer, peripheral settlements. In this way the highlanders gained continuous access to the exotic maize, fish, hot peppers, timber, cotton, and coca leaf of the lowlands. Such complementary distribution did not imply control of the intermediate regions, beyond trying to protect the caravan routes against pirates. The pattern that emerges is one that the sixteenth-century Europeans called *salpicado*, a "sprinkled" distribution of dispersed settlements belonging to a single polity. In another metaphor, any one ethnic group's territory formed an "archipelago," grouping "islands" up and down the cordilleras and reaching west to the Pacific and east to the Amazon (see Murra 1975, article 3).

One peculiarly Andean feature is that these complementary outliers were frequently multi-ethnic: Representatives of polities quite distant from each other in the mountains found themselves in close, if tense, proximity at the periphery. These settlements were five, ten, and sometimes even more days' walk away from their respective power centers. How the tensions were resolved or how the caravans linking a polity's outliers were protected is not yet sufficiently understood (Núñez 1985).

It is nevertheless clear that in such circumstances barter or trade among the ethnic groups was reduced to a marginal percentage of the exchange traffic. This is a major difference between the Andes and Mesoamerica, where we know that large marketplaces operated on schedule and that professional merchants, frequently of high status,

undertook not only economic but also political assignments.[3] Since 1972, when the archipelago model was first outlined at a comparative seminar organized by Angel Palerm in Mexico, efforts have been made to identify the model's geographical limits and structural limitations. Archaeologists have probed for its antecedents and early manifestations (Lumbreras 1974). Ethnologists have discovered its enduring relevance (Fonseca 1973).[4] As a result it seems that the model applied most effectively in the Qollasuyu part of the Inka realm. Polities with a nucleus on the coast or in the tropical highlands of the northern Inka periphery did not fit the model (see Salomon, Chap. 7, this volume).

Wherever it did function, the "vertical archipelago" implied a rather closed economic circuit, linking several tiers through ties of kinship, ethnic identification, and political subordination. This nesting of *ayllu*, moieties, and ethnic levels into a single pyramid can still be seen at work today, albeit in reduced, almost beggared circumstances, in Tristan Platt's essay (Chap. 13, this volume). When the Inka state expanded its dominion over hundreds of conquered polities, it attempted to project a familiar model to a vast territory and an unprecedented population. The state set up its own "islands" in the conquered domain; the local people were expected to work these lands in much the same spirit as they had harvested the acreage of their own ethnic lord or local shrine. Again, on the model of these traditional authorities, the Cusco state was expected to behave with "institutional generosity," so that this asymmetrical reciprocity would manifest itself at each level of the pyramid and on every ecological tier.

But the greatly expanded scale of operations, as a result of which the mitmaq colonies might now find themselves sixty days' walk from their homelands or assigned to garrison or mining rather than agricultural duties, argues that the organization of the archipelago had been fundamentally altered. Colonists who were sent far away from their ethnic homelands could no longer return there easily to exercise residual rights in farming, marriage choices, or worship. If to this we add the establishment of a completely unprecedented management domain, independent of local and regional interests, along the Inka highways (administrative centers, warehouses, military installations) (see Morris, Chap. 5, this volume) we can assume that the vertical archipelago was undergoing fundamental changes in the decades immediately before 1532 (Murra [1955] 1980, Chap. 8). However, it probably continued at the local, ethnic level, since we find it functioning and affecting the earliest European settlement patterns.

The kingdoms and lesser polities conquered were presumed by their rulers to be incorporated within the "realm of the four parts," Tawantinsuyu: In a way, quadripartition is an elaboration of the underlying dual division found throughout the central and southern Andes. As in many other instances where moieties prevail, we are faced with a system of classification that orders not only society but also space, time, the very universe, through a series of confronted pairs: high and low; male

and female; left and right; summer and winter. It is notable that in this part of the world neither moieties nor their subdivisions have any exogamous functions: Preferential marriage is endogamous within the ayllu and moiety. Can we then claim that each group affirmed its identity by stressing its opposition to its immediate neighbors at comparable levels?

In fact, the deeper meaning of Andean dualism surfaces in one of its most original traits, the mirror image. The component elements of any of the classificatory categories can undergo endless bisection. Thus the upper moiety can be divided into a part perceived as the "upper upper," whereas the other becomes the "lower upper." Similarly the lower half can be partitioned into the "lower and upper halves of the lower" (and so on, indefinitely). Such subdivisions can overlap and cross each other, generating quadripartitions and devising multiple configurations, all of which depend on the observer's stance. Structuralist analyses (such as Zuidema's, especially 1964) can in certain cases clarify the internal logic of the permutations, a logic defined by its repetitive and relational character.

One can detect a structural homology in the processes of subdivision of opposed pairs, the nesting arrangement of social groups, and the closed economic circuit within the vertical archipelago. The evidence seems to favor a self-enclosed circuit of production and exchange, which, we think, could not exist in the Andes unless it faced the reflection of a circuit formed by classificatory categories as well as systematic bisection of the ethnic groups. All could be bisected, indefinitely.

We are not dealing with a hypothetical "order of orders" that would provide a definitive key to stratified structures. Most likely we are confronting here a global logic that permeated both experiences and representations simultaneously; these, in turn, were folded back into practice. All of this categorized societies that we cannot parse into the facile traditional categories of economic, social, political, or religious concerns, which are usually summoned from Western norms. The model of the archipelago cannot be reduced to its economic dimension; from its very expansion out of transhumance, it was part of a symbolic network. It presupposes an overall scheme assimilating the allocation of lands and the assertion of kin ties; attitudes toward work; the distribution of power; agricultural and pastoral rituals; and eventually, relations with the gods.

It is not so much that these elements are linked in terms of some neat parallelism: Their homology manifests itself at the level of general principles of organization. They are articulated within a system of relations in which clusters and their subdivisions are defined through mutual opposition, but they are also repeated: They nest, and they correct themselves following a variety of criteria and perspectives (the dominant Aymara, the dominated Uru, etc.). Geographically, these general principles are operative over a vast area; they provide its unity, the one we call Andean civilization.

After the European invasion, the state's institutions crumbled; local

polities weakened and were eventually fragmented; the ethnic differences paled, but an overall scheme endured. The indigenous world readjusted under colonial domination. Thus it is notable that after the European administration ordered massive resettlement into *reducciones*, the inhabitants of the Andes (who had become "Indians") spontaneously organized these strategic villages along dualistic lines. The ayllus continued as their basic component. Many mitmaq of the state abandoned their distant exile to return to their homes; once the authority of the ethnic lords was eroded, local autonomies were strengthened at the moiety and lineage level. Regionally, vertical archipelagoes were consolidated.

The colonial system tried to impose a new logic – that of the marketplace, of a money economy, and of an organization of space based on relations no longer vertical but longitudinal, oriented to a dominant pole: the mines and the city of Potosí. But even Spanish domination could not forgo the partial utilization of certain indigenous institutions such as the *mita*. Although this reuse detaches such institutions from their native context, its continued utilization contributes to the perpetuation of an ancient framework, no matter how distorted. Colonial society was constructed from many more such Andean components than is generally recognized.

This collection is organized along three major axes, which we think are related:

1. Problems of spatial organization and the relations between the ethnic polities and the Inka state (Parts I and II)
2. Systems of classification; symbolic representations and practices (Parts III and IV)
3. The progressive erosion of ethnic groups and the emergence of the "community" (Part V)

The collection presents contributions of historians, geographers, archaeologists, and ethnologists. It does not pretend to provide an exhaustive balance sheet of Andean studies. We have aimed, rather, to offer a view of the issues under debate and some samples of work in progress that we hope will stimulate further inquiry.

Notes

1 The congress met in Lima; its *Proceedings* were edited by Ramiro Matos in 1978. The debate over modes of production can be followed in a collection edited by Waldemar Espinoza, *Los modos de producción en el imperio de los incas* (Lima: 1978).

2 See the report by Murra (1965), as well as essays supplementing the two volumes of Iñigo Ortiz's visita ([1562], 1967 and 1972).

3 For a different analysis of exchange in the Andes, see Hartmann 1968 or the paper read by Pedro Carrasco at a comparative seminar held at Stanford

University, published in George A. Collier, Renato I. Rosaldo, and John D. Wirth, eds., *The Inca and the Aztec States, 1400–1800: Anthropology and History* (New York: Academic Press, 1982).

4 See also the symposium organized by Flores Ochoa at Americanist meetings in Paris, published as *Actes, XLII Congrès International des Américanistes*, vol. 4 (Paris, 1978), and particularly Harris 1978.

PART I
Ecology and society

The Andean environment would seem to pose insurmountable difficulties for man, for it consists of one of the most arid coastal deserts in the world, of high plateaus that are cold and dry, and of vertiginously steep Amazonian slopes. Yet its inhabitants have used its resources in such a way that they have managed not only to survive but also to create a series of civilizations that confer upon the Andes, for all their diversity, a remarkable cultural unity. Even the most isolated valleys have been open, sometimes repeatedly in the course of millennia, to external influences. Thus archaeologists have come across objects of Chavin, Tiwanaku, or Inka origin some hundreds of kilometers from their place of manufacture, along with remains from the local tradition.

In this first part of the volume, Olivier Dollfus analyzes the diversity of Andean environments through both time and space, and Ana María Lorandi examines the factors that seem to account for the spread of the three great "horizons" that succeeded each other before the European invasion. These two essays complement the article by Lautaro Núñez, who evokes the destiny of the Tarapacá Valley over what turns out to be truly a long haul (from 6,000 B.C. to our day). The ecological circumstances of this valley, located today in northern Chile, were perceived and rated in the most varied ways by the many societies that have succeeded each other: The successive changes in the settlement pattern and in the awareness of potential resources are witness to the multiplicity of possible solutions and to their originality.

1
The tropical Andes: a changing mosaic

Olivier Dollfus

The Andes are the most imposing mountain mass in the tropics. Those who live there have for millennia made full use of the possibilities offered by an ecological mosaic utilizable from sea level to an altitude of around 4,500 meters. The spatial organization of Andean society is rooted in this ecological diversity, but this mosaic has itself altered over time, in response either to climatic change or to human activity. Ecology is in fact variously interpreted, depending on the techniques available from the space and on the aims of the particular society. We must therefore consider how, in the Andes, space acts as a material constraint upon social organization, and how the ecological mosaic is exploited, experienced, and perceived.

Ecological diversity

The richness of the ecological mosaic may be attributed to the strips of land being ordered in a succession of tiers, explicable in terms of the drop in temperature accompanying a rise in altitude. The alternation of damp and dry, sloping and horizontal, forested and deforested, and the presence or absence of human planning further complicate the mosaic. There are in fact several hundred basic physiognomical units, or "geofacies," in the tropical Andes, whereas the Alps can lay claim to only a few dozen and the mountains of the far north to fewer then ten. This opulence permits a large number of possible ecological combinations, some of which, in the course of history, the Andean societies have adopted.

The diversity of Andean natural environments has been a central theme in geographical research for the past two centuries. Alexander von Humboldt gives an account of the main forms of vegetation in the South American cordilleras, explains their distribution, and inquires as to their part in determining the use of space. A little more than a century later, Carl Troll, after his first researches in Bolivia, provides the essential elements for a geo-ecological interpretation of the Andes and analyzes the manner in which the peasantries and the pre-Columbian and colonial forms of political organization exploited the natural resources of these environments. He demonstrates the difference between the northern Andes, on the equator, which are lower, damp, wooded,

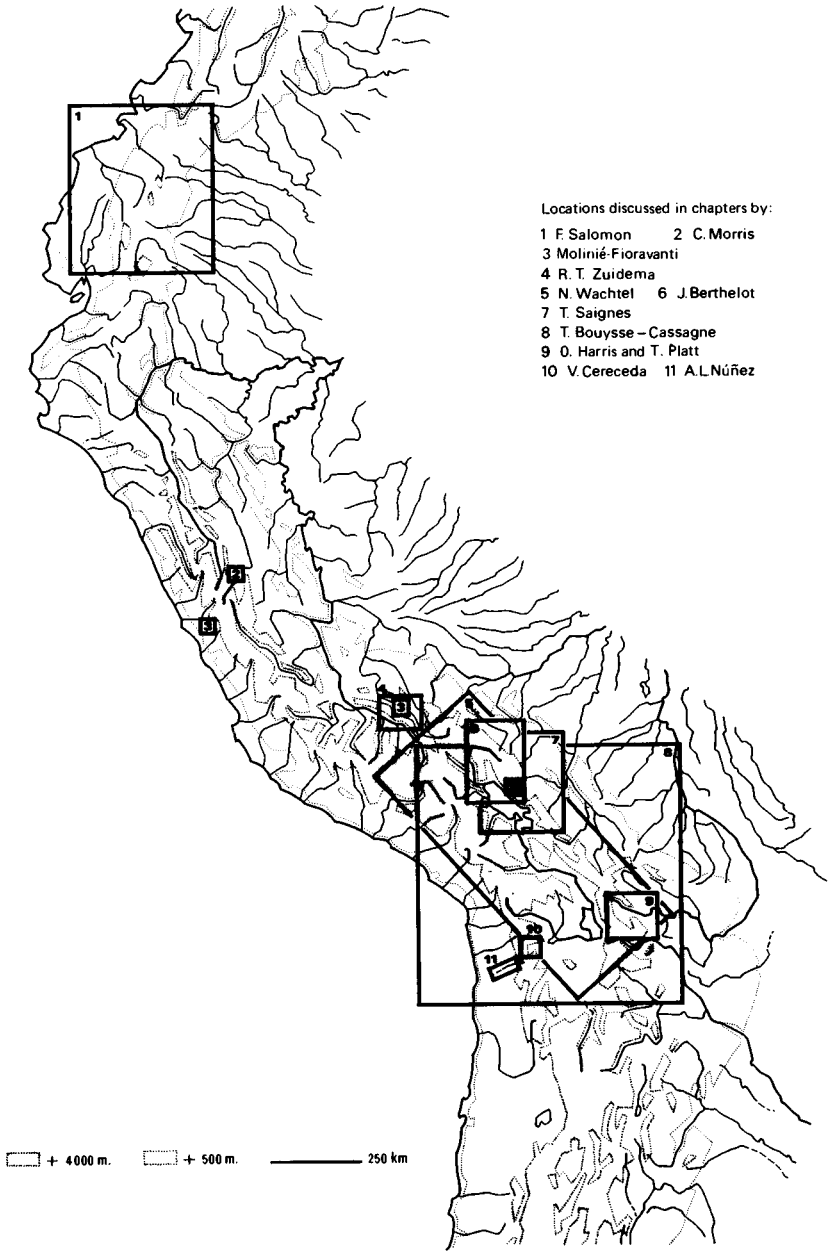

Figure 1.1. Andean relief map.

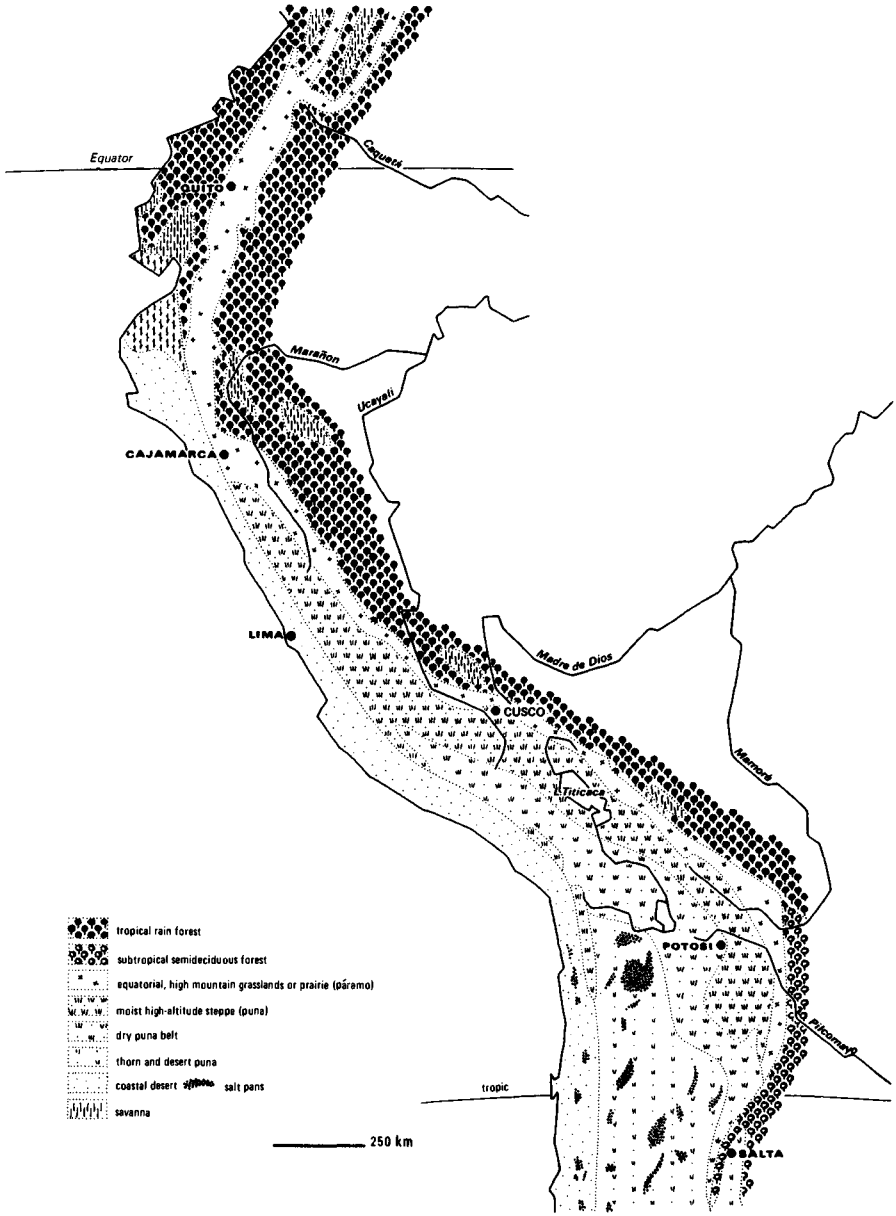

Figure 1.2. Vegetation tiers in the Andes (from Carl Troll's *Geo-Ecology of the Mountainous Regions of the Tropical Americas*, Bonn, 1968).

and sloping, and the southern Andes in the tropics, which are massive and higher, and where the flat stretches of the puna, which are grassy steppes, cover several hundreds of thousands of square kilometers, at a height of more than 3,500 meters. Although the outermost edges of the cordilleras to the north of the equator are always damp, the cordillera that abuts on the Pacific is a desert, and the eastern one is wet and wooded.

Carl Troll distinguishes between the peasant societies of the north, which, before the Spanish arrived, had never advanced beyond the stage of chiefdoms, and those of the tropical Andes to the south, which on more than one occasion were the sites for large political organizations holding sway over the peoples and the land for hundreds of thousands of square kilometers, and whose material traces allow the archaeologists to define three different "horizons" (see Lorandi, Chap. 3, this volume). Troll contrasts the northern Andes, where the peasants use the clearings to cultivate maize, manioc, and various tubers, to the tropical Andes, which have high and treeless slopes, providing a natural pasture for flocks of llamas, and where the cold makes it possible to freeze-dry certain kinds of tuber (*chuñu* and *caya*). Many species of tuber are cultivated in the tropical Andes, and hundreds of different varieties allow adaptation to the different ecological conditions. These Andes also feature the llamas, pack animals that provide not only wool from their coats but also fertilizer and fuel (*takia*) from their dung. It is in these regions that irrigational techniques allow the inhabitants to combat the aridity and inadequate rainfall.

Carl Troll's analyses, the earliest of which is almost sixty years old (1928), should be complemented by, and in some cases revised in the light of, historical and geographical research. But they do, nevertheless, provide the geo-ecological canvas that anthropologists and ethnohistorians use. Thus J. V. Murra refers to them when he describes the rules of spatial and political control that enabled the precolonial chiefdoms to exploit the complementary forms of production that flourished at different altitudes on the mountains ("vertical control" or "archipelagoes").

Carl Troll was one of the first scholars to emphasize the fact that the rules for the use of space alter in response to the actual architecture of the mountain range. The sorts of terrain described in the articles presented in this volume bring out this point quite clearly. Thus, in the equatorial Andes, Frank Salomon analyzes the spatial organization of four pre-Hispanic tribal groups (Chap. 7). Below the great volcanoes and isolated mountain masses is a chain of *páramos*, damp meadows and shrubby heaths rising in tiers at elevations of between 3,200 and 4,500 meters, and rich in game. The páramos dominate the inland basins, which are temperate and quite moist. Deep, dry valleys may sometimes cut across them. To both the east and the west the damp, wooded sides of the cordilleras merge into the hot plains of the piedmonts. There is thus a spatial system connecting the páramos and their hot valleys with

the central nuclei implanted in the basins. It takes a day, perhaps less, to walk from the páramos to the agricultural basins, and one can pass from the inter-Andean basins to the outlying piedmonts in two or three days.

In the tropical Andes of "Upper Peru" (Bolivia and southern Peru), the mountains are at their widest, from 500 to 600 kilometers, as against 150 kilometers at the equator. Their average height exceeds 3,500 meters. At the center there are vast plains and steppes; these are the puna plateaus and the altiplanos, with Lake Titicaca in the middle, at an altitude of 3,800 meters. The year is divided into a dry and a rainy season, the latter usually being the shorter one. The desert climbs to a considerable height toward the west, and volcanos 6,000 meters high are without glaciers. Agriculture on the western slope of the mountains is possible only owing to systems of irrigation supplying limited amounts of water. On the eastern side is a succession of sheltered basins that are relatively dry, apart from those slopes that face into the wind and are perpetually humid. The distances involved are often considerable. The Lupaqa, who live on the banks of Lake Titicaca, have to walk for eight to ten days (and sometimes from fifteen to twenty days, if the pace of the llama caravans requires it) in order to cross 150 to 200 kilometers of plateaus, at a height of 4,500 meters, before reaching the oases at Moquegua. The Macha, whom Tristan Platt discusses in Chapter 13, have to travel 100 kilometers to get from the higher part of their territory to the lower, even though both are situated on the eastern flank. The region described in Chapter 16 by Thierry Saignes, to the east of Lake Titicaca, provides the exception, for in one day's walk one arrives at the shore of the lake situated at the end of the eastern valleys, where, at altitudes below 3,400 meters, maize is grown, and in another day's walk one can reach the small, hot, and unhealthy oases where coca leaf and peppers are harvested.

It is obviously of interest to know what sort of significance the peasants themselves attached to the lengths of time they have to devote to their journeys between the islands of the archipelago. Did the Lupaqa resent the ten days it took them to reach the Pacific shore oases where coca leaf, cotton, and hot peppers are to be found, in comparison to the inhabitants of Otavalo, at the equator, who could reach the same products within two or three days? Again, the Inka administration had a different interest in this same question. The exercise of power in a huge empire demands that information circulate quickly: hence the importance accorded to building routes of communication for the *chasqui*, the imperial power's couriers.

Alterations in the ecological mosaic

Those changes that affect either parts or the whole of the mosaic are usually brought about by modifications in the very basis of the ecosystem. They may be induced either by climatic variations or, if one thinks

on a historical scale, by human action. There are, admittedly, transformations in the ecosystem that may not be accounted for in terms of external disturbances. For instance, in the Andes we have hitherto had little insight into the reasons for the disappearance of various species of large mammal such as the hipparion (the American horse), the mylodon, and the mastodon, between 20,000 and 5,000 B.C. many factors prevent us from attributing these disappearances to the activities of hunters alone. We would do well to take account of climatic variations in the Holocene, and indeed more recent ones, such as have often been invoked by archaeologists and historians and are discussed by Lautaro Núñez and Ana María Lorandi (Chaps. 2 and 3, this volume).

For the Andes south of the equator, our knowledge of climatic fluctuations in the course of the last millennia, and indeed during the last few centuries, is still tentative and fragmentary in terms of both space and time. Research of this sort is less advanced than it is for Colombia, where Van der Hammen's teams have used the lacustrine deposits of the *sabana* in Bogotá to outline a climatic chronology of the last twenty-five thousand years. A range of techniques, derived from a series of different natural and human sciences, has to be used if one is to grasp the meaning, extent, and duration of a climatic change: palynology, pedology, geomorphology, but also archaeology and history. It has rarely been possible, at least until now, to have much success with forms of research that, if they are to be fruitful, require sites providing material open to treatment in terms of several different research techniques. Thus, although I do not propose to enter into an exhaustive discussion here of the problem of climatic change and of the sequences involved, it would seem to be worth drawing the attention of social scientists to the risks entailed by accepting wholesale theoretical positions taken from other disciplines or by taking what specialists in the subject regard as fragile working hypotheses to be accredited facts.

I begin by noting that it is ill advised to apply what is in fact quite localized information to the whole of the tropical Andes. Climatic variations do not have the same consequences at every latitude. Thus, at least in the last few decades, the sequences of dry years on the altiplano of Lake Titicaca have coincided strikingly with above-average rainfall in the equatorial Andes. It would, therefore, seem hazardous to suppose, on the basis of a phenomenon restricted to one part of the Andes, that the same phenomenon prevailed some hundreds of kilometers away.

I would go on to point out how relative such notions as a worsening or an improvement in climate are. The same climatic variation may have completely different consequences in adjacent ecological tiers. Researchers in the southern tropical Andes have found signs of a slight rise in glaciation between the sixteenth and eighteenth centuries. This increase in glacial activity may have been provoked by a greater or more evenly distributed annual rainfall or by a lowering of the average temperatures by one or two degrees. On the punas, these slight modifications

can give rise to greater difficulties for agriculture and stock raising that are already close to their climatic threshold. One or two harder frosts in the periods between the seasons, which are so critical to agriculture, may threaten the harvest; snowfalls in the dry season, especially if they cover the ground for more than a few days, may raise the mortality rate of the young animals in the herds and will affect the sheep more severely than the camelids (llamas, alpacas), for the latter are better adapted to the rigors of the puna. At a lower elevation, on the other hand, heavier rainfall and a damp season that is lengthened by several weeks help to improve the grain harvest in an ecosystem in which water is one of the limiting factors for agriculture. As a working hypothesis, and one that has not yet been substantiated, I would argue that the regroupings, or *reducciones*, that the Inka began and that the Spanish made general, and that gave rise to settlements that were usually relocated some hundreds of meters below the previous ones, may well have been facilitated (although I would not go so far as to say made necessary) by a climatic change that brought about a deterioration in agriculture and stock raising on the punas but offered better opportunities for agriculture at the tier just below it.

The same phenomenon may, however, be due to quite different causes. D. Lavallée and M. Julien (1973) have observed that in the central Andes of Peru, on the plateaus inhabited by the Astos in the Chunku and Laraw chiefdoms, from the eleventh century onward the upper limit for the cultivation of *quinua (Chenopodium quinoa)* and tubers was 200 meters above the present limit. This rise in the upper limit of cultivation is attributed to a slight rise in temperature. In the same region, after the deterioration in agriculture and habitat at the end of the Inka period, and during colonial times, H. Favre (1975) finds that in the nineteenth century the punas were reconquered for agriculture. This "reconquest," according to M. F. Houdart-Morizot (1976) was accompanied by the partition of some communities and by the proliferation of new settlements on those punas that were above 4,000 meters. It would not seem possible to attribute this growth in agriculture to a more clement climate. The population was rising at a time when the haciendas were taking over the better estates at the lower altitudes, and the Indians therefore had no choice but to use the punas for agriculture, notwithstanding the low productivity of labor in such circumstances and the restricted and random results.

To define the ecological limits of cultivated plants is invariably a delicate matter. These limits vary according to agricultural techniques and practices, and with genetic modifications. Simply because diminutive maize was grown for ceremonial purposes in the sheltered gardens of the islands of Lake Titicaca, one cannot therefore presume that it could also be cultivated on the altiplano. Likewise, it is difficult to compare maize of the first millennium B.C. with that grown now, for both the varieties of crop and the agricultural techniques have changed.

Forestation and deforestation in the southern Andes

To understand forestation in the Andes south of the equator, one also has to take into consideration possible climatic changes. At several points in his article on the human occupation of the Tarapacá Valley, Lautaro Núñez inquires as to the reasons for the disappearance or thinning out of trees in the drier parts of the Andes. How much was it due to soil factors, and how much to human ones? He also stresses the need for a better understanding of the state of all plant life in that epoch. With a vegetation as precariously balanced as the tamarisk and polylepis forests in the Tarapacá Valley must have been, a small alteration in just one of the above factors would have sufficed to unsettle the system and, through the play of positive feedback, to destroy it.

Ecological systems do not develop symmetrically over time. Systems in equilibrium may well be fragile, and a slight modification in one of the thresholds to the system is liable to entail its ineluctable downfall, with a return to its prior state then being to no avail.

Consider the example of the wooded steppe that covers a part of the Andean piedmont in the department of Piura (in northern Peru). This steppe contains *algarrobos* (false carob trees) and encroaches upon the ancient dunes at the edge of the Sechura Desert; it used to stretch as far south as Chiclayo, to a region that is at present a desert. In Piura, the steppe lies in a dry environment; the annual rainfall wavers between 50 and 500 millimeters, and the average temperature is 22 to 24 degrees Celsius. The *algarrobos* have deep roots that draw out all the moisture provided by the underground streams running beneath the dunes and are fed by the rains falling on the nearby sierra. In the "winter" season, a carpet of graminaceae show up green beneath the paler foliage of the trees. This is the country that Pizarro encountered a short while after disembarking at Tumbes. The horses had no difficulty finding forage, either by grazing on the tufts that grew between the trees or by eating the leaves of the *algarrobos*.

Two situations encourage the disappearance of the trees and an encroachment on the part of the desert, which, once begun, is so hard to reverse. There is either a constant local climate in which case human activity is to blame, or else there were at some point temporary modifications in the climate.

In the former case, the trees die and disappear as their leaves and branches are taken to feed flocks or to provide wood for fires. As the shadow provided by the trees, which is light enough, disappears, the ground grows hotter in the middle of the day, producing an increased convection of the air, stronger winds blowing against the soil, and therefore renewed shifting of the dunes. The last impedes the growth of the grassy steppe when the rains come.

In the latter case, a climatic oscillation marked by a decrease in rainfall in the neighboring sierra gives rise to a lowering of the phreatic table, which in turn causes the trees to die, along with consequences similar

to those outlined above. Reversion to the previous climatic situation would not be accompanied by the revival of the trees; the desert would hold its own, even in a climate appropriate to a wooded steppe. Although I cannot develop these basic hypotheses here, the decline in the number of trees in the Andes south of the equator and, in places, their disappearance were probably in the main due to human action. The Andean basins lying on the equator, which Frank Salomon has studied (Chap. 7) were much more wooded in the fifteenth century than they are today, and the northern Andes, before the colonial period, were forested mountains, with occasional clearings here and there.

Activities associated with mining have hastened deforestation in zones close to the workings, and above all in early colonial times. This is the case with the Zaruma gold mines in Ecuador, with the Cerro de Pasco silver mines, and with the mercury mines at Huancavelica. But the disappearance of trees is particularly evident in the mining zone of Potosí, since wood was required for the construction of the mines, for the smelting of the metals, and for fuel for a population of some one hundred fifty thousand. The massive transportation of takia (some sixty thousand llama loads in 1604 alone) compensated only to a small degree for the use of wood. The trees of the Upper Andes, and the *quenoales* (polylepis) in particular, grow very slowly, and they are sensitive to excessive amounts of water; they recover only with difficulty. The eucalyptus tree, which is to be found almost everywhere in the Andes, was not introduced until the second half of the nineteenth century. Agricultural practices and stock raising were mainly responsible for the decrease in the number of trees in the tropical Andes and may be said to be the deciding agents in the transformation of the ecosystems.

When peasants settled in large numbers in the Andean basins, as they did in the region of Cusco, they set about, before even the Inka period, transforming some of the mountain slopes through the construction of terraces, *andenes*, which were often irrigated, whereas the practice of dry cultivation, letting the land lie fallow for long periods, brought about the elimination of the forest and its replacement by a brush-covered terrain, regularly burned and then reclaimed. The temperate tier, named *quechua* in the Peruvian Andes, was to be, with the emergence of peasantries, more modified than the punas. On the desert coast, fringes of irrigation created new landscapes that could usually support a certain cultivation.

It would be particularly rewarding to study the kinds of landscape in the colonial period. The reshaping of the habitat through the reducciones; the demographic collapse in the coastal countryside occasioned by the disruption of particular oases; the introduction of new crops (wheat, barley, oats); the rise in maize production for the purposes of pig raising; the increase in coca leaf production as its use became more general; and, above all, the arrival of European domestic animals – cows, sheep, goats, donkeys, and horses helped to bring about quite new landscapes. Stock raising must have been the crucial factor in this

transformation, for agricultural techniques, in spite of the introduction of new plants, were hardly altered at all. We know little about this domain, however; we still have to undertake the archaeology and history of the Andean countryside, along with the study of the consequences of stock raising upon social structure and upon the organization of the productive forces.

The significance of natural constraints

The real change in the weight and significance of natural constraints occurred in the present period. The sixteenth century does not represent a major break in this respect, for natural constraints played the same part in pre-Hispanic as in colonial societies. They were similar to those at work in peasant societies in general, and the rate of territorial displacement was also much the same – for time and space are structured in a basically similar manner in all peasant societies.

So as to be in a position to analyze the nature of the changes that have occurred in the present period in the interpretation of physical phenomena, let me present three examples.

EARTHQUAKES

The intertropical Andes, which belong to the Pacific "belt of fire," are subject to earthquakes. Of the more significant ones that occured in the last few decades, it is worth mentioning the one of Cusco in 1950 and in Ancash in 1969. Parts of Lima and Arequipa have been destroyed by earth tremors on several occasions in their history.

The better equipped a society is in technical terms and the more it has in the way of a network of fixed infrastructures, the more vulnerable it is to large-scale earthquakes. Indeed, apart from the cosmic fear that the rumbling and the tremors might instill in the hearts of hunters or stockbreeders, there was hardly any damage. Cultivators did suffer from the effects of earthquakes, but only to a limited degree. Adobe buildings were often destroyed, but they could be rebuilt in a matter of days or weeks, and sometimes cultivated terraces subsided or irrigation channels collapsed. But, for a predominantly urban population, an earthquake may be a catastrophe. This was the case in Ancash, in 1969, when some fifty thousand people are believed to have died.

CLIMATIC OSCILLATIONS

Climatic oscillations are brief fluctuations in the weather (lasting only a few years) that are followed by a return to a prior state, such as occurs, for instance, in particularly dry years. The droughts affecting the altiplanos in 1956–7 were of much the same order as those of the forties, but the effects were more far-reaching, for the population had grown in the meantime (it was 40 percent larger than it had been in 1940). The peasants with smallholdings on the shores of Lake Titicaca, whose living partly derives from the rich pasturage enjoyed by their cows beside the

lake, were adversely affected when the shore was lowered by a meter, with the consequent drying up of the reed beds (*totorales*). On dry land, the fields of potatoes, barley, and onions were burned by the frost and retarded by the scarce rainfall. In the haciendas on the puna, the search for a higher quality of wool led to the introduction of flocks of sheep of imported stock (Corriedale, in particular) that turned out to be less resistant to random climatic changes than the native stock had been, and pastoral mortality rates rose. At the same time, around 1957, Arequipa and Lima were expanding very fast and could absorb a sustained rate of immigration, while pioneers were opening up new frontiers in the *ceja de montaña*, in the region of Tambopata, on the edge of the forest of Madre de Dios. Drought helped to accelerate the waves of migrants and to give credence to the idea that the living conditions of the people from the altiplano were becoming more and more difficult. Some decades earlier, a smaller population, a more flexible relation between the haciendas and the communities, and a lesser degree of openness to, or dependence on, the outside would have allowed them to handle more successfully the consequences of a climatic crisis. It is worth noting, moreover, that present-day societies have a greater need for security than those of the past and that they are less and less able to bear, and evaluate as ever more costly, the "fantasies" of nature that for the most part were readily calculable paroxysms within the longer climatic series and for which allowance could have been made in economic planning.

SLOPES

In an economy in which work is performed with hand tools, and in which goods are transported on the backs of men or animals, the existence of a slope does not render work in the fields significantly more arduous, and it has the advantage of allowing exchange of products over short distances and between adjoining but separate tiers. It also facilitates the installation of modes of management that allow one to supervise archipelagoes straddling several natural milieus. The advantages it offers, as much at the local as at the regional level, compensate for its minor inconveniences. This in part accounts for the widespread presence in the tropical Andes of the archipelago, or "vertical control" model, and also the significance of the divisions in Andean peasant society between upper and lower moieties. In contrast, in an economy that relies upon machinery, in which transport and some productive labor are effected by means of engines, the existence of a slope proves costly and difficult to overcome. For a field with a slope of 10 degrees is difficult for a tractor to work, and a road with a slope of 6 degrees presents a loaded lorry with serious problems. These become thresholds that may not easily be crossed. The fragmentation of plots situated on slopes, along with their difficulty of access, often rules out mechanized agriculture. Installing and maintaining a transport network are two to five times more expensive on a slope than on the plain. It may well be an advantage

for ecologically different regions to be adjacent to each other, but with the lowering of the cost of transportation in the low-lying areas everything works against the mountains. The new channels of communication, which often follow routes determined by the exploitation of industrial raw materials, help to shatter the customary circuits of exchange and to introduce distortions in space, such that it becomes at once rougher, more constraining, and more varied.

The archipelago or vertical control system thus loses its raison d'être, a number of the squares in the ecological mosaic are abandoned, and the age-old fabric of economic life and relations comes unstitched.

The natural constraints of the Andes are increasingly considered, for the first time in the long history of its human settlement, to be disadvantageous. This applies, more generally, to all the mountains in the world that are densely populated, but it is especially true of the tropical Andes because the structuring of space in the mountain areas, both local and regional, was particularly well adjusted to the natural milieux.

The North American geographer Isaiah Bowman tried to show that since the beginning of the twentieth century Peru's future depended on the development of the low-lying regions, the Pacific fringe, and the forested plain of Amazonia. He held that such a development would have to be carried out by entrepreneurs using technology and capital from the industrial countries. National progress ought to rely on the export of raw materials and on foreign trade. This policy, which is the one that governments in the Andean countries have been following for more than a century, marginalizes the mountains and their inhabitants. The mines ("mining archipelagoes"), it is true, are worked; the water and hydraulic energy provided by the slopes are put to use, as is the labor power of the migrants from the mountains; but in this scheme of things the Andes and their inhabitants are, at best, ignored. Hence those involved in applied research, and in agronomy in particular, are not concerned to try to discern the potentialities of the Andes or the fitness of the peasants to exploit them. Given that raw crop production decreases with a rise in temperature – that is, with the altitude – they conclude that the economic productivity of mountain milieux is necessarily lower than that of the low-lying regions. The high-altitude milieux undoubtedly possess hidden resources, as much vegetable as animal, that we would do well to identify and define more exactly. In this respect, our all too limited knowledge of Andean ecosystems, of the rules by which they function, and of the matter and energy flows that traverse them constitutes a major brake on any programs of agronomical research we may hope to undertake. Our backwardness in understanding the natural history of the Andes is beginning to hinder our understanding of its social history (we saw how archaeology in the strict sense demands that we undertake research into the "archaeology of landscapes"). The bases of a peasant policy in the Andes ought to rest as much on the history of contemporary, but also past, agrosystems as on the history of societies.

2
The evolution of a valley: population and resources of Tarapacá over a millennium

Lautaro Núñez

The Tarapacá Valley lies in a dip at the edge of the plain that descends from the Andes to form the pampa of Tamarugal, part of the arid lands of northern Chile. During the more recent part of the Quaternary, the valley was subject to turbulent flows that lasted to the end of the Pleistocene. In a later period, the rains at the continental divide caused intermittent floods varying in strength according to rainfall in the Andes. The Tarapacá River allowed the formation of oases throughout this vast and extremely arid region. After the Pleistocene, there apparently was an increase in summer rainfall on the Andean peaks, creating an intense hydrological cycle in the lower valley. During the hot season this cycle was activated by floodwaters that reached as far as the pampa of Iluga (Tricart 1965). By summer's end the torrents brought back the vegetation both to the floor of the valley and to the surrounding pampas. A brush forest cover would expand and contract according to the extent of the waters. Groundwater saturating the slopes would surface in numerous springs; it also maintained large groves of *prosopis*, growing near the temporary lakes and swamps. All this could be found in a place where the valley had to yield to a landscape that is today one of the most arid in the world.

Hunter-gatherers

The earliest hydrological model to involve people apparently functioned from 8000 to 2000 B.C. It did manifest fluctuations, with threatening droughts (though apparently not as long as those of today) but also wet periods, with frequent floods. An ecological niche appeared between

This chapter summarizes a monograph (1971) that remains in manuscript form. I lived in the valley during 1967 and have recently returned there to resume fieldwork. I dedicate these pages to my friends in the valley who taught me so much and encouraged me; I would like these pages to be part of the great challenge facing us. This version differs slightly from the French one, since I included facts learned during my recent stay. This time I saw more people, both locals and highlanders, who view the resources and ancient settlements in a new way. There is hope for continuity in the socioeconomic process of Tarapacá (San José de Huarasiña, 1979).

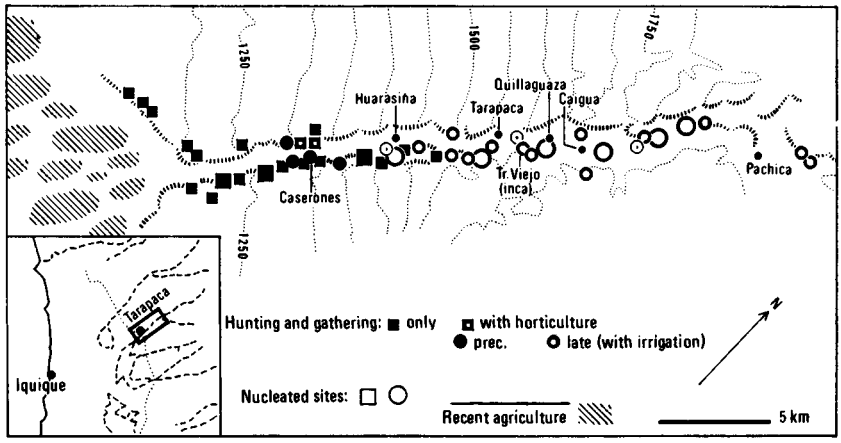

Figure 2.1. The valley of Tarapacá: changes in settlement patterns.

the upper end of the valley and the neighboring pampa, favoring groves of prosopis (carob beans and tamarugal). These trees produced pods rich in glucose; when ripe at the end of summer, the pods served as fodder for the camelid fauna (*huanacos*). These encountered human gatherers exploiting the lower reaches of the valley and the nearby pampas.

This environment attracted the earliest hunting bands identified so far. Their camps were established at the mouth of the valley facing the Iluga groves; here hunting implements were fashioned, particularly lanceolate stone points (see map, Fig. 2.1). Judging by the absence of mortars, these groups did not practice gathering here before 7000 B.C. (True, L. Núñez, and P. Núñez 1971). If we consider the precarious nature of gatherers' settlements in the different ecological zones of the Andean region, we may assume seasonal migrations, especially during the summer rains or the low temperatures of winter. The springs would create intermediate "corridors." In this way people would come into contact with the forest, the river, or the sea, depending on the seasonal abundance of food.

Information collected at Tiliviche (Lautaro Núñez et al., MS), another clearing near Tarapacá, leads one to believe that transhumance continued in this valley from 7000 to nearly 2000 B.C., exploiting the intermediate ecosystems.

The farther end of the Tarapacá Valley nearest to the pampa proved extremely attractive to settlers, among them the first groups to use pestle and mortar, who occupied the land between the coast and the altiplano, skillfully exploiting the multiple ecological resources.

The arrival of the first bands of gatherers initiated a local tradition that was to last for a long time – the search for greater seasonal stability,

with less emphasis on hunting. This restricted their movements to this particular area, where they developed more stable patterns of settlement (see the semicircular structures). They settled the terraces at the exit from the valley, living in camps that endured, thanks to the prosopis woods and the flow of water through the lower valley. Despite the variety of resources these bands seem to have been small and their settlements were contemporary with periods of drought. What is certain, though, is that in these camps, dating from 4020 B.C., food remains brought from the nearby coast have been found alongside valley resources (huanacos and vegetable fibers) indicating a multi-environmental pattern of development that lasted throughout the whole region over a long period of time (True and Núñez 1974).

When shorter periods of drought offered better conditions for survival, larger groups developed more stable settlements along the lower terraces of the inner valley near the springs of Caserones and Huarasina. The stress on gathering in these settlements is obvious, to judge by the pestles and mortars; we note the more systematic use of the symbiotic resources of pampa and valley. A subsistence diet that depended on the use of local foodstuffs and raw materials allowed marked stability of settlement: We find now the first semicircular structures, dating from around 4480 B.C., although they may have originated in even earlier periods at places like Tiliviche. These later camps of hunters-gatherers are dated from "workshops" from approximately 2830, 2740, and 1960 B.C.

Settlements of greater importance have also been found – witness the notable group of thirty complex stone structures found near Caserones, away from the pampa. It is possible that this progressive occupation of Caserones occurred because this area was more suitable for the first attempts at horticulture (assuming the maize plant found there was actually a part of the preceramic archaeological context). This is plausible, given similar evidence from the Tiliviche site (L. Núñez, P. Núñez, and Zlatar 1975). Although these new settlements have not been dated, a perceptible increase in their size can be observed.

Toward 2000 B.C. the various patterns of transhumance still prevailed in the lowlands. The Conanoxa groups (Niemeyer and Schiapacasse 1963) of the Caserones Valley were familiar with the multi-ecological exploitation of varied coastal and interior resources. This may have also been true in Tarapacá; some indicators suggest, however, that the transfer of some highland crops became more intense from this period onward. These experiments bring these crops into areas well within the tropical/semitropical environment.

The presence of a nonagricultural population in an area limited to the lower part of the valley indicates a balance between the productive capacity of the pampa and an outflow of water that was probably higher than at present. Today's landscape is noted for its hyperarid configuration (Galli and Dingman 1961), showing eroded mounds in sparse woodland. If we take into account the gradual lessening of summer

floods, we could conclude that certain important ecological changes have altered a formerly productive environment and turned it into a desert. We must recall, however, that this area experienced a period of mining development for four centuries when the wood available for fuel was used irrationally.

For a while the forest resources of the pampa exceeded what was needed by the gatherers, who did not establish relatively stable camps. The lack of diversity of this environment, due to the irregularity of floods, offers too short a season for gatherers, along with a shortage of drinking water and low temperatures. The inhabitants of the valley proper were more efficient, since they inhabited a more diversified environment of warmer microclimates, very different from the open spaces of the pampa with its marked contrasts.

At the end of the preceramic era, with the progressive evolution of gathering and the first attempts at horticulture, there was less dependence on forest resources, to the benefit of food production. In other words, after five thousand years of intensive gathering, which encouraged the knowledge of vegetable resources, new and more productive forms of activity appeared that led to greater stability of settlement within the valley.

The beginnings of agriculture

The factors that favored sedentation in the lower part of the valleys differed fundamentally from the patterns of settlement in the highlands. We can see in these lowland areas, at an early stage, a balance between the resources of the coast, forest, and valley, with conditions on the valley floor favoring attempts at horticulture.

Within this cycle of exploitation, the ecological diversity of the area changed once some of the later, larger camps, which some would consider macrobands, gradually reduced their range of transhumance (2000 B.C.). Slowly, the more stable Tarapacá camps, specializing in the production of carob bean flour, showed considerable success in meeting the needs of a growing population. The emphasis on full sedentary occupation and production of foodstuffs was already present in those groups occupying the nearby coast about 2000 B.C. It was complemented by new methods of exploitation of introduced, supplementary crops. However, the traditional multiecological approach to resources was still exploited.

From a theoretical standpoint, we can suppose that these local settlements, grouped together in semistable structures, made the first attempts at proto-agricultural work. The chronological distance between the final preceramic and transitory Tarapacá camps (1960 B.C.) and the agricultural/pastoral activities of the Wankarani culture of the Bolivian altiplano, dated about 1270 B.C. (Ponce 1970), is not too significant. Horticulture did not originate in the lowlands, but from this time onward

the productive possibilities of cultigens brought down from the Andes were familiar.

However, there was no radical transformation of the landscape. Smaller groups of early farmers settled in between the woodlands and the slopes of the valley. A short, dense covering of vegetation alternated with *chañares*, reeds, *tamarugos*, and carob beans, with the river water eventually disappearing into the pampa of Iluga. The population grew along the slopes of valley and coast. The rapid expansion of agricultural/pastoral practice from the nearby altiplano encouraged new forms of relationship between man and the environment.

Sometime around 630 B.C., there is evidence in dry country of the cultivation of sweet potatoes, quinua, manioc, and kidney beans on the coast of Laucho, Arica (Rivera 1976), by a population of turban wearers. Other groups, bringing maize, reached the desert coast to the south of Iquique, below Tarapacá, around 890 B.C. (Núñez 1976). The funerary mounds along the Loa (ibid.) and others closer to the Conanoxa Valley (Niemeyer and Schiapacasse 1963), dated at 450 and 320 B.C., were associated with early agriculture and ceramic production, influenced by altiplano dwellers. Together they show a new development of considerable importance: the beginnings of agricultural activities linked to cultural complexity (as indicated by ceramics), which led to the strengthening of genuine agricultural settlements in the Azapa Valley, known as the Alto Ramírez phase. Agriculture and pottery are also in evidence at Caserones (Tarapacá) between 1000 and 400 B.C.

In 1919 Max Uhle proved that groups of "protonazca" people had settled the lower valleys of Arica, south to the Loa, including the Atacama oases. The land they took possession of had alredy been prepared by elementary agriculture. They traveled with llama caravans, wearing their turbans, and exploited the different crops of the tropical and semitropical complex. Penetrating the valley, they chose the Caserones area for the cultivation of maize, pumpkins, calabashes, *poroto* beans, and probably quinua. They exploited oases between Pisagua, on the coast, and Caserones, though much of their time was still spent gathering and hunting camelids on the altiplano. Despite all this mobility, a certain permanence of settlement can be seen at Caserones. Groups seeking permanent settlement converged there. Agricultural achievements were reflected in the growth of the population. By 400 B.C. the first settlers had begun building the village of Caserones: The cemetery contained more than two hundred graves.

The persistent relationship between these communities and the sea explains their continuous mobility while specialized gathering and the production of local crops like maize increased in importance. The staple food continued to be carob bean flour, which regulated their diet and productivity.

In Caserones they began to irrigate the carob bean woods; as production of foodstuffs increased, they built larger, more durable structures. Traditional transhumance slowed down. Here we confront a new

and noteworthy social phenomenon: people showing considerable capacity to achieve complex social organization. The village structure became extensive, with houses grouped together into rectangles with low roofs, solid pillars, and protective walls. Storehouses featured prominently in these constructions. Well-defined crafts can be identified: basket making, weaving, metal working. It is also likely that some parts of the community kept control of lands in other, more distant areas on the coast.

Somewhat later, a second wave of settlement, distinguished by Tiwanaku textiles, engendered an impressive diversification of agricultural production: maize, squashes, kidney and poroto beans, quinua, potatoes, and hot peppers. The amount of red-and-black pottery found increases. Caserones reached the height of its growth toward A.D. 360. By then, techniques of both food production and storage had been mastered. The lower end of the village consisted of fifty-four dwellings capable of supporting a population of some two hundred sixteen inhabitants. It was around these dwellings that the cultivated fields were flooded, with waters retained by dams. Carob beans and maize competed for this acreage; both were stored semisubterraneanly. Both were ground into flour, to be transported by llama caravan.

The new village stored its considerable surplus and enlarged its walled enclosure; this ultimately led to the construction of a new group of dwellings 200 meters from the first. The settlement was by now thoroughly permanent; it depended on the contributions of other productive oases in a region that included the coast. It was from people making red-and-black pottery on the Cañamo coast that the turbaned folk obtained great quantities of wool processed into tunics, bags, blankets, and cloth.

All of this points to the probability that the people of Caserones, carriers of the ceramic tradition of Wankarani–San Pedro de Atacama, may also have introduced new agricultural implements such as the stone hoe. Caserones is also a particularly good example of a village organized as a peripheral "island," whose original nucleus may have been situated on the southern altiplano. Its inhabitants may well have sent their surplus to the center, according to the "proto model" of the vertical utilization of differing ecological tiers. Did this population, which acquired Tiwanaku products only later, form part of a vertical model of colonization, older than has been accepted until now (Murra 1972)? For the time being, such early dating cannot be disregarded.

During the period of most extensive settlement at Caserones there is evidence in the graves of social stratification: Goods in some are more elaborate and richer than in others. During the settlement's later development, only one sample of the Tiwanaku style was found in the tombs. At this time there were also indications of greater diversity in local crafts, pointing to a certain planning of productive activities.

Here we have evidence of a community that was initially self-sufficient, which subsequently produced a food surplus. In its later stages

of development the village was economically integrated into a larger system. This would explain why a large quantity of ground meal was found at Caserones: Both carob beans and maize were abundant, and reserves could be stored and transported over remarkable distances, both uphill and down the coast. Would this explain the presence of Caserones pottery on the coast? How high in the Andes could this surplus be transported? During later stages like Tiwanaku, was Caserones a colony within a larger sphere of interaction, producing what they could not produce in the altiplano? Even if beyond the valley of Caserones land was still not cultivated, people had already "discovered" the land's "wealth."

Irrigated agriculture

Between A.D. 400 and 600 Caserones appears to have lost some of its functions, there being no new occupation during the period known as Regional Development. No other settlement was established in the area after Caserones. Perhaps the flow of the river diminished and prevented the irrigation of the lower valley, thus causing a progressive withdrawal of settlement upstream. There are insufficient data to explain the archaeological silence that follows the early occupation of Caserones. Is it because the aglutinated pattern of the village did not fit the later emphasis on dispersed hamlets linked by caravan traffic?

Instead of attempting to improve harvests in restricted areas, from Regional Development onward the use of land for agriculture stressed geographical spread. Caserones had been built downstream, close to the carob trees of the archaic settlement; it developed by alternating all the available food resources. As can be seen from the map (Fig. 2.1), later villages were established upriver, in the Huarasiña area. The new settlements relied on an extension of a cultivated area, much larger than that of Caserones, through a complex system of irrigation canals. The water catchment now had to be located much further upriver. According to this plan, Caserones remained marginal to the new irrigation system; the development of new land occurred as part of the increasing control of the upper stream.

After Caserones, villages were constructed in nucleated, rectangular groups with better-defined trails following the course of the streams around Huarasiña. Two contemporary hamlets, separated by a wall, seem to indicate a dualistic organization, under the guidance of lords who were increasingly concerned with the production of surplus food for the populations of the desert coast or the altiplano. They maintained social and political links with Arica, Pica, or Camiña.

These later communities obtained their "wealth" from the oases and lower valleys, where they were able to store sumptuary foodstuffs and feed dense peasant populations. In order to preserve a certain level of political autonomy, they remained closely linked to the highlands, including the nascent kingdoms of the altiplano. From A.D. 1000, the

late communities of Regional Development, of the San Miguel or Pica phases, tended to specialize their agricultural production by extensive use of coastal resources. The later villages of Huarasiña form part of this development of local chiefdoms, closely related to the highlands.

The two villages, occupying an area of 9,504 square meters, had a maximum population of two hundred seventy-two, spread throughout sixty-eight dwellings. We should stress that the slopes of Huarasiña and the land that could be cultivated thanks to irrigation originating from the permanent stream skirting the village were skillfully exploited to increase maize yields. The first dwellings were developed around storage facilities designed to protect harvests of maize flour. There was less emphasis on carob bean conservation.

These late villages expanded using the same terraces upstream, toward Tilivilca, where new settlements appear, covering 1,600 square meters, containing twenty-five buildings, and capable of supporting up to one hundred inhabitants, a low density. Once this upstream settlement was completed, the entire course of the river, from Huarasiña to San Lorenzo, was now occupied. At the new site, maize was definitely preferred to carob beans; storage capacity and flour reserves increased, and the settlement shows signs of planning, with wide entrances to the village. The local cemetery confirms that such late habitation sites (around A.D. 1000) were linked to the local Pica culture.

While these three villages were developing, a new pattern of settlement appeared showing low density in areas distant from the focal village. At the hamlet of Challocollo, twenty houses were built using a later technique of double-walled construction. Challacollo funeral rites took place at the edge of the larger cemeteries used by neighboring settlements. Such separation would indicate an apparent autonomy for the tiny settlement; it is unclear if the people were highlanders.

This was a period ideal for the spread of what has become known as the complementary exploitation of a maximum of ecological tiers. It was a period when the foodstuffs grown on the altiplano were combined by a single polity with products of the sierras and valleys. This combination of social organization and economic productivity (Murra 1972) has been given various explanations, but the archaeological evidence is still limited.

This latter expansion occurred after the establishment of a complex system of irrigation controlled by local elites who organized an irrigation circuit, dependent on the lords of the altiplano and on the chiefs of such major chiefdoms on the Chilean side as those of Chiapa, Sibaya, or Guaviña. This unity can be seen at work in the early European period when Francisco Pizarro granted in the same *encomienda* part of the valley (to an altitude of 1,450 meters), along with some coastal sites and highlands near Huarasiña (at an elevation of 2,370 meters). Shortly after, in 1564, the headman of Chiapa (situated at 3,115 meters) defended in court his traditional rights to lands around the Tilivilca-Quiuña oases, located at 800 meters and close to the ocean.

The political authority exercised in the upper reaches of the valley must have been linked to the control of water for the irrigation of the rest of their domain. The lower-lying villages were dependencies of prestigious lords who had their headquarters upstream. This was a sociopolitical relationship, equivalent to a microfederation, that linked the elites of the higher and lower tiers. Demographic pressures may also have forced highlanders to make use of other productive enclaves reaching to the coast.

At this time, all arable land being under cultivation, people were making less use of forest resources, now a complementary food at times of drought or bad harvest. San Lorenzo was now the social and political center and maize the main cultigen; ritual gathering places are indicated by petroglyphs. The valley had attained a hitherto unsurpassed level of production employing specialized farmers, metalworkers, weavers, potters, traders, religious leaders, all of whom lived in contact with the caravan drovers who came from the nuclei of the upper valley. Between A.D. 800 and 1300 there is evidence of a slow increase in demographic pressure.

On the eve of the Inka expansion the lower part of the valley was completely occupied; any population increase would have required a parallel development in agricultural productivity. Otherwise any sizable increase, imposed by Cusco, would have destroyed the ecological balance. It is at this time that we note the enormous enterprise required to construct the terraces we see on the heights of Pachica. Although they received scant summer rainfall, they covered an area of 40,000 square meters and extended up to an elevation of 1,750 meters. The shards found here point to a relatively brief occupation: Growing demographic pressure was forcing highlanders to stress public works even before Tawantinsuyu.

The Inka conquest

In this final pre-European epoch, a new demographic peak was reached around Tarapacá Viejo, at San Lorenzo, with an additional five hundred to a thousand new inhabitants. It is likely that the demographic balance of the region was now altered and that a critical stage in this mode of development slowly created favorable conditions for the appearance of new hydraulic techniques. According to Lozano Machuca ([1581] 1965), Inka engineers and, presumably, local technicians had perfected a revolutionary means of bringing water from across the continental divide by piercing through the mountains to bring west waters normally flowing into the Amazon basin. The aim was to make possible the cultivation of the arid lands of the pampa of Iluga, which had previously been used only at periods of peak flow. The lack of permanent irrigation prevented the establishment of settlements on the pampa of Tamarugal. The new canals not only allowed new settlements; they are also evidence of the extraordinary creative capacity of the Andean world. As far back as

1884, Cañas had stressed the quality of the canals that brought altiplano water to the valley through vast empty territories. At the time of the Spanish invasion, the canal that was to give life to the pampa of Tamarugal remained incomplete.

The Inka built an administrative center in Tarapacá Viejo, reoccupying earlier settlements; the lords of Tarapacá were assigned to use the region in new ways. Although sociocultural patterns of the conquerors were adopted, in most ways traditional production techniques were maintained. The local lords were now made to transfer some of their wealth to food and artisan items; they also had to provide labor for a new mining model. In 1543, some *mitmaq* who had been transferred to Tarapacá earlier were returned to their homes in Tacna (Barriga 1939); this points to a "social surplus" transferred over long distances to make up for local, demographic limits on production. There must have been some loss of local political authority, but the Andean norms of a conjunction between lowland and highland peoples and resources continued to prevail.

The European invasion

The valley was first sacked in 1537, when Valdivia and one hundred seventy Europeans came through; thus began the disintegration of Tarapacá society. The silver mines at Huantajaya and Asino transformed the valley into a staging area. A second sack in 1547 had devastating consequences, but already in 1540 the valley had been granted by Francisco Pizarro to Lucas Martinez Vegazo, who also received the coastal population and the valleys up to Pachica and Guaviña. All this had been ruled earlier by one headman or a pair of headmen: The only name that has reached us is Tuscasanga, whose llama caravans are recorded.

The description left by Lozano Machuca ([1581] 1965) refers to the old project of shifting the waters flowing to the Atlantic across the continental divide. He suggested that Spanish towns be created in the valley, to use the native labor force in the Huantajaya mines. The census records now showed some two thousand Aymara households and one thousand "fishermen." There was talk of concentrating this dispersed population in some new settlement. All eyes were on the mines – a first perception of what turned out to be the tragedy of Tarapacá.

In 1540, Tuscasanga's seat of power was Tarapacá Viejo (facing today's San Lorenzo). It is the only site where Inka and Spanish ceramics are found together; apparently the local elite shared the settlement with European colonists. The new settlement occupied a minimum of 30.15 square meters, overflowing beyond the Inka outpost. In 1600, the valley was incorporated into the ecclesiastical regime (Echavarría [1804] 1939–41), and from about that date the Europeans seemed to be in control of Tarapacá Viejo. Excavation has located bones of European cattle and evidence of wheat growing. Gradually the Europeans occupied other

places in the valley, and the pattern remained stable until 1717, when an epidemic forced the survivors into previously uninhabited lowlands.

Land use changed in colonial times: Maize yielded to wheat, and maize beer to wine; pastures had to be created for the mules; European fruit trees did well. All this was accompanied by a rapid disintegration of the local communities: They lost control of the traffic to the outliers and eventually to the coastal lands. A bare subsistence economy became the norm, and the population thinned out dramatically. In 1699, the indigenous communities of the valley sold their last wheat fields (Barriga 1941).

Export cycles

During the eighteenth century, mining prosperity, the dynamics of commerce, even agriculture attracted settlers of European origin. The valley entered a long period of dependence that has lasted until today. Two cycles of prosperity and decline followed each other, based first on silver and then on nitrates.

San Lorenzo de Tarapacá developed as a real capital of the valley. The mining destiny of the whole region was planned here. The landscape was utterly changed: Agriculture now served the mines, and the forests were cut to feed the smelters. San Lorenzo became the political and cultural capital of the viceregal frontier. An "oasis aristocracy" grew out of silver production, the semiindustrial work of the laboratories (e.g., Tilivilca) flourished, and charcoal burners went farther and farther to cut the cacti they used. A final blow at food production was delivered by the growth of pastures for the transport oxen, though the project of bringing water down from beyond the continental divide was revived once again (O'Brien [1765] 1975).

Toward the end of the colonial period, San Lorenzo had 1,337 inhabitants, 329 of whom were "fit Indians" (Dagnino 1909), devoting themselves to food production for the miners (Barriga 1941). The richest man in the area, a silver miner, lived in his mansion in San Lorenzo. The end of the Spanish regime was a period of crisis: In 1792, some 400 mestizos, *cholos*, Indians, and blacks abandoned Huantajaya.

This retreat permitted the opening of new interests, centered now on the pampa of Iluga: A new space was discovered, occupied by a new resource – nitrates. These had been used earlier for explosives in the mines. Now gunpowder emerged as a product of the Tarapacá Valley, and in 1809 contacts were made with the European market.

Eventually saltpeter became the main use for nitrates. Foreign capital became indispensable; inland San Lorenzo lost its urban hegemony to the port of Iquique. Nitrates became the major export of the new republic of Peru, and a *tarapaqueño*, Ramón Castilla, its president.

In 1876 the census reported ninety-two agricultural proprietors between Huarasiña and Pachica, only nine of whom can be considered "rich." The bulk of the population worked in the nitrate fields, with

one family of Andean origin, the Vilcas, applying traditional labor exchanges to the extraction of nitrates. The valley slopes were depopulated: in 1901 Huarasiña had one hundred fifty inhabitants; only four were left in 1971. At San Lorenzo, fifteen hundred had been enumerated in 1901; there were twenty-three in 1971. No one can now claim the valley; the settlements are already archaeological sites.

Still, ecological conditions in Tarapacá continue favorable. In 1972, the waters of the Tarapacá overflowed and covered the pampa of Iluga. While the few remaining inhabitants were wondering who the proprietors of the new resource were, a new group of highlanders squatted on the pampa and cultivated it, reviving the ancient style of occupying the landscape.

If this process of depopulation continues, leaving the valley a complex of archaeological ruins, and if it is true that both wealth and poverty are the works of men, one ends by asking, Why so much poverty where once there were so many ways of creating wealth?

3
"Horizons" in Andean archaeology

Ana María Lorandi

The process of formation of pristine states is of interest to historians, ethnologists, and archaeologists. Each scholar's experience has encouraged him or her to make a particular selection of the variables, and, on the whole, monocausal proposals have turned out to be as useless as multicausal ones.

I have no intention of going through these schema. Instead, I would like to review some of the features that characterize the central Andean area. These features display two shared conditions: (1) They are very old in the region and recurrent, and (2) the Inka state enlarged their applications to state proportions. Their central features are (1) a system of "archipelagoes," with resettlement of populations over great distances, the *mitmaq*; (2) the role played by technology and crafts, with controls exercised over skilled labor; (3) the hydraulic network and controls over water.

Other processes had a more limited distribution: massive migrations or temporary displacements, episodic but sometimes violent – the result of droughts, even famine, changes in climate, or demographic pressures. Such migrations could be at the root of many regional conflicts and play a role in the development of polities to the point where they may have encouraged pan-Andean expansion.

I make no claim that the variables analyzed here cover all pre-Hispanic features that would explain the formation of the Inka state. They do not exclude some that remain unmentioned. The variables that are discussed are not arranged in any hierarchical order, nor do I pretend to elaborate a model of universal validity.

I do assume the existence of state formations older than Tawantinsuyu, able to achieve overarching multiregional institutions, amenable to central control. Archaeological remains point to parallelisms in their distribution in all three horizons: Chavin, Tiwanaku-Wari, and Inka. It is my intention in this chapter to analyze the degree of cultural similarity among these horizons and to determine to what extent this can be explained by the fact that they may have emerged from similar social organizations.

The variables to be discussed should be considered in a broad context. It is generally understood that the Andean socioeconomic systems were

articulated around *reciprocity* (with an ideological claim to symmetry), made possible by strong, if imposed, kinship ties and *redistribution*, which presupposes the existence of a centralizing power on a variable scale, be it a *curacazgo*, chiefdom, or kingdom (Murra [1955] 1980; Wachtel 1971b; Alberti and Mayer 1974). It would seem that such structures were widespread in the Andes; they constituted the very fabric of relationships of production and redistribution.

Complementarity is another Andean constant. The system of colonization that permits the simultaneous utilization of separated ecological tiers is a consequence of complementarities imposed by geography (Murra 1972, 1978). Such colonization implies almost permanent resettlement of a percentage of the population. At the state level, such resettlement involves large populations, and the historian or archaeologist should not confuse them with other kinds of migrations resulting, for example, from agricultural crises. The latter are likely to be much more violent.

The land in the puna, above an elevation of 4,000 meters, is an ecological frontier. Climatic and archaeological research have shown that the upper limits have varied a good deal (Cardich 1974). The investigations at Lauricocha, Junín, Huancavelica, Titicaca, and Vilcanota indicate that the upper limits could reach an altitude of 4,400 meters for tubers, and that in both the Early Intermediate (200 B.C. to A.D. 800) and the Late Intermediate (A.D. 1000 to 1400). This contrasts with the finding that this extreme zone displays little significant occupation during either of the three horizons; climatic data record unfavorable conditions for the three periods. Between 700 and 200 B.C., during the Chavin Horizon, the temperature was low, a fact confirmed by evidence of drought in cave sediment found by Cardich in 1958 and by the climatological and glacial studies carried out in the cordillera of Vilcanota (Mercer 1977). This glacial increment reached a peak between 800 and 700 B.C., retreating at an apparently constant rate until A.D. 325, when a more stable era began, with much less frost than we witness today.

A second cold epoch has been noted around A.D. 900 during the Tiwanaku-Wari Horizon, at altitudes of about 3,850 meters, particularly in puna areas around Lake Titicaca and also in some valleys of the Ayacucho region (W. Isbell 1970; Browman 1976; Cardich 1977). Finally, Mercer's data for Vilcanota confirm a new peak, a Little Ice Age beginning around A.D. 1320 and lasting until 1600. These unfavorable circumstances in the highlands lasted, with some oscillations, until the last century. As will have been noted, these crises were contemporary with, or somewhat earlier than, the horizons. A parallel occurrence is a rise in the population density on those lands located at altitudes between 3,000 and 3,500 meters.

This is not to imply a cause and effect correlation between ecological phenomena and the horizons. We confront covariating situations, probably mediated by states of war. It is also important to separate such contingent and institutional structures. The criticism voiced by Dollfus

(Chap. 1, this volume) of my own suggestions, and those of Núñez Atencio, are products of this confusion. Crisis situations did speed up colonization pressures, and they even forced migrations, which in some cases led to the formation of new political units. These were built on preexisting structural bases that were not simply invented to fill a new need but were already part of the existing cultural patterns of the polities involved. Hence we are not suggesting that a people, in response to climatic change, would invent productive archipelagoes or any other economic system. We are simply noting the presence of a contingent factor that could affect both land rights and settlement patterns, but we do not mean to suggest that this factor was a cause of the formation of pristine states.

There is no shortage of descriptions of famines in the work of sixteenth-century chroniclers (Murra [1955] 1980; Chap. 1); they report ritual and state measures undertaken to fend off such critical conditions. The state tried to gain new lands at diverse altitudes and latitudes; it also aimed at a technology that would augment the productivity of certain areas through irrigation, terracing, and development of new pasture land (ibid., Chaps. 2 and 3). Such efforts are frequently mentioned for Inka times (Kosok 1959; Núñez, this volume, Chap 2). Duviols speaks of "longitudinal or horizontal systems" that created new productive relations in newly irrigated zones or by connecting separate valleys (Duviols 1974–6). These are among the most significant contributions of archaeology to the study of the state's capacity to face agricultural difficulties. Another reaction was the emergence of workshops in administrative centers or of entire settlements devoted to pottery making or metal working (Morris, this volume, Chap. 5; Murra 1979). All this reveals the interest of Tawantinsuyu in participating in the organization of the manufacturing and distribution of sumptuary and ritual objects, so as to ensure reciprocity with living and deceased lords, and between the people and their gods.

At the beginning of this century, Max Uhle was the first to note that before the Inka, the Andes had been overwhelmed by a major cultural tide that displayed similarities to the monuments of Tiwanaku. Beginning with Moche and Pachacamac data, Uhle elaborated an Andean cultural sequence in which he recognized that before and after Tiwanaku one could distinguish many local traditions, which in turn were interrupted by the Inka occupation (Uhle 1903).

Since that time, such cultural tides, which Uhle called horizons, have been of value, particularly for elaborating chronologies. Wherever one found remains that could be dated by reference to the Tiwanaku or Inka periods, all other cultural manifestations could be placed chronologically. Since 1919, Julio C. Tello had worked at getting recognition for ceremonial centers as belonging to a new horizon, Chavin. In 1924, Kroeber redefined the label and called it a Horizon Style, indicating

that he meant to go beyond mere decoration, to strengthen its value as a chronological indicator (Kroeber and Strong 1924).

During the 1940s, when U.S. archaeology achieved significant influence in Andean studies, we witnessed an ideological and methodological effort to establish criteria for the definition of horizons. Thus Gordon R. Willey redefined and sharpened the notion of what horizons were as concepts by defining them as "specialized cultural continuum[s], represented through an ample distribution of a recognized art style" (Willey 1945). Until well into the 1950s, the definition of a horizon rested on two identifying criteria: the diffusion of an art style, and its value as a chronological indicator. These confined the analysis within rather narrow limits, but given their intrinsic ambiguity they favored certain implications. Eventually some authors identified up to six horizon styles, three of which were the traditional ones and three others that were identified through technical ceramic characteristics.

Later the notion developed that Chavin and Tiwanaku-Wari were, like the Inka Horizon, results of political expansion. It became obvious that during the horizons, the diffusion of particular artistic styles was associated with important structural and economic changes. Still, few studies dealt confidently with the process itself. So far, we are still forced to use rather dispersed materials in order to set up a grid into which new information can be fitted.

The search for archaeological indicators that would confirm or reject the existence of pre-Inka states involves certain difficulties. The almost total impossibility of using the older monographs provokes anxiety, since they centered on chronological relations. Students of settlement patterns did not go beyond the morphological-descriptive level while proclaiming their functionalism. But, of course, we cannot expect these researchers to have found something they were not looking for.

A new generation of archaeologists emerged at the end of the 1960s, more concerned with ecological integration, as well as economic and social systems. Even these, however, were unable to encompass political phenomena, many of which were hidden within kin ties and surfaced only rarely on their own. In recent years, only a few studies have evidenced thorough theoretical, methodological, and technical renewal: They give us a consistent basis to use in verifying the hypotheses under discussion here.

Our reference model here will be the Inka Horizon. This horizon is characterized by the expansion of the following criteria:

1. Administrative centers built following definite architectural norms dictated by Cusco – which did not prevent local adaptations, sometimes extensive
2. The expansion of the road network
3. Warehouses, generally associated with administrative centers or *tambos*, along the roads
4. The distribution of artistic or religious objects, as well as certain tools

and weapons (These artifacts maintain certain rather characteristic relations among themselves but also in relation to objects attributed to the local "cultures.")

The presence of these indicators will help us to identify institutions similar to Tawantinsuyu, even though they can act only as necessary but not sufficient conditions: The administrative and ceremonial centers may once have fulfilled overlapping functions, but with time religious activities prevailed at shrines. The laic centers cumulated two functions: They supervised compliance with *mit'a* obligations in public works and agricultural tribute, and they controlled polities and ethnic groups that had been freed for full-time military service (Murra, this volume, Chap. 4). We can distinguish among these several situations through archaeological study of these sites. For example, we have identified:

1. Ceremonial centers or administrative settlements of some importance, built in areas free of any earlier occupation. This is the case with Huanuco Pampa (Morris 1970; Chap. 5, this volume), whose multiple functions would never be confused with local activities.
2. Cases in which such state centers and the exotic artifacts are partially or completely mixed with local manifestations but where regional traditions are not interrupted and eventually emerge reinforced. A model for this kind is available for the Inka occupation of the Ica Valley (Menzel 1976). The administrative center was installed near the local headquarters; no significant change occurred in the settlement patterns; local art styles persisted and only the tombs of the local elite display artifacts of imperial manufacture; some tombs of Cusco functionaries show nothing but imported objects).
3. Situations in which we note major changes that endured even after foreign domination was lifted. One should probably distinguish two different kinds:

a. Valleys emptied of their aboriginal inhabitants by the Inka – such as Cochabamba (Wachtel 1982) or Abancay (Espinoza Soriano 1975) – and populated with colonists from many different places. In such cases, the pre-Hispanic occupation was short, and the colonists were farmers. Whatever archaeological testimony they left will seem confusing to the investigator; one may or may not find pottery with hybrid characteristics; there was no local elite to leave behind significant homes or burial monuments although it may be possible to locate houses or cemeteries for the local representatives.

b. Cases where significant changes are noted in the local tradition but where the data available do no permit drawing a clear distinction between (1) state-sponsored colonies; (2) outliers of independent polities; and (3) migrations followed by new, permanent resettlement. At different times in its history the Viru Valley would provide examples of such distinctions.

The Chavin Horizon (800 B.C. to A.D. 200) reached from Lambayeque to Ica on the coast, and along a comparable reach in the highlands. Two kinds of settlements deserve some notice: (1) ceremonial centers, and (2) rural or maritime installations, some of which may have had their shrines.

If the Chavin expansion was really the result of or the origin of a process that allowed the emergence of centralized state organization, the so-called ceremonial centers should have fulfilled functions similar to those of Inka administrative nuclei. A centralized state needs a seat of government that can also serve as a ceremonial place, a cosmogonic knot of the known universe. During the first millennium B.C., in the northern Highlands, Chavin de Huantar was a central place where many complex and sumptuous temples were built. Other contemporary places show partial reproductions of the Chavin plan: The Middle Las Haldas temple reproduces the sunken patio and the stairway of the Chavin de Huantar temple plan (Matsuzawa 1978; Lumbreras 1977). Even more notable similarities can be perceived in the ornamentation of the temples, whether they are carved in stone or made of stucco – as seen in the shrines at Cerro Blanco in Nepeña, Mogeke in Casma, or Kuntur Wasi in Cajamarca.

One should recall that the building of ceremonial centers is ancient in the Andes. Pacopampa (Rosas and Shady 1974), Kotosh (Izuma and Terada 1972), or Las Haldas (Matsuzawa 1978) testify to long-standing tradition, which in the case of Kotosh reaches back to 1840 B.C. Ample previous experience with the political, social, and economic potentialities of ceremonial centers would explain the Chavin emphasis on the construction of temples and the enlargement of existing ones. More than just an innovation, we are dealing here with a maximizing phenomenon that we deem characteristic among a state's functions. The iconographical similarities point to a statelike model and justify the hypothesis that these centers were part of a controlled and coordinated network. This is shown by spatial relations and the economic complementarities existing between the valleys of Nepaña and Casma and their highland counterparts (Ravines and Isbell 1975).

The literature is less explicit when dealing with the artifacts. One hears talk of objects decorated in the Chavin style or one similar to it – to the point where it is difficult to distinguish between imported pieces and those manufactured to Chavin standards. Some of the confusion is also due to the fact that different names are used for similar types of objects. Several quite different decorated wares found in the galleries of the temple at Chavin have been grouped into a "Chavin complex" (Lumbreras 1974). These can be found separately in different parts of the area of its expansion. The Ofrendas type of pottery appears in Ancón and is reproduced in the iconography of the Garagay murals. The kind of ceramics called Wacheqsa by Lumbreras may be the same as that called Cupisnique on the coast (Larco Hoyle 1945).

When dealing with the Ocucaje ceramics from the Ica Valley, it has

been possible to distinguish a regional interpretation of the Chavin style. In this one case, Chavin iconography was integrated within the technical resources characteristic not only of the southern coast but also of the contiguous highlands. They all were integrated within related traditions that reached to the shores of Lake Titicaca, without absorbing Chavin influences. Despite its indisputable local affiliations, the sequence noted in the grave lots allowed for the establishment of a sequence of changes in the sculptured art at Chavin (Rowe 1962). If the rhythm of change was the same at Ica, at the very southern border of the horizon, and also at Chavin, the probability that the one depends on the other is high.

Highland ceremonial centers were also places at which artifacts of high ritual and social value were accumulated and from which they were distributed. These centers may also have been workshops. Several notable technical advances in metal working and in the manufacture of textiles and ceramics took place in Chavin times. The subterranean galleries of the temple at Chavin may well have been workshops and storehouses, not only places of worship. These functions are hard to separate at the present state of our knowledge. It is probable that each cell's occupant in the gallery of the *ofrendas* had a different function. Lumbreras's description reports:

> In the first cell, most of the objects were bottles of 4 [named] kinds; cell no. 3, almost all of the fifty or so were bowls or plates; bottles and jars in nos. 5 and 7; in cell 6 almost all were red, plain jars, whereas in no. 9 there was almost no pottery, but we found mortars and stone vessels.

Elsewhere, Lumbreras gives some additional details:

> In most of the plates and bowls we found remnants of food, particularly the hams and ribs of camelids and deer, birds, guinea pigs, fish, and mollusks (particularly Mytilus sp.); the bottles and pots probably contained corn beer. [Lumbreras and Amat 1965–6; Lumbreras 1977]

This distribution reminds us of the workshop section described for the Mochica city of Pampa Grande in the Lambayeque Valley (Shimada 1978).

These cells, connected by corridors but separated from other galleries, remind us of those described for the Huaca del Dragón, a temple (or palace) but also a workshop-warehouse of the Moche-Tiwanaku period (Schaedel 1966). It is conceivable that the artisans were prisoners, and we might be able to determine this if we could establish a relation between the murals of the Huaca and its functions. These prisoners were at work making wooden and Spondylus shell figurines as well as other ritual objects. The existence of captives in the Chavin galleries is evoked by archaeologist Mariano González, who gave the name of Galería de los Cautivos to one of the galleries (Lumbreras and Amat 1965–6). What

should be noted is the presence of many objects and fragments of Spondylus, Strombus, and Mytilus in both Chavin and the Huaca del Dragón.

The earliest occupations of the coastal valleys were apparently concentrated near the sea. Movement to the upper valleys may well have had only local purposes but may also have resulted from Chavin policy. One problem that remains unsolved is this: Were the coastal dwellers climbing, or were the highlanders descending? It is even probable that the two movements were convergent, maybe even generating conflict. Whatever the ethnic affiliations of the middle sectors, it was a recent incorporation that may well have been the result of a process planned at Chavin.

Until quite recently, the degree of agricultural and technological development of Chavin was underestimated although the claim that maize was introduced at this time is rather old: Maize first appeared at Las Haldas in Chavin strata, and it may turn out to be even older (Matsuzawa 1978). If irrigation canals also date from this period, the events that occurred then could be explained as maximizing, not innovation. Canals are so readily visible that they may have been recorded long before other contemporaneous traits.

This is also confirmed by the frequent presence of fish and seafood in highland refuse, which points to exchange networks of unknown extent. Many details suggest the possibility that Chavin was capable of organizing the first great system of archipelagoes.

The puna presents a contrast with both the coast and the tiers at some 3,000 meters: Few Chavin occupations are found there. The herders at high altitudes may display some Chavin materials, but we cannot specify whether these were ethnic or ceremonial Chavin outliers. At Pacopampa, Chavin refuse shows an increase of camelid bones (Rosas and Shady 1974).

It is still premature to certify evidence of the presence of archipelagoes in Chavin times, capable of providing the revenues of a state. Some forms of colonization are difficult to distinguish from contingent movements. Some northern coast valleys, like Moche or Virú or Chicama, may have been occupied by mountaineers, who at a later (post-Chavin or Early Intermediate) time would create independent polities. Such an occupation may have begun in Chavin times, as shown by some of the vessels excavated by Larco Hoyle in a Virú cemetery. According to this author, they showed Cupisnique designs on coastal Chavin vessels or Recuay traits on a highland container, apparently later in date (Willey 1953). It is still difficult to evaluate the impact of highland agriculture on the coast.

In summary, the existence of a large Chavin archipelago in the highlands appears to be proved. Nevertheless, it is still to be established whether any part of this large system was dependent on a central authority located at Chavin de Huantar. Such centralization is documented by stylistical features, and the model they suggest is not very different

from the Inka one. In my opinion, the amount of positive indicators favoring a centralized polity are sufficient.

The economic development promoted during the Chavin Horizon was not interrupted when such ceremonial centers lost their hegemony. Between 200 B.C. and A.D. 1, small polities continued to compete for water and land. If war seemed absent during Chavin times (was Pax Chavinensis somewhat like Pax Inkaica?), it was prevalent now: Equilibriums had become unstable, and frontiers had changed. Around A.D. 400 some of the polities had grown and could dominate their neighbors. Both the Mochica in the north and the Nazca on the southern coast formed chiefdoms or even kingdoms encompassing several valleys. Toward A.D. 600, similar polities emerged in the mountains: Tiwanaku and Wari. Such polities pursued policies of colonization on the coast quite early (Menzel 1964; Rivera 1976). For whatever reasons, at this time it is plain that sierra and altiplano shared a common religion and a similar iconography that led to a Middle, or Tiwanaku-Wari, Horizon.

We note the presence of two expansion centers, maybe two capitals. Tiwanaku was essentially a ceremonial center, even though Ponce Sanginés found traces of dense populations in the lacustrian countryside (Ponce, n.d.; Browman 1973). Wari, on the other hand, was a complex urban center with many residential buildings, cemeteries, warehouses, public plazas, and aqueducts (W. H. Isbell 1970).

Tiwanaku expanded along the altiplano and its eastern and western slopes, reaching the coast of Chile. Wari moved eastward toward Cusco and toward Sicuani to the south (Rowe 1956); it installed colonies at Nazca, with whose lords it probably maintained complementary relations. Eventually this influence spread to the central coast; in the highlands it reached to Cajamarca, where it built Viracochapampa, an important urban and administrative center. About A.D. 700 to 800 Wari had to begin sharing its authority with Pachacamac, on the coast (Menzel 1964).

The first suggestion offered by this short account is that the Middle Horizon was the result of a threefold expansion. The archaeological evidence of influence within the area of each of the three capitals indicates that, despite the common iconography, we confront here the existence of three politically independent centers.

Tiwanaku was solidly installed around Lake Titicaca; here the urban settlements were dependent on the capital (Browman 1973; Hyslop 1979). Within the area of Tiwanaku expansion, Late Intermediate ceramics were derived from Tiwanaku types. This may be an indirect but valuable hint that Tiwanaku could mobilize people, install colonies, and thus bring most of the altiplano's population within the reach of its authority. There are some places on the southern puna where there is no trace of any pre-Tiwanaku occupation. It is quite possible that such territories on the Bolivian–Argentinian border were colonized only at this late time.

Such a process had different connotations in the area of Wari influence: Here there was an old urban tradition, a body of six hundred years of urban experience. Artisans, independent of the rural countryside, are a feature of this experience; this may well imply dependence on their lords. Full-time efforts by artisans favored technological development and the massive production of objects. Such elegant artifacts were warehoused in secondary centers and circulated along networks of lordly reciprocity, encouraging a growing social differentiation. The warehouses used to store such artisanal efforts require excavation (W. Isbell 1970; 1978), since we do not know if such storage was independent of the cumulation of tribute. One aspect that clearly distinguishes Tawantinsuyu was its capacity to tolerate a separate, ethnic warehousing organization not liable to tribute (Murra [1955] 1980).

Several authors agree that in Middle Horizon times the central highlands went through an agricultural crisis (Menzel 1964; W. Isbell 1970). This may explain the intensity of colonization from 650 to 700 in less affected areas along the central and southern coasts. Highland ceramics of Chaquipampa type B expanded to Acari, Nazca, Cañete, Lima, Ancón, Chancay on the coast or to Huancayo and Huaraz in the highlands. This testifies to relations of privilege and prestige between Wari and the local elite; the association is similar to those prevailing in Ica tombs during Tawantinsuyu.

To overcome the difficult conditions mentioned, Wari may also have attempted to colonize distant *jalcas* in the northern highlands, where climatic change was less extreme. In the valley of Chotano, at 2,900 meters above sea level, there is a settlement called Surco. Its tiwanacoid pottery is related to the *cursivo* of Cajamarca and to the black wares of coastal affiliation (Shady and Rosas 1977). These vessels were locally made and can be seen as regional interpretations of tiwanacoid iconography: There are no imported ceramics. The interpretation offered by the researchers who studied this site is that we are confronted with a multi-ethnic colony, located in Cajamarca but revealing ties with both the coast and the highlands. One can also imagine that Surco was a colony allowing Wari to overcome a climatic impasse, though this hypothesis is weakened by the absence of any imported artifacts. However, one should recall that none of the great *mitmaq* establishments like those of Abancay or Cochabamba have been excavated so far. We still do not know if any imperial ceramics were associated with such colonizing ventures.

As much as Wari, Tiwanaku expanded beyond Lake Titicaca, in archipelago patterns. This was a period when the establishment of colonies was expanded, since the nuclei enjoyed sufficient power to implant but also to maintain them, along with the network of communications. As a fully altiplanic kingdom, Tiwanaku controlled droves of llamas, which ensured the circulation of goods between the lake and the colonies. We cannot determine whether the smaller herds available to Wari affected its reach (Browman 1976).

The topic cannot be considered exhausted without mention of Pachacamac. The evidence is confusing: The pottery is frequently described as tiwanacoid, although very few specimens are imported. It may be a good moment to recall Schaedel's point (1966) that at Huaca del Dragón the most intensive settlement coincides with tiwanacoid periods in the valley of Moche. Schaedel thought that the Huaca could have been a production and storage center on the route between the guano islands in the Pacific and the warm waters of Ecuador. María Rostworowski has stressed the importance of these ties.

Before leaving this topic, we may well consider the following hypothesis: Instead of being a polity with its center either in Pachacamac or Wari, the northern coast may have been integrated through a commercial network that monopolized the circulation of certain sumptuary goods. Such a trading polity need not have displayed methods of domination and control with which we are familiar from the later Twantinsuyu.

Meanwhile, it is still early to affirm that Wari was a pan-Andean state, capable of organizing a multi-regional state enterprise. But it may well have set the bases for the coordination of highland archipelagoes and coastwise traffic.

PART II
The ethnic group and the state

Built up through successive conquests of many and diverse ethnic groups, the Inka state continued to utilize preexisting Andean institutions. It looms as the supreme polity, crowning all the embedded and pyramidal ethnic structures it had incorporated. Kin ties and ethnic solidarities, the promises of assymetrical reciprocity and redistribution, were all systematically reutilized as ideological disguises justifying new social relations. A qualitative threshold was crossed as the Inka state expanded: The development of a state apparatus, with its own dynamic and logic, suggested by the increase in the numbers of *mitmaq* colonists, *yana* retainers and *aqlla* weavers – all separated from their ethnic base. Do we merely imagine the risk and fundamental challenge that we detect in this change?

Thus the perspective changes, depending on whether one's study centers on the organization of the state, viewed from above, or whether one observes from below the more accessible ethnic groups or older polities. We mentioned above the disappointing awareness that our understanding of the Inka state has not kept up with the rhythm of information concerning other Andean institutions. Marcos Jiménez de la Espada, who died in 1898, has had no successor as a locator and editor of unfamiliar eyewitness sources. Waman Puma's "letter to the king" of 1615, published by Paul Rivet in 1936, has been reprinted several times; in 1980 a critical edition, with translations of the texts in Quechua and the indexes to facilitate its use was published in Mexico.

Numerous major topics remain unstudied. What was the organization of Andean modes of production? To contemplate an answer one would have to take up the still forbidding task of unraveling the multiplicity of rights in lands and waters that were to be meshed when scores of ethnic groups had to articulate their bundle of privileges with the model imposed from Cusco. The protocols of litigation during the early decades of the colonial regime have provided some revealing information. Also high on the priority list should be the system of weights and measures used in Andean agriculture. Despite the pioneer work of María Rostworowski (see her 1964 article in the *Revista del Archivo Nacional*), we still lack systematic studies of this dimension of the modes of production.

Our understanding of the solar cult and other religious institutions

promoted by the Inka state is in no better shape. Although the researches of Franklin Pease have opened certain doors, on most topics dealing with the state religions we are still repeating the vocabulary and the information of the early chroniclers. Archaeology has not known how to take advantage of the fact that so many of the installations of the solar cult were still standing and identifiable. Many other matters (the decimal system attempted by the Cusco administrators, the presence or absence of marketplaces) are still at the stage where Louis Baudin left them in 1928, sometimes even Heinrich Cunow in 1890.

This second part of the book offers some suggestions in an area most of which is awaiting serious research. J. V. Murra looks at the twins of war and rebellion as a way of studying changes in the organization of Tawantinsuyu's army (Chap. 4). Craig Morris (Chap. 5) and Jean Berthelot (Chap. 6) indicate how much archaeological or archival work can reveal about such fundamentals as the statewide storage policy or mining. Again, one notes that Inka archaeology, though the most accessible, is also less active than that of earlier horizons. And mention of mining reminds us of the forthcoming study of metallurgy and other technologies edited by Heather Lechtman and Ana María Soldi, which will fill out some of the gaps in the present collection.

Finally, one should note the interest provoked by the researches of Frank Salomon (Chap. 7), who offers rich new materials about the northern frontiers of Tawantinsuyu. This was the locus of rebellions at the very moment when the Spanish hosts broke onto the Andean stage.

4
The expansion of the Inka state: armies, war, and rebellions

John V. Murra

Some years ago the Swedish historian Ake Wedin urged us to reject Rowe's chronology of Inka expansion, which claimed that Cusco rule had expanded and was destroyed by the Europeans, all in less than one hundred years (Wedin 1963).

John Howland Rowe's evidence, marshaled more than thirty years ago, seemed convincing then, became the conventional wisdom, and continues to be persuasive (Rowe 1945).[1] Many of us active in the Andes did wonder how such a vast polity, incorporating scores if not hundreds of separate ethnic groups, spread out over more than 4,000 kilometers, could have been welded together in less than a century. Wedin stressed the lack of any occidental precedent for such rapid expansion; he also voiced his skepticism at the claims of Inka oral dynastic tradition recorded less than twenty years after the European invasion.[2]

An indispensable component of this incorporation has been stressed, if in preliminary form, by Paul Kirchhoff (1946). When undertaking the expansion, the kings of Tawantinsuyu, the Inka state, were heirs to an experience of statecraft going back centuries, if not millennia. Wari, Chimu, Tiwanaku – all were pre-Inka states, and archaeology gives us no reason to assume that even these were the earliest complex, stratified societies of the region. How to incorporate and then govern disparate linguistic and ethnic groups was part of the political repertoire of thousands of local Andean lords well before A.D. 1000.

All-important in the eventual expansion of Cusco rule to the north, south, and west was one experience shared by many societies in the Andes: If an ethnic group had its productive and power nucleus within the puna region (above 3,200 meters, with pastures reaching to 4,500 and even 5,000 meters), it found it indispensable to complement its tuber, *quinua*, and pastoral wealth with the productive potential of lower valleys. Both to the east and to the west, maize would ripen under field conditions in *qhishwa* valleys. Beyond, even lower, lay *yunga* regions, dry to the west[3] and humid to the east.[4]

By controlling the resources of so many outliers through caravan traffic connecting permanently settled kinsmen, the highland nucleus expanded its productive capacity significantly. Trade was marginal, and no trace of marketplaces has been found in the central and southern Andes.[5] In managing this complementarity, the ethnic lords acquired

governing and military skills, coordinating people and their energies even if these were located five, ten, or more days away from the center. Very early this translates into political experience in how to handle competing highland polities, since the camelid caravan routes linking the centers with their respective colonies crossed and recrossed. The threat of desert pirates was constant. Facing each other's claims to the maize, timber, coca leaf, or fish on the lower tiers, busy managing both caravans and the pirates preying on them, ethnic leaders and institutions emerged that knew how to administer a multi-ethnic landscape. Temporary hegemonies flourished but then collapsed. Frequently the precious outliers had to be shared by several highland polities in tense, temporary truces (Rostworowski 1967–8; Murra and Morris 1975, pp. 67 and 81–5).

The centuries immediately before 1438, before the Inka, were particularly tense for reasons (climatic and demographic changes) that the archaeologists are now unraveling (see Lorandi, Chap. 3, this volume, esp. the bibliography). The Andean writer Waman Puma ([1615] 1980), called those centuries *auca runa*, the age of soldiers, a time of wars. Archaeologists describe it as the Late Intermediate, a period when local traditions reasserted themselves after the collapse of the earlier Tiwanaku-Wari integration. Highlands and puna seem to have been part of a universe in which war was everywhere:

> The good settlements were depopulated in fear of war and uprisings and agreements that prevailed among them . . . And they went to settle on the heights and mountains and ravines so as to defend themselves, and they began to build fortresses . . . They built walls and enclosures, and the houses were inside . . . hideouts, . . . and many died . . .
>
> They even took captives and kidnapped their women and children and grabbed their fields and water ditches and pastures . . . and carried away even their grinding stones.[6]

At this time, the largest highland polities recorded by the oral tradition were of the order of twenty thousand to thirty thousand households (the Wanka of the Mantaro Basin, the Chincha on the coast, the Lupaqa at Lake Titicaca). The probability is high that around 1400 the Inka population at Cusco was of a comparable size. When the expansion began, the drive was fueled by what they perceived as a need for new subjects, new productive energies – only now the outliers could be located farther and farther away. One should not dismiss the claim of Andean writers such as Garcilaso that an effective part of the Inka ideological effort was their assertion that conquest by Cusco would bring protection.[7] The new Pax Incaica regulated auca runa violence and redirected it to Tawantinsuyu's periphery.

The major leap made from Cusco expanded the realm to several million souls; it spread from Carchi to Cochabamba and Atacama, from the Mapocho River to Túmbes. According to the oral tradition it took

only three kings, ruling between 1438 and 1530, to spread the fear of Cusco everywhere in the Andes. According to one of the witnesses of the invasion,

> We should note that according to the elders not even ninety years had passed since this land had become subject to a prince, and they recall and can list all the princes they have had, and although they had no writings they can bring things gone by to memory with certain cords and knots.[8]

The articulation of hundreds of separate ethnic groups into a single state was successfully undertaken by the Inka using time-tested, already existing Andean solutions. The Inka did not undertake the consolidation of each expansive step; given the dispersed nature of Andean settlement, their initial aim did not require a thorough control of every pocket and valley on their route. The striking force could move swiftly, leapfrogging over nuclei of resistance, particularly as "they did not have to face universal resistance, since each province defended its lands without receiving anyone's help, because they were *vehetrias*." (Polo [1571] 1916: 51).[9]

As a first strategic step, the Inka confirmed each ethnic group as a separate administrative unit. The ethnic lords, interviewed by early European observers, were unanimous that everywhere local government had been left in their hands. Marriage alliances reaffirmed the personal tie of each local lord to his royal peer:

> He gave a lady of his own lineage in Cusco to each one. She was to be the principal wife of the local lord, . . . and the sons born of her were to inherit their father's estate and lordship. Inka Yupanki [Pachakuti] relied on the kin tie established in this way to prevent any rebellion.[10]

In turn, the Inka accepted the daughters of his new allies for his harem.

Thus indirect rule and dynastic kinship ties facilitated expansion. If resistance arose, the rebels could always be moved to safer, inland zones and their territories inundated with permanent settlers from the center, on the age-old Andean model of archipelagoes (*mitmaq*, in Quechua), now promoted to state policy.

However, this imposition and attempted justification of Pax Incaica did not convince everybody. The "natural lords" of each polity were aware of opportunities for rebellion. Whenever the headquarters of the sovereign were at the opposite end of the elongated realm, the temptation to try going it alone must have been strong. The institutionalized wars of succession following the death of each king also provided, as in Rwanda or Ashanti (Arhin 1967; Kagame 1952; Vansina 1962; Wilks 1975). a new opportunity for a structural challenge to Cusco. The dynastic oral tradition records that soon after the Aymara of Lake Titicaca had been incorporated into Tawantinsuyu, the Inka king seemed to be in trouble east of the Andes. It looked like an opportunity for several Aymara lords, who

. . . from Vilcanota south, on both sides [of the lake], agreed in the greatest secrecy to rebel and not remain under the rule of the Inkas . . . It was a shame for all of them, their forebears having been free, . . . to have yielded to a single lord so many and such great lands, . . . and since they all hated the power the Inkas had over them . . . they gathered at Hatun Colla and at Chucuito . . . and took an oath according to their [pagan] blindness, . . . and then they killed the governors and the delegates [of the Inka] and many of royal blood who lived among them. . . .

The news of the rebellion of the Collao spread throughout the kingdom, [but] the Colla were defeated, and many men as well as women were taken prisoner.[11]

This oral tradition also reflects an apparent contradiction in our sources: Rapid incorporation into Tawantinsuyu is recorded as frequently as the urgent need to reconquer, to defeat again and again ethnic groups listed as already inside the porous frontier. Recent restudies of the ninety-year history of the Inka convince us that rebellion and rapid expansion were both facets of the same process.

The challenge of growing populations, ever-widening territories, and perennial uprisings led to changes in the structure of the Inka state that can be best understood by focusing our attention on the evolution of the army (Murra [1955] 1980, Chap. 8; Murra and Morris 1975, article 3, pp. 109–15).

The earliest hosts were recruited on the universal Andean principle of the *mit'a*, a cyclical rotation: Whatever the local ethnic group, its lord, and eventually the Inka needed done was performed for their benefit by sending lineage after lineage, the second moiety spelling the first. The community's and its authority's fields were cultivated, its houses and palaces built, the roads and the irrigation ditches repaired, and its military forces renewed by sending one's quota of men and women. The military mit'a arrived at the appointed place under the command of its own ethnic leaders, armed with its own traditional weapons: "They fought with only one kind of weapon, and thus they were allocated to units according to the arms they wielded," and "They marched divided into several squadrons according to their provinces and nations, each observing the order of their seniority."[12]

While on campaign such troops were fed with sumptuary food from the state warehouses along the royal road. The oral tradition promised opportunities for booty; a guarantee of two garments per turn of fighting seems to have been universal. We read of mutinies by troops who did not receive their maize and textiles (Montesinos [1644] 1957, Bk. 2, Chap. 10, p. 58). Overall command remained in the hands of the royal kinsmen, "since they did not trust any others."

The proportion of the population recruited for war via the mit'a is still difficult to quantify. Subsistence needs had to be taken into account; the percentage must also have varied with the importance of the cam-

paign and the proximity to the battlefields. María Rostworowski has stressed that not every ethnic group provided its quota: Some coastal populations were not considered trustworthy (1977). Their biological fitness to fight at an elevation of 3,500 meters may also have been a factor.

Recent research allows us a quantitative approximation: The Chupaychu of Huánuco, who were almost 4,000 households, reported providing "200 guards" against the Chachapuya, living to the north; 200 more were "guarding" Quito. On the royal highway, 68 more were stationed at the regional administrative center nearby. We read that elsewhere on the same *khipu*, the Chupaychu also owed "500 . . . who went with the king in person to Quito and other places" (Ortiz de Zúñiga [1549] 1967: 306–7). We cannot tell how many of these 500 had already been enumerated with the 468 knotted onto the cords mentioned above. It seems a heavy burden to provide at any one moment a military mit'a of 1,000 fighting men out of 4,000 households. One factor to take into account: Andean armies included both women and men, so the proportion drafted may have been a pair or a couple from every 8 households.

There is only one other instance where a quantitative hint is offered: At Lake Titicaca, the Lupaqa, who claimed to have been 20,000 households, reported sending 6,000 soldiers (the proportion of women to men is again unknown) to the same wars "of reconquest" on the northern frontier. "The said war lasted twenty years, . . . and only one thousand people out of the 6,000 returned" (Diez de San Miguel [1567] 1964: 106). In either case, even allowing for rotation, the proportion drafted was obviously quite onerous.

In evaluating the weight of this prestation, one must recall that the 4,000 households in the first case and the 20,000 in the second continued to provide the state with many other *mit'ayuq*: 200 Chupaychu men and as many women were reported to have walked annually all the way to Cusco to "make walls," and 400 others "planted fields" there. Twenty more went "to guard the body of [King] Guanacava after he died," and 400 did high-quality weaving. Among the 20,000 Lupaqa, a large, unspecified number also built walls in Cusco; 100 youths went there singing, carrying the first quinua of the year; still others tilled the king's acreage and guarded his herds (Diez de San Miguel [1567] 1964).

At some point in the administrative and military history of the Inka, the principle that soldiering was to be a routine part of the mit'a became a burden. One can speculate that the obligation to bear arms (but only on rotation); the right to use only familiar weapons, and the continued allegiance to one's own ethnic lord in wartime may all have been seen as inefficient from Cusco's point of view. The army was increasingly fighting far from the soldier's home base; the countryside was unfamiliar; rotation, lineage after lineage, was difficult to enforce. The Inka chose a solution by which certain ethnic groups were henceforth excused from any other duties and assigned to provide only fighting men, recruited

according to criteria of bravery that ignored mit'a rotation. Their descendants testified in 1582:

"We are the four nations, the Charcas and Caracaras and Chuis and Chichas, distinguishable according to clothing. We have been soldiers since the time of the ingas, called Inga Yupangui [Pachakuti], and Topa Inga and Guaina Capac . . .

"We were only soldiers . . . excused from tribute, . . . and all the other taxes and personal services like herding of cattle . . . or from serving the mit'a at the court in the great city of Cusco, and from being masons, weavers of cloth, . . . and from farming, carpentry, and quarrying – people accustomed to move a hill by hand to some other place . . . We were not dancers, nor clowns accustomed to sing victory songs to the said ingas."[13]

The Charka were an Aymara-speaking group who lived in what today is Bolivia. The wars in which they fought comprised the same battles, in the northernmost part of Tawantinsuyu, mentioned by the Chupaychu and Lupaqa informants. The difference consisted in the many prestations these groups continued to provide beyond the military mit'a; in contrast, the Charka and their neighbors were exempt from all duties but fighting:

"We enjoyed this privilege in order that all [our] people would be very successful in war . . . and to honor them, and in lieu of [other] rewards for their services, . . . they called them first-born sons and seniors in their kingdom, as is public and well known to all."[14]

At the end of such campaigns the Aymara returned to their altiplano homes. We cannot indicate at this time what the consequences of their protracted military service may have been on domestic food production or other subsistence activities. Elsewhere in the Andes, the lands of soldiers on campaign were worked for them by their kinsmen who had remained behind. One assumes that something similar happened among the Charka and Karakara, though prolonged absence must have put a strain on kin-based reciprocities. Probable solutions may have included limits on the proportion of those absent and on the number of harvests a soldier could miss, and possibly new methods of enforcing what were earlier traditional obligations.

An interesting if not conclusive confirmation of the Charka claims emerged in 1976. Nathan Wachtel located a detailed description of how the Cochabamba Valley had been cleared of its aboriginal inhabitants to allow its full-time dedication to large-scale production of maize for the Inka army (Morales 1977). The emptied lowlands were not resettled on a permanent basis, as one would expect on the classic Andean model. The valley was divided into four quadrants, each containing fourteen to sixteen strips, "from cordillera to cordillera." Each strip was assigned to an altiplano group that sent some of its members in rotation, to plant and harvest the maize. Most of the ethnic groups charged with the new mit'a were Aymara speaking (including again the Lupaqa), coming from as far away as Lake Titicaca in the north and the Atacama oases to the

south. Missing from the list are the military specialists, the Charka and the Karakara, even though they lived closer to Cochabamba than many of those listed.

If this exclusion is confirmed by further study of the Cochabamba case, it will verify their claim to have been "reserved" from any civilian duties. The seemingly endless campaign to "reconquer" the peoples in the north, beyond Tumipampa (see Salomon, Chap. 7, this volume), had encouraged the Cusco regime to innovate: It "freed" a few Aymara polities such as the Charka from all but their military prestation, at the cost of losing their other services.

Even before it was discarded, the mit'a had obviously been stretched far beyond its original functions and meaning. Duties owed to one's ethnic and kin community had been extended centuries before to include one's ethnic lord, who in return was supposed to make sure that one's access to strategic energies and goods was enforced.[15] Even if one was assigned on a permanent basis to a distant ecological tier, one did not waive one's social, economic, or ceremonial rights in the home nucleus (Murra and Morris 1975, article 3, pp. 79–80). But the farther away the outlier settled or the longer one's absence on the northern front, the harder it was in practice to exercise and enjoy this right (ibid., pp. 109–15). Although it endured for some of the conquered people, the mit'a could eventually be discarded or ignored for others.

Another innovation accompanying expansion challenged the ethnic principle. Under Inka rule, most ethnic lords continued (when they were not contemplating rebellion) to have an important role in providing mit'a contingents. Their traditional enmities lingering from auca runa times; their differences in power, ability, even in the size of their respective populations – all were factors in continued Inka success. Cusco insisted that each group be readily identifiable through headdress, cranial deformation, and other diacritical marks.

But this need to divide came increasingly into conflict with administrative and military efficiency. At some point, the knot system of the khipu was tried out as a decimal grid, forcing ethnic and kinship groups into a new, less random, more "rational" pattern (Wedin 1965). Thus, the Chupaychu of Huánuco were awarded three hundred households of Q'iru only a few years before Pizarro's invasion. A new decimal, nonethnic border was drawn, depriving a neighboring group in order to fill out one of the subdivisions of a thousand households each.[16] Similar tampering with ethnic borders is reported from elsewhere (Rostworowski 1972). It is unclear how recent this rationalization was: Its application did not cover all of Tawantinsuyu in 1532. In the southern half, in the Qollasuyu and Kuntisuyu quadrants of the state, many local sources never use the decimal vocabulary.[17]

While they were mired in the northern campaign, the Inka took still another major step away from the rotational, polivalent mit'a. Only twelve years before the European invasion, they converted yesterday's rebels, the Kañari, into privileged military partners. The Charka soldiers

reported ruefully that the Chachapuya and Kañari rebels they had fought for so long, and with so many casualties, on Cusco's behalf were now coopted and promoted to enforcers for the winning side (Espinoza Soriano [1582] 1969: 24–5).

Though recruited along ethnic lines and still expected to grow their own food, the Kañari troops no longer returned to their homes once the campaign was over. An as yet undetermined proportion of them were permanently removed from their territory and resettled in the Yucay Valley, near Cusco, which, like Cochabamba, had been emptied of its aboriginal population. Most of their time was now to be devoted to royal and army matters. Freed from mit'a obligations to their own lords, all that was left of their Andean obligations was the cultivation of their own newly granted acreage (Oberem 1974, 1976a, 1976b; see also Pérez 1962).

Such freedom from mit'a rotation matches that of the *yana* retainers, separated from their ethnic base and dedicated to full-time service to the crown, and that of the *aqlla*, women weavers and food preparers in the administrative centers. If this analogy can be documented in the future, it would extend innovations in herding and weaving to the military sphere (see Murra and Morris 1975, articles 4 and 5). What the proportion of such full-time state retainers may have been in the total population cannot be determined today. In our effort to understand how the Inka state was expanding when the European invasion snuffed out its internal development, changes in the recruitment of the army and its ability to coopt rebels are good indicators of wider structural transformation.

Notes

1 See early versions of the Inka dynastic oral traditions in Betanzos ([1551] 1968) and Cieza ([1553] 1967).

2 If we compare the sources available for the pre-Columbian history of Mesoamerica, the ones dealing with the Andes are curiously scanty. Some of it is due to the presence in Mesoamerica of a written tradition, but it is difficult to shake off the impression that since Marcos Jiménez de la Espada, almost a century ago, there has been no one seriously concerned with the search for unpublished versions of the Andean dynastical tradition. See Porras Barrenechea 1951.

3 Producing fish, guano, coca leaf, hot peppers, and maize.

4 Producing timber, coca leaf, and maize. See maps in this volume.

5 The debate is still open about the importance and even the very existence of Andean trade. In earlier publications I have stressed the need to distinguish several different kinds of exchange. Ritual offerings, tribute, complementary exchanges among kin at different altitudes, what Polanyi called "administered trade" – all these activities could move goods from place to place without constituting commerce. See Murra ([1955] 1980, Chap. 7), and Murra and Morris (1975, article 10). For a different point of view see Hartmann (1968); Rostworowski (1970a) and (1977); and Salomon, Chap. 7, this volume.

6 Se despoblaron de los dichos buenos citios de temor de la guerra y alsamiento y contradicion que tenian entre ellos . . . se fueron a poblarse en altos y serros y peñas y por defenderse y comensaron a hazer fortalezas . . . edificaron las paredes y zerco y dentro de ellas casas . . . y escondidixos . . . y auia mucha muerte . . .

Hasta cautiuarse y se quitauan a sus mugeres y hijos y se quitauan sus sementeras y chacaras y asecyas de agua y pastos . . . Hasta lleualle las piedras de moler.

7 Max Gluckman's research in Lozi territory, now in Zambia, provides several examples of ethnic groups who joined the Rotse kingdom to gain protection against endemic warfare.

8 Estete [1535], 1918, f. 11:

Es de saber que esta tierra a la cuenta de los mas ancianos no habia 90 años que era sujeta a principe y daban por memoria y nombran todos los principes que habia habido

Y aunque no tienen escrituras por ciertas cuerdas y nudos recuerdan a la memoria las cosas pasadas.

9 The term *vehetria* or *behetria* was used in the sixteenth century to describe a society lacking constituted government. The 1611 dictionary of Spanish compiled by Sebastian de Covarrubias offers a long entry in which he mentions that "the chronicles pretend that there were towns in Old Castile that since times immemorial had a custom of changing their lords at will, and that is why they were called behetria" ("Cuentan las coronicas que como oviesse en Castilla la Vieja algunos pueblos que tenian costumbre de tiempo inmemorial mudar a su voluntad los señores que quisiessen, por cuya razon se dixeron behetrias").

10 A cada uno dellos dio una señora natural del Cuzco de su linaje para que fuesen cada una destas mujeres principal del cacique . . . e que los hijos que en tales hubiesen fuesen herederos de los tales estados e señorios que sus padres tuviesen fundandose Inca Yupanqui por el deudo que con ellos por esta via habia que nunca ninguno dellos en sus dias se le rebelaria.

Betanzos [1551] 1968, Chap. 12, p. 36; Cieza [1553] 1967, Bk. 2, Chap. 15 31 and 60, pp. 109 and 201; Cabello Valboa [1586] 1951, Bk. 3, Chap. 16, p. 315.

11 Cieza [1553] 1967, Bk. 2, Chap. 53, p. 178:

Concertaronse todos a uno desde Vilcanota para adelante a una parte y a otra con muy grande secreto de se rebelar y no estar debajo del señorio de los incas . . . Era poquedad grande de todos ellos habiendo sido libres sus padres . . . sujetarse tantas tierras y tan grandes en un señor solo.

Y como todos aborreciesen el mando que sobre ellos el inca tenia . . . juntos en Atuncolla y en Chucuito . . . hicieron su juramento conforme a su ceguadad . . . y luego mataron a los gobernadores y delegados . . . y a muchos orejones que estaban entre ellos . . .

Por todo el reino se divulgo la rebelion del Collao . . . los Collas fueron vencidos y presos muchos asi hombres como mujeres.

12 Cobo [1653] 1956, Bk. 14, Chap. 9, p. 256:

No peleaban no mas que con una suerte de armas y asi estaban repartidos en tropas por los generos de armas que manejaban . . .

Iban repartidos en diversos escuadrones por sus provincias y naciones guardando cada uno el orden de su antiguedad.

13 "El memorial de Charcas": See Espinoza Soriano [1582] 1969, p. 24:

Las cuatro naciones somos los Charcas y Caracaras y Chuis y los Chichas deferenciados en los trajes y hauitos. Hemos sido soldados desde el tiempo de los ingas llamados Inga Yupangui y Topa Inga y Guaina Caua . . .

Fuimos y hemos sido soldados . . . reseruados de pechos . . . y de todas las demas tasas y seruicios personales que se entiende de guarda de ganados . . . y de hazer la mita en la corte de la gran ciudad del Cuzco y de ser canteros texedores de la ropa . . . y de ser chacareros albaniles y canteros gente que tenia por costumbre trasponer un cerro a otra parte a puras manos y labranzas . . . No eramos gente bailadora ni truhanes que estos tales tenia de costumbre de cantar canciones delante de los dichos ingas por las victorias . . .

14 Este priuilegio theniamos para que fuese toda la gente muy lucida en las guerras . . . y por honrar y en lugar de dar recompensa por sus seruicios . . . les llamaron sus hijos primogenitos y mayorazgo de su reino como es publico y notorio.

15 For a local application of this principle, see the testimony of the local lords during the inspection of Iñigo Ortiz ([1562] 1967 and 1972).

16 Ortiz de Zúñiga [1562] 1967; see index of ethnographic categories.

17 In a recent thesis, Catherine Julien suggests that the decimal vocabulary was applied in the administration of the Lupaqa: See Julien 1978.

5
Storage, supply, and redistribution in the economy of the Inka state

Craig Morris

In the more than 1,200 leagues of coast they ruled they had their representatives and governors, and many lodgings, and great storehouses filled with all necessary supplies. This was to provide for their soldiers, for in one of these depots there were lances, and in another, darts, and in others sandals, and in others, the different arms they employed. Likewise, certain depots were filled with fine clothing, others, with coarser garments, and others with food and every kind of victuals. When the lord was lodged in his dwellings and his soldiers garrisoned there, nothing, from the most important to the most trifling, but could be provided. [Cieza (1553) 1959: 68–9]

For it was their custom when they were making a progress through any part of this great kingdom to travel with great pomp and fine style, in keeping with their habits, for except when it was to the state's interest, they did not travel more than four leagues a day. And so there were lodgings and storehouses abundantly supplied with everything to be found in these regions. Even in the uninhabited areas and deserts there had to be these lodgings and storehouses, and the representatives or stewards who lived in the capital of the provinces took great care to see that the natives kept these inns or lodgings well supplied. [Ibid., p. 105]

From the fortress (Sacsahuaman, above Cusco) one can see many houses, and many of these are the houses of pleasure and rest of the past rulers, and others are of the leaders and chiefs of all the land who now reside in the city; the others are houses or storehouses full of blankets, wool, weapons, metals, and clothes – and of everything that is grown and made in this realm. There are houses where the tributes the vassals bring in are stored . . . ; and there is a house in which are kept more than one hundred thousand dried birds, for

This essay was presented as a paper at the Troisième Réunion Internationale sur la Conservation des Grains (Levrous, France) in December 1980. It is a revised version of Chapter 5 of my doctoral dissertation entitled "Storage in Tawantinsuyu," University of Chicago, 1967.

from their feathers articles of clothing are made . . . There are shields, beams for supporting tents, knives, and other tools; sandals and armor for the people of war in such quantity that it is not possible to comprehend how they had been able to tribute so many and different things. [Sancho (1543) 1917: 194–5]

The storehouses were full of everything . . . It seemed impossible that it could ever be used up. [Pizarro (1571) 1965: 191]

As these quotations indicate, Spanish observers noted the existence of a vast storage system in the Inka empire almost immediately after the invasion. There were great stockpiles of food to supply state operations virtually throughout the realm, and in some places, especially the capital at Cusco, there were huge accumulations of weapons and sumptuary goods.

In 1965 and 1966 I undertook an archaeological study of the Inka warehousing system. I was able to confirm that the Inka had built and maintained a storage system of enormous size and technological sophistication. The major aims of the study, however, were to document the role of the storage system in the economy and to explore its relationship to broader political principles and to aims of state expansion and control. As a methodological strategy, the study of storage provided access to information on a whole series of economic and organizational matters, many of them related only indirectly to the immediate supply functions of the storage network.

The technological and organization aspects of the Inka storage system have been considered in a recent paper (Morris 1982). This chapter summarizes some of my conclusions on the economic and political context of Inka storage.

The pivotal nature of an economic surplus for the emergence and maintenance of state societies has long been clear, whatever theoretical position one takes regarding its importance as a causal factor in the developmental processes by which these societies arose. But it is increasingly clear that surplus cannot be legitimately studied or understood apart from the sociopolitical framework in which it is extracted and deployed. The still archaic principles that largely governed the organization of the so-called primitive states do not easily permit isolation of their economies from the substance of the social and political relationships to which they were bound (Polanyi, Arensberg, and Pearson 1957: P. 3).

Probably the most interesting, and for comparative purposes the most important, aspect of the economies of the archaic state is the manner in which surpluses were extracted from the production of village farming communities and then disposed of by the ruling elite that had arisen at the society's apex. This cycle usually closely follows what Polanyi and his colleagues have called "redistribution" (ibid., pp. 253–4). As Smelser (1959) has pointed out, redistribution can be most easily recognized and

understood in its economic sense as one system or mechanism for the exchange of goods. But the original formulation by Polanyi of redistribution as an economic "form of integration" conveys a broader, if more elusive, feeling for the involvement of redistribution with activities and institutions that are not purely economic. A third one – storage – emerges between these primary operations of the extraction of an economic surplus and its disposal, deployment, or redistribution. Though in itself less interesting and less directly relevant to sociopolitical problems, it impinges on both extraction and deployment, and its relationship to redistribution is often judged to be so intimate that the term "storage-cum-redistribution" has been applied (ibid., p. 253).

In his study of the Inka economy, Murra ([1955] 1980) outlined in some detail the *mit'a* labor tax (see also Rowe 1946: 265–8) by which the ruling Inka elite obtained the revenues they used to support their aims. The principles that governed this revenue system were essentially amplifications of the principles of economic reciprocity and redistribution that operated in Andean villages. State revenue consisted of the products of a corvée system of obligatory labor owed by all able-bodied married citizens; the pattern of state corvée was a projection onto an expanded social framework of traditions of communal working of the lands of local leaders and of shrines. The other side of those reciprocal obligations was the necessity for hospitality and "generosity" on the part of the state. This included the maintenance of crews involved in working in the state's fields and on other state projects. It also included lavish entertainment and the giving of prestigious state goods in various situations.

Although the input side of the mit'a labor tax has emerged with considerable conclusiveness and clarity from the written sources, the details of the disposal of the goods collected have been befogged almost since the system first began to be interpreted by the Europeans. The terracing, roads, monumental architecture, and reports of a relatively sumptuous court life for the elite have left little doubt about how much of it was used. But many speculations and hypotheses have assigned to the Inka revenue and redistributive system functions far beyond the support of the state elite and its aims of conquest and control.

The most famous of the ancilary functions attributed to the state economy is the so-called welfare hypothesis, which credits the state with the elimination of hunger and want within its borders. There seems little value in pursuing the welfare notion at any length here. It has been elaborated especially in the writings of Baudin (1928) and rather solidly refuted by Murra.

The birth of the notion probably lies with Garcilaso, who tended to exaggerate the beneficence of the Inka in contrast to the seemingly limitless demands of their Spanish conquerors. But more than this, the welfare hypothesis represented a mislocation of the quite real welfare responsibilities that were built into Andean societies, but at the level

of the local village community, not the state (Murra [1955] 1980: 34–5).

As a further function of the system of revenue and the concomitant disposal of surplus, it has been suggested that this system exchanged goods among different segments of the productive population and among the highly varied Andean ecological zones.

> In our characterization of the Inka economic system as a redistributive one, the major commodity-exchange role was assigned to the state. The crown received most of the surplus production of the peasantry and retainer craftsmen and, in turn, redistributed most of these goods to various segments of the population according to state logic. In that sense, the state revenue system justified itself by acting, among other roles, as a market; exchanging, for example, warm-weather commodities like maize, cotton and coca leaf for highland wool, meat and administrative services. [Murra (1955) 1980: 139]

Other cases have been noted where the centralized administrative apparatus of archaic states were used to mediate interchange among specialized units in the population. Adams (1966: 49–51) has drawn a not dissimilar picture for Early Dynastic Mesopotamia. But the conditions of long traditions of close face-to-face contact among the various segments of the population presented for Mesopotamia do not hold for most of the far-flung territories of Tawantinsuyu, where great natural barriers to communication had to be reckoned with and the centralized control of the Inka was still new and in many places very superficial. Indeed in many aspects, especially ecological conditions, the Andean region is more similar to Mesoamerica, where markets were hyperdeveloped.

The extent to which the state revenue and redistribution system functioned as a commodity exchange network clearly is a matter to be pursued in terms of kinds, quantities, and movements of goods and number of people benefited, not as an either–or proposition. When I undertook a study of the locations, capacities, and contents of the Inka storehouses that so amazed the early Spanish chroniclers, I expected that their accounts of storage would be as incomplete and contradictory as their interpretations of other facets of Andean life. But although the administrative records of storage for the most part perished with the last interpreter of the *khipu* knot records, the storehouses themselves still dot the hills above the ruins of many Inka towns and cities, inviting archaeological investigation.

My study of storage was designed to collect information on the movement and storage of goods through three different contexts in the overall economy: (1) on the local level, in the villages; (2) within the supply system operated by the state along the road system; and (3) in the vicinity of the capital at Cusco. The actual archaeological research in village

storage and on the state warehousing system in the central highlands was limited to the region of Huánuco, in the Peruvian central highlands.

Within these contexts an attempt was made to bring archaeological studies of distributions, capacities, and contents together with some of the more detailed ethnohistorical information. The resulting descriptions provide some suggestions regarding the gross magnitude of storage in the three contexts, the kinds of products that were stored, and their likely deployment. From this information, partial answers to several questions regarding the position of storage in the Inka economy begin to emerge. Among these questions are the following:

1. Did storage in local villages reflect peasant reserves or the accumulation of goods for local disposal by the state?
2. Did the storage centers in the state-built towns and cities along the main roads primarily store supplies related to the functioning of those centers, or did they function as marketlike regional exchange centers?
3. Did the goods that moved to the capital and were redistributed from it differ in kind from those moving through the state centers along the roads?
4. Did the discrepancies between production and need or consumption that led to such a vast depository system result from the functioning of the redistributive economy as a mechanism of economic interchange, or did it result mainly from the relation of storage to the supply of state projects and activities?

The results of the study may be briefly summed up as follows: In the case of the villages studied, storage was usually limited to the household context, and no large surpluses were accumulated in the villages, for either the Inka state, the local communities, or individual local authorities. The variability that I saw in Huánuco, however, would certainly be multiplied by a broader sampling drawn from other regions and other gradations of sociopolitical complexity. The centers built by the Inka along the principal communications routes were the scenes of the massing of vast quantities of foodstuffs drawn from the surrounding hinterland for the support of ambitious state activities. Significant quantities of foodstuffs were also stored in Cusco, but the emphasis was on ritual and luxury goods "from every corner of the realm."

In turning to the place of storage in the Andean economy as it was effected by the Inka, we may pursue two somewhat different topics. One of these is the clarification of some of the redistributive features of the state economy; the other is the relation of storage to important aims of the ruling elite and to the Inkaic variety of urban life.

Some of the primary features of the Inka redistributive system as it has been outlined by Murra from the historical sources were summarized earlier in this chapter. A crucial point, and one that we cannot deal with adequately here, is that Tawantinsuyu, or the Inka state, was actually a great multiplicity of political units of various sizes and levels of complexity marked by strong ethnic and linguistic cleavages.[1] The re-

lations between the vast majority of the people in the villages and the Inka elite were thus mediated by a profusion of other authorities and other political units. Only in the immediate area of Cusco do the Inka appear to have had a really firm grip on virtually all levels of their operation. And although the Inka rulers may have envisioned a deep-rooted control over the many thousands of square miles where their armies and their persuasions had been victorious, in 1532 one could still speak of the Chupaychu, the Lupaqa, and many other groups as viable political and also economic units. Failure to be aware of these units and this complexity can lead us to incorrectly assign functions to the Inka state that were in fact performed by other units. An example of such an error is the "welfare" hypothesis that made the Inka government responsible for activities actually lodged in local communities at lower levels of organization. Our research suggests that two groups or classes of goods may be visualized in relation to Inka state storage. One of those groups is made up of subsistence goods. The other comprises primarily cloth, especially *kumpi* cloth, but includes sandals and other things such as military paraphernalia whose ritual or status value outweighed any utilitarian value. The special ceremonial connotations of maize that Murra (1960) has demonstrated may also tend to put it into this class.[2] These two classes of goods seem to have flowed through the state storehouses in significantly different manners, cloth and the high status goods going largely to the capital, subsistence products going to a nearby provincial center.

That a heavy portion of those goods that tend to confer or signify status should go to the capital is, of course, not surprising, for much of the upper social strata resided there. But the quantities that the documentary reports imply were carried there and actually seen there appear to have been far beyond the conceivable needs of the elite among the permanent residents of Cusco. Many, if not most, of these goods apparently were redistributed to the army and others in service to the state (Murra 1962: 717–22). One reason they went *to* Cusco was so that they could come *from* Cusco. For the value of the gifts and issues was greatly increased by their association with the Inka himself and with the imperial city. The huge amounts of cloth witnessed at Cajamarca when the Spaniards first set eyes on the Inka party (Estete 1918: f. 8) were probably a temporary result of the Inka's presence, not a representation of Cajamarca's usual stores.

There is no need to pursue the subject of these special goods further. Murra (1962) has analyzed the evidence for cloth in detail, and it certainly was the most important of them. The point simply is that the movement of the goods contributed to their value, helping to turn the trick of balancing an otherwise unequal exchange for gifts and issues that depended for much of their value on the context in which they were received.

Regarding subsistence goods, I found that they were carried to the big provincial administrative and storage centers, such as Huánuco

Pampa (or, in the region of the capital, to Cusco), and that for the most part they were stored or consumed there in support of state activities, giving the villages access to goods that were not locally available. There is also little evidence for interregional transfers between one major storage center and another.

Polanyi and his colleagues have suggested that economies that lack money and functioning markets often have substitutes for them, and that the growth of large-scale storage may be such a substitute. As I have mentioned, Murra ([1955] 1980) suggests that the Inka state revenue system (with its complementary redistribution system) played a commodity exchange role, handling at least part of the task of equalizing local imbalances resulting from the great diversity between the vertically oriented Andean ecological zones. This commodity exchange function would presumably have been greatly facilitated by, and evident in, the well-developed state storage network. I do not believe that there is at this time sufficient evidence, either documentary or archaeological, to suggest the major movements of subsistence goods through the state storage and administrative network and out to the villages that would be required for state redistribution to take on a major commodity-exchange function. Certainly this does not appear to have been the case in Huánuco, where our evidence is best.

The *visita* of Garci Diez de San Miguel, however, gives an example of what at first glance seems to be contradictory evidence. Testimony from one of the two leaders of the Lupaqa suggests that fairly large quantities of goods were taken out of what, theoretically at least, were state storehouses and issued to the local authority "for the subsistence of his house and to use for the *capitanes* and leaders who passed through this province."[3] If these goods formed any important part of the sustenance of the receiving family and were also used for hospitality to traveling chiefs, it does not seem likely that a very important part of them trickled down to the common villagers. What seems more likely is that these goods supplemented the chiefs' "incomes" and helped them to maintain their positions (courtesy of the ruling elite) at a level similar to what they were before the Inka takeover channeled a major part of the area's surplus production to the central coffers.

The relative rarity of marketplaces was probably compensated for by patterns of exchange through local reciprocities and redistribution, often reinforced by colonization. The important operation of the exchange of subsistence products among different ecological zones was thus carried out below the level of the Inka state.[4] It is possible, however, that in the Cusco area, where the imprint of the state was all-pervasive and local units were of less functional importance, the exchange of subsistence goods was in fact controlled by the Inka elite. And it is not improbable that similar control over a larger area would have been achieved had the rapidly changing chain of events not been disrupted by the Spanish.

The vast quantities of labor that flowed into the Inka economy can

thus be seen to have resulted, among other things, in the accumulation of millions of cubic meters of foodstuffs, cloth, and other items in the various state storehouses. A large part of the cloth and other "special" items were redistributed as gifts and rewards to the many "serving" the state. What I judge to have been relatively small quantities of subsistence goods were issued to important local authorities. The remainder, and in my opinion by far the larger part, remained in the storehouses to be used toward the goals of the elite. This particular form of redistribution, in which the emphasis is on using up much of the accumulated surplus at the center rather than redistributing it once again to the hinterland, has been called "mobilizative exchange" – or, more pronounceably, "mobilization exchange" – by Smelser (1959: 179). But we must use reserve in applying that term to the Inka form of redistribution, for Smelser bases his concept on modern economies and justifies the gross economic inequalities between the contribution and the values received in terms of striving toward "collective goals." The inequality in the exchange can perhaps be accounted for by a variety of factors, among them the sort of charismatic persuasive powers of many of the Inka leaders, fear of the Inka armies, and, certainly not least important, the redistribution of status by way of special gifts. Indeed, it is in the still poorly understood nature of the tradition-bound reciprocities involved in these exchanges that much of the ability of the Inka to mobilize such vast surpluses lay.

In my research at the regional administrative center of Huánuco Pampa I concluded that the huge amounts of foodstuffs stockpiled there were intended to supply the city's varying needs as a center of logistical support for state operations and to supply its semipermanent inhabitants in times when famine or some other crisis caused disruption of the flow of goods from the hinterland. Observations in Cusco raised the possibility that smaller reserves of food may have been kept in the immediate area of the capital, where measures like terracing, irrigation, and colonization had ensured a fairly constant supply to that city. In this light, storage becomes mainly another means of stabilizing the economic base – of making certain that the tens, even hundreds, of thousands of people engaged in nonagricultural activities throughout the provinces could be continuously supplied. The necessity of storage is greatest in areas of marginality, like Huánuco Pampa, which lacked a permanent population, had economic relations with their hinterlands that were artificial and enforced from the outside, and where both the technological and social mechanism to guarantee the continuous production and delivery of supplies sufficient to support the population and their activities were not yet fully developed. Without the stockpiles, even a temporary breakdown in the delivery of supplies would probably have resulted in almost immediate curtailment of the city's functions, and in a short while its abandonment, as the people who served it returned to their families and their villages.

The source that credits Pachacuti with the founding of the storage

facilities in Cusco (Betanzos [1551] 1968, Chaps. 12–13, pp. 34–40) is clear regarding its aim. In order to support the massive rebuilding project that was envisioned, great numbers of men and the food to supply them must be amassed: "It was highly desirable that there be storehouses in the city of Cusco full of all kinds of food, . . . and once it was gathered [Pachacuti] could build the city he wanted." This probably does not misrepresent the Inka rulers' conception of the purpose of the storehouses that they ordered built.

So, on the one hand, we see the extensive aims of the Inka elite, aims that were satisfied through the mit'a labor system, with its incumbent obligations for supplies furnished by the state. And on the other hand, we see the uncertainty that the state was often faced with concerning its ability to extract and deliver the supplies. Massive storage appears mainly as a solution to these supply problems. An effective and flexible measure, on a short-term basis it is an expedient answer to a host of economic problems. Storehouses can be built and sufficient reserves established in a few good seasons, whereas the terracing, waterworks installations, and social alteration sufficient to guarantee a continuously adequate surplus production every season are tasks requiring decades of intensive effort. In many of the hinterland areas of Tawantinsuyu, projects aimed at increasing production and at giving the Inka elite more control over, and access to, the surpluses produced appear to have been hardly begun when the Spanish arrived. And almost the only way to maintain the large provincial centers that supported the Inka aims of conquest and expansion, often under conditions of semi-marginality, was to endow them with stockpiles sufficient to weather any emergency. How well this worked is demonstrated by the efficiency with which the various forces competing in the period of civil strife following the Spanish Conquest were supplied with necessities.

I have touched here on but a few of the broader implications of the storage network and the goods that moved through it. But the great interdependency of the nature of the surpluses and the manner of their mobilization and deployment is evident, as is the interdependency and extreme complexity of the sociopolitical, technological, and ecological factors that condition the mobilization, storage, and deployment of the economic resources that supported the Inka elite and its programs. In picturing Inka storage as mainly a technological device aimed at stabilizing the economic base of the state and ensuring the supply system for ambitious state activities, I do not wish to imply that such storage systems are always, or even generally, devoted primarily to these functions. Polanyi and his colleagues have pointed out that many institutional traits and operational devices recur in various developmental contexts (1957: 14). Although Inka storage may well be seen as an outgrowth of an archaic system of state revenue coupled with the high aims of the ruling elite and a degree of economic marginality, in other times, places, and contexts extensive storage systems may have meant something quite different – including substitutes for markets. And it seems probable that

situations in which storage was called upon to bear such a basic and quantitatively important part in sustaining the activities of an ambitious conquest state have been quite rare in human history.

Notes

1 For a list and brief description of many of these units see Rowe (1946: 185–92); for more detail on examples of three of them see Ortiz (1967) and Diez de San Miguel (1964).

2 The differences in movement between subsistence and luxury or ritually significant goods is of course not uncommon and constitutes here something very close to what Nash (1966: 48–50) has referred to as different "circuits of exchange."

3 The quantities stated were two hundred loads of *chuñu* and one hundred fifty loads of maize, each at "a half *fanega* per load," and in addition two hundred llamas. Using the size of the modern Spanish fanega at 55 liters (those in question were perhaps larger), the 100 fanegas of chuñu are 5,500 liters, and the 75 fanegas of corn 4,125 liters. We know nothing of the frequency of these issues, but we can point out that, assuming utilization of only half of the smallest Inka storehouses that we measured, two such storehouses would have been adequate to house it. It is obvious that the two hundred llamas is the most important quantity here (Garci Diez [1567] 1964: 22).

4 To see some of the details of the mechanisms that provided for the exchange of subsistence goods at various levels (community and "tribal") below the Inka state, consult the *visitas* of Iñigo Ortiz (1967, 1972) and Garci Diez de San Miguel (1964), and see the essay by Murra (1972) accompanying the second volume of Ortiz.

6
The extraction of precious metals at the time of the Inka

Jean Berthelot

Although the "advanced civilizations" of Peru had used gold and silver long before the emergence of the Inka empire, it was only from the second half of the fifteenth century onward, with the extension of that empire, that the Andean mines were intensively exploited. The fabulous plunder taken by the conquistadores at Cajamarca and Cusco in 1533 and 1534 (10 tons of 22 1/2 carat gold, 70 tons of fine silver) testifies to the fact that the last sovereigns of Tawantinsuyu had, in the space of a few decades, amassed considerable quantities of precious metals. This would presuppose the existence of intensive mining, the mobilization of many workers, and an organization of the mines at the state level. Who worked these mines, for whom, and how?

I shall concentrate upon two mining regions in Collasuyu, namely Carabaya and Chuquiabo. The first lies northeast of Lake Titicaca, on the eastern slope of the cordillera, in the *montaña*, the wooded slopes of the Amazonian piedmont of the Andes, 1,500 to 2,500 meters above sea level. The second lies southeast of the lake, near La Paz, in a heavily eroded basin of the upper Andean plateau, at an average elevation of 3,600 meters. These were the two most important centers for the production of gold in the southern part of Tawantinsuyu, and the only two, to my knowledge, on which we have information that is in any sense detailed (see the map, Fig. 6.1).

Let me begin by noting that just as the Inka had sovereign rights over the lands and flocks in his kingdom, so he also did over all the mines. But in Tawantinsuyu the mines functioned much as the lands did: If there were no Indians to work them, they did not function. Control over the work force, and the right and access to labor power, was the factor that enabled one to lay claim to the lands, the mines, and other resources. In Inka society those who could call upon the labor power of the Indians were of two sorts: At the top of the hierarchical pyramid there was the Inka himself, and at the level of the local communities there were the caciques, or *curacas*.

The present article is an extract from my thesis entitled "Une région minière des Andes péruviennes: Carabaya inca et espagnole (1480–1630)," Université de Paris-X, Nanterre, 1977.

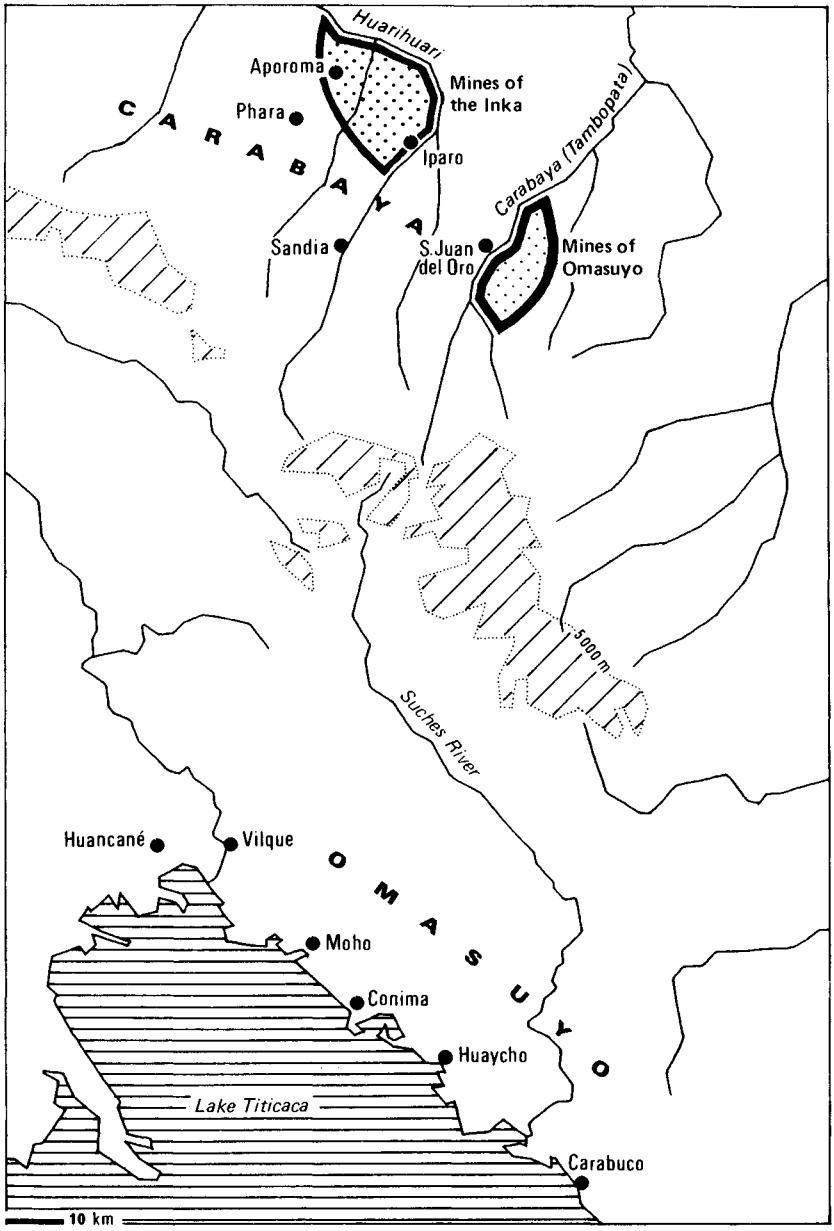

Figure 6.1. Inka mines in the Carabaya region.

The mines of the Inka and the community's mines

Under the Inkas, the caciques may well have kept some of their former privileges, in particular rights to the labor of the communities that they governed (for instance, for the cultivation of their lands, the herding of their flocks, and the upkeep of their homes), but we are here concerned to discover what latitude they managed to keep as regards the exploitation of the mines and also in their use of gold.

All the chroniclers assert that the precious metals were meant for the Inka – by which they may be taken to mean the ruling caste in general – and for the requirements of the state cults. Some (Santillán and Matienzo, for instance) even go so far as to specify that the caciques no longer had any power, because they could own nothing, neither gold nor jewels, unless it was granted to them by the Inka.[1] The use of precious metals, of raw materials, and of finespun woollen clothing became a privilege. But as well as receiving gifts from the Inka, they also owed them. "If there was such an abundance of gold, silver, and precious stones at Cusco," Cobo writes, "it was because the caciques and governors made offerings of such things to the Inka when they went to see him at his court or when he himself called upon them while inspecting his kingdom."[2] The structures of reciprocity and redistribution, the system of "gifts" and countergifts that makes up the warp and weft of Inka society, presuppose that the local and community chiefs did themselves have access to some mines. One does indeed find gold, jewels, or pieces of worked gold in the possession of the caciques and the regional nobility, whether to be offered to the Inka or granted by him.[3] This suggests that the curacas had some part in the exploitation of the mines, if only to the degree that would have allowed them to make gifts to their sovereign.

There were actually two quite distinct categories of mines – those belonging to the Inka and those of the ethnic groups. Consider the Carabaya mine, which is described in an inquiry that the Spanish authorities made in 1573 regarding the curacas and elders of the villages on the eastern bank of Lake Titicaca, namely, Carabuco, Huaycho, Conima, and Moho. The Indians living in these villages, in the province of Omasuyu, complained that they had had to abandon the Carabaya and Larecaja mines, where they had gone at the time of the Inka and up until the time of their first Spanish masters (the *encomenderos*), around 1550. When asked where these mines were, the Indians replied:

> The Carabaya mines are situated in the Aporoma and Vilcabamba hills (*cerros*) and in the Rio Grande of Callana and Hipara, *where the Inca's mines are*, and at San Juan del Oro and San Cristóbal, in different gullies and rivers, that *are allocated by the Inca to those Indians who live in the villages in question* and to others who would go there in search of gold, such as those who live in Guancané and Vilque, and in various neighboring villages, still do.[4]

The wording of this statement suggests that at the time of the Inka the deposits at Carabaya (and at Larecaja) could be freely exploited by the Omasuyu communities, for the Inka is stated to have "allocated" mines to the Indians from the villages of Huancané, Carabuco, and to others "who would go there." But are these mines, made available through the sovereign's generosity (a little like the lands "redistributed" among the communities) the same as those "belonging to the Inca"?

The curacas distinguished between the deposits at Aporoma, at Vilcabamba, and in the Rio Grande of Callana and Hipara, "where the Inca's mines are," and the "different gullies and rivers that are variously named [*de muchos nombres*], which the Inka allocated to the Indians of the villages of Omasuyuo." On the one hand, then, we have the "Inca's mines," concentrated in certain specified sites, and on the other hand the "community's mines," which are *scattered* throughout the many gullies and torrents. This distinction is yet further emphasized by another declaration of the caciques of Carabuco, respecting the absence of any legal disputes between them and the Indians of Huancané, or of the other villages, over the beds that they used formerly to exploit: "There was never any dispute between them . . . , because the mines *belonged* and belong *to all*, and because the sites that either party may exploit are *numerous*."[5]

Moreover, there are several documents, one of which tells of an inspection of the Carabaya works by the Spanish administration in 1628, which enable one to locate the sites mentioned by the curaca.[6] The Inka's mines are all in the *montaña* farther down from Phara, on the left tributaries of the Huarihuari (Upper Inambari) River and on the slopes downstream from Sándia. The mines said to belong to the Omasuyu communities are less easy to identify, for they are too scattered and are not named. Some details in the Carabuco inquiry suggest, however, that the sands worked by and for the caciques lay in the Tambopata Basin. It is in itself revealing that the Indians mention San Juan del Oro and San Cristóbal. The very names testify to these being mines discovered and named by the Spanish (San Juan is the earliest one located at Carabaya), rather than the Inka's old mines. It is plausible that the Spaniards may have discovered the riches of the Tambopata region by following the ancient paths that the Indians of Omasuyu still used to supply their first encomenderos with gold. These roads were later abandoned, and they ought, the curacas said, to be restored to their former condition, so that the Indians might return to the mines of previous times.[7]

It was not only in Carabaya, nor indeed in gold-bearing deposits alone, that the Inka's mines were concentrated at several specific points or that the community's mines were scattered. In Charcas Province, for example, "there were the cerro mines of Porco, from which the Indians extracted silver *for the Inka*, and other mines that were in each village."[8] The same was true of the Chuquiabo gold mines, as the reader will see. Since the Spanish were so greedy for precious metals and so dazzled by

the riches of Peru, they may well have been exaggerating when they claimed that "in the time of the Inkas, each group or *ayllu* had its own mine,"[9] but it is certain that there were, in Tawantinsuyu, both great Inka mining centers (in the south, Carabaya and Chuquiabo for gold, and Porco and Tarapacá for silver) and a large number of less important mines, of merely local interest, scattered throughout those provinces that were rich in precious metals.

How many community mines were there, roughly speaking, in proportion to the mines belonging to the Inka or to the sun? As was the case with land, the proportion must have varied in each mining region depending on the quality and quantity of the deposits, the available work force, and other factors. Cobo, who begins by stating that the "mines worked for the Inka were numerous and very rich," asserts several pages farther on that "some mines were worked at the expense of the Inka, and . . . others, the greater number, were [worked] at the expense of the caciques of the districts in which the mines were located, so that they might have presents to give to the Inka."[10] These two assertions are, admittedly, not contradictory, but they do not provide us with precise information.

I want here to distinguish between the two categories of mines in terms of their respective beneficiaries:

1. The Inka's mines were grouped in several clearly specified centers and were worked by the people actually living in the region, who were often supplemented by groups of displaced families resettled at the site. The work done by the Indians in these mines represented the tribute that they owed to their sovereign.

2. The community's mines, however, were scattered and quite separate from those belonging to the Inka. Several different communities shared the various works. The extracted metal went to the curacas who, according to the ancient Andean custom, provided the means of subsistence for those whom they employed. The Indians' labor did not, in this case, constitute a personal service owed to the Inka but was one of the traditional relations of reciprocity between the communities and their lords, just as the metals and precious objects subsequently presented by the caciques to the Inka formed a part of the system of "gifts" and countergifts, which were free yet obligatory, linking the caciques to their sovereign.

Control over utilization of the mines

Because the curacas played a crucial role at the local level, particularly in mobilizing the energy of the Indians and in distributing and organizing labor, and because they had access to the mines, some have concluded that the exploitation of precious metals among the Inka of Peru depended in the last analysis on a "control which [was] local rather than national."[11] This assertion is acceptable only on condition that one re-

strict it to the community mines. Where those belonging to the Inka are concerned, it is important to distinguish between the authority of the curacas and that of the sovereign. For the Inka and his representatives, in fact, enjoyed extensive powers, whereas, in contrast, those initiatives left with the local chiefs were severely limited. The central power's authority prevailed in two areas: that of the size of the work force and that of the collection of the product of the labor in the mining centers.

THE WORK FORCE

When, in the 1480s, Carabaya was conquered by Tupa Yupanqui, the Inka laid claim to the gold-bearing deposits and, in order to exploit them, supplemented the native population with some groups of families (called *mitmaq*) from the Collao (from the villages of Azángaro, Asillo, and Oruro – known today as Orurillo – and Nuñoa).[12] At Chuquiabo, it was Wayna Qhapaq, Tupa Yupanqui's successor, who resettled Indians on the site so that they might work the mines.[13]

The transfers of populations constituted one form of control over the work force. But it was not the only one. Cieza states that in mining areas the Inka did not merely specify the number of men who were to work there; he even went so far as to cite the quantity of precious metals that they were to produce. Santillán observes that in these provinces tribute from the mines was reckoned at the rate of 1 percent, and that the amount that they were supposed to extract, though not the crucial aspect of the question, was determined with the aid of weights supplied by the Inka.[14]

The chroniclers are all agreed on this first point. Whatever the work to be done or the service to be provided, the sovereign's will was paramount. It was he who decided on the number of workers to be supplied by each province, a number that varied according to changing needs and circumstances. It was the curacas, however, who had to allot the groups[15] no matter how large or how small they were, among the moieties, *ayllu*, or into subgroups of ten. Percentages were sometimes specified, as noted by Santillán. At Huánuco, for instance, where there were gold mines worked for the Inka, the Chupachos had to provide three men and three women for every group of a hundred tributaries – that is, about one hundred and twenty couples, and for the silver mines that lay in the territory of the Yaros, their close neighbors, about sixty men and their wives.[16] The deposits were probably worked by means of the ancient system of the *mit'a* – that is, in turns. The curaca's role was, therefore, simply to specify who was to work, to organize the various turns, and to form teams.

It is hard to tell whether the yearly labor contribution was allotted by the central power. We merely know that it varied from region to region according to different climatic conditions. At Huánuco, the mines were worked throughout the year. This was probably also the case at Carabaya. But at Chuquiabo, "on account of the cold," the Indians worked only four months of the year, during the most clement season –

the rainy one (from December to March) – and only "from midday to sunset."[17] The mines were, in fact, located at high altitudes, in a treeless zone, where the climate tended to be dry and cold.

The second part of Cieza's and Santillán's assertion is less easy to accept, for it contradicts everything that other sources tell us of the nature of the institutions of Tawantinsuyu, and everything maintained by the best-informed students of Andean society. Just as the Indians were obligated only to work on the lands belonging to the Inka or to the sun, not to produce specified quantities of agricultural products each year, so they only had to provide the obligatory number of tributaries for the Inka's mines, and not a specified quantity of precious metals. Whenever he speaks of tribute, of labor prestations, Polo de Ondegardo insists that under the Inkas the Indians were not "taxed" on the product of their labor, but only through the number of hands that they had to provide. More specifically, as regards mining, all the provinces that had gold-bearing deposits on their territory, such as Chumbivilcas, Andahuaylas, Carabaya, Huánuco, and Quito, "gave gold by sending a prescribed number of Indians to the mines, and by delivering up the fruits of their labor, be these small or great, but no province was obliged to supply a specified quantity of gold."[18] What the Indians of Huánuco declared in 1562 bears out Polo's observations. The Inka "did not specify the amounts that they had to give him . . . ; he merely fixed the number of Indians who were to extract the gold or the silver."[19] There were circumstances – for instance when the sovereign died and another succeeded him – when the provinces in question had to provide more miners and the labor that was demanded weighed more heavily on the communities.[20]

Since the deposits were rich, and therefore adequate for almost every need, the central power controlled the volume of production, and was able to vary it, by deciding upon the number of workers to be employed at each occasion.

THE INSPECTORS OF THE INKA'S MINES

Although the quantity of precious metal to be extracted was not specified, mining sites were supervised. Polo tells us that

> When the Indians went to the mines, there were persons who accompanied them in order to collect the gold that they found, no matter how large or small the quantity, since they were solely obliged to supply their labor, and the Indians therefore did not even know how much gold had been amassed, and no one dared to take the smallest piece for himself.[21]

At Huánuco, the gold and silver that the Chupachos extracted for the Inka were handed over to the Inka in full, "under threat of serious penalties."[22] Is this an exaggeration, or is it peculiar to a given mining region? Whereas the communities were free to do as they wished with the deposits granted to them by the sovereign, the Inka's mines, on the

other hand, were subject to local supervision that would seem to have been very strict. By whom, and how, was this supervision effected?

When asked how much gold each Indian used to produce per day or per *mita*, at the time of their first Spanish masters the caciques and elders of Omasuyu, casting their minds back to a previous epoch, described how surveillance of the *mitmaq* of northern Collao, set up by the Inka at Carabaya, was effected: "We do not know how much gold they used to extract, because in each site there was an Inka, the kinsman or majordomo of the one who ruled, who would receive all the gold extracted by the aforementioned *mitmaq*."[23] Exploitation of each mine was therefore supervised by a representative of the central power, in this case by a noble of the Inka caste.[24]

According to Cieza, gold and silver had to be surrendered to "inspectors" (*veedores*), who were placed there by the sovereign,[25] as was the case with the Chuquiabo mines described in Sancho de la Hoz's "Relación." This source is altogether pertinent here. For the Chuquiabo gold mines were actually the first discovered by the Spanish in Collao. The two scouts sent south by Francisco Pizarro in December 1533, a month after the conquerors had entered Cusco, found that the mines were still being worked quite thoroughly, as if the sovereigns of the riven Tawantinsuyu (the two brothers and rivals, Huascar and Atahuallpa) were still alive. The explorer's account, as taken down by Pizarro's secretary, therefore provides a description of the working of the mines in an area near Lake Titicaca and before the Spaniards had invaded the country. It concerns mines worked by Indians whom Wayna Qhapaq, the father of Huascar and of Atahuallpa, had resettled at Chuquiabo:

> There are some fifty working in this region, both men and women: twenty supplied by one cacique, fifty by another, thirty by a third, and a greater or lesser number by a fourth, depending upon the number of people that they have; they extract gold for the principal lord. The precautions are such that they are absolutely unable to take anything of what they extract. There are actually guards around the mines, so that none who work there may leave without being seen, and in the evening, when they return to their homes in their villages, they enter through a door that is surveyed by the majordomos concerned with gold, who take from each person the gold that he has extracted.[26]

If we disregard the mistaken but thoroughly comprehensible interpretation that the Spaniards give of the presence of guards around the mines (it was actually to prevent theft), the account given by the two explorers may be said to be a vivid synthesis of the main elements that we have encountered so far. The mines are exploited for the Inka, whom the first chroniclers sometimes termed the "principal lord," and state organization was still intact in this region. Each curaca provided a contingent of *mitayos*, calculated in ratio to the number of Indians whom he ruled.[27] Apart from appointing the workers and fixing their periods

of service, the role of the local chiefs was a low-key one. They were clearly not in control of the working of the mines. As at Huánuco, both men and women were employed. Everyone lived at the site itself, since they worked "from midday to sunset" and at night they returned "to their homes, to their villages." "Guards" were placed around the mines and surveyed the comings and goings of the miners. Who were these guards – Indians appointed to this task, merely heads of work teams, or government officials? Be this as it may, upon entering the village in the evening those who received from each person the product of his labor were "majordomos concerned with gold" – that is, officers of the Inka, as was the case at Carabaya, where they were "kinsmen" or "majordomos" of the Inka's.

The gold extracted from these mines was usually transported to Cusco, so as to be transferred and entrusted to the skill of his jewelers. In certain provinces, groups of artisans also worked for the Inka. At any rate, the transport of precious metals was a state matter. Polo is adamant about this: The Indians "extracted the gold, and, accompanied by the Inka's majordomos, took it to Cusco, where it was worked."[28]

The deposits granted to the communities by the sovereign, on the other hand, were freely worked by them, with apparently no interference at all on the part of the central power. Here the curacas reclaimed their own rights. For the community mines, supervision of their working was local, or, in other words, ethnic.

Mining techniques

The distinction between the community mines and those of the Inka becomes more vivid if one considers the kinds of deposits that were worked and the techniques used. As far as the gold-bearing beds are concerned, we have at hand a description (more detailed for Chuquiabo than for Carabaya) of the original procedures for the extraction and washing of the gold.

AT CARABAYA

I shall begin by considering the manner and means by which the Indians of Omasuyu exploited the mines granted to them by the Inka, whether in the many ravines and rivers of the valleys of the Upper Tambopata or in the region of Larecaja.

During the Carabuco inspection, the caciques and elders were asked where they found the gold that they used to mine in former days – "whether it was in the beds of the rivers or streams, or in the mountains or elsewhere." Their answer was unambiguous: "*All the gold* that they gathered in the mines derived from what the currents of the rivers or streams carried along; and when they wanted to get it, they diverted the water, dug out the still damp earth, and washed it in wash troughs." They went to the mines "in summer . . . when their fields and affairs did not require their presence" – in other words, between June and Sep-

tember, months in which the rivers were low and there was little agricultural activity on the high plateau. They were absent only for three months, including the three weeks or so that it took to go and to return, with llamas and provisions.[29]

All the "mines" of Omasuyu communities consisted of river depositions produced by currents that were relatively weak or else slowed down in the dry season. The gathering and gold-washing techniques were simple, the means employed rudimentary and readily put into action. They did not require any complicated organization of labor.

But another sort of deposit existed at Carabaya, in which the gold was hidden in the ground or scattered over the slopes and mountains, such as the cerros of Aporoma and of Vilcabamba, "where the Inka's mines were." These were worked by means of galleries. López de Caravantes says that Paullu Inka, a grandson of Tupa Yupanqui's, owned one at Aporoma. The lack of ventilation, and the consequent difficulty in lighting candles, must have caused the Spaniards to abandon it.[30] The inspection of Cambaya in 1628 also revealed a seven-gallery mine at Aporoma, "which the elders had stopped working."[31]

Unlike the man sifting through the riverbeds at Omasuyu, those working the mines at Carabaya did not only use wash troughs: "The other way of washing gold is with trenches (*acequias*), and these were used only in the province of Carabaya.... These were the only two methods that the Indians used to gather gold in former times, for they had never learned how to work mines where the gold was hidden in the rock."[32] Cobo is not talking here of large channels several kilometers long, although the Spaniards working at Carabaya had long used such methods, but rather of a process in use at the time of the Inka. The first explorers of the Collao, when they discovered the Chuquiabo mines, described it for us. Cobo is therefore in error when he maintains that Carabaya was the only region in which the Indians used a system of channels to wash the gold-bearing earth.

AT CHUQUIABO

In the mines worked for the "principal lord" (the Inka), the gold-bearing mud, dug out of the galleries much as at Carabaya, was smeared out on slick flagstones. River water was pumped through a pipe onto these stones. Washed by this water, the mud was gradually eroded, whereas the gold, being denser, collected in the crevices of the stones, where it was scooped up.[33] The procedure was the same as that used with the wash trough but, being more mechanical, was also more sophisticated and, as noted by the chronicler, more productive.

The actual extraction of the gold-bearing soil was itself a more complex matter than the amassing of river sand:

> The mines lie at the side of a ravine, halfway up. They have the shape of cave mouths, by which those who dig the soil may enter. They scratch using stag's antlers and carry out the soil by means of stretched hides, which are made up into sacks or leather bot-

tles. . . . The mines are very deep: Some are 10 fathoms deep, others 20. The largest, which is at Guarnacabo, is as deep as 40 fathoms; there is no light, and it is so narrow that only one person, stooping, can enter; no one else can go in until the first has come out again.[34]

Although de la Hoz does mention them, there were obviously galleries in these mines, worked by the most rudimentary methods. They were from 15 to 30 meters deep. The longest and most uncomfortable one was as much as 65 meters deep, and, like the Paullu gallery at Carabaya, it was unventilated and unlit. The mines lay at the side of a ravine, halfway up. If we disregard for the moment the climatic and geographical conditions, they bear comparison with the cerros mines at Carabaya. Like them, they were worked for the Inka's benefit; when the eyewitness speaks of "guards" who watched the comings and goings of the miners, he has in mind such state operations. In the evening, at the village gate, state officials collected the gold obtained by each miner during the day.

Other, far more rudimentary mines also existed at Chuquiabo. They were

. . . scattered throughout the area and resembled wells, which, when worked, allowed whoever was at the bottom to raise the earth to the person above; once the excavator could no longer reach him, the hole was left as it was, and they went to hollow out another one, elsewhere.

Of course, they still had to wash the earth that they had extracted in wash troughs, and therefore these mines had a smaller yield.[35] We are not told whose mines these were, but they sound like a community enterprise: They were scattered here and there and not concentrated in specific sites; they did not last long, since the wells were abandoned once they were deeper than the height of a man, and others were begun elsewhere; the organization of labor was extremely simple; no guard or supervision is mentioned, and the mines would seem to have been worked without constraints of any sort.

It would thus seem that two quite distinct techniques were in use at Chuquiabo. As far as extraction and washing were concerned, the first sort were rudimentary (excavations, wash troughs), and the second were more sophisticated (galleries, channels, flagstones for washing), with the former belonging to the curacas and the latter to the central power. This was also true of Carabaya. Simple techniques (diverting the streams, wash troughs) were employed in the community mines, whereas more complex techniques were used in the Inka's (galleries, channels).

The only sources that provide detailed information as to the methods used in the Inka culture area during the pre-Hispanic period for extracting and washing gold concern the mines at Carabaya and Chuquiabo. But we know that the public works undertaken by the sovereigns of Cusco were intended to develop not only agriculture and commu-

nications but also the production of precious metals. In the region of Tarapacá, in northern Chile, where some rich gold-bearing deposits were exploited for the Inka, the course of a river was to be diverted from the sierra to the arid mining zone, not for technical reasons, since they were silver-ore mines, but to enable the scale of operations to be enlarged by bringing water to a sandy and desertlike region. The works covered some forty kilometers and were just nearing completion when the Spaniards arrived (see Núñez, Chap. 2, this volume).[36]

In Table 6.1 I outline the main features of the mines at Carabaya and at Chuquiabo. Comparison of the Inka's with the community mines suggests that we have to do with two systems, with the second superimposed on the first but without eliminating it. Nathan Wachtel is right to observe that Inka institutions were probably grafted onto preexisting ones.[37] Apparently, the same was true of the mines. Andean communities exploited and used precious metals long before the emergence and expansion of Tawantinsuyu. Even the more sophisticated techniques for gathering and washing the ore were not invented by the Inka. But although it left the Indians free to enjoy the scattered deposits worked for their lords, the centralizing power of the state was able to organize and develop some mines to its own advantage. It concentrated on particularly rich sites, using technical methods guaranteeing a better yield. It did not fundamentally alter thereby the prevailing approaches of the mining industry.

The sacralization of the Inka's mines

In a society without markets, in the economic sense of the term, and therefore without money, precious metals obviously do not play the same role as they do in a society with a market economy. In the Inka empire, as in other ancient civilizations, gold and silver had a purely symbolic value, in which political and religious aspects were closely linked.

THE SYMBOLISM OF GOLD

In Tawantinsuyu, gold was the attribute of the sun god, Inti, and his supreme power was linked to it. In the mythological origins of the Inka, a golden stake had marked the valley of Cusco for the founding ancestor, Manco Capac, as the fertile site that the sun, his father, had chosen as the center of Tawantinsuyu. There Manco had raised the first temple to the sun, Inticancha. It later became a golden enclosure, since Pachacuti was to build there another temple, called Coricancha, as his empire grew in wealth and power. In the new shrine the image of the sun god, made of the finest gold and adorned with gems, had the place of honor. Facing the rising sun, "It reflected the first rays with such clarity that it seemed to be the sun itself, and the Indians told us that with its light the star communicated its own power to the effigy."[38] The

Table 6.1. *The Inka mines and those of the community: characteristics of the different kinds of mining enterprises (in Carabaya and Chuquiabo)*

	Inka mines		Community mines	
	Carabaya	Chuquiabo	Carabaya	Chuquiabo
Organization and control				
Beneficiaries of gold mining	The state	The state	The *curacas*	The *curacas*
Surveillance and control	By the state	By the state	By the ethnic group	By the ethnic group
Decisions as to numbers of workers	By the Inka	By the Inka	By the *curacas*	By the *curacas*
Affiliation of the work force	Residents (both natives and *mitmaq*)	Residents (both natives and *mitmaq*)	Seasonal migrants	Unknown
Mining technology				
Location of the mines	Concentrated	Concentrated	Scattered	Scattered
Types of deposits	Mountains and slopes	Mountains and slopes	Rivers	No fixed patterns
Techniques				
Excavation	Galleries	Galleries	Gathering (diverting rivers)	Gathering (digging)
Washing	Channels	Channels	Troughs and sieves	Troughs and sieves
Duration of annual season	Continuous (all seasons)	4 months (rainy season)	2½ months (dry season only)	During rainy season
Beliefs				
Origin of the mines' *mamas*	Mountain and slope mines	Mountain and slope mines	—	—
The sacred	All mountain and subterranean mines	All mountain and subterranean mines	—	—

Inka was the incarnation of this sacred power; the worship due to the sun became confused with the homage due to his son.[39]

Andean thought was deeply marked by the symbolic value attributed to gold, and, by extension, to every precious object meant for the Inka or for the sun. If workers did not dare to keep for themselves the smallest part of what they extracted from the Inka's mines, it was precisely because this gold was meant for the sovereign, and not because of the presence of officials whose duty it was to collect the product of their labor. The behavior of the Indians after the Spanish conquest is very revealing in this respect, and there is no end of texts in which the chroniclers speak of hidden, buried, or submerged treasures. We hear of mines that had been blocked, camouflaged, or kept secret, so as to prevent the Spanish from acquiring riches that were dedicated to the Inka or to the sun. A full century after the conquest, Juan de Solórzano could still write, "There are Indians who superstitiously believe that their Inka is to rise again, and they guard for him all the rich mines that they know of, and no requests, threats, or punishments will bring them to disclose their whereabouts."[40] This stubbornness, with all its messianic overtones, is a telling sign of the mythical and sacred value attributed by the Indians not only to the precious metals meant for the Inka and for the sun but also to the mines from which they were extracted.

THE MAMA OF THE MINES

The political and religious ideology of the Inka came to be grafted onto a set of popular beliefs and practices that were widespread in Andean societies. In what religious and ritual terms did ordinary Indians think about precious metals, mines, and mining?

According to ancient beliefs, metals were, like harvested crops, a product of the earth. They were born and developed there. Although man had no part in their genesis, he could intervene in their emergence to the surface of the earth by mining, thus influencing the sacred power that had engendered them. This is why each mine had its own "idol," its *huaca*. According to Cristóbal de Albornoz, one of the first Spanish churchmen to specialize in the struggle against indigenous religions, the Indians kept their ancient beliefs and practices regarding all the gold, silver, and mercury mines discovered long ago:

> They selected the most beautiful rocks of these metals, and in fact keep them to this day. They worship them, calling them *the mothers of those mines*. Before going to work in the mine, upon the day in which they have to go there, they worship the rock and drink in its honor, calling it the *mama* of the mine being worked.[41]

Albornoz, who claimed to have located a large number of these huaca wherever there were mines, asserted that it was still possible to discover the ancient sites hidden from the Spanish by the Indians. All you had to do was find the hiding place in which the mama was revered and then

interrogate its guardians, in order to learn the name of the mine from which the sacred "rock" had come.[42]

These mamas are "the most beautiful stones of the ores." As far as gold is concerned, this expression refers to conglomerates in which the metal is mixed in with quartz or with some other silica matrix. These rocks come either from gold-bearing veins that, as the reader will recall, were rarely mined in the Inka domain or, as Cobo specifies, only in isolated pockets.[43] We have several descriptions of such blocks of rock flecked with gold, some of them of exceptional size. In 1556, one was discovered at Carabaya that was as big as a man's head. The young mestizo Garcilaso, along with some Spaniards and Indians of Cusco, saw and admired this extraordinary stone, which he described in his *Comentarios reales*. His most interesting observation touches upon their respective reactions to the stone: "The Spanish regarded it as a marvel; the Indians called it *huaca*."[44] The mamas revered by the Indians were sometimes large nuggets.[45] Silver was occasionally found as pure lumps of the metal or else agglomerates comparable to the stones flecked with gold. The *mama* associated with the mercury mines might be pieces of particularly vivid red cinnabar or of pure mercury that had collected in a cavity, as had a deposit that the Spanish had found at Huancavelica, which looked like a man's hand.[46] Whatever the metal or ore, the object treated as sacred always had this unique quality, of strangeness that set it apart and defined it as huaca charged with supernatural power and a promise of the mine's fertility.

If we now return to the distinction between the community mines and those of the Inka, the question of the mamas of the gold mines becomes all the more pertinent. Both the unusual mineral conglomerates and the exceptionally large nuggets are natural curiosities that are not to be found in rivers, for there the gold is thin and takes the form of small grains or of flakes, but rather in mountains or on the slopes.[47] We know that this form of exploitation, in Carabaya as in Chuquiabo, was characteristic of the Inka's mines, whereas the community worked other kinds of deposits for their caciques. Given their physical characteristics, if the mamas of the gold mines came from the Inka's operations the sacred and mythical link between the sovereign, the sun, and gold must have been enhanced in the minds of the Indians who worked these mines.

Such symbolic links were also reinforced, given the fact that in Inka times and today mountains and noteworthy peaks have been worshiped. People were, and still are, familiar with their height, the presence of eternal snows, and their geological composition. The cerros that enclose the mines were also held to be sacred, huaca. If, before going to work, one held a feast in honor of the mama of the mines, it was as much to guarantee the fertility of the mines as to pay homage to the mountain and to beg it to deliver up its mineral wealth:

Those who went to the mines used to worship the cerros where they were located, and also the mines themselves, which they

called *coya*; they begged them to deliver up their ore; and to obtain what they sought, they spent the night in keeping vigil, drinking and dancing in veneration of the cerros.[48]

It is worth stressing Cobo's use of the word *coya* in this context (employed, in the same context, by Murúa), for it has a precise meaning. This Aymara word has nothing to do with the word for queen (*qoya*), or with any other divinity. When the *q* is glottalized, *q'oya* refers to the mine, in the sense of "a gallery from which one extracts the metal."[49] Through the mama, the material focus of the rite, the worship is addressed as much to the mountain as to the underground mines that it encloses. Just as the existence of gallery mines allows one to distinguish symbolically a cerro from all others and to sacralize it, so, conversely, the mines are considered huaca because they are cerro mines. These rare lumps of metal or unusual conglomerates are thus the site of a ritual encounter between mountain and mine. On the one hand, they are the symbolic link between the world on high (*hanaqpacha*), the special domain of the sungod; on the other, the world within (*ukhupacha*), revealed in the gallery mines but also in the domain of seeds, the ancestors, and – according to ancient Andean cosmogony – the primordial beings as well.

We know now that the places from which gold was extracted for the Inka at both Carabaya and Chuquiabo were mountain or slope mines and that they were worked by means of galleries. The local huaca doubtless extended its protection and its benefits and made its influence and power felt over all the mines in the area; still, it is patent that the gallery mines, rather than the placer or well mines, were the ones that were revered. The city of La Paz offers us a telling example of the symbolic links that, at the level of deepest belief, bind mountain, gallery mine, and their mama, on the one hand, with gold, the Inka, and the sun ("lord of the gold"). The inspector reported:

> The people of this locality of Chuquiabo used to worship a huaca that was called Choqueguanca, which means "lord of the gold that does not run out," because at the foot of the cerro and opposite it there are numerous gold mines that were worked in pagan times and also after the Spanish had conquered this country.[50]

We are now in a position to complete Table 6.1, which presents the characteristics of the mining at Carabaya and Chuquiabo, by adding the symbolic dimension peculiar to the Inka's mines. The various levels can thus be seen to reinforce each other, each emphasizing, in its own manner, the preeminence of the Inka, son of the sun, to whom we owe the gold torn from the earth.

Conclusion

As the power of the Inka was reasserted and their realm extended, their need for precious metals also grew, for these helped to enhance and to

sanctify the powers of the sovereign and of the ruling caste. At Cusco, and in the newly conquered provinces, palaces and temples proliferated, official worship and ceremonies were installed, nobles and high officials grew more numerous. In short, as the territory grew ever larger and the state ever more powerful, so did display and luxury increase. The actual expansion of the empire and the centralization of power made available an ample work force and significant agricultural surpluses, which encouraged the production of prestige goods. The Inka expanded and organized mining. They shifted peoples so that more might extract the precious metals; regions rich in gold or silver were assigned to provide mit'a energy for the mines. They undertook major public works so as to facilitate the working of the mines and used technical procedures that guaranteed better yields; they controlled the technology, the transport, and the labor required to obtain precious metals.

In this area, as in so many others, the Inka put the preexisting institutions to good use, while diverting them from their original meaning and function. They may have proclaimed their paramount rights over all the mines, as they had done with respect to all the lands, but they had left the communities free to work a certain number of mines for the curacas. If they shifted people so as to settle them close to the mining sites, they did so by invoking the old Andean system of *mitmaq*, "colonies," which had served to guarantee access to complementary resources much as in their places of origin. If they ran the mines by means of corvée, they did so in terms of the ancient mit'a that had earlier been performed for the ethnic lords, and with a nod to the principles of reciprocity. The mythical and sacred connotations attached to the precious metals, and to gold in particular, that became the symbol of the solar divinity and of his son the Inka were articulated with popular beliefs and practices that in turn helped to reinforce them. Here we confront a coherent ideological system in which the Indians are not to feel themselves to be coerced or exploited when working in the Inka's mines; this work was to be seen as having its roots in the traditional obligations of reciprocity and in duties of a religious nature that no one would consider shirking.

Notes

1 H. de Santillán, "Relación del orígen, descendencia, política y gobierno de los Incas," secs. 51 and 57, in *Crónicas peruanas de interés indígena* (1563; Madrid, 1968), pp. 116–18; J. de Matienzo, *Gobierno del Perú* (1567; Paris and Lima, 1967), pp. 7 and 43.

2 "Historia del Nuevo Mondo," Bk. 12, Chap. 36, in *Obras del P. Bernabé Cobo* (1653; Madrid, 1964), vol. 2, p. 141; likewise Garcilaso de la Vega, "Primera parte de los comentarios reales de los Incas," Bk. 5, Chap. 7, in *Obras completas del Inca Garcilaso de la Vega* (1606; Madrid, 1965), vol. 2, p. 156.

3 *Obras del P. Bernabé Cobo*, Bk. 3, Chap. 36, vol. 1, p. 138. The use of

silver was much more widespread, even among the people (Chap. 37, p. 141).

4 "Informacion sobre las minas de Carabuco," 1573, in Marcos Jiménez de la Espada, *Relaciones geográficas de Indias* (1881–97; Madrid, 1965), *Peru*, vol. 2, p. 69 (my emphasis).

5 "Informacion sobre las minas de Carabuco," p. 70 (my emphasis).

6 "Visita que Alonso del Moral tomó de los asientos de minas de Aporoma y Santiago de Buenavista, provincia de Carabaya, a cuyas labores asisten indios de repartimiento," 1628, Bolivian National Archives, Sucre, Minas, 123, MS. 1,093: ff. 405–576. These documents from the Bolivian archives on Carabaya were brought to my attention through the kindness of Nathan Wachtel.

7 "Informacion sobre las minas de Carabuco," p. 69. Another instance gives much the same impression, namely, that to reach their community mines the Indians from Moho took ten days with llamas loaded with provisions; those from Huaycho, who probably had to proceed by way of Moho, needed twelve; but the people from Carabuco, who lived still farther south and apparently were more distant from Carabaya, took only eleven days, because they followed another path, which was shorter (p. 70). This would have been possible only if the mines in question were in the region of Tambopata, on the upper tributaries of this river.

8 "Discurso de la succesión y gobierno de los Incas," in V. M. Maúrtua, ed., *Juicio de límites entre el Perú y Bolivia* . . . (c. 1570; Barcelona, Prueba Peruana, 1906), ser. 1, vol. 8, p. 161 (my emphasis).

9 A. Alonso Barba, *Arte de los metales* . . . (1640; Lima, 1817), p. 62.

10 Cobo, "Historia," Bk. 12, Chaps. 33 and 36, vol. 2, pp. 131 and 141.

11 S. F. Moore, *Power and Property in Inca Peru* (New York, 1958), p. 40.

12 "Visita que el licenciado don Diego Muñoz de Cuéllar . . . tomó del asiento de minas de oro de Aporoma, provincia de Carabaya, donde asisten indios de repartimento," 1614, Bolivian National Archives, Sucre, Minas, 123, MS. 1091: ff. 365r – 368r; and "Visita . . . del pueblo y asiento de minas de oro de Santiago de Sandia, provincia de Carabaya, donde asisten indios de repartimiento," 1614, ibid., f. 354r. The situation at Carabaya was actually more complex. Tupa Yupanqui had claimed exclusive possession, for himself and for his royal lineage (his *panaca*), of the "Indians of Carabaya and their gold mines"; see "Memorial del pleito que pende en el Real Consejo de Indias . . . ," c. 1617, published by M. Rostworowski de Diez Canseco, in *Historia y Cultura* (Lima) 4 (1970b): 258). But it is not altogether clear if the *mitmaq* transported from the Collao were, like the natives of Carabaya, in the personal service of the Inka and his lineage. Be this as it may, in the present study I shall assume a fundamental opposition between the technologies employed in the Inka's and the community mines, respectively.

13 P. Cieza de León, *El señorio de los Incas: 2a parte de la crónica del Peru*, 1553 (Lima, 1967), Chap. 63, p. 211.

14 Ibid., Chap. 18, p. 58; de Santillán, "Relación," secs. 42 and 51, pp. 115–16.

15 J. Polo de Ondegardo, "Informe del licenciado Juan Polo de Ondegardo al licenciado Briviesca de Muñatones sobre la perpetuidad de las encomiendas en el Peru," 1561, *Revista Histórica* (Lima) 13 (1940):148.

16 M. Helmer, "La visitación de los yndios Chupachos": Inka et *encomendero* (1559)," *Travaux de l'Institut Français d'Études Andines* 5 (1955–6):40. An

analogous though less detailed record of observations may be found in Iñigo Ortiz de Zúñiga, *Visita de la provincia de León de Huánuco en 1562* (Huánuco, 1967–72), vol. 1, p. 26.

17 P. Sancho de la Hoz, "Relación para S.M. de lo sucedido en la conquista y pacificación de estas provincias de la Nueva Castilla . . . ," (1535), in *Colección de libros y documentos referentes a la historia del Perú* (Lima, 1916–19), vol. 5, p. 198.

18 J. Polo de Ondegardo, "Relación de los fundamentos acerca del notable daño que resulta de no guardar a los indios sus fueros . . . ," 1571, in *Colección de libros . . . del Perú*, vol. 3, pp. 101–2.

19 Ortiz de Zúñiga, *Visita*, p. 26.

20 Polo de Ondegardo, "Relación," p. 102. The need for precious metals had in fact increased, whether because of funeral rituals (upon the death of the sovereign) or because of the requirements of the new Inka, who had to amass an inheritance for the lineage founded upon his accession to the throne.

21 Polo de Ondegardo, "Informe," p. 165.

22 Ortiz de Zúñiga, *Visita*, p. 26.

23 "Informacion sobre las minas de Carabuco," p. 69.

24 What the caciques of Omasuyu say here about the *mitmaq*, who are not mentioned by name but are clearly implied, would also apply to the natives of Carabaya, who were in the personal service of Tupa Yupanqui's royal lineage.

25 Cieza de León, *El señorio . . .* , Chap. 18, p. 58.

26 Sancho de la Hoz, "Relación," p. 198.

27 The "fifty or so" workers mentioned at the beginning of the text would seem to represent the approximate number of those involved in the extraction properly speaking, which this text mentions some lines farther on. A *mit'a* is a labor prestation, which is performed in rotation. Those involved in a mit'a are called in Spanish *mitayos*.

28 Sancho de la Hoz, "Relación," p. 102.

29 "Informacion sobre las minas de Carabuco," pp. 69–70 (my emphasis).

30 "Noticia general de las provincias del Peru, Tierra Firme y Chile," 1630, in Maúrtua, *Juicio de limites*, 2d. ser., vol. 1, p. 280.

31 "Visita que Alonso del Moral, f. 455r.

32 "Historia," Bk. 3, Chap. 36, vol. 1, p. 140. It may be true that the inhabitants of southern Tawantinsuyu had not discovered how to work the gold to be found in the rock. In the north, apparently, the Chachapoya used to work cerros where gold was found "en betas fijas," continuous and dense veins; see Biblioteca Nacional, Madrid, Codex J 58, MS 3,040, "Memoria de las minas de oro que ay en estas prouincias de los Chachapoyas," n. d., f. 448r. Outside the Inka domain, it may be worth citing the veins of gold-bearing quartz by the natives of Antioquia, in what today is Colombia; see Fernandez de Oviedo, *Historia general y natural de las Indias*, Bk. 27, Chap. 10 (1549; Madrid 1959), vol. 3, pp. 167–8.

33 Sancho de la Hoz, "Relación," p. 198.

34 Ibid.

35 Sancho de la Hoz, 'Relación," p. 198.

36 "Carta del factor de Potosí," in *Relaciones geograficas*, vol. 2, p. 62; P. Pizarro, "Relación del descubrimiento y conquista de los reinos del Perú . . . ," 1571, in *Crónicas del Perú* (Madrid, 1963–5), vol. 5, p. 221.

37 Wachtel, *La vision des vaincus* (Paris, 1971), p. 119; cf. also M. Godelier, *Horizons, trajets marxistes en anthropologie* (Paris, 1973), pp. 83–92, 343–55.
38 Bernabé Cobo, "Historia," Bk. 13, Chap. 5, p. 157.
39 A. Métraux, *Les Incas* (Paris, 1961), p. 115.
40 *Politica indiana*, 1648, Bk. 2, Chap. 17 (Madrid, 1972), vol. 1, p. 291. The myth of the "Inca king" (Inkariy) is still alive in Andean communities. According to versions of this myth collected in the province of Azángaro, the Inca's death at the hands of the Spanish brought about the disappearance of precious metals, but these would reappear at the Last Judgment (J. A. Flores Ochoa, "Inkariy y Qollariy en una comunidad del altiplano," in J. Ossio, ed., *Ideología mesiánica del mundo andino* (Lima, 1973), pp. 301–36.
41 Albornoz, "Instruccion para descubrir las guacas del Piru y sus camayos y haziendas," c. 1580, ed. P. Duviols, *Journal de la Société des Americanistes* 56 (1967):18 (my emphasis).
42 Ibid., p. 38.
43 Cobo, "Historia," Bk. 3, Chap. 36, vol. 1, pp. 138–9; cf. also Acosta, "Historia natural y moral de las Indias," Bk. 4, Chap. 4, in *Obras del P. José de Acosta* (1590; Madrid, 1954), pp. 92–3.
44 Garcilaso, "Primera parte," Bk. 8, Chap. 24, vol. 2, p. 328.
45 C. de Molina (el chileno), "Conquista y población del Pirú . . . ," 1552, in *Crónicas peruanas*, p. 76.
46 *Relaciones geograficas*, vol. 1, p. 185, n. 55; Cobo, "Historia," Bk. 13, Chap. 11, vol. 2, p. 166; M. de Murúa, "Historia de los Incas,"1590, Bk. 3, Chap. 49, in C. Bayle edition (Madrid: 1946), p. 278.
47 Fernández de Oviedo, *Historia*, Bk. 6, Chap. 8, vol. 1, pp. 163–4; Acosta, "Historia," Bk. 4, Chap. 4, pp. 92–3; Cobo, "Historia," Bk. 3, Chap. 36, vol. 1, p. 139.
48 Fernández de Oviedo, *Historia*, Bk. 13, Chap. 11, vol. 2, p. 166; cf. also Murúa, "Historia," Bk. 3, Chap. 49, p. 278.
49 L. Bertonio, *Vocabulario de la lengua aymara . . .* , (1612; La Paz, 1956), vol. 1, p. 317, and vol. 2, p. 55. In Quechua, the meaning is a little different: D. González Holguin calls *koya* the vein of a mine; see *Vocabulario de la lengua general de todo el Perú . . .* , 1608 (Lima, 1952), pp. 69, 142, 589. The confusion of the glottalized and aspirated kinds of *k* and *q* with the plain varieties of those consonants in the native languages, along with phonetic corruption, must have occasioned the widespread error regarding the meaning of this word, as much in the past as in the present; see, e.g., "Descripción de la villa y minas de Potosí, año de 1603," in *Relaciones geográficas*, vol. 1, p. 374.
50 *Relaciones geográficas*, vol. 1, p. 346.

7
Vertical politics on the Inka frontier

Frank Salomon

What happened within aboriginal Andean societies after Tawantinsuyu overpowered them? Chronicles transmit to us the Inkas' own answers, emphasizing the state's largesse and civilizing influence, the teaching of Inka cults, and the establishment of idealized political structures in the likeness of Cusco. But in these accounts two crucial questions go unanswered. First, what kind of societies did the Inka propose to transform? Their habit of dismissing subject societies as barbarian *behetrías* prior to conquest makes it difficult to tell whether they were fundamentally similar in political makeup to central Andean communities or qualitatively different. Second, by what concrete series of interventions, incentives, and manipulations did the Inkas set about recasting the aboriginal formations in the image of a uniformizing structure? The ideal form of the "Fourfold Domain," seemingly rigid and abstract, must in some way have provided a realistic guide to the problem of dealing with thousands of more or less refractory local ethnic lords, yet we do not know in terms of historical process how it was done.

These problems should be especially interesting at the extreme frontiers of the empire, where Tawantinsuyu subjected peoples who had adapted to ecological conditions different from those that shaped Cusco, and whose ancestors had been relatively little affected by earlier waves of Andean empire building. Aranibar (1969–70) has suggested that the northern Inkaic periphery may have conserved archaic cultural complexes lost in the central Andes and thus could afford a clue to cultural elements older than the Andean states. The problem should also be especially accessible at the peripheries, because when Tawantinsuyu was decapitated, it left its work there in various stages of incompletion. Hence, even though we lack the diachronical narratives of the conquered peoples, we have in such areas an extraordinary opportunity to extract diachrony from synchrony. If it can be shown that the provinces at the

The research on which this study is based was conducted in 1975–6 under a Fulbright-Hayes doctoral dissertation grant. Joseph Casagrande of the University of Illinois kindly afforded additional research opportunities by facilitating study of document microfilms acquired under National Science Foundation Grant Number GS–1224.

utmost frontiers had received the lightest Inka imprint and those to the rear progressively greater modifications, then ethnohistorical testimonies about them, even if they give only a synchronical or "ethnographic present" account when taken singly, constitute a diachronical source when taken together. Such comparison might throw new light on Inka rule, seen not as an ideal structure or as a self-perpetuating system but as a process of historical transformation.

The heuristic conditions under which this can be done are the following. First, we must know at least ordinally, if not in absolute chronology, the sequence in which the chiefdoms were effectively subdued; second, there must be grounds for supposing the differences among Inkaic provinces to have resulted from differences in degree of Inka contact (and not primarily from difference in pre-Inkaic cultural substrates or in natural habitat); third, our sources must be of approximately equal antiquity, so as to control for European influence and the erosion of memory; and finally, they must have been compiled by closely comparable methods, lest observers' idiosyncrasies produce spurious differences.

Recent discoveries of mid-sixteenth-century documentation from highland Ecuador and Colombia (the historical Audiencia de Quito) make it possible to satisfy these criteria. The documents in question are records of detailed field studies made during the period 1557–71 for the purpose of fixing tribute quotas. They illuminate chiefdom and imperial politics in four of the small highland basins into which transverse ranges divide the inter-Andean corridor. These are (1) the Pasto region, at the utmost frontier of the empire, in modern Nariño Province of Colombia and Carchi Province of Ecuador; (2) the Otavalo region, home of the Caranqui and Otavalo chiefdoms, in modern Imbabura Province, Ecuador; (3) the Quito region, modern Pichincha Province, Ecuador, whose chiefdoms were of the culture called Panzaleo in the *Handbook of South American Indians*; and (4) the Riobamba region, modern Chimborazo Province, Ecuador, whose aborigines were called Puruháes.

Heuristic tests

ORDER OF SUBJUGATION

There is a widespread tradition in chronicle sources and some local reports that Tupa Inka Yupanki led the first Inkaic invasions of the far north (Murra 1946; Larrea 1965; Rowe 1946: 204–9). The chroniclers best acquainted with the late northern wars – Cieza, Cabello, and Sarmiento – concur in portraying them, including the possibly apocryphal subjection of the Pacific littoral (León Borja 1964), as campaigns of reconquest against "rebellions" that had undone the earlier work of Tupa Inka. Thus the campaigns of Wayna Qhapaq were seen as a second wave, pushing northward in the wake of initial penetration. Although this scenario of treason and reconquest appears with such regularity that one cannot help but suspect some shaping of the record in the image

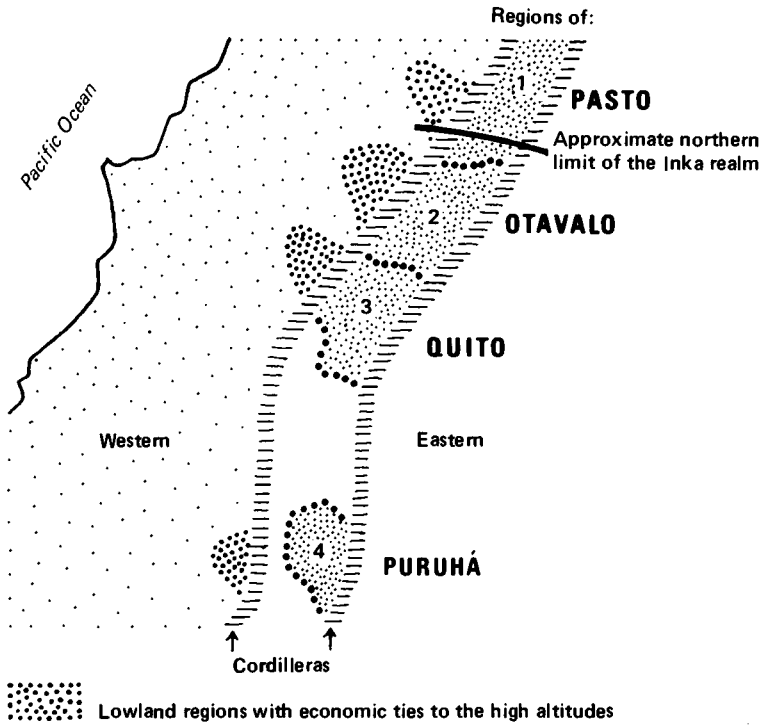

Figure 7.1. Regions on northern frontier of the Inka empire.

of an ideologically legitimated model, it is entirely possible that Wayna Qhapaq's campaigns were in fact intended as a second step in a planned strategy whereby the advanced enclaves implanted by his father were to be replaced by effective occupation and the erection of the full apparatus of governance. The speed at which this could be done, however, was limited by the disastrous fortunes of the northern wars. From what we know of these late campaigns, it is possible to estimate how far the effort had advanced in various regions by the time of the Spanish invasion.

In this matter the preferred testimony is that of Miguel Cabello de Valboa, who, alone among major chroniclers, lived and traveled for many years in the locale of the problem and was informed by the Inka nobility of Quito ([1586] 1951: xvii–xxii, xxv–vi). According to his account, or rather, his interpretation of that of his informant Matheo Yupanki, the last great Inka break through in the north was Wayna Qhapaq's defeat of a coalition of Imbabura chiefs (Fig. 7.1) who had allies from the Quito area (area 3 in Fig. 7.1) at the massacre that gave Imbabura's Yahuarcocha (Blood Lake) its name. Notwithstanding the tradition that Tupa Inka had implanted an imperial citadel at Quito long before, it is likely that the effective subjugation of the lands around

Quito came no earlier than that of Imbabura; this is seen in the fact that the last resistance mounted by the remnant aboriginal forces after Yahuarcocha took place not in Imbabura but on the eastern heights overlooking the Quito basin (Cabello, p. 282; Sarmiento [1572] 1943: 247). Cabello dates the battle of Yahuarcocha and this last resistance at 1492. Although his date cannot be taken literally, since it suggests a desire to make European chronology mesh with that of the New World, new evidence uncovered by Waldemar Espinoza Soriano confirms him in assigning a date not much before 1500.[1] His data confirm earlier estimates of the duration of effective Inka rule (as opposed to enclave penetration) as some thirty to forty years in the two valleys that form the middle of the area here studied.

This datum affords a baseline for estimating the relative depth of Inka influence in the remaining two districts. Inka rule over the Pasto region (area 1 in Fig. 7.1) appears to have been even briefer than in the Quito-Imbabura areas. No incursion here is credited to Tupa Inka. Wayna Qhapaq, in the first of his northern expeditions, sent an army against the Pasto and was soundly defeated. The retreating Inka forces, although they had penetrated deep into Pasto country, "did not set up any fortress that could have acted as a watch tower"; instead they limited themselves to building a fortress at Rumichaca, in the southern part of the Pasto lands, so that "their zone of influence did not reach beyond the present-day Colombian frontier; they held border stations to watch out for potential insurrections" (Moreno Ruiz 1971b: 19; Cabello [1586] 1951: 368–9). The era of the Imbabura wars would then have seen in the Pasto area a situation of enclave penetration similar to that achieved by Tupa Inka decades earlier in regions 2, 3, and 4 (Fig. 7.1). Following the Yahuarcocha massacre, Wayna Qhapaq investigated the possibility of consolidating a more advanced dominion over the Pasto but decided against it (Cabello [1586] 1951: 384). Inka rule over the Pasto may therefore be estimated as some thirty to sixty years only at the level of enclave penetration.

The Puruhá country, on the other hand, had a longer Inka history than the Otavalo or the Quito region. Tupa Inka is said to have defeated the Puruháes, but they probably were not effectively subjected to Inka rule until about halfway through the era of the Imbabura wars. According to Cabello, they, like the other highland peoples, seized on the early victories of the far-northern aborigines as an occasion for revolt, and the Inka armies had to fight them along their route to the second northern campaign (Cabello, p. 368). But en route to the third encounter and also the fourth, the Inka armies supposedly passed over finished roads and used ready-made *tambos* in the Puruhá country without being attacked. One may therefore guess that the difference in date of conquest between the Otavalo and Quito regions and the Puruhá country was less than the total duration of the northern wars, which is commonly estimated at seventeen years; effective Inka intervention among the latter might therefore be estimated at some forty or more years.

CUMULATIVE CHARACTER OF INKA INFLUENCE

If the differences between northern provinces are to serve as an index of Inka policy in integrating new provinces, it is necessary to refute two versions of a null hypothesis: first, that such differences are due only to ecological variations and adaptations to them; and second, that such differences are due only to variation in the pre-Inkaic cultural substrates.

Ecologically, the entire northern Andean orbit belongs to the class of environments called "Andes de páramo" by Carl Troll (1931; 1968); such differences as exist within this class are due to an overall increase in moisture as one proceeds northward. Throughout the Andean north the inter-Andean altitudinal zone reaching downward from the lower margin of the eternally frozen heights to about 3,400 meters consists of the seemingly endless expanse of foggy, rolling grassland slopes that give the "páramo Andes" their name. This habitat is distinct from the drier *puna* of the central and southern Andes. A belt of *ceja interandina*, or intercordilleran cloud forest, intermittently separates the *páramo* from the inter-Andean valley floors, which in turn consist of two more or less distinct types. The higher and moister valley floors, which were covered at least in part with a now-extinct forest, range between about 2,300 and 3,200 meters above sea level and were select maize lands, housing most of the larger aboriginal settlements. At somewhat lower altitudes, and typically on rimlands overlooking river canyons that break through the cordilleras into Amazonia or the Pacific littoral, one finds drier lands where unirrigated maize and fruit agriculture is still practicable, though supporting lower population densities. The river canyons themselves are usually hot and arid or semiarid but yield spectacular crops when their waters are channeled into irrigation plots. On the outer flanks of the cordilleras, both the slopes facing Amazonia and those facing the Pacific littoral present dense tropical forest landscapes from about 3,400 meters downward. The uppermost forests are of the *ceja de la montaña* type, the lower slopes and foothills comprising enormous tracts of rain forest (Acosta-Solís 1968; Maggio Peña 1964). The latter were the homes of tropical forest horticulturist peoples. The pattern of adaptation to this spectrum of habitats was also quite consistent throughout and depended on the complementary productive potentials of the inter-Andean valleys, transverse canyons, and outer slopes.[2]

The second null hypothesis, that variation is due only to idiosyncrasies in the pre-Inkaic cultures of each region, would be plausible if the degree to which Inka institutions and traits had been accepted prior to 1534 could be shown to vary irregularly, and independently of the sequence of conquest. This, however, is not the case. If the *Relaciones geográficas* edited by Jiménez de la Espada ([1881–97] 1965) may be taken as a corpus of methodologically comparable data (the majority of the sources included having been written in 1582 to the specifications of a single questionnaire, mostly by local clergy and officials with a good knowledge of aboriginal culture), it becomes possible to treat them collectively as

a survey of highland locales and draw from them an estimate of the relative impact of Inka culture in different regions. This impact, on the whole, takes the form of an increasing penetration of Inka institutions as one moves from north to south.

Proceeding southward from the Pasto region, where what we know of the Inka presence is limited to scattered material remains, a legend concerning a pro forma tributation, the introduction of llama herds, and the incipient penetration of the Quechua language, we find a coherent body of Inka-derived traits characteristic of regions recently consolidated under Inka rule. These include the use of Quechua as a lingua franca; imperial roads; testimony about warfare with Inkas; the modification of llama herding in the direction of specifically political management; and the emplacement of *mitmaq*. In the Quito region we find this complex augmented by a tendency toward Cusco-emulating toponymy and imitation of Inka clothing. Farther south, in the Puruhá country, and beyond it among the Cañari and Palta domains, Inka modifications of cult practice, theoretical schemes of administration, tributation rules, regional-scale economic organization, and the terminology of social organization become conspicuous.[3] Although it is not possible with evidence from the *Relaciones* to refute the null hypothesis absolutely, it is possible to show that where we are forced to choose between it and a cumulative or duration model of Inka impact (and, indeed, there is little prospect of interpreting northern Andean data without doing so), the latter is a more reasonable choice. Such a model has been independently confirmed by Meyers (1976) on the basis of ceramic data. This conclusion affords a prima facie warrant for treating the differences between northern and southern chiefdoms in the mid-sixteenth century as being at least in part fossil evidence of a diachronic process occurring under Inka rule.

Chronology and comparability of sources: In treating the functional character of chiefdoms under differing degrees of Inka modification, we turn to sources both older and more ethnographically detailed than the *Relaciones*. These sources derive from efforts by Spanish officials in the period between the consolidation of crown rule by La Gasca and the arrival of Viceroy Toledo (1548–69) to regularize tributation on the basis of detailed knowledge of aboriginal demography and economy. They recorded, therefore, the structure of the native political economy before it was substantially deformed by the *reducción* movement; indeed, in many of the places studied, the common people had not even come effectively under the *doctrina* system and retained their pre-Christian anthroponymy. The colonial regime at this time was largely a matter of indirect rule, with *encomenderos* extracting tribute from chiefdoms whose internal constitutions had not been radically altered. It is even possible that the relaxation of Inka rule had resulted in a resurgence of the power of ethnic lords, so that the status quo of the 1550s and 1560s may reflect to some extent a new florescence of pre-Inkaic political styles (Atienza [1575?] 1931: 24–5; Santillán [1563] 1968: 118–20).

Of the four zones studied here, data on two derive from *visitas* (administrative community studies) of the late 1550s. The earlier of the two, dealing with certain chiefdoms in the Puruhá country, was executed in 1557 by Diego Méndez and Pedro Rengel, a Franciscan friar (AGI/S Justicia 671, ff. 242r–257r); the later, compiled in 1559 by Gaspar de San Martín and Juan Mosquera, reports on six communities immediately east of Quito (AGI/S Justicia 683, ff. 798r–874r). Both are conserved in Spain as evidence read into legal records, the former in extracts only, the latter complete with detailed demographic records. Comparable in space and time, they are not only methodologically of like genre but actually sister documents, since both were conducted according to one set of instructions and questionnaire. This document has also survived; it was written by the *gobernador* Gil Ramírez Dávalos in 1557 and is reproduced together with the Puruhá extracts. Probably for reasons similar to those that interest us – the compilation of comparable data – Rámirez Dávalos chose to reuse it in 1559.

Three more points about the methods of these visitas merit mention. First, although the order in which the communities were studied reflects the geographical trail of the official inspectors, the order in which the inhabitants of each settlement were brought before the officials is no artifact of Spanish administrative convenience but, rather, that of the ethnic lords' own *khipu* records. Both this methodology and internal evidence show that they faithfully reproduce local ethnocategories of social organization.[4] Second, the *visitadores* were by no means insensitive to Inka influences; Gil Ramírez Dávalos, author of the *instrucción*, had recently been *corregidor* of Cusco (Gonzalez Suárez [1881] 1969: vol. 1, p. 1247) and encouraged his delegates to cast their report in Inka administrative terminology,[5] of which he shows considerable understanding. If certain Inka institutions are modified or absent in the visitas, it is probably not because the officials failed to look for them; conversely, if institutions alien to Inka norms appear, it is not because they had been encouraged to find them. Third, although the visitas were compiled in order to solve contemporary (i.e., 1557, 1559) administrative problems, they are not just synchronic renderings of observed institutions but ethnohistorical studies in their own right; because Spanish law forbade tribute in excess of Inka levies, the *visitadores* had to carry out extensive interviews with ethnic lords concerning economy and governance in the last years of the pre-Hispanic era.[6]

The data on the Otavalo region are less uniform but closely related in genre and period. They derive chiefly from fragments of visita summary records and tribute quota records of the 1550s and 1560s that appear embedded in the record of a lawsuit of the 1560s (AGI/S Cámara 922A); these are fleshed out with data from later sources. Pasto data derive primarily from a tasación book compiled in 1570–1 but containing numerous interviews with Spaniards who had lived in the district since the days of Benalcázar's first incursions. It therefore records perceptions dating from the earliest contact period and for this reason deserves a

higher place in the hierarchy of sources than its date alone would suggest (AGI/S Aud. Quito 60:2).

The Pasto Case

The Pasto country was the utmost hinterland of northern Tawantinsuyu, the most distant and least consolidated of imperial outposts. The aboriginal Pasto territory is thought to have included not only a section of the sierran corridor extending from modern Carchi Province, Ecuador, through the southern part of modern Nariño, but also a much larger area of the western slope, largely forested lands including, at a minimum, most of the upper Guaitara River valley (Moreno Ruiz 1971: 438). If Jijón (1945: 72) was correct in identifying the Barbacoas as a Pasto-related people, the Pasto radius would have covered a huge part of the Chocó coastal plain as well. In these regions, Inka dominion, such as it was, probably extended only to the more southerly and intercordilleran areas; the most recent and complete studies of Pasto territory identify the Angasmayo River, "which is as far as king Guaynacapa reached," as slightly south of Funes, only about halfway between the southern and northern extremes of Pasto country (Cieza [1553] 1947: 115; Moreno Ruiz 1971b: 19; E. N. Martínez 1974: 652–3). Moreover, Inka control probably did not extend far to the east or west of its northward path and left only a thin scattering of material remains along it. The *Qhapaq Nan* itself apparently reached only to Tulcán, in the southern half of the Pasto area. Because of this incomplete penetration, one may expect that data on governance and the mode of adaptation among the Pasto will report a substantial portion of conservative aboriginal practice.

In particular, the highland Pasto, cultivators of tubers, maize, cucerbitacea, and *quinua*, depended for key elements of subsistence – salt, cotton, and capsicum peppers, among others – upon contacts with lower-lying areas. We know, too, that among most Colombian peoples, access to certain highly prized wealth objects whose circulation was the means of articulating social stratification within communities depended upon remote contacts (Trimborn 1949: 174–93, Wassén 1955). Reichel-Dolmatoff has shown that these interzonal imperatives had to be played out in an ambience of sharp military rivalry among chiefdoms (1961). A question remains, however, concerning what kind of institutional means northern Andean peoples had developed for dealing with this problem prior to Inka contacts.

Two characteristics stand out from the data about these mechanisms. The first is the striking diversity of institutional means used; the second is the degree to which these means depended on achieving exchange relations beyond the sphere of political control of the chiefdom benefiting from them. These tendencies stand in contrast to the dominant traits of interzonal relations within more consolidated parts of Tawantinsuyu, where interzonal resource management tended to depend on the application of a very small number of mechanisms (variations on

the mitmaq principle) and apparently aspired to the creation of sealed and self-sufficient assemblies of resources under each level of political authority.

The chief area of *montaña* horticulture that provided production complementary to that of the sierra was the middle and lower Guaitara River valley, sloping down from the Pasto highland nucleus westward toward the Chocó. The natives of this area were called Abades, a little-known forest people whom the Spanish considered poor and primitive but whose land they admired as "abundant in all kinds of food and crops that the Indians eat and trade" (AGI/S Aud. Quito 60:2, ff. 208v–210v). From this terrain the Pasto drew supplies of cotton and gold. The higher-dwelling Pasto obtained these goods in at least two separate ways. On the one hand, Pasto highlanders traveled to gold-bearing zones in the Guaitara Valley (apparently either individually or as representatives of domestic groups, rather than as political envoys) and collected gold, which they then bartered for cotton in the nearby low-lying environs (ff. 206v–207r). This may also have been the conduit through which salt was brought from Yascual, a low-lying western Pasto settlement (Cieza [1553] 1947: 117; AGI/S Aud. Quito 60:2, f. 217v). On the other hand, the Pasto had developed a curious mode of production in which groups of ethnic Pasto not only dwelt among the foreign natives of a tropical zone – this in itself would have been familiar to southern Andean peoples – but coexisted so closely with them as to abandon the most characteristic highland institutions. The Spanish, to their evident surprise, found that the Pasto dwelling at Ancuyá, lowest-lying of Pasto settlements, deep in the Guaitara Valley, conducted Abad-style production of "mahiz de tierra caliente y algodon coca mani platanos y todas las otras cosas que tienen los de tierra caliente" (f. 210r). The Pasto of Ancuyá did not have any of the middle- and long-distance barter apparatus (*contrataciones*) typical of their highland compatriots and were treated in colonial administration as Abades rather than Pastos. Another instance of the Pasto tendency to create outliers that assimilated to local norms rather than acting as outposts of highland power is seen in P. Antonio Borja's famous report on the coca lands of Pimampiro, in the semiarid irrigable lands of the Chota-Mira transverse river system, at the southern margin of the Pasto homeland. Here lived

> más de ducientos indios de los Pastos, que vienen al mismo rescate (i.e. coca). Hay ochenta indios pastos que son como naturales; éstos son camayos, que dicen, que son como mayordomos de los dueños de las rozas de coca y estánse con estos naturales, porque les dan tierras en que siembren; y así están ya como naturales. [(1582) 1965: 252]

The word *kamayuq* notwithstanding, this appears to be a purely aboriginal and non-Inkaic establishment. In the first place, the owners of the coca were local lords, and it is contrary to the kamayuq tradition that a kamayuq should serve as "mayordomo" to any but their own

llajta lords. Ordinarily, Inkaic *kamayujkuna* bore a political relationship of only secondary responsibility to local authorities where they were stationed, and it is unlikely that they should become managing representatives of them. Second, the demographic scale of the colony would be uncommonly large for a nonstate kamayuq colony; ordinarily such large outliers are not found attached to small chiefdoms. Third, the statement that the Pasto colonists "are like natives" goes against the uniform status of kamayujkuna as culturally and politically alien.

Although Pasto installed in such special sites were expected to supply highland nuclei with exotic produce, they did not themselves conduct the traffic. In part the transport function was fulfilled by household-level expeditions, as seems to have been the case at Ancuyá. But Pasto society also possessed a specialized sector of politically sponsored long- and medium-distance exchange specialists who were called *mindaláes*. In 1570 twenty-one Pasto chiefdoms, in fact all except Ancuyá and tiny Nastar, commanded corps of mindaláes; since the existence of such groups in highland Andean societies has not been generally known, they merit detailed study.

The word *mindalá* is probably not of Quechua origin. It is absent from Quechua dictionaries of Peru and Bolivia, ancient or modern, and seems likely rather to derive from a Macro-Chibchan language (Pérez 1962: 224; Jijón 1941: vol. 2, p. 382; Loukotka 1968: 246, 250), in which it would be related, through the verb root *min-*, to the terminology of roads and travel. The word remains in use today in Ecuadorian highland Spanish and some subdialects of Quechua (Z. Ponce 1955: 44; Moreno Mora [1956] 1967: vol. 1, p. 293; Cordero Palacios 1957: 193), having changed in its stress to the penultimate. Today, in the Ecuadorian south, it denotes an itinerant retailer of foodstuffs, invariably female, and carries a connotation of vulgarity similar to the English *fishwife*. In what was once the Pasto country it now means "stingy, miserly." In the sixteenth century, however, it was not a pejorative but a true ethnological term, denoting a privileged corporate sector responsible to a local ethnic lord and dedicated to the procurement and distribution of certain goods of high unit value and high prestige.

Certain of these goods derived their value not only from exotic provenience and scarcity but from their religious connotations. Among these was coca leaf, which mindaláes obtained in the Chota-Mira transverse valleys, probably in the Abad lowlands, and possibly also from Amazonian peoples. Borja testified that certain *mercaderes*, a term that the Spanish used to translate *mindalá*, were active in traffic between the Pasto and coca-rich Pimampiro; the fact that these, unlike the rest, were bilingual ("ladinos en la lengua general del Inga") suggests that their orbit of operations also reached deeper into Tawantinsuyu. *Chakira*, that is, wealth objects consisting of strings of small beads, variously described as being of red or white bone or of spondylus shell from the Pacific coast (Cieza [1553] 1947; Marcos 1977–8; León Borja 1964) also figures among their stock (Grijalva 1937: 81). Chakira had quasi-

monetary exchange value, and mindaláes were probably the agency through which chiefs disposed of the immense quantities of chakira that they received from subjects in tribute (AGI/S Aud. Quito 60:2). Colonial mindaláes of later times bartered all over southern Colombia in a variety of goods, that included many articles of personal adornment (Arboleda Llorente 1948: 108), mostly of metal. Such dealings imply a special access to production at remote locales. But what did the mindaláes give in return? The likeliest answer is, highly processed goods of highland manufacture. Chief among these appear ready-made clothes and processed food and beverages (AGI/S Aud. Quito 9). *Chaguales*, buttons of polished gold, which have a broad Colombian distribution as wealth objects and are attested in the south of Ecuador as grave wealth (Wassén 1955, CVG/Q: 1st ser., vol. 3ª:3d 316) are another possibility.

The mindalá complex was tied to the existence of certain gathering places for exchange, which the Spanish, borrowing the Nahuatl *tianquiztli*, "marketplace," called *tiangueces* or *mercados*. Important tiangueces existed around and in Pasto (AGI/S Aud. Quito 60:2 ff. 206v–207r). It appears that in such settings both specialists and Pasto common people with cargo from the Abad country and household produce offered their surpluses in return for products of diverse origin. In this way a portion of mindalá imports may have reached communities in the hands of commoners. But it is easy to overestimate the degree to which mindalá operations resembled European commerce. The mindaláes were not entrepreneurs so much as political operatives, and the object of their travels was less likely to have been the accumulation of wealth objects than the channeling of interzonal flows in directions favorable to the interests of their sponsoring lords. There is no attested case of a mindalá without political sponsorship. A telling case of the political character of mindalá operations comes to light in a lawsuit of the 1560s studied by Carlos Emilio Grijalva (1937: 81–4), which concerns the doings of a certain "Juan Cuaya mindala," who was active in what is now Carchi Province, Ecuador. Apparently, a Pasto chief desirous of subverting a rival chief's dominion over the community of Cuasmal arranged for Cuaya, himself a subject of the former lord or of a third lord, to distribute to the people of Cuasmal "many gifts of coca leaf and *chequira* and other things." Finding his authority undercut, the victimized lord turned to Spanish courts for redress. The decision to dispose of precious goods as an "investment" in the political uses of reciprocity, rather than in order to maximize material return through market transactions, suggests that mindalá traffic is best understood not as commerce but as a method for practicing redistributive politics in an ambience of fluid political borders and small rival centers of sovereignty. This motive perhaps helps explain the universal practice of exempting mindaláes from the usual types of cacical corvée and tributation, and requiring of them only contributions in special wealth objects. In the Pasto region the Spanish regularized mindalá contributions to their lords in the form of finished cotton cloaks.

The case of Otavalo–Quito

Since the overall ecological profiles of the Otavalo and Quito regions are relatively similar (with the former evidencing slightly higher rainfall for any given altitude, and similar overall elevation), and since the effective subjugation of their respective native peoples by Tawantinsuyu probably occurred at about the same time, one would expect them to show resemblances both in pre-Inkaic interzonal integration and in the degree to which the Inka had modified them. The documentary record supports these suppositions enough to justify joint treatment.

In both regions, the archaeological and documentary records suggest that as of the 1530s the Inkaic presence still preserved a marked enclave character (Plaza 1976: 114), the chief Inka habitation centers having only recently begun a transition from defensive citadels to elite ceremonial and administrative centers. In both areas, Inkaic development sites (Otavalo, Quito) were guarded to the immediate east by fortresses of rustic construction overlooking the aboriginal communities of the basins (ibid., p. 66; Larrea 1971: 178), and at borders of the respective highland basins chains of forts apparently used during the Inkaic wars dominated the slopes of the transverse and eastern mountain ranges, thus closing in the highland nuclei on three sides. The *bocas de montaña* giving access to the western exterior slopes do not seem to have been similarly fortified. Imposing imperial dwellings and temples are attested for both Inka centers (Cieza [1553] 1947: 123–7), as are imperial *tampukuna* of high rank (Guaman Poma [1615] 1936: 1093), yet in both, monumental architectural remains were scarce even in the sixteenth century. There were Cañari and Chachapoya mitmaq emplacements outside the Inka strongholds (Salomon 1978: 226–8), but although Inka artifacts had become popular as sumptuary goods among aboriginal elites, there was as yet no markedly Inka-syncretic tradition among local potters (Meyers 1976: 177–85).

The relative military openness of the western mountain boundaries of both basins appears to relate to axes of peaceful interaction with lowlanders of the forested western montaña. These avenues of exchange were in turn partly analogous to the Pasto interaction with the middle Guaitara drainage area and seem to have been, like the Abad–Pasto contact zones, major sources of supply of tropical goods. Among the Otavalans, the sources of cotton fiber, which was the predominant clothing material, lay along the middle of the valley of the westward-flowing Mira River, at Cahuasquí and Quilca, and on the western forested foothills around Intag: "The commercial operations of these Caguasquíes involve only cotton, which they harvest within a league of this town, in a warm valley, down toward the Mira river" (G. Aguilar [1582] 1965: 246). The Quilca people, according to the same witness, "get much coca leaf every three months, and a lot of cotton, from another valley two leagues away from their town and these are rich" (see also Paz Ponce [1582] 1965: 240). The Spanish assigned Intag a specialized

cotton tribute on the grounds that its people, as cotton dealers, had become richer than any other group (AGI/S Cámara 922A pieza 2ª: ff. 169r-v), probably at a household level of interaction. Another type of goods in which the western slope peoples were considered rich was gold. They did not deal peacefully with the tribes of the far-western littoral, as they did with sierrans, and were often at war with Lachas and Utubíes (Aguilar [1582] 1965: 247; Rodríguez [1582] 1965: 244).

The analogous axis in the Quito area was that between intercordilleran communities and the western slope people called Yumbos, dwellers on the southern bank and tributaries of the middle Guayllabamba River, likewise a tropical forest zone (Anónimo [1582] 1965; Cabello [1579?] 1945). The six highland communities visited in 1559 testified to having depended heavily on the Yumbos for their supplies of cotton and capsicum pepper, which they secured by carrying their maize and tuber surpluses into the Yumbo country through the "bocas de montaña" (AGI/S Justicia 683: ff. 838v, 856r, 817r-v, 803v). The conformation of early *encomiendas* shows a pronounced pattern of affiliation between highland and Yumbo villages. Like their northern counterparts, the Yumbos were rich in gold (AGI/S Justicia 671: ff. 66r–68r) and like them also, they warred against their western lowland neighbors, the "Niguas" (CVG/Q Sueltos 49–6–9 to 18, vol. 2, f. 530).

In addition to tropical crop lands, the highlanders put a high value on access to other special resource niches: salt springs and transverse river canyons where coca leaf could be grown. In the Otavalo area these resources occur close together in the Mira Valley. Not only the Pasto but also sierrans from Otavalo and even as far south as Latacunga (between the Quito and Riobamba regions) came to negotiate for the coca leaf of Pimampiro, on the Mira headwaters; Quito-area people were probably among them. The masters of salt refining in Mira "get a lot of it [i.e., salt] and use it for very copious trade, . . . and they peddle it in all towns in this region, and even heathen Indians who have not yet been conquered come to trade for it" (Paz Ponce [1582] 1965: 239–40). In the Quito district the coveted *muru kachi*, "grainy" or "spotty" salt, which aborigines valued far above sea salt, was under Yumbo control at Cachillacta, the "salt community." The highlanders inspected in the visita of 1559 obtained it, as they did cotton and capsicum pepper, by direct bartering expeditions.

Mindalá organizations, too, existed in the Otavalo and Quito regions as well as among the Pasto. Indeed the uniform use of the term *mindalá* throughout this linguistically heterogeneous area suggests that the various mindalá organizations formed a single supraregional network independent of Inka sponsorship. They shared, too, the characteristic special rights of Pasto mindaláes, so that by comparative study it becomes possible to outline in a supraregional fashion the defining traits of mindalá status. First, they were a unique corporate group set aside from common, noble, servile, or foreign categories; they had no "prin-

cipal" as sectoral leader but followed a primus inter pares, "a mindalá who was in charge of the rest" (AGI/S Justicia 683: f. 829v), and were responsible only to the apical chief of their home communities. Second, they were exempt from the usual political obligations such as corvée, owing only a special tribute in sumptuary goods; in Otavalo these were "gold and blankets and *chaquira* of white or red bone" (Paz Ponce [1582] 1965: 236). Third, they were associated with traffic in prestige goods of exotic provenance and the export of local goods to remote locales; characteristic imports include "gold, silver, salt, and coca leaf" (CVG/Q 2d ser., vol. 18, p. 114) and bead wealth and clothing. Whether regularized extraterritorial residence constitutes a fourth defining trait remains an open question. In the Quito region, mindaláes were observed to dwell at the locally preeminent nexus point of transport and exchange, the Quito *tianguez*, and in a late Otavalan datum they were present at Amboquí in the Mira Valley coca lands (AGI/S Justicia 683: f. 829v; IOA/O 1ª notaría: ff. 647–702). But it is not known whether such norms prevailed among the less Inka-dominated Pasto.

Taking both mindalés and contacts with the nearby western montaña into account, it becomes evident that both agriculturalist commoners and exchange specialists were agents of interzonal contact, although they used different channels. These channels apparently had separate termini (distribution points) within the communities: respectively, households and the courtlike cacical complex. But they intersected at a point between termini of supply and distribution, namely tiangueces at sites outside the home community, where mindaláes and commoners could exchange directly. To Quito's tianguez (Hartmann 1971), where Spaniards did business from the earliest days of the conquest, the people of nearby *llajtakuna* brought foodstuffs, especially maize, and cooked specialty foods, and goods as varied as pearls and jewels from the Esmeraldas coast; silver from the southern sierra; gold, salt, and peppers from the montaña; and coca leaf, cinnamon, and possibly tobacco from Amazonia were offered by vendors (AGI/S Justicia 683: ff. 838v, 803v, 817r, 869r; Cobo [1653] 1956: 344; 1ʳ LCQ, vol. 1, p. 79; CVG/Q ser. 4, vol. 18, pp. 114–5; Anónimo [1573] 1965: 228; Atienza [1575?] 1931: 84). It is likely that Amazonian montaña peoples such as the Quijos sent exchange specialists of their own to Quito (Oberem 1971, vol. 1, p. 171), where in turn one could obtain goods from the western slopes, notably cotton, scarce in their own lands. Since Quito also lay along the route of north–south intracordilleran traffic such as that between Latacunga and Pimampiro, its tianguez formed a nexus uniting middle- and long-distance trans-Andean channels with the longitudinal axis of the *Qhapaq Nan* and its probable pre-Inkaic prototype. In all likelihood it was this strategic position in commodity flows, rather than its dubious status as a pre-Inkaic population center, that weighed in the Inka's choice of Quito as the paramount development site of far northern Chinchaysuyu. Although early tianguez data from Otavalo are lacking, early testimony that its people "have [i.e., in 1552] all the barter, or

most of it, from all of Quito and its environs" (AGI/S Cámara 922A pieza 3ª: f. 165v) suggests that there, too, Inka interest may have centered on places crucial to commodity flows (Hartmann 1971).

Such data show affinities between Pasto modes of vertical integration and those of peoples farther south. But in the Otavalo and Quito areas, and especially the latter, the traces of Inka policies designed to modify the aboriginal system are equally marked. They can be grouped under a small number of widespread functional tendencies.

First, Inka rule in the phase attained around Quito manifests a tendency to seek, as it were, a closure of the ecological circuit. For aboriginal structures that depend on the development of diverse, flexible ties with the groups native to each exotic resource area, a strategy oriented toward the use of permeable frontiers and multiple external affiliations, the cusqueños apparently sought to substitute structures that would enclose whole assemblies of complementary resources within single, closed political universes at any given level of governance. The boundaries of such units should not be imagined as enclosing areas of contiguous space, since the territorial form was characteristically that of an archipelago (Murra 1972) of noncontiguous parts; the system was closed, rather, in the sense of minimizing points of external dependency. Of the Pasto techniques for access to exotic resources, the one that implied the most intimate relationship with groups under foreign political control, namely, the surrender of extraterritorials to outside lords' authority in return for harvest rights, is absent in the Quito and Otavalo evidence. Intermarriage between subjects of Yumbo and highland lords did persist (AGI/S Justicia 683: ff. 850r, 848v, 867r), and since this implied the lord's endorsement (Atienza [1575?] 1931: 81), a relationship beyond that of private persons is implied; but there is no evidence of whole households permanently transferred to alien rule. Moreover, Tawantinsuyu was not content to allow the exchange partners of the subject peoples to remain wholly outside the imperial orbit, even though it must have been evident by 1500 that Inka conquest of tropical forest peoples was costly and problematic. Oberem (1971: vol. 1, p. 145, 1974: 108–9) has gathered evidence of Inka attempts to penetrate Amazonian groups immediately east of Otavalo and Quito; these did not give rise to a permanent or active dominion, yet even during the Inka dynastic wars, the attempt was renewed (Cabello [1586] 1951: 437–8). Similarly, the *orejones* sought to subdue both the Lita-Quilca-Cahuasquí terrain northwest of Otavalo and that of the Yumbos, west of Quito. These invasions were associated with the Inka commander Guanca Auqui (Aguilar [1582] 1965: 246). Inka rule over the montaña peoples seems to have rested at the level of an inactive hegemony, but the regime does seem to have taken an interest in east–west transport routes, elevating the aboriginal paths to imperial roads (Oberem 1971: vol. 1, p. 175).

The Inka state not only sought such controls over existing interzonal arrangements but was in the process of introducing elements of the specific mode of interzonal operations most characteristic of the central

and southern Andes, namely, the kamayuq apparatus. Kamayuqkuna, specialists who exploited or processed a particular resource not as a subsistence activity but as a delegated function of a political authority, cult, or community frequently resided extraterritorially in multi-ethnic enclaves of fellow kamayuqkuna while remaining politically subject to their home lords, even when they owed secondary tributes at their place of work. In the Quito area, kamayuq arrangements (so named) appear at the southernmost edge of the region in two communities close to the Qhapaq Nan. Incoming delegates from communities farther south formed an enclave that was in a small way multi-ethnic; they were probably "carpenters" specialized in exploiting the now extinct sierran forest. And another nearby community commanded a small outgoing cotton kamayuq delegation, suggesting conversion of the cotton import complex from external dependency to archipelago self-sufficiency. In Inka-developed sites such as Pomasqui, kamayuq economy had advanced farther than in aboriginal settlements; here, delegates classified as *hortelanos* of chiefs from the whole surrounding region operated what seems to have been a pilot or demonstration project in state management of irrigated lands (Navarro [1571] 1941).

Second, the Inka regime apparently favored the organization of aboriginal groups into compound units that were politically structured as pyramidal hierarchies of inferior and superior authorities. In 1570, in the Pasto country, each localized community was headed by a single chief, with no further divisions evident. In the Quito area the same pattern of aggregation survived Inka rule in some places, chiefly small communities at some distance from the main imperial arteries. In such places, the head of a small aggregate (perhaps consisting of a few hundred people, before the epidemics of European diseases) held the rank of cacique and recognized no ethnic lord as a superior, but only the Inka state itself. However, the same highland communities that show Inka influence in the matters discussed earlier also show an organizational plan in which ethnic authority takes on the multi-level character seen on a grander scale in state organization. In these – three to five population aggregates, each in the same general size range as the smaller autonomous communities – all owed allegiance to a single apical lord. Each aggregate was headed by a subordinate lord, called *principal* by the Spanish. The apical lord or cacique was himself the chief of one of the sectors, or *parcialidades*, but delegated his intrasectoral powers to a stand-in, normally his brother. All the parcialidades, taken together, were treated as a single local community, inspected at one site and associated with only one toponym. The subordination of principales to caciques was expressed in tribute law by a duty of each principal to send the apical lord a small contingent of *mit'ayujkuna*, servitors in rotating quotas. The fact that this tribute fell into disuse very early in the Hispanic era suggests that it posited a scheme of aggregation foreign to local mores. A document of 1564, apparently using Inkaic categories of regional organization (León Borja and Szászdi 1971), hints at the existence

of regional-level *provincia* lords recruited from the aboriginal nobility, representing *saya* moieties at the regional level, but the caciques of compound communities did not acknowledge these in any other known source, perhaps for similar reasons.

This tendency did not lack implications for the system of vertical organizations. Whereas, in the Pasto country, the command of mindaláes was lodged in the office of each autonomous cacique, in the Quito area, and probably also in Otavalo, only one chief in a given region was endowed with a mindalá corps. This privilege, in both places, accrued to the chief commanding the largest subject population and the largest number of parcialidades. In Quito, the mindaláes of Juan Zangolquí lodged in the part of Quito that also housed the Inkaic and aboriginal nobles of the southern or Hanan moiety of the province (AF/Q, legajo 8: ff. 82v–83r; Oberem 1976b: 34). This, together with the fact that there was no other mindalá corps in Hanan Quito, suggests that the mindalá function was centralized at an apical position over all the chiefdoms of a given half-province. It remains, however, an anomaly that Juan Zangolquí did not occupy a Hanan position in his home district; his chiefdom was styled Urin Chillo. This irregularity recurs in the 1564 document, where he, and not his Hanan counterpart, represents "Chillo" in Inkaic Quito. It may represent an Inkaic concession to persisting political realities based in pre-Inkaic practice; there is, indeed, some doubt to what degree the relationship of Hanan and Hurin Chillo ever was reflected in political behavior.

Third, there was a noticeable tendency for the Inkaic state to define the concrete content of political relationships in such a fashion that the rights and duties of any given authority over its subordinates were qualitatively similar to those exercised by authorities at the other levels. That is, with the single exception of military recruitment, a state monopoly under *Pax Incaica*, the claims made by the Inka state on subject peoples were qualitatively similar to those that its vassal ethnic lords could themselves levy; a theoretically unitary model of authoritative behavior was thus to be played out at differing levels of inclusiveness in any given district. Since the conquest of the north was to some extent an encounter between differing cultures, this was possible only insofar as Tawantinsuyu either modified its conduct in the image of local norms or exerted its own norms only in the degree to which local lords could be persuaded to adopt them. Both tendencies can be observed in the Quito case. In the realm of ecological relationships, this tendency becomes evident with respect to the vertical spectrum of goods and services rendered as tribute to the different levels of authority. Detailed data on Pasto tribute are not yet available, except that its cacical level included quotas of service labor and *chaquira* of uncertain provenience. But Cañari witnesses explained that the specifically pre-Inkaic mode of tributation had included contributions of unprocessed wild goods such as animals caught by hunting, firewood, water, and grass, and labor in the building and repair of the cacical house as well as cultivation of

cacical fields (Gallegos [1582] 1965: 275; Gaviria [1582] 1965: 285). These contributions proceeded from a relatively narrow swath of the total ecological spectrum with which these witnesses were acquainted, including only the llajta nucleus and adjacent woodlands and páramo; tropical elements are lacking. The contributions of Quito-area subjects to their ethnic lords in 1559 were still of this type, differing only in the addition of *choclos* (tender maize, possibly first fruits) and of a full-time hunter, in one case (AGI/S Justicia 683: f. 817v). Significantly, tribute to the Inka state was very similar. It consisted of labor applied to the Inka's maize fields, houses, and household economy; labor applied to páramo animals; and offerings of wild plant products (ff. 856r, 838v, 817v, 869v, 804v). Notwithstanding Atienza's assertions, there is no evidence of Quito aborigenes' having contributed labor to state productive facilities below the altitude of maize fields, as did subjects of the Inkaic heartland, or of any corvée related to state-controlled tropical outliers. In this respect the level of Inka control exerted around Quito still represented a compromise with local norms. Tawantinsuyu, whose enclaves at the peripheries acted almost as chiefdoms among chiefdoms, here acted as a chiefdom over chiefdoms. But there had already been one important innovation, the introduction of state llama herds and the apportionment of part of the corvée to herding and textile labor using animal fiber. This does not violate local norms about the vertical range of tribute duties, being, as it were, a substitution within the páramo category of domestic for wild resources. It did, however, entail extra work, and one would expect that in order to make this palatable to ethnic lords they would be endowed with such rights at their own level; as will be seen, this occurred at a slightly later phase of the Inkaic transformation. In the meantime it appears that the persuasive measure used, possibly while the subject peoples were being trained in camelid technology, was the distribution of substantial amounts of woolen clothing to subject peoples. Cieza noted that when he passed through Quito, before 1550, Inka-style woolen clothing was widely used and admired by native peoples ([1553] 1947: 131–2).

The case of Puruhá

When the visitadores of 1557 interviewed the ethnic lords of five Puruhá highland communities, they recorded the functioning of a system whose ecological plan was similar to that of the northern examples, but one that adopted sharply differing institutional means for connecting its components. Like the others, it linked highland maize and tuber farming settlements (slightly cooler and dryer than those to the north) with specialized locales of cotton, salt, and capsicum pepper production on the external western slopes and foothills of the cordillera, and with coca leaf plantations in transverse river canyons. Unlike them, however, it did so by adopting some recognizably central or southern Andean techniques, creating at the regional level a political economy similar to well-

known Inkaic patterns. These had more drastic consequences for the role of the local nobility than was the case in the Pasto, Otavalo, or Quito regions.

These differences can readily be seen in several facets. First, the shift toward closure of the sphere of interzonal exchange had taken a more radical turn: The dependency of highlanders on regularized ties with montaña peoples for supplies of cotton, salt, and peppers had been eliminated. External lowland contacts play no acknowledged part at all. Instead, the highland communities were endowed with economically equivalent specialized outposts in the montaña, where camayos produced under direct cacical supervision; the minimal kamayuq enclaves of the Quito area had here bloomed into a full-scale archipelago system. Among the islands of Puruhá settlement in the forests, the cotton sites were preeminent and occupied some 60 percent of the total outlier work force. The largest of them, at Chanchan on the westward-draining river of the same name, described by Cieza as an Inkaic *aposento* site ([1553] 1962: 141), and the one at Chalacoto between them housed thirty-one households and had contingents from all the inspected communities. Salt was refined only at Tomavela, on the outer flank of the towering volcano Chimborazo, probably at or near modern Salinas, where every ethnic lord sent a small delegation; these, taken collectively, formed only a part of a large, clearly multi-ethnic complex of similar delegations from all over the central Ecuadorian sierra (Cantos [1581] 1965: 259). Capsicum pepper was grown at Ypo, probably a less intensively developed site. Coca leaf, too, was managed on an outlier plan; all the Puruhá lords had sent *kukakamayuqkuna* to a site probably near modern Huambaló, in the warm, dry valley of the upper Pastaza, slightly west of its plunge into Amazonia, a region known to have housed Inka-managed multi-ethnic settlements still visible toward the end of the sixteenth-century (Anónimo [1605] 1868: 463).

The Puruhá visita is one of a small number of sources that afford some detail on the internal management of archipelago systems. All the Puruhá lords testified to working their outliers on a sharecroplike basis that distributed the fruits equally between cacical revenue and the households of the kamayuqkuna themselves, with the half that entered the political channel then being redistributed to those who worked tribute service:

> The custom they observed as far back as he could remember was that the Indians who grew coca leaf and cotton and salt and hot peppers took half [of the crop], and the other half went to the lord, who distributed it among the Indians of his *ayllo* who had worked. [AGI/S Justicia 671: f. 225v]

According to one of the Puruhá lords, this regime was followed "because that was the Inka custom" (f. 248v). The half of the crop accruing to outlier cultivators also found its way into households of their llajtamates, but through a different exchange mechanism: The highland res-

idents apparently bartered directly at household level with the specialists, using the proceeds to make, for example, cotton clothes for their own use. In this fashion the kamayuq strategy served a seemingly conservative function, acting, as it were, in the role of internal Yumbos: western slope exchange partners, but now within rather than without the limits of highland cacical rule.

Yet the kamayuq order was not without radical implications for the character of this rule. These are seen more clearly when one examines them under the hypothesis of formal state–cacical congruence. As one might expect, Tawantinsuyu operated a parallel system of outliers, drawing on local labor to produce special goods, not for local but for imperial redistribution (AGI/S Justicia 671: f. 251v; Golte 1968: 479–80). This organization followed known central Andean norms such as the classification of coca harvesting as a labor category apart from coca gardening (Matienzo [1567] 1967: 178) and in all likelihood also followed the Inka norm of distinguishing between crown revenues – tribute as such – and goods stored for redistribution as state assets rather than royal household goods. The introduction of this distinction into cacical-level economy is a striking innovation. The inspectors asked the Puruhá lords specific and well-phrased questions about their tribute rights, but the chiefs never mentioned outlier production in answering them; only questions on the location of subject groups and on crops elicited outlier information.

When asked about tribute proper, the Puruhá lords claimed rights amounting to a revised version of the pre-Inkaic bizonal complex, that is, revenues derived from maize lands and higher grasslands. Maize, however, came no longer from the autochthonous cacical plot within the llajta but from special plantations in select lands at some distance from it, probably under imperial supervision (AGI/S Justicia 671: ff. 245v, 247v, 250r); similarly, tribute maize for the Inka proceeded from special plots that from the Inka point of view were also remote enclaves, although they were central with respect to Puruhá geography (AGI/S Justicia 671: ff. 243v, 252r). Animal goods of the páramo level included herds held at cacical level and, in a parallel fashion, at imperial level (whether as crown or state assets is not clear), with the corresponding forms of textile labor. The usual cacical household service continued to obtain, together with parallel household service to the Inka. While these practices show a shift toward the basing of cacical tribute revenues on factors of production supplied as imperial prebends rather than on intra-llajta traditional rights, they conserve the traditional scope of cacical tribute as a link in interzonal articulation. The fact that the redistribution of goods from the wider ecological network organized through outliers was not considered a tribute matter suggests that among the Puruhá the chiefly function was no longer that of the "big man" dealing out his personal wealth but that of an administrator managing a separate governmental sphere of exchange. It is precisely at this point that one may say that ethnic lordship passed from a chiefdom to a state mode of

organization. The Puruhá chiefdoms had not only been integrated more tightly into the imperial economy; they had been induced to reproduce on a small internal scale the precise mechanisms that on a larger scale tied them into the empire.

The tendency toward organization of aboriginal groups into ever more inclusive units structured as pyramidal hierarchies had also taken a further step. Signs of extreme local autonomism, such as the concession of the title "cacique" to heads of isolated "parcialidades," or the right of even the tiniest chiefdom to tribute directly to the Inka without recognizing any local superior, which had persisted into the colony in Quito, were here absent. Among the Puruháes interviewed, five communities associated with separate place names were distinguished, but only one of their lords was styled "cacique principal." This term, in colonial usage, referred to a lord with dominion over multiple local communities. The remaining "aillos" (the use of this Quechua term, rather than the Hispanic word "parcialidad," may in itself reflect greater Inka influence) were ruled by subordinate "principales" subject to the "cacique principal," Don Gaspar Tiqui. Tiqui ruled his own "aillo" through the agency of his brother, so that he occupied an apical role over a multi-communal complex. Demographically as well as formally, the Puruhá scheme was more inclusive than that seen near Quito. The five Puruhá "aillos" were more considerable units than northern "parcialidades," so much so that even the smallest of them seem to have been more populous than certain whole "cacicazgos" of the Quito area. Indeed, the entire collectivity of the Puruháes studied resembles in plan a single compound llajta of Quito, with the exception that its components are units that farther north would have enjoyed cacical autonomy in their own right. The institution that expressed this relationship in terms of economy was that of rotating service quotas, the *mit'a*, in which each "principal" supplied his "cacique" with small contingents of temporarily attached mit'ayuq households, much as the collectivity supplied rotating mit'ayuqkuna to Tawantinsuyu. This complex appears to have belonged to the sphere of tribute.

At the time of the visita, a quarter-century after the fall of Tawantinsuyu, the fate of these innovations is instructive. The tendency toward the arrangement of ethnic lordships in regional hierarchies does not seem to have won a strong cultural mandate, since Gaspar Tiqui, like the chiefs of smaller compound units to the north, reported that his vassal nobles no longer supplied the mit'a quotas that they theoretically owed. Indeed, this tendency is relatively constant and suggests that Inka rule promoted a hierarchical treatment of sectoral relations foreign to local norms. On the other hand, those Inka innovations that allowed lords to augment the ecological reach of the political sphere of exchange within their respective domains without reliance on superior lords seem not only to have persisted but to have flourished anew as the unsettled conditions of dynastic and Pizarran wars left ethnic lords an increasing margin for initiatives. Besides the various outliers mentioned by Gaspar

Tiqui, in which each "aillo" was granted a share under the aegis of multicommunal administration, some of the "principales" had apparently developed additional outlier sites of their own, chiefly for cotton production. Similarly, two of the "principales" had equipped themselves with maize fields at remote locales; that Tiqui himself did not mention these indicates they may be late accretions to the precolumbian order. Under a Pax Incaica it had become possible to attain wholesale control of certain tropical productive assets whose products could previously be captured only through the relatively precarious manipulation of supply-and-demand forces through barter and alliance; after the collapse of central control, ever-smaller fragments of the state sought to arrogate such means to themselves.

Conclusions

The comparison of data from three ecologically comparable regions differing in the degree to which Tawantisuyu absorbed them suggests some generalizations that may, in turn, produce testable models for future northern Andean studies.

The first group of generalizations concerns the workings of the chiefdoms as such. The aboriginal components of political economy in various zones, although not without local idiosyncrasy, show enough common traits to suggest a roughly formulated "ideal type" along the following lines: Populations ranging from a few dozen persons to more than a thousand were aggregated in minimal or modular political units, probably similar to the locally defined *ayllu* of Peruvian societies, each headed by a privileged household with a male leader and a marked concentration of servile and dependent persons as well as the leader's privileged kin. Such units could form in themselves communities acknowledging no local overlords but might also aggregate into larger compound formations with populations numbering into the thousands. In such cases, one unit occupied a leading role, and its chief an apical position over the whole complex. This process of compounding appears to have increased in areas of greater Inka presence. Political relationships were expressed through tribute of commoners to chiefs, payable in labor and in goods gathered or hunted in natural settings. In the former case, tribute labor was applied to the cacical household itself or to factors of production considered part of it.

The direct subsistence base, like the tribute base, was essentially local. Cacicazgos ordinarily commanded resources of the immediate small region in which they resided, from páramos downward to warm maize lands (the western lowland equivalent dimensions are not known), in a "microvertical" pattern (Oberem 1976a). The various "cacicazgos" of a given small region, though various in size, tended to be similar in ecological reach. Each depended for certain culturally and even nutritionally indispensable goods on the ability to secure products under the political control of cacicazgos centered in ecologically foreign regions,

usually at a distance of between a day's and a three- or four-day journey. The subsistence apparatus had a concentric structure: a microvertical organization of adjacent productive zones at the center (Oberem 1976a), a system of generalized exchange connecting the center with ecologically complementary zones under control of moderately distant cacicazgos, and a long-distance organization to attain exotic goods from beyond the working radius of people with agricultural commitments.

The second or middle-distance tier of this system was operated by at least two means. On the one hand, commoners from any given highland llajta were able to travel directly to the source of, for example, montaña salt or cotton and conduct barter with producers; these links appear to have been stabilized between paired cacicazgos of neighboring, ecologically complementary regions and may have been associated with marriage or other, more than nakedly economic, transactions. On the other hand, highland "cacicazgos" sometimes sent or allowed groups of highlanders to reside permanently in such regions, becoming subject to local political authority and assimilated to local cultures; these people then remained in contact with highlanders of their original ethnicity through traffic of the sort just mentioned. The full dimensions of these mechanisms, and their interrelationships, are still dark and are likely to have been among the institutions most disturbed by Inka intervention.

The third, or long-distance, tier of the system was the part most thoroughly politicized; that is, as Golte has predicted, the most exotic components of the economy were the most likely to be channeled through specifically political institutions. The prime mechanism in doing so was the commissioning of mindalá corps of import–export specialists. These were privileged persons forming a separate, closed collectivity, responsible only to the sponsoring cacique. Their role consisted of exchanging products from their community of origin, proceeding probably from tribute labor and the productive power of the cacical household, for other products whose redistribution would redound to the advantage of the sponsoring lord. These might include products of prime subsistence necessity but more typically included goods of high unit value, from far-off sites, which were of special symbolic prestige as "wealth objects," or of known usefulness as quasi-monetary media of exchange with a wide area of circulation. The concentration of the former in the hands of ethnic lords gave the rulers an advantage in the manipulation of relationships where their prestation was necessary (including rites de passage, marriage, burial, curing, and religious sacrifice) and consequently afforded them a strong hand both within their communities as well as where intercommunal diplomacy was needed. The concentration of the latter probably served the purpose of guaranteeing access to exotic goods regardless of momentary fluctuations of exportable surplus.

The mindaláes were often – perhaps always – extraterritorial residents, dwelling at certain sites advantageously placed on the routes connecting the major ecological zones (humid high valleys, dry high valleys, transverse semiarid valleys, montaña), also forming links in the

more remote articulation of the various inter-Andean basins and of those with the remoter coast and Amazonian regions. These places were sometimes, perhaps always, the locales of what Spaniards called *tiangueces*: central places for bartering, at which mindaláes played a special, perhaps managerial, part but where less specialized types of traffic also took place.

The ranges of goods accessible through these media were in part overlapping, especially where *tianguez* barter entered. Their relative importance probably varied in accordance with changing political circumstances. The dependence of the population on politically channeled imports presumably rose when other mechanisms were obstructed; the hostility of certain lowland tribes, competition with other communities for scarce supplies, climatic or geographical obstacles, agricultural cycles with strong peak labor demand, military emergencies within the home zone, and regimentation imposed by foreign powers would have had the effect of strengthening the mindaláes and their sponsors. But their power would not have disappeared in less difficult times, since under any circumstances the mindaláes, free of agricultural chores and backed by coercive powers as well as wealth, must have developed stronger links over longer distances than other people could.

The intrusion of Tawantinsuyu into this landscape presented the Cusco elite with a singular problem in social engineering: how to conserve outwardly the authority of local lords while at the same time reducing their dependency on unconquered, exterior polities and creating a dependency on an encompassing centralized authority without a mandate in local tradition. The way in which this was achieved becomes visible from a study of Inka administration at various stages of the encounter.

One of the most conspicuous traits of the Inka revolution from above was its pseudo conservatism. At every stage, from preliminary incursions to the consolidation of relatively established provinces far back from the military frontier, Inka administrators appear to have observed a norm demanding a superficial formal congruence between the imperial and aboriginal levels of government; innovation was clothed in a conservative rhetoric. In the first stages of the encounter, the Inka outpost probably acted much as a *curacazgo* among *curacazgos*; a remembrance of this stage appears in Cieza ([1553] 1947: 159), where an advanced garrison on the unconquered northern coast is directed to do what its neighbor polities do – namely, "rescatar" (barter) the goods that moved along the sea lanes and inland routes. After military victory, the empire demanded tributes, but not the characteristic imperial tributes; instead, the bizonal tribute demanded by ethnic lords was simply levied at a more inclusive level, while seeds of more elaborate systems were gradually planted. This state of affairs, in which the empire acted as a curacazgo over curacazgos, had come to fruition and was already being superseded in Quito. With the growth of the administrative apparatus and the end of armed resistance in neighboring districts, the Inka could

attempt a more radical intervention, rearranging the economic parts of communities so as to make them formally similar to the imperial structures concurrently being built up in the locale. This process took place both in the realm of ideal structures and in the realm of economic management.

Among the groups studied, this process took the form of three consistent tendencies. First, the aboriginal apparatus of interzonal integration, centering on the use of diverse external ties among polities politically independent of one another, was gradually replaced by arrangements based on the exploitation by each community of an assembly of resource zones within the political control of its lords; these took the form of increasingly complex archipelagos of kamayuq-staffed outlier settlements. The net result was the closing of the economic circuit on which each given level of political authority depended. Instead of depending on exchange flows between autonomous groups, long-distance articulation depended increasingly on flows between different levels of governance within Inka sovereignty. Second, a shift took place in the relationship between Inka modes of governance and those of the subject peoples: Whereas in areas of shallow Inka penetration it is Tawantinsuyu that appears to have modified its operations so as to dovetail with those of the chiefdoms, adopting their norms with regard to tributation, in areas of more established control it is the chiefdoms whose internal constitution has been modified to resemble that of Tawantinsuyu as a whole, specifically in the emergence of a redistributional channel among productive zones, independent of the personal tribute resources of the lord administering it. The "state," as opposed to the "crown" sector of the economy (Murra [1955] 1980) comes to have a local analogue. Third, at the same time as the empire was extending its apparatus of governance downward so as to attain close control over the chiefdoms, it caused the chiefdoms to increase their level of political aggregation upward, so as to forge from the multiplicity of ethnic lordships a hierarchy of subregional and regional-level authorities that would form a middle level of governance connecting aboriginal societies to imperial institutions.

It seems strange, superficially, that such an extremely hierarchical and uniformitarian program could be of any use as a guide to the realpolitik of dealing with thousands of more or less refractory chiefdoms. Yet the rapid advance of Tawantinsuyu over the Andean landscape suggests that the Inkaic program did in some way take realistic account of the interests of local power elites. The aspiration to a "crystalline" kind of regularity, in which larger social structures would be formally congruent to smaller ones, seen in such formal schemes as moieties, quadripartition, and the decimal order, implied that the economic system of the great centers should also have a counterpart in the internal economies of lesser centers. In practice, this implied that at the same time as chiefdoms were incorporated into the imperial economy, their economies should be endowed with resources and exchange mechanisms analogous to those of the empire as a whole. Such a rule would, in turn,

have mandated both the introduction of new and valuable productive bases and the integration of productive zones on a new basis – the vertical archipelago – that guaranteed the chiefdoms access to exotic goods through a locally governed apparatus rather than through shifting alliances with outside groups. Thus, from a local autonomist point of view, imperial rule might be seen as enhancing, not destroying, the adaptive independence of chiefdoms. The rule of crystalline integration applied not only to a projected end moment of the process; it also applied diachronically, in the sense that at any given moment in history, the formal and economic constitution of large and small units should be qualitatively similar. Thus the cumulative sequence of changes and increasingly complex orderings that transformed a raw frontier into "another Cusco" would proceed, *pari passu*, on a local scale. Seen synchronically, the rights and duties of a local lord would be qualitatively similar to those of Inka lords as they applied in his district. No ethnic lord could then call in question imperial institutions without at the same time questioning his own prerogatives.

Thus the structured retelling of the northern conquests as sequences of initial penetration, revolt, and Inka retreat, followed by reconquest and consolidation under a subsequent Inka, may perhaps be taken as an ideal-typical rendering of events ordered by a conscious policy. In the initial phase, Inka rule probably did little to interfere with the web of relationships among subjected and unsubjected peoples; Inkas would have sought merely to establish themselves as one of the peoples in control of desirable resources and to stimulate interest in Inka affiliations. Under such conditions it would not have surprised them that aboriginal chiefs regularly loosed their armies on the cuzqueños in "rebellion," or that such revolts rolled backward into the rear, where rebels maintained ties of exchange and alliance. As areas on the frontier were pacified, however, it would have become possible to constrict systematically the opportunities of groups in the rear for organizing their economies through ties to unsubjugated polities and to force them to fall back increasingly on the resources and management systems favored by the empire. Since by this phase they would have been in part culturally prepared for such a shift, this project could be undertaken relatively rapidly. The forward momentum of the Inka frontier up the intercordilleran corridor, and its outward momentum into the external slopes of the cordilleras, would therefore have been a precondition to the consolidation of areas farther to the rear. Expansion, even where the costs were immense (as in both the Imbabura area and in Chile), was the price of guaranteeing military efforts already expended. The alternative, a hermetic closing off of a static boundary, does not seem to have been attempted. This dynamic, deriving ultimately from the difference between, on the hand, the outward-looking, alliance- and external exchange–oriented character of interzonal integration among chiefdoms that could attain only local territorial control and, on the

other hand, the aspiration of state-organized societies to territorial control of complete resource assemblies, may be of some use in explaining the explosive growth potential of Andean horizon civilizations.

Notes

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Legajo 8

Archivo General de Indias, Seville [*AGI/S*]
Quito 9, 60
Cámara 922A
Justicia 671, 683

Archivo del Instituto Otovaleño de Antropología
Segunda Notaría, juicios 1

Colección Vacas Galindo, Dominican Convent, Quito (CVG/Q)
1st series, vol. 30
4th series, vol. 18
Sueltos 49–6–9 to 18, vol. 2, ff. 527–32

1 Espinoza found that *mitmaq* stationed near Quito during the Imbabura wars had passed through only two generations of political leadership by 1577; thus even if each past ruler had enjoyed longevity, the colony could not have been founded much before 1500 (Espinoza 1975: 360).

2 The inter-Andean valley floors nourished their populations with maize, primarily, and also with beans, cucerbitacea, *quinua*, and various Andean tubers including potatoes. Substantial amounts of timber were taken from the inter-Andean forest, which were later exhausted by overexploitation during the building of colonial Quito. Protein was available from wild game on the páramo, from edible insects, and from fresh-water seafood. The highlanders depended, however, on access to tropical forests for their supply of cotton, capsicum pepper, and certain wealth objects, and salt came both from springs on the outer slopes and from parts of the river canyons. Coca production was also concentrated in the river canyons, but sources in Amazonia and the western littoral plain are also likely. Within this overall pattern there was considerable diversity in the institutional links connecting productive zones, varying Inka impact being a chief cause of such differences.

3 At the southern margin of the Pasto country, numerous wedding-cake shaped fortresses, similar to those that the Palta pointed out as remnants of an early stage of Inka rule, are still visible; the *Qhapaq Nan* extended past this margin but seems to have ended at Rumichaca, far short of the Pasto heartland (Moreno Ruíz 1971a, 1971b; Plaza 1976 map; Salinas 1965: 299). In the Imbabura and Quito basins a coherent complex of "advanced" traits appears. This includes the use of Quechua as a lingua franca; Quechua came into general use wherever Inkas achieved effective dominion, and was spreading in the sixteenth century beyond into the Pasto country through the mediation of Pasto exchange specialists. Testimony about warfare with Inka armies covaries closely with the distribution of Quechua, as does the penetration of royal roads and their *tambos y depósitos*. The extraction of mitmaq from

conquered peoples had begun to touch even the Pasto (Ramos Gavilán [1621] 1976: 43), and emplacement of "incoming" mitmaq seems to follow closely. Llama herding was also an early manifestation of Inka presence, but the uses of llamas vary with degree of consolidation; in the far north they are attested as sources of meat for nobles and in Quito as beasts of burden but not as sacrificial beasts or as a fiber source.

Looking southward from Quito one finds increments of Inka influences on religion in the form of modifications of the solar cult and the use of sacrificial deer as well as shrine herds of llamas; both are attested from the Puruhá region. Solar–lunar temples of stated Inka design are known in the Cañar country. Otavalo had *aqllakuna*; further south, the recruitment of *mamakuna* and endowed shrine lands were added to the cult among the Palta. In formal organization the Hanan–Hurin moiety plan may have been used in Otavalo, but confirmation from early sources is lacking; it appears to have taken effect early in Quito and further south. In Quito the decimal regimentation of population was applied to mitmaq but not, apparently, to the aboriginal population as was done in southern Ecuador. Schemes of Cusco-emulating toponymy appear in Quito but with greater completeness in Tumipampa (modern Cuenca), Wayna Qhapaq's capital in the Cañar country. In economic organization, no modification of cacical tributation imposed from above is recorded north of Quito. In Quito a modified form of Inka tribute, similar to the local tradition of cacical tribute, was levied, and along with it there appears an incipient *kamayuq* system of territorial outliers. (Although the word *camayo* is also used in connection with Pimampiro, near the southern Pasto frontier, it seems there to refer to a non-Inkaic installation.) Kamayuq economy and the use of multi-ethnic, Inka-governed *huerto* outliers are well documented from Ambato southward. It is in the central southern region, too, that Inka levies included the types of extraterritorial service found in more central parts of the empire (G. Aguilar [1582] 1965; Angeles [1582] 1965; Anónimo [1573] 1965; Anónimo [1605] 1868; Arias Davila [1582] 1965; Borja [1582] 1965; Cantos [1581] 1965; Cieza [1553] 1943: 308; Gallegos [1582] 1965; Gaviria [1582] 1965; Gómez et al. [1582] 1965; Pablos [1582] 1965; Paz Maldonado [1582] 1965; Paz Ponce [1582] 1965; Pereira, Tostado, and Lopez [1582] 1965; Salinas [1581?] 1965; Ytaliano [1582] 1965).

4 Indeed we know that the 1559 visita was made to update a previous *visita de quipos*, that is, a transcription of the record made without inspection of the persons named. The ethnic lords explicitly promised to justify these records:

> Por mandado del dicho señor governador se venyan a revesitar personalmente a el (i.e., the ethnic lord Juan Zangolquí) y a los dichos (crossed out: sus yndios e) principales e yndios pro quanto por la vesita que por quipos avian hecho parecia aver dexado de vesitar cantidad de yndios chicos e grandes casados y solteros viejos y viejas e que para que constase si hera ansi convenya que traxesen ante ellos a los dichos sus yndios de todas hedades chicos e grandes el qual dicho Don Juan Zangolqui y los dichos sus principales respondieron que ellos estavan prestos y aparejados de traer ante los dichos señores visitadores todos los dichos yndios como les hera mandado porque ellos estavan satisfechos que los yndios que avian declarado por sus quipos son los que tiene al presente en los dichos sus pueblos y que despues de hecha la dicha vesita personal que asi quieren

> hazer los dichos señores visitadores constara ser ansi. [AGI/S *Justicia* 683 f. 822v]
>
> Following the orders of the said lord governor they came to inspect him [that is, the ethnic lord Juan Zangolquí] and the said [crossed out: his Indians and] chiefs and Indians because judging from the inspection they had conducted according to quipos they had left out of the inspection a quantity [meaning "lots"] of Indians young and adult married and single old men and old women and to verify if this was so it was appropriate that they present before them all the said Indians of all ages young and old to which the said don Juan Zangolqui and he said his chiefs answered that they were ready and qualified to bring before the said gentlemen inspectors all the said Indians just as they were ordered because they were content that the Indians they had [previously] declared according to their quipos are those now present in the said towns and after conducting the said inspection in person which the said gentlemen inspectors want to undertake it will turn out to be so.

Each community presents its people according to *parcialidades* (probably similar to the *aillo* of Peruvian visitas), each headed by a subchief called *principal*. At the end of the section on each community there appears an appendix containing, duly distinguished, the foreign specialists imported by the Inka regime and other outsiders whose presence postdates the Spanish invasion. That they are placed apart strongly suggests that the remaining categories are not factitious but substantially those of pre-Hispanic intra-communal organization.

5 The instrucción charges the officials to find out in particular what *guarangas*, *pachacas*, and *ayllos* there were. *Curaca*, *mitima*, *huno*, and *mita* are also among the terms proposed. Ramírez Davalos had some idea of the nature of Inka state revenues and urged the visitadores to detect, for example,

> que chacaras e tierras e ganados tenian en sus tierras el ynga suyo propio e para el sol y en guacas y si abian sido primero de los yndios del dicho repartimiento y si las labro ronpio e benefiçio de nuevo el ynga y si traxo el ganado de otra parte. [AGI/S *Justicia* 671: f. 237v]
>
> . . . what fields and lands and cattle the ynga had for their very own and for the sun and the shrines and [to inquire] if they had earlier been of the Indians of the said area and if the ynga had them worked opened and harvested anew and if he had brought the cattle from elsewhere.

Ramírez's preference for Inka terminology tends to cast a shadow over local terminology. Apparently the Quito-area ethnic lords felt many of the Inka terms to be inappropriate, since they simply declined to use them in their replies.

6 In regard to Inka-period economy and polity, the inspectors were ordered in particular to investigate the following matters: locale and scale of coca leaf production; other artisan and exchange specialties; manner of tributation to minor and major ethnic lords as designated in Inka decimal categories; succession to ethnic lordships; level of jurisdiction of ethnic lords in criminal cases; and assets held by the Inka, the solar cult, and other religions. The questions appear to have been heavily conditioned by Ramirez's experience in Cusco.

PART III
Systems of classification

Soon after the European invasion, the newcomers became familiar with a few score indigenous nouns. They discovered the *khipu*, a knot-string record used in bookkeeping and the enumeration of people; it came in handy when granting *encomiendas*, since both the Andean and peninsular law dealt with souls liable to tribute, not territory. They were delighted to find an existing servile population, the *yana*; this permitted the accumulation of "perpetual servants" without contravening royal ordinances prohibiting the enslavement of "Indians." They had some trouble understanding what *tupu* stood for, since it measured not only surfaces but also distances; it differed too, according to the ecological fit of a given plot of land. They had no trouble adopting the *mit'a*, which facilitated the mobilization of thousands of workers far from their homes.

And yet despite (or maybe just because of) the ready adoption of these terms into the colonial vocabulary, the Andean implications, the shades of meaning, frequently even the most elementary glosses of these concepts escape us.

Whether we are thinking of access to land or about royal lineages, of the state's revenues or the drafted hosts, it is indispensable to understand the fundamental concepts underlying the organization of Andean societies from inside the system. But we face this task four centuries too late. Although Andean languages are still spoken by about 10 million people, much of the esoteric vocabulary dealing with statecraft is lost. The kind of sophisticated consultant available to Eric de Dampierre, Jan Vansina, or Ivor Wilks in Africa has long since vanished in the Andes. Nor do we get much help from Andean philology, which is still behind linguistics; although there are hundreds of sixteenth century texts in Nahuatl, there is only one in Quechua.

So one falls back on the grammars and dictionaries compiled by the Jesuits in the late sixteenth and early seventeenth centuries: The utility of such an endeavor can be evaluated in the vocabularies dealing with work and reciprocities (assembled by Jürgen Golte and read at the 1972 meeting of Americanists in Rome) or with weights and measures or the ethnic lords, as compiled by María Rostworowski. We include in this collection an attempt by Floyd Lounsbury to reconstruct the Inka kinship system from such fragmentary entries (Chap. 8).

As a way of reaching the categories of indigenous thought without reanalyzing early texts, one can use ethnographic field data (not that we argue for a simplistic application of modern classifications to the past). As in other parts of the world, native taxonomies provide us with an essential dimension that has remained insufficiently explored: Jorge Flores Ochoa (Chap. 9) offers us a way of classifying camelids that is still in use today among highland herders. Beginning with a homely handbag still woven by the women of Isluga, Verónica Cereceda reveals a world of unexpected complexity and true beauty (Chap. 10): She is attempting to decipher what may well be Andean writing, a record of the woven word.

8
Some aspects of the Inka kinship system

Floyd G. Lounsbury

Data on the meanings of Inka kinship terms during the late sixteenth and early seventeenth centuries are found in the following sources: the *Arte* and the *Vocabulario* of Domingo de Santo Tomás, printed in Valladolid, both in the year 1560; the anonymous *Arte de la lengua general* (attributed to Juan Martinez Ormaechea), printed in Seville first in 1586 and again in 1603, and then in Lima in 1604 and 1614; the *Arte* and the *Vocabulario* of Diego Gonzalez Holguin, printed in Lima in 1607 and 1608 respectively; the *Arte* of Diego de Torres Rubio, printed in Lima in 1619; and the *Ritual formulario* of Juan Pérez Bocanegra, printed in Lima in 1631. The amount of data provided by these sources is surprisingly large, and although the glosses of many particular items are ambiguous, many others are unexpectedly free of ambiguity because of the descriptive specifications that follow the initial glosses. And although at first glance some aspects of the data may seem self-contradictory, the sources appear to be sufficiently reliable so as to render inappropriate any hasty judgment that the apparent inconsistencies are the result of error. It would seem better to take the testimony of the period as we find it and try to construct a theory of the Inka kinship system that can accommodate what the sources indicate. A full presentation of such a theory, and its support by analysis of all of the available data, would require a monograph of some length. The purpose of this chapter is to give only a brief outline of the structural principles that appear to underlie the sixteenth-century Inka usage as these are implied by crucial data. We proceed now to the outline.

First, to begin with the simplest features, it is obvious that the Inka kinship system is a "bifurcate merging" system, in the classic sense of that characterization. That is to say, the terms for close kin are systematically extended to include more distant parallel collaterals of the same

An early version of this essay was read at the International Congress of Americanists at Barcelona in 1964. A later version was offered in 1970 at Rochester as part of the Lewis Henry Morgan Lectures. The author will return to this topic in his *Historical Studies in the Language of Kinship*. See also Harold W. Scheffler and Floyd Lounsbury, *A Study in Structural Semantics: The Siriono Kinship System* (1971).

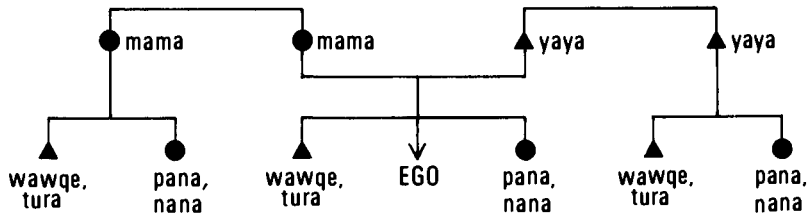


Figure 8.1. Bifurcate merging system.

sex and generation as the primary *denotata* of these terms. Collateral relatives are said to be "parallel" if their linking relatives in the parental generation are of the same sex as each other, and collateral relatives are said to be "cross" if those links are of the opposite sex. This is a widely observed classificatory distinction in the kinship systems of the world, although it is of little import in ours, where it is an option available only by circumlocution and employed but rarely. A system in which the observance of this distinction is largely obligatory, or "built-in," is said to be "bifurcate." One in which this distinction is observed but distinctions of collaterality are ignored is said to be "bifurcate merging."

Thus, for example, the Inka term for father, *yaya*, was also applied to one's father's brother; the term for mother, *mama*, also to one's mother's sister; and the sibling terms *wawqe* ("brother to a male"), *tura* ("brother to a female"), *pana* ("sister to a male"), and *ñaña* ("sister to a female") were extended to also include parallel cousins of the first, second, third, and even fourth degrees; and so it was also with other terms. This is a basic classificatory principle, or pair of principles, in the system. The bifurcation principle segregates parallel kintypes from cross kintypes within a number of larger categories, whereas the merging principle groups more distant parallel collaterals together with closer collaterals or lineals into single categories (see Fig. 8.1).

Next one may note an apparent "Omaha" character that is evident in the extensions of some of the terms. That is to say that certain kinship statuses, as evidenced by the terms denoting them, are generalized down the male line, from one generation to the next. Thus, the "mother's brother" term, *kaka*, is applied also to one's mother's brother's son. And one source, the anonymous *Arte* of 1586, gives the "mother" term, *mama*, as applicable also to one's mother's brother's daughter (although none of the other above-named sources attest to that familiar Omaha type feature, and it is a point at which some differently motivated alternatives are found). Further, there are separate attestations of the term for one's wife's father, also *kaka*, being extended to one's wife's brother. All of these exemplify a patrilineal transmission of senior kinship statuses to cross kin of lower generations, such as is characteristic of so-called Omaha type systems (see Fig. 8.2).

In the third place there is to be noted an apparent recognition of a

Figure 8.2. "Omaha" tendencies.

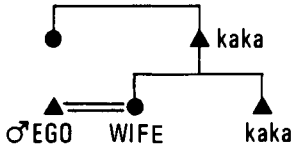


Figure 8.3. Matrilateral cross-cousin marriage prescribed.

convention, or "prescription," of matrilateral cross-cousin marriage in the use of many of the kinship terms. This would be the anticipated rationale for a man's calling his father-in-law by the same term that he employs for his maternal uncle, as just noted. And so also, in the next generation, it makes reasonable his application of the same term to his wife's brother and his mother's brother's son, which is also attested in the sources. Apparent confirmation is also found in the terminological equivalence of a woman's husband's sister and her father's sister's daughter, both being called *ipa* (discussed in more detail later in this chapter). All of these point to an equivalence between a man's wife and his mother's brother's daughter, and conversely also of a woman's husband and her father's sister's son, at least as a principle of kinship reckoning, whatever may have been the social facts behind it (see Fig. 8.3).

Enough is known today from ethnography and from the structural study of alliance systems so that it is not necessary to understand these equations in their most literal sense, as if every man had married his mother's brother's daughter. In known systems of this type it is often the case that a single such marriage per generation between representatives of two patrilineal kin groups suffices to perpetuate an alliance between the groups and thus to maintain the matrilateral cross-cousin marriage equation as a classificatory principle in kinship reckoning. It may be understood as representing a conventional potentiality or ideal, one that may be latent or dormant but that is realizable under appropriate circumstances. There is ample precedent for a fairly loose practical implementation of what is a very tight principle in the formal calculus of kinship statuses and terms. In the Inka system, at least in the application of the terminology, the matrilateral cross-cousin marriage "prescription" requires recognition as a fundamental structural principle, whatever its correlates in other behavior may have been.

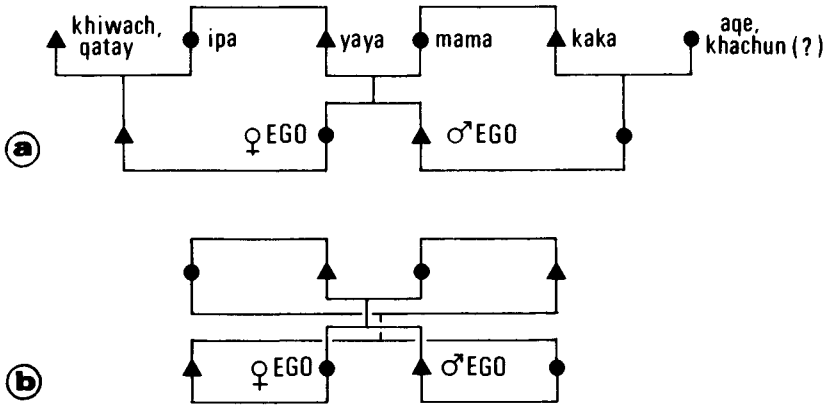


Figure 8.4. a. Asymmetrical model of kin terminology with Quechua terms, categorically distinguishing FSH from MB and WF, and MBW from FS and HM. b. Symmetrical model, categorically equating FSH with MB and WF, and MBW with FS and HM.

It may be noted further that the marriage prescription is apparently asymmetrical; that is, it is restricted to the so-called matrilateral variety (matrilateral from the man's point of view). Nothing in the data is indicative of the symmetrical variety. Thus, a man's father's sister's husband (FSH) is *not* terminologically equivalent to his mother's brother (MB) and his wife's father (WF), as would be normal in a kinship system that expressed the symmetrical variety of cross-cousin marriage. That is, this relative is not the man's *kaka* in the Inka system. On the contrary, he is designated by a reciprocal of that term, if Ego (the propositus) is male (e.g., *qoncha*) or *qatay*, and he is equated with the husband's father, *khiwachi*, if Ego is female. Nor is one's mother's brother's wife (MBW) equated with one's father's sister (FS), as is normal in symmetrical systems; rather, these are distinguished as *aqe* and *ipa* respectively. Neither at these most usual points of diagnosis for typology nor at any others is there evidence for the symmetrical variety of cross-cousin marriage. (For a comparison of the two varieties and the application of the Inka terms to the asymmetrical variety, see Fig. 8.4.)

The principles that have been recognized up to this point would seem to fit a type of elementary social structure that is well known to us from the social-anthropological literature on systems of prescriptive alliance. Classic examples of this type are found among the Kachin of highland Burma, the Purum of northwestern India, the Gilyak of Sakhalin Island, and the Toba Batak of Sumatra. With all of these there are systems of kinship terminology that exhibit an underlying Omaha principle of classification but that depart from a straight and simple Omaha type by incorporating accommodations to a rule of matrilateral cross-cousin marriage. In the case of the Inka system, there are ample data to support the comparison. To take but a single kinship category by way of illus-

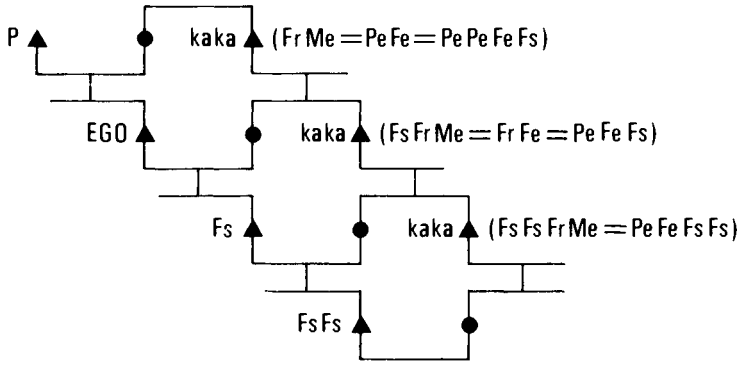


Figure 8.5. "Crow" reckoning elements.

tration, it may be noted that there are separate attestations in the sources for the inclusion of each of the following types of relationship under one terminological category–for example, *kaka*:

A man's or a woman's mother's brother (Fr Me in Fig. 8.5)
A man's or a woman's mother's brother's son (Fs Fr Me)
A man's wife's father (Pe Fe)
A man's wife's brother (Fr Fe)
A man's or a woman's brother's wife's brother (Fr Fe Fr)
A man's son's wife's father (Pe Fe Fs)
A man's son's wife's father's father (Pe Pe Fe Fs)
A man's son's son's wife's father (Pe Fe Fs Fs)

A few moments of calculation, or direct comparison with Kachin or Purum models, will suffice to establish the point. By the matrilateral cross-cousin marriage principle, all of the affinal types in this list reduce to mother's brother, or to mother's brother's son, or to mother's brother's son's son (see Figure 8.5). And by the Omaha principle of classification, these three consanguineal types belong to a single terminological category deriving from the mother's brother.

Now, however, it is necessary to take note of important differences between the Inka system and the classic type to which it has been compared. In spite of the Omaha-like features that have been noted above, the Omaha principle and the matrilateral cross-cousin marriage principle are not sufficient to account for all of the classifications found in the Inka data. There is also, though to a more limited degree, an apparent Crow character to some of the groupings; and this suggests the quite contrary Crow type principle of reckoning whereby generalization of senior statuses proceeds down the female line. For example, certain equations that are given by the data can be understood – or can be formally accounted for – only by the assumption of the matrilateral cross-cousin marriage rule, together with a Crow type rule of reckoning. Thus, a woman's husband's sister is found classed as *ipa*, under the same

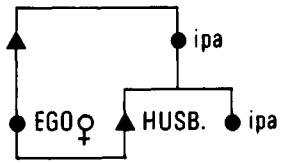


Figure 8.6. How to reconcile "Omaha" and "Crow" elements.

term as is applied to one's father's sister. It is difficult to see how this might follow from any principle other than the typical Crow type extension of the term for father's sister to the father's sister's daughter, in matrilineal transmission of the status, taken together with the equation of a woman's husband with her father's sister's son under the matrilateral cross-cousin marriage prescription. A woman's husband's sister is thus equated with her father's sister's daughter, who in turn, by Crow reckoning, is classed with her father's sister, all of these then receiving their designation as *ipa* (see Fig. 8.6).

These data pose something of a puzzle. Crow type and Omaha type principles are thoroughly at odds in their nature, yielding, when allowed their usual degrees of contextual freedom, incompatible classifications for a large proportion of the varieties of kin in the tree of relationships. For example, a man's mother's brother's daughter is typically his classificatory mother by Omaha type principles of reckoning, but she is his classificatory daughter by Crow type reckoning. Similarly, his father's sister's daughter is his classificatory sororal niece by Omaha type principles, but she is his classificatory paternal aunt by those of the Crow type. And so the contradictions multiply throughout the domain of relationships. How then, one must ask, can two such principles coexist in one system? Three possible solutions will be examined.

1. As a first possibility to be considered, it might be answered simply that *they cannot*. To accept this answer, it would be necessary to suppose that the data at hand derive not from a single system but from at least two different systems of diverse types, both current in the region but perhaps in different communities, and that data from each were thrown together into a few composite assemblages as the priest-philologists of the colonial period compiled and recompiled their lexicons, possibly drawing freely on the labors of their brethren and predecessors. This might then be taken to imply that descent principles in Inka society were variable – patrilineal in some places but matrilineal in others – and that, accordingly, both Omaha-based and Crow-based systems of kinship classification were current, but in different locations.

2. A second possibility is that two different principles of reckoning might indeed have been employed, even by one and the same people, but under different circumstances, in different situations, or for different purposes, so that at one time a relative might be named or referred to

in one manner, expressing one facet of his or her social relationship to the user of the term, whereas in another situation the same kinsman might be referred to in a different manner, giving expression to a different facet of the relationship. It is possible thus for one and the same relationship to be differently represented in different contexts, according to different classificatory options appropriate to particular circumstances. Bizarre as this may seem (not striking a familiar chord in our own experience), it is a situation for which precedents of a sort are known from anthropological literature.

3. The third possibility is that the two apparent principles, though inherently contradictory if allowed full latitude, might have been employed in the same system but with restrictions to complementary referential domains. Although this, too, may seem farfetched, perhaps even more so than the second possibility, there are precedents for it in systems of so-called parallel descent and of cross descent such as have been reported or analytically deduced for certain tribes of central Brazil and Bolivia. Although the authenticity of these systems is not beyond dispute, the evidence in their favor is sufficiently strong to require that the possibility be considered real. In the parallel variety, one or more social attributes that can be attributed to descent (in some sense of that term) are understood as being transmitted from generation to generation in the male line for males, but in the female line for females, and there are apparent reflections of these principles in the associated kinship terminologies. In the Inka system, the complementarity between an obvious Omaha type of generalization for some of the kinship terms denoting male statuses and a more limited, apparently Crow type of generalization for some terms denoting female statuses suggests that the Inka system may possibly have been an instance of that type.

The formal equivalences that underlie these systems, and the rules that are capable of generating them in all of their detail, have been discussed in previous publications. At basis is an equivalence between a man's sister and his daughter (and conversely, between a woman's brother and her father) in Omaha type systems, and one between a woman's brother and her son (and between a man's sister and his mother) in Crow type systems. They are, in a sense, "covert" or "underlying" equivalences, inasmuch as they apply not to the terminological classification of these very relationships but, rather, to that of relationships traced through such pairs or through an intermediate to such pairs. The two varieties are mirror images of each other, so to speak (seen through the mirror of sex), the one deriving from a father–son identification, or from rights and statuses that are transmitted from father to son in certain dominantly patrilineal societies, and the other from a similar mother–daughter continuity in certain prevailingly matrilineal contexts. In systems exhibiting these principles in their simplest form, the equivalences are pervasive, and their ramifications extend to the boundaries of the kindred.

Since the two have contradictory consequences when carried this far, their incorporation into a single system might be expected to pose something of a problem. For example, by Omaha type logic, a man's mother's brother's daughter becomes his classificatory mother, and she is referred to by that term; but by Crow type logic she becomes his classificatory daughter and is so designated. The classic exemplars of these systems, however, are without prescriptive alliance. When that institution is present, the affinal or spousal status ascribed to this relationship takes precedence; a mother's brother's daughter is a man's "wife" or "potential wife," and she is a woman's "sister-in-law." It has already been noted that the Inka terminology contains many equivalences that imply the matrilateral variety of cross-cousin marriage. So, in the case of this kin type, the Crow–Omaha contradiction is avoided, at least in its surface manifestation. The overlaying of affinal statuses on consanguineal ones resolves at least a part of the problem.

Yet another aspect of this system remains to be described. So far, grounds have been adduced for recognizing both patrilineal and matrilineal principles in Inka kinship reckoning (the latter to a more limited extent than the former), suggesting a concern for both agnatic and uterine descent lines – as in some form of either double or complementary descent. Beyond this, there are several independent pieces of evidence that appear to indicate classificatory three-generation cycles in both lines. Cycles of two, or of three, or even of four generations are a commonplace to the comparative study of kinship systems and have been ascribed to a variety of presumed causes. It has been noted, for example, that among these, three-generation cycles are a possible consequence of asymmetrical prescriptive alliance functioning in the minimum connubium ring, an arrangement in which matrilateral cross-cousin marriages unite just three exogamous unilineal kin groups. Three is the minimum number for the maintenance of asymmetry in such a relationship, making viable a distinction between "wife-givers" (a group from which men of one's own obtain wives) and "wife-receivers" (one to which they give their sisters), and permitting a categorical distinction between matrilateral and patrilateral cross cousins. Though societies with such institutions must necessarily depart from this minimal form, the threesome has been encountered as an ideal type and as a kind of fictional view of reality. And although exchange circuits may be of varying lengths, involving various numbers of lineal kin groups, and also including alliance chains without closure, ethnographic literature does not lack for systems that are premised on cycles of fixed lengths, with systematic exchanges of spouses (via matrilateral cross-cousin marriage) among four groups, or among three. With reduction to two groups (exogamous moieties), the exchange loses its asymmetrical character and becomes reciprocal exchange. With reduction to one, the exogamic character of a group is lost, and it becomes endogamous.

Whatever the actual social organization may have been in the stratum of Inka society that our sources represent, three-generation cycles ap-

pear to have been at least a classificatory phenomenon in the terminology of kinship. The evidence is as follows:

1. The "brother" term *wawqe* (brother of a man) is also given as the term for a man's great-grandfather, and reciprocally also for his great-grandson.
2. Fourth-degree collaterals of one's own generation in a "transverse" line ("en línea transversa") are given a categorization that is applied to siblings – that is, to first-degree collaterals, namely, *runamasi*, "same people" (one's own kind) – but that is not applicable to collaterals of the intervening degrees.
3. The agnatic great-grandson is also described as *mittansana*, one who, in contrast to the intervening descendants in that line, returns or brings back one's *sana*. *Mittan* is the third-person form of the verb *mittay*, which the dictionaries gloss as "to take one's turn" and that is familiar from the chronicles and from ethnography as the term also applied to the cyclical rotation of positions or of duties. *Sana* is glossed as "descendants" when in context with *mittay*. The dictionaries do not make it clear whether it is a synonym or an antonym. However, for the third generation, agnatic descent appears to imply reference of the term to a uterine descent line; otherwise the intervening generations would not be excluded, and there would be no basis for the notion of "returning" it, or to it.
4. A man's great-great-granddaughter in his daughter's uterine line is listed in one source (see Fig. 8.10) as his *sullca usus*, his "little daughter." *Ususi* is the term that otherwise designates a man's daughter or classificatory daughter. (The child of a woman, in contrast, is *wawa*, whether son or daughter.) This item implies categorical equivalence between a fourth-generation female descendant and one of the first descending generation, these being related to each other in the female line.

Although there are indications here of complementary unilineal principles in kinship reckoning, the implications for descent (in the technical sense of the term) are unclear. Unclear in particular are the precise senses in which the terms *mitta* and *sana* may be construed, whether in reference to corporate unilineal groups or only to ego-centered lines of reckoning or informal quasilineages lacking corporate status. Nor is it certain whether these cyclical patterns were general or whether they pertained only to a noble stratum that is represented in the sources.

Where matrilateral cross-cousin marriages unite a definite number of lineages into an alliance system, it follows that anyone's matrilateral cross cousin is necessarily also a patrilateral cross cousin of some degree. Assuming equality of the generation count in the separate lines of reckoning, the fact can be expressed abstractly as

$$W = MBd = F^n d^n = F^{n-1} S d^{n-1}$$

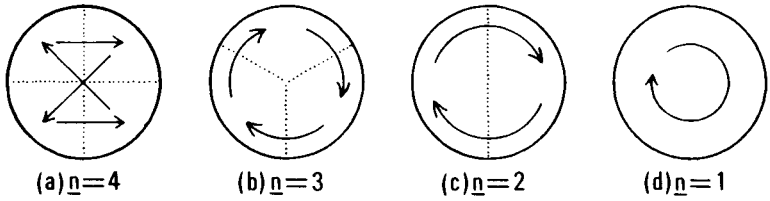


Figure 8.7.

where n is the number of lineages involved in the exchange, and parental and filial terms are understood in classificatory senses. (Abbreviations: *W*, "wife"; *MBd*, "mother's brother's daughter"; *F*, "father" (or father's); *S* "sister (or sister's)"; *d*, "daughter (or daughter's)"; e.g., *FSd*, "father's sister's daughter"; etc.). By the nature of things, in such situations n is bound to be a small number, probably not larger than 4 in a society that incorporates a definite number of lineages into a single circuit. The following cases may be distinguished:

1. If $n = 4$, then W = MBd, = F^4d^4, = F^3Sd^3; i.e., FFFSddd.
2. If $n = 3$, then W = MBd, = F^3d^3, = F^2Sd^2; i.e., FFSdd.
3. If $n = 2$, then W = MBd, = F^2d^2, = F^1Sd^1; i.e., FSd.
4. If $n = 1$, then W = MBb, = F^1d^1, = F^0Sd^0; i.e., S (sister), or Fd (agnatic half-sister), or equivalently, FBd (patrilateral parallel cousin).

In all cases, a prescription can be interpreted and expressed either as matrilateral cross-cousin marriage or as a patrilateral variety of some degree, and the emphasis may be on the one or on the other. In the case of three groups, for example, it may refer to a mother's brother's daughter or to a father's father's sister's daughter's daughter. In the case of one group, it may take the form of patrilateral parallel-cousin marriage (as in Semitic history), or, carried to its logical extreme, as in cases of royal incest, it may involve agnatic half-sister marriage or even full-sister marriage, for limited purposes, in a royal caste.

The relations among the groups in these cases are the familiar arrangements represented in Figure 8.7, all known to ethnography, which can be seen as special cases of a more general alliance principle based on political marriages, their differences being ascribable to the number of participating groups and the manner of exchange. They represent, respectively, the four-section system, the three-lineage system, the pair of exogamous moieties (or two-section system), and the endogamous lineage or clan. The corresponding forms of marriage are the subject of an extensive ethnographic literature.

The principal features of the Inka kinship system noted so far have been (1) its classificatory merging of parallel collaterals in any given generation; (2) its complementary Omaha-like and Crow-like lineal mergings across generations; (3) its implied asymmetrical cross-cousin marriage prescription; and (4) its apparent three-generation cycles in the male

and in the female lines. The simplest hypothesis under which these can be brought together as consequences of a single factor is that of alliance between related unilineal kin groups by way of marriages between cross cousins who are – in general – not too closely related. Patrilateral reckoning and a prevailing exclusion of first cross cousins as eligible spouses could have produced the classificatory alignments that appear to have obtained in this system. (The qualifications "in general" and "prevailing" are inserted in order to leave open the possibility of a narrower proscription among high nobility and royalty, such as the numerous references to Inka royal "sister marriage" might require.)

This arrangement may be posited, then, for the purpose of comparing its consequences with what is inferable from the data on Inka kinship terms, social organization, and marriage that survive in documents from the post-Conquest period. An extension of the incest taboo to cover first cross cousins (in general), as well as parallel cousins of a number of degrees (as is common in unilineally organized societies), leaves the second cross cousins as the closest eligible types for in-marrying or for reaffirmation of prior alliances. Sex-linked unilineal tracing to the cross link identifies potential spouses, then, as for a man, his father's father's sister's daughter's daughter (prescribed potential wife), and, for a woman, her mother's mother's brother's son's son (potential husband). As noted above, this would be structurally equivalent to a matrilateral cross-cousin marriage, since it would involve the same kin groups and members of the same extended kinship classes; but there is no necessity for its involving the same genealogical types. (Further degrees of collaterality can intervene). This provides the matrix for complementary tracings of descent, as well as for recognition of three-generation cycles. The outcome can be schematized as in Figure 8.8:

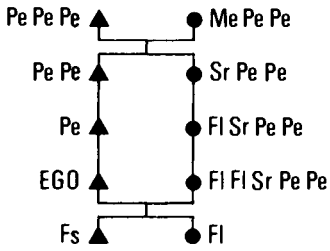


Figure 8.8.

A man (EGO) and his female second cross cousin (Fl Fl Sr Pe Pe) recreate the relationship that existed three generations earlier between their respective agnatic and uterine great-grandparents. They tie back together again an agnatic line and a uterine line that had been diverging for three generations (in avoidance of incest), and their respective successors are siblings again, as were their antecedents three generations earlier. If the hypothesis is valid for the Inka system, the arrangement

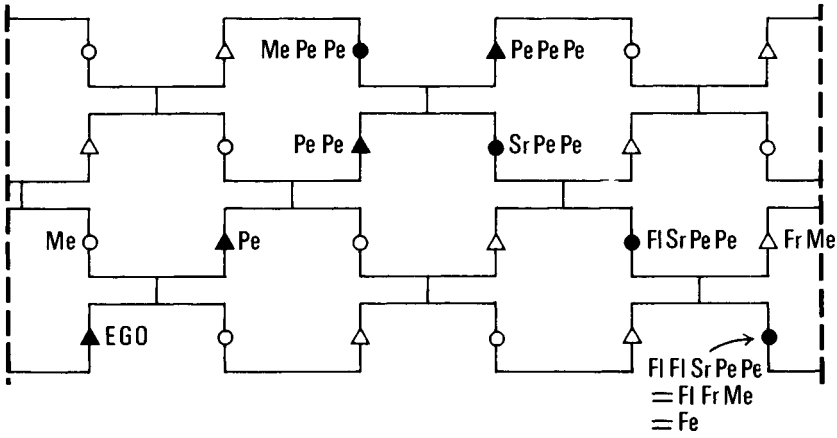


Figure 8.9. Kin positions over four generations. (Read the diagram three-dimensionally, in the form of a cylinder joined at the broken edges. Each triangle and circle may represent a class of relationships equated in categorical status.)

suggests that in respect to some important roles a man's successors were in his agnatic line and a woman's were in her uterine line. This is the essence of complementary unilineal descent (so-called parallel descent), and it provides a rationale for the limited incorporation of a Crow-like succession to kinship status that is fitted into an otherwise dominantly Omaha-like context.

Figure 8.9 is a fuller diagram of the relationships generated over a four-generation span by matrilateral cross-cousin marriage or by its patrilateral equivalent, with $n = 3$. Recognizable lines may be patrilineal, matrilineal, or both, with either of them pertaining to one or to both sexes. The solid triangles and circles are the male and female positions depicted in Figure 8.8. The diagram also demonstrates the structural equivalence between Fl Fr Me (mother's brother's daughter) and Fl Fl Sr Pe Pe (father's father's sister's daughter's daughter), when $n = 3$.

Lest this system seem too improbable a construct ever to have been real, it is appropriate now to call attention to some sources of data concerning name transmission that appear to lend a modicum of support, at least, for the inference of complementary unilineal descent reckoning. (I am indebted to John Murra for the first two of these and to John H. Rowe for the third.)

The first is in the paper "El hombre y la familia, su matrimonio y organizacion politico-social en Q'ero," by Oscar Nuñez del Prado C. (1957), which contains the following statements:

In so far as kin terms are concerned, and without going into details, one should mention a matter of great historical interest.

We saw that the q'ero family had a conjugal basis with patrilo-

cal residence, nearby. However, it seems that earlier a different order prevailed, because in the parish registers of Paucartambo, covering the period from 2 June 1679 to 4 February 1778, we located 36 references to q'ero marriages which provide us with the following data about the couples:

Details of licenses	Males	Females
Use only patronymic	19	—
Use only matronymic	—	12
Use surnames different from either	12	18
Use only composite surnames	2	4
Use one name only	—	1
Use no surnames in ascending generation	3	1

In all 36 weddings, the betrothed are listed as "legitimate."

As can be seen, a high percentage of women use only the matronymic and men the patronymic. Another high proportion use surnames chosen apparently in arbitrary fashion. Both methods are still in use today; people do chose names they "like," called *munay suti* while others reckon women matronymically, and men use their father's surname.

All this seems to indicate that in ancient times there was a system of ambilineal filiation and that the patrilineal system in use today is a recent innovation.

The following points especially should be noted in this excerpt and tabulation:

1. Whenever a child bears the family name of either of its parents, the male child has that of his father, whereas the female child has that of her mother. Note that these data on family name transmission are not biased in this direction by instances of illegitimacy, for they concern only persons who were stated in the records to be the "legitimate children" of their parents.
2. Some children bear names different from those of their parents.
3. These data, which are from the last quarter of the seventeenth and the first three-quarters of the eighteenth century, are in accord with two present-day customs in the same community: (1) the tendency to reckon the descent of women matrilineally and that of men patrilineally and (2) the custom of taking on new names "in certain cases."
4. The author of the article noted that the data "appear to indicate that anciently there existed an ambilineal system of filiation, and that the present-day patrilineal system is a very recent innovation."

The second item on this subject is a brief comment by Julio C. Tello (1922), noted by Murra: "The parents grant their children their own surnames: the father to his son and the mother to her daughter."

The third item is the following from the acts of the Third Provincial

Council of Lima of 1583 ("Los decretos que se publicaron en la segunda action [sic] del Concilio Provincial celebrado en la yglesia catedral de la Ciudad de los Reyes en quinze de agosto de mill y quinientos y ochenta y tres años):

> To avoid the errors which happen when unknown Indians repeat baptisms and marriages, let us deprive the Indians of the use of the names they had when they were gentiles and idolatrous. During baptism they should be given names customary among Christians, and they should be made to use these among themselves. And in order to differentiate the surnames, try to have the men use those of their fathers and women those of their mothers. [Vargas Ugarte 1951, vol. 1, p. 327]

It appears that the intent of the decree was to cause the Indians to abandon their native usage in regard to personal given names and to substitute Christian baptismal names for these, but to allow them to receive their surnames from their parents, the male children receiving those of their fathers and the female children those of their mothers. Though it is not so specified, it would appear that this prescription for surnames was in continuance of native custom rather than a clerical invention without Christian or Hispanic precedent.

These three items give evidence of a social practice concordant with the pattern first detected in the applications of kinship terms. Whether any other social practices followed suit remains to be determined.

In the *Ritual formulario* of Juan Pérez Bocanegra (1631, facing p. 614), there is a diagram of degrees of relationship that is of interest in this connection. I did not recognize the significance of its details until after the patterns in the kinship terminology had become evident. It represents precisely the relationships that are involved in complementary unilineal descent reckoning (as in so-called parallel descent) that are manifest in the pattern of surname transmission noted in the Inka system and that are necessarily in focus when marriages productive of an asymmetrical alliance pattern are conceptualized in the alternative manner that has been described. The diagram is reproduced here as Figure 8.10. Its legends, mostly in Quechua, are as follows (translations in brackets):

Top left, in reverse lettering on the banner: *Caricuna*. [Males]
Top right, on the banner: *Huarmicuna*. [Females]
Top center: *Pedro, Yaya*. [Pedro, the father]
Bottom center: *Alcaide* [(Sp.) *castellan*, apparently in reference to Pedro as head or founder of the kin group.]
Left-hand column (the males referred to in the top left-hand banner):
Sebastian, Pedrop churin. [Sebastian, Pedro's son]
Agustin, Sebastianpa churin. [Augustin, Sebastian's son]
Bar.^{me}, *Agustimpa churin, Sebastianpa hahuainintac*. [Bartolome, Augstin's son, and Sebastian's grandson]
Ant.^{0}, *Bart.*^{mep} *churin, Agustimpa hahuainin, Sebastiampa mittāçanan.*


CVNA
CA RI
HVARMI
CVNA
PEDRO Yaya.
SEBAS tianpedrop churin.
MARIA pedroppiui. ususin,
NAVPAC VIÑAI GRADO I
ISCAI VIÑAI GRADO II
ISCAI VIÑAI GRADO II
GRADO II
AGVSTin Sebastianpa churin.
ISABEL Mariaphua huan.
ISCAI VIÑAI GRADO II
QVIMZA VIÑAI
QVIMZA VIÑAI GRADO III
GRADO III
Bar.me Agustinpa churin. Sebastian pa ha huaininitac.
Lucia. Isabelpa hua huan Mariap ha huainin tac.
QVIMZA VINI GRADO III
TAHVA VIÑAI
TAHVA VIÑAI GRADO IIII
GRADO IIII
Ant. Bart.o mep churin Agustin pa ha huaininSe bastiampamitã canan.
Ines Lucia hua huan Isabelpa ha huaininMariap. ha huainimpacat e. quen L sullca. vsus.
TAHVA VIÑAI GRADO IIII
ALCAID

Figure 8.10.

[Antonio, Bartolome's son, Augustin's grandson, Sebastian's "replacement" in the *sana*.]

Right-hand column (the females referred to in the top right-hand banner):

Maria, Pedrop piui ususin. [Maria, Pedro's first-born daughter]

Isabel, Mariap huahuan. [Isabel, Maria's daughter]

Lucia, Isabelpa huahuan, Mariap hahuainintac. [Lucia, Isabel's daughter, and Maria's granddaughter]

Ines, Luciap huahuan, Isabelpa hahuainin, Mariap hahuainimpa catequen, L sullca usus. [Inez, Lucia's daughter, Isabel's granddaughter, Maria's granddaughter's successor, or (the) "little daughter" (of a male)]

Connecting lines:

Naupac uiñai, Grado I. [First degree.] (Connecting brother and sister)

Iscai uiñai, Grado II. [Second degree.] (Connecting maternal uncle and sororal niece; also paternal aunt and fraternal nephew; also first cross cousins, father's sister's daughter and mother's brother's son)

Quimza uiñai, Grado III. [Third degree.] (Connecting FSdd and MMBs; also FFSd and MBss; also FFSdd and MMBss)

Tahua uiñai, Grado IIII. [Fourth degree.] (Connecting FFSddd and MMMBss; also FFFSdd and MMBsss; also FFFSddd and MMMBsss)

It seems to me that the evidence is almost conclusive that in offering the kinship model described here, we have chosen a promising route. Of course, Pérez Bocanegra's diagram does not assert that the marriage of Bartolomé and Lucia had actually taken place; but the ultimate characterizations of the two great-great-grandchildren of Pedro imply it, be it in fact or as classificatory kin ties.

9
The classification and naming of South American camelids

Jorge A. Flores Ochoa

In conversation with a herder from the Andean altiplano, I asked if he would be able to recognize any one of his alpacas and llamas wherever he saw them. He said he would, and when I pressed him as to his method, he asked, "Can you recognize your children when you see them, even far from home?" I said, "yes, but I haven't got three hundred children." "So what?" he said. "The alpacas are like children to us, we recognize them everywhere. We know them, and we love each one from the day they're born."

The herder's answer made sense. It showed the same high level of understanding between men, alpacas, and llamas that appears in ceremonials and myths (Flores 1976). There is, however, still a question about the techniques that enable them to distinguish each single animal in the herd and recognize it at any time or place, and, especially, about how they then transmit this information to other herders so that they can do the same. What follows here deals with the system of describing llamas and alpacas, although it is only a partial treatment. The folk taxonomy is part of the techniques and practice of herding; it has its own special language, which helps and perpetuates this economic activity.[1]

It is rare for herders to baptize their alpacas or llamas with proper names. Among the exceptions are animals born on certain days, thought to be special. Those born on January 6, the Feast of the Epiphany, are called Revis; those born on January 20, which commemorates Saint Sebastian, are called Sebastian. Some of those born on a Sunday are called Domingo. This is similar to the way the herders name their own children. It is also thought suitable to give alpacas names with a feminine

This study was prepared while I was a research associate in the Department of Anthropology at the University of California at Berkeley, thanks to a postdoctoral grant from the Ford Foundation. A slightly different version was read at the annual conference of the Institute of Andean Studies, Berkeley, in January 1977. Much of the material on which this study is based was obtained while I participated in the "Research Project into the Sociocultural Adaptation to the Highlands (Herders and Farmers)" directed by Ralph Bolton for the National University of Cusco, and Pomona College, California, from February through May 1974.

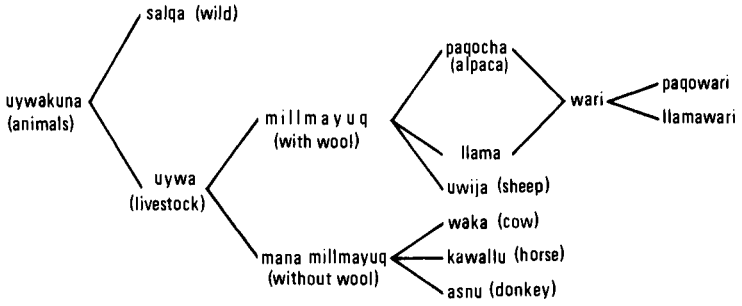


Figure 9.1. *Uywa*, or domestic animals.

connotation, like *niñacha* or *señuracha*, formed from Spanish words that mean "little girl" or "miss," with the Quechua diminutive *-cha* added. One also hears *t'ikacha*, "little flower" in *runa simi*.[2] Llamas and sometimes the male alpacas are called *wiraqocha*, which today is used to address a *misti*, a person of the urban middle classes. Another generic term for buck llamas is *niñucha* (little boy).

Parallel to these naming practices we found recently a classificatory system of great flexibility with a wide range of applications. We present these categories in an order that we have chosen for the purposes of this article.

The naming of South American camelids

The system is derived from concepts explaining the animals' origins. According to the herders' mythology, there are two kinds of animals: the *salqa*, or wild ones,[3] and the *uywa*, or domestic beasts (Fig. 9.1). *Salqa* are those beyond man's control, those that are not directly useful; in mythological terms they are considered the property of the *apu*, the local and regional deities. The *salqa* are the *uywa* of the *apu*. Thus the puma, deer, and fox may be wild animals; but they act as the cats, llamas, and dogs of the gods, for whom they carry out the same roles as domestic animals do for men (Flores 1976).

The generic denomination of domestic animals is *uywa*, which is best glossed as "livestock." The *uywa*, which came up from the depths of the earth through the sacred springs and are covered with wool, are called *millmayuq uywa*, wool-clad livestock, and include llamas, alpacas, and *wari*.[4] They are included in the sacred ceremonial knots and possess *enqa* and *illa*.[5] Sheep are also included in this broad category, but they rank lower and do not figure importantly in ceremonies and myth. They do enter the ritual corral and are invoked in some sacrificial offerings, but they are clearly lower in the hierarchy. This is perhaps due to the fact that they come from outside the Andes, having been introduced by

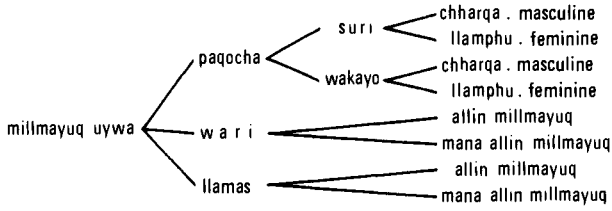


Figure 9.2. Quality of fleece.

the Spanish invaders. All other animals are *mana millmayuq uywa*, livestock without wool, such as horses and donkeys.

Figure 9.2 outlines another descriptive category, which uses qualities of the fleece for reference and classification. The alpacas can be *suri*[6] or *wakayo* (in some places they say *wakaya*). The fleece of the former is silky, long, and shiny; it is thought to be finer and has a higher market value. The *suri* are better suited to the altiplano, the high plateaus, where temperatures are lower. The *wakayo*'s fleece is shorter, less silky or shiny than the *suri*'s.

The fleece of the *suri* and *wakayo* can also be classified as *chharqa* and *llamphu*. The former is coarse and heavy, whereas the latter is soft and light. Hence *chharqa* fleeces have a higher sales potential and are valued accordingly; the heavier weight of this fleece is one factor considered when selecting the animals, but *llamphu* fibers are better for spinning and weaving. It is used for homemade clothing, which explains why they raise both kinds of animals. The *chharqa* is considered masculine fleece, whereas the *llamphu* is feminine.

Llama fleece is classified as *allin millmayuq* or *mana allin millmayuq* (good- or poor-quality wool, respectively). To be "good" the fleece should be comparable to the alpaca's; it is sometimes used as a substitute; some fleeces can be mistaken for alpaca.

The next category relates to gender. It may be obvious that biologically alpacas and llamas are either male or female, but if one listens to the herders one begins to accept intermediate stages. The females who do not reproduce, either because they are infertile or too old or because they abort, cannot belong to the same gender as the fertile females. Similarly, males can be sterile or, more frequently, castrated. In the case of alpacas, such sterilization happens to animals considered "surplus," beyond the seed animals needed for each flock. Male llamas to be used as pack animals are castrated, since then "they are stronger, more resilient, and don't go chasing after the females."

Alpaca seed animals are called *haynachu*; such llamas are *chullumpi*. There is no special name for *wari* seed animals, just *tatala* (adult male), which is used for all male camelids. Fertile females are *mama*, whether they are alpaca, llama, or wari. Males without progeny are *malto*, and

Table 9.1 Sex of the South American camels

ALPACA									WARI				LLAMA					
♂							♀		♂			♀	♂					♀
ORQO (male)	TATALA (adult male)	HAYNACHU (stallion)	MALTO (male without offspring)	CHIFLON (sterile male)	URWA (sterile female)	MACHORA (sterile female)	CHINA (female)	MAMA (mother)	ORQO (male)	TATALA (adult male)	URWA (sterile female)	MAMA (mother)	ORQO (male)	TATALA (adult male)	CHULLUMPI (stallion)	MALTO (male without offspring)	URWA (sterile female)	MAMA (mother)

Table 9.2 Ages of the camels

Age in years	ALPACAS		WARI		LLAMAS	
	orqo	china	orqo	china	orqo	china
0–2 years old	tuwi	tuwi	tuwi	tuwi	tuwi	tuwi
Productive for more than 2 years	ankuta	ankuta	ankuta	ankuta	ankuta	ankuta
Over 5 years old	machu	paya	machu	paya	machu	paya

if sterilized they are *chiflon*. Sterile females are *urwa*. Table 9.1 shows this nomenclature by gender.

Age is another important consideration in herd management; it is directly related to shearing, head counting, and slaughter. This is reflected in the names used. One should note that the actual number of years the animal has lived is not thought to be decisive for determining its age. The considerations taken into account have more to do with the quality of the range used for grazing, the altitude, the number of offspring produced, illnesses, state of teeth, quality and quantity of fleece produced, load-carrying capacity, and other factors that may differ from one area to another. These factors are taken into account when the time comes to separate the flocks of males from females, to castrate the males considered unsuitable for breeding, and also to shear or slaughter the old animals.

In Table 9.2, the terms used are based on age, which reflects an approximation of the herder's criteria.

Table 9.3 Colors of fleeces of South American camels

Range	Yuraq white		Kulur / color																Yana black	
Basic colors			MAPHA creamy white		WAYRA cream		KHURUSA chestnut			OQHE leaden			WIK'UÑA tobacco	PAQO dark brown			CHUMPI coffee					
Tones	qoyllu	yuraq		wayra mapha			yuraq khurusa	puka khurusa	wanaku (?)	yuraq oqhe	'asul' oqhe	yana oqhe	paqo wik'uña	qoyllu paqo	choqe paqo	yana paqo	k'iska chumpi	chawpi chumpi	puka chumpi	yana chumpi	puka yana	ch'illu

The terms listed so far are quite broad. From time to time they are not as precise as required for certain herding practices when a given animal must be identified quite accurately. This is achieved through a naming system that takes into account the colors of the fleece and offers a rich and varied terminology. Only some of the aspects of this technique will be mentioned here. When considering the colors of the fleece, we find three primary hues: *yuraq* (white) at one end of the spectrum, and *yana* (black) at the other. Between these two extremes there is a range known simply as *kulur* (from the Spanish word *color*, for color).

The *kulur* scale is the richest, since it is made up of seven base colors; white and black do not show a range. Each base color is subdivided into tones: White and black have two tones each, and *kulur* fifteen. When describing base colors or tones, the degree of lighter or darker shade is taken into account,[7] using the degree of approximation to black or white.

Table 9.3 provides a résumé of colors and their location according to their hues, their base color, and their tones. The table does not represent the complete range of possibilities or of existing criteria: Several tones were not described clearly or precisely, partly because regional and local variations swell the numbers of possible terms.

The terms used for colors in Table 9.3 are taken into account when naming the animal whose hide has that color.[8] For example, *khurusa* (chestnut) is given to an animal of that color, and it is known by that name. It is unusual for the animals to have fleeces of just one color, except for herds selected for whiteness. More often, the fleeces have several colors, and the names reflect a variety of nomenclatures that combine colors and spots.

When such combinations are taken into account, the criteria used in naming stress the juxtaposition of colors and the shapes of the markings. The dark colors are used as the basis for the description: They are *yana* (black), *chumpi* (coffee), *paqo* (brown), and also *wik'uña* (the color of vicuñas or tobacco). Also taken into account are tones such as *puka* (red) and its varieties *puka khurusa* and *wanaku*, which are, like the

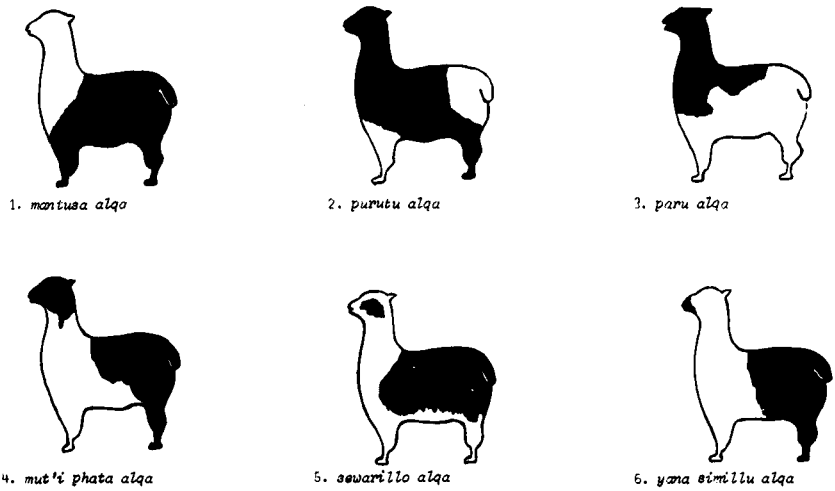


Figure 9.3. *Alqa* colors, with the dark fleece less than 50 percent.

related wild animal, the guanaco, "semired". These dark colors are combined with lighter hues, especially white, *mapha* (creamy white), *wayra*, and other similar tones. From all these combinations arise numerous names. Here we will deal with thirty-six terms, starting with *alqa*, which corresponds to a clearly recognizable, distinct group.

Alqa is the general name given to a combination in which light colors predominate. The proportion is more or less two-thirds light fleece and one-third the darker color. It is probably the easiest category to pick out. As shown in Figure 9.3, there are variations, each with its own name. So far, twenty-six different *alqa* have been identified, of which six are included in Figure 9.3.

Alqa beasts are found frequently and are thought to be a quite distinctive variety. The other combinations described here have arisen from arbitrary groupings made for this chapter; they do not have a generic term to differentiate and identify them.

The second group has been created by choosing those with more dark color and lighter spots in their fleeces. In Figure 9.4 we are given only shortened names that do not take into account the dark hue that would be the name common to all. Only the shade of *kulur* is listed here, but it can be combined with the darker base: One can say *yana ahuya* (a black *ahuya*) to distinguish it from a *chumpi ahuya* (a coffee-colored *ahuya*).

Again, in this group we consider only six varieties. The lighter markings can be on the upper part of the body, as with *wamant'ika*, the *mayuch'ulla* or the *kunka pañyolo*. There can be markings on both the upper and lower parts, as with the *ahuya*. If the distribution is inverted, the terms are different: See the *inka misa* and the *akqusa*. Number 3

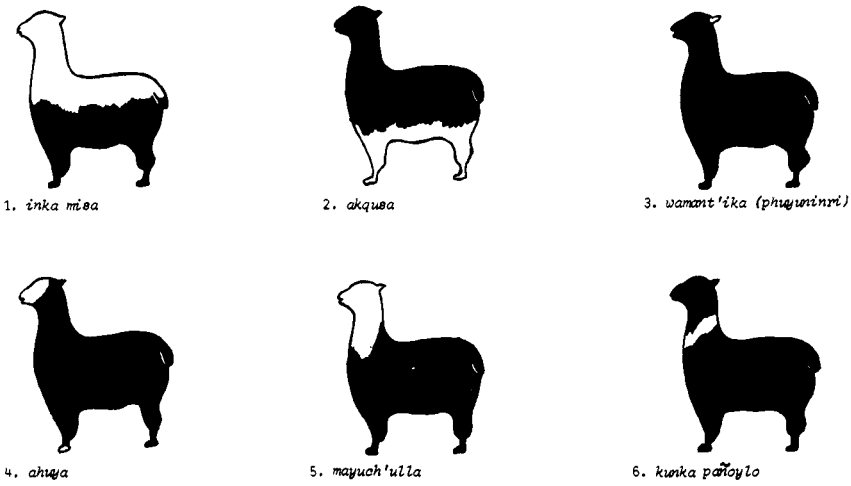


Figure 9.4. Opposite color distribution, with light fleece less than 50 percent.

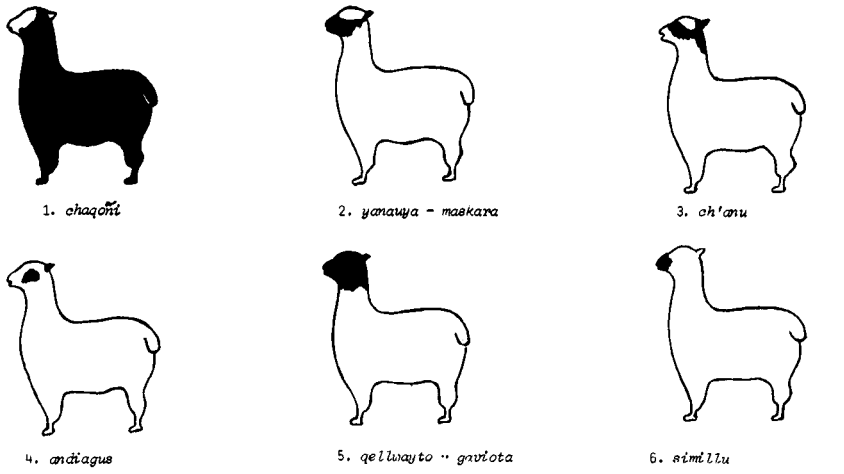


Figure 9.5. Light colors dominant.

can be called by alternative names: *wamant'ika* (as illustrated) and *phuyuninri*; the first means "falcon flower" and its opposite "cloudy ears." The sixth term is formed from a Spanish word, adapted to Quechua; it means "neckerchief."

The names in Figure 9.5 refer to different combinations in which, with the exception of *chaqoñi*, the light color predominates, and only the markings are dark. The *chaqoñi* has a dark body with face and ears

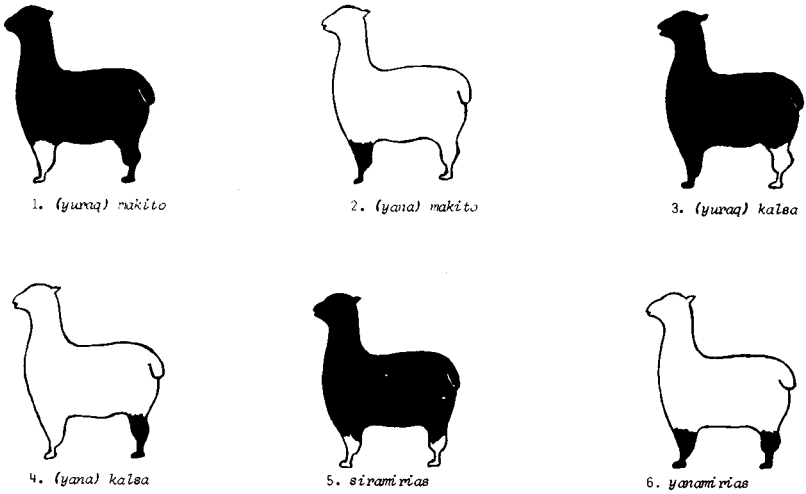


Figure 9.6. Name influenced by color of limbs.

that are light; it can be viewed as the opposite of *yanauya* (black face), also known as *maskara*, perhaps for the Spanish word for mask. In some cases, the differences are small: *yanauya* and *ch'anu*, for example. The markings on the *ch'anu* do not extend to the muzzle; they run behind the nape of the neck. Only the face is taken into account in this variety: The small markings it may display are disregarded.

Figure 9.6 brings together names based on the colors of the animal's extremities and how these relate to the rest of the body. Hindquarters are contrasted with forequarters: Thus *yuraq makito* (white hand) versus *yana makito* (black). The color of the limb conditions the name, and this extends to other base colors: *paqo makito, ch'umpi makito*, and so forth.

Spots on the hindquarters are called *kalsa*, perhaps deriving from the Spanish word *calza*, which refers to an article of men's clothing similar to trousers. Here again, the small area of color is what determines the name: Thus *yuraq kalsa* (no. 3) selects the white "boot." *Siramirias* (no. 5) is formed from two Spanish words: *seda* (silk) and *medias* (stockings). Its opposite is *yanamirias*, where the stockings are black. As in previous categories, there are other color combinations not listed here.

The types shown in Figure 9.7 also have dark markings on a light base. Numbers 1 and 2 have the common term *kartilla*, derived, most likely, from the Spanish *cuartilla*, "pastern." The markings cover less than a quarter of the body, even if the dark is interrupted. Even when the markings are located on back and feet, in *kartilla* number 2 they are thought to cover less than a quarter of the body. If *muru* is added to the name, this refers to small dark spots, widely scattered. *Purutu* (nos. 5 and 6) refers to the more or less quadrangular markings on the

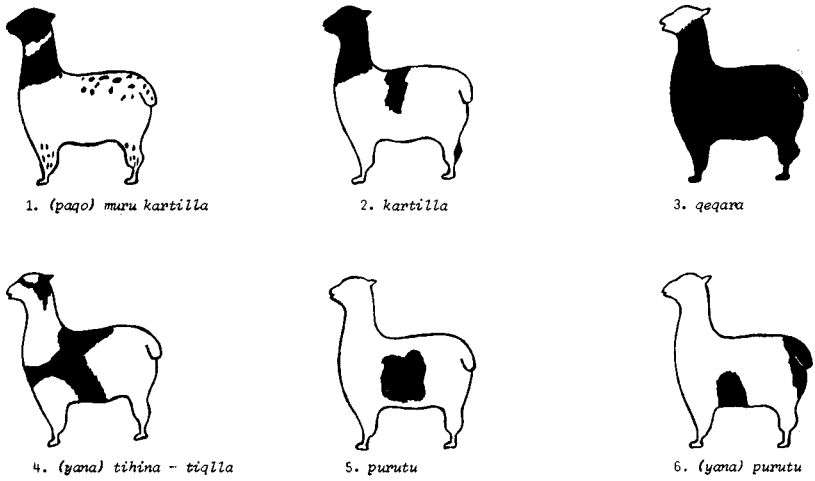


Figure 9.7. Thought of as spotted.

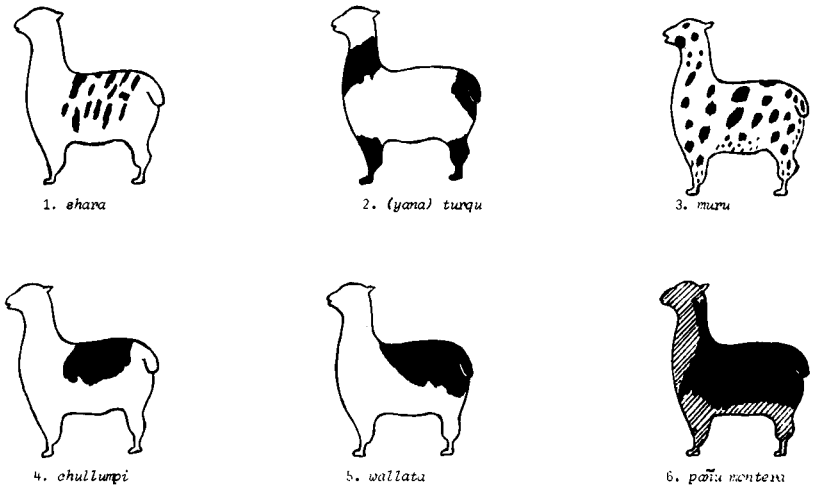


Figure 9.8. Rare, mottled color distributions.

central part of the body. *Qeqara* (no. 3) does not differ too much from *chaqoñi* (no. 1); the difference chosen for stress by the namers deals with the ears.

Another set of combinations is illustrated in Figure 9.8. Numbers 1 and 3 are characterized by small spots. When the markings are distributed all over the body and tend to be elongated in shape, these are called *muru*. The *shara* is a variant of the *muru*; it stresses the more

localized distribution of the spots. The *turqu* has dark markings dispersed in four places: at the extremities, at the rump, and on the neck. *Wallata* and *chullumpi* remind the herders of the loads carried by the llamas.[9] Finally, another association that intervenes in the naming: Number 6 refers to cases where white has been displaced as a base by other light shades, or even a dark one. The *pañu montera* or *siwara alqa* may combine black with chestnut transversal stripes. The name derives from the Spanish *paño* and *montera* and refers to a headdress worn in the Cusco region that is colored black, red, and blue.

Use of the terms

It should be stressed that the combinations available through this system are much more numerous than would ever be faced by a single herder.[10] The average herd rarely has more than five hundred head. If a larger number of animals has been accumulated, it is broken up into smaller herds and pastured separately. The herder can describe each animal according to the system outlined above, and this becomes the animal's name; whenever herding practices require precise and speedy identification, this name will be used. Such names have the advantage of being understood by others who have never seen the particular animal but are familiar with the nomenclature. This is useful during the search for lost or stolen llamas and alpacas.

Each animal can thus be described individually, unless it is completely white or some other uniform color. In such cases the description will be limited to gender, age, or quality of fleece. It is unusual to find beasts of a single color, except on the older ranches that selected for whiteness.

The terms of reference are not hierarchically grouped. They are used flexibly, depending on the precision with which the animal must be defined. The speaker states first whether the animals are llamas, alpacas, or *wari*. Then distinctions are drawn according to the range, the base colors, and the tones. The distribution of colors and markings comes next and, finally, distinctions according to gender, age, and quality of fleece. When dealing with two very similar animals, terms are added in whatever measure is needed to distinguish them.

For example, if there are two *alqa* of different species, it will be sufficient to identify one as an alpaca and the other as a llama. If they are both of the same species, one adds the basic tone – for example, a *chumpi alqa*. If both are *chumpi*, one indicates the hue by saying *k'iska chumpi alqa* or *puka yana alqa*. If confusion is still likely, one draws finer distinctions and says *muti phata chumpi alqa* or *yana simillu chumpi alqa* or draws other, similar distinctions. Gender and age can also be indicated. In dealing with a single herd, we can calculate the probability of having to deal with all the distinctions drawn above.

I mentioned that there are twenty-six varieties of *alqa*; if one takes into account the four basic dark colors, we get one hundred four varieties of *alqa*. If in addition one takes into account the hues or tones within

the basic colors, which number about ten, one gets one thousand forty possible varieties of *alqa*. When one includes references to gender, the number can be doubled or even tripled, since herders consider that the animals display more than two. By adding the criterion of age, one can easily get to six thousand forty varieties. Thus it is evident that a single term, *alqa*, describes many more animals than any herder will ever have to face.

Thirty-three different terms have been used in this study; if one adds the twenty *alqa* not listed here, we get fifty-three names. Using the four dark basic colors of the system and the tones, gender, and age, one can contemplate some twenty thousand descriptive names, more than sufficient for the use of any one herder, even if he were in charge of several herds. In this work we have not exhausted all possible names; there are others, less frequently used.

In conclusion, the terms used to name alpacas, llamas, and *wari* are part of a technical system aimed at creating a nomenclature that allows for more efficient methods of herding so as to obtain maximum productivity from the livestock.

Notes

1 These herders live in the Andes, usually above 4,200 meters.
2 All the italicized words are in Runasimi, also known as Quechua.
3 This term includes mammals and some birds; it does not include invertebrates, reptiles, and fish.
4 *Wari* is the term applied to the hybrid of an alpaca and a llama. The sire is usually a llama; other crosses are possible but uncommon. The herders claim that male alpacas are too small and find it difficult to cover a llama. Two terms are used to describe them: *paqowari* or *llamawari*, depending on the external resemblance.
5 *Illa* are small sculptures in the form of camelids; they play an important part in sacrifices.
6 *Suri* is also the name given to the South American *rhea*, an ostrich living on the altiplano.
7 The dark colors are profane, and the light ones sacred. In ceremonies these are inverted, since the night is related to males and is the sacred time, whereas the day is related to women and is profane (Flores 1976).
8 The animals belonging to the Indian population are mostly *kulur*. Before the agrarian reform of the 1970s, the haciendas selected for whiteness, since the demand on the world market was for white, "colorless" fleeces, which commanded a premium price. Such pressures, coming primarily from England, prevailed despite the negative effect of selection for whiteness: Under the extreme conditions of the altiplano, inbreeding creates a genetic weakness. Albinism was frequent, the rate of miscarriages high, and in general there was higher mortality. Although some white individuals can occasionally be seen in the herds of Andean communities, colored fleeces prevail; there is some indication that the international market is also shifting toward a preference for color.
9 The terms *chullumpi* and *wallata* are also used in ceremonial life, where they

appear in songs of sacrifice and prayer. *Wallata* is the symbolic name of all alpacas in songs and prayers; it is also the name of a web-footed bird living wild on the altiplano. *Chullumpi* also has a wider connotation: a llama stallion.

10 One herder usually herds fewer than five hundred animals. Some may possess up to five thousand animals, but the average is between two hundred and five hundred.

10
The semiology of Andean textiles: the talegas of Isluga

Verónica Cereceda

Andean textiles, especially the archaeological ones, have been the subject of many studies. Questions have been asked about technique, use, chronology, style, and spatial and ethnic distribution. Still one can say that the specific language of the fabrics has been ignored, despite the valuable anthropological contributions made by these studies. From an iconographical point of view, attempts have been made to identify figurative motifs (flora, fauna, mythical scenes) or to interpret abstract forms that suggest the presence of more or less recognizable symbols. Efforts to isolate a possible lexicon, using a hierarchy exterior to the design, have started with the most immediately legible (head, sun, hut), but the syntax that would explain how such elements are articulated within the whole of the cloth remains unknown.

What, then, shall we do when confronted by a hermetical landscape of bands and stripes or, even worse, one made up of empty space? We consider the questions, Can a traditional Andean textile be viewed as a text – not as a decoration or an illustration of realities outside the woven cloth but as a specific message behind which lies a system that explains the message? What are the conventions of this code? What are its minimal units? To what extent is the woven text comprehensible within but also beyond the Andean communities in which it has been elaborated?

My examples come from among the textiles studied during fieldwork at Isluga, an Aymara township on the Chilean altiplano in the province of Tarapacá. Its territory includes stark cordilleras, narrow valleys, and high plains, with occasional swamps. It stretches between two salt lakes: Surire, to the north, and Coipasa, to the southeast. Its eastern border is the frontier with Bolivia; westward it reaches into the peaks of the occidental chain of the Andes.

For a long time Isluga was isolated; even today its highest pastures are most accessible from the Bolivian side. The ethnic group maintains a traditional division into Arajj Saya, the "upper" moiety, and Manqha Saya, the "lower" one. Each has a *mallku*, a leader elected annually. The two moieties are articulated through a central settlement, *marka*

This chapter has been adapted from two chapters of an unpublished work about Isluga textiles.

Isluga in Aymara, or *pueblo* Isluga in Spanish. Until just a few years ago one found four altars outside the church, reminding us of an ancient division into four *ayllu*.

Among the textiles of Isluga that I have studied in greater detail was a king of bag, called *talega* in Spanish and *wayajja* in Aymara. I selected them for scrutiny because the basic design is expressed in bands and stripes and also because among similar textiles they display more variants, complicated but quite recognizable. But I can also claim that the talegas selected themselves: a dark band, then another, light one, and, at their meeting place, two stripes that interchange the colors of the bands. This structure was easily recognizable not only in the talegas of Isluga but also in other textiles from there; far beyond its borders one notices it in weavings from all over the highlands, on the shores of Lake Titicaca near Puno but also in Arequipa or Cusco. How to explain this insistence, an almost obsessive one, on a single theme?

The talegas are woven of llama or alpaca fiber – never from the wool of sheep. The thread is fine, and contrasts of tone are prized. The size of the bags fluctuates between 20 and 50 square centimeters. If the size varies too much, the name of the bag changes: if smaller than 14 centimeters, it is called a *wayuña*; above 80 centimeters they become *sacks*. Between these extremes there is a margin within which each talega finds its distinctive size. Used in many routine or ceremonial contexts, they can be used to carry seed for planting, store food in a kitchen or granary, or convey food on trips taken by the living or the dead.

In this chapter I deal only with what can be called the "language of design." It is an effort to reveal the organization of woven space and the significance of formal elements. I plan in future work to analyze in more detail the color system as well as that of the figurative ribbons (*saltas*) found on some of the talegas. Many other questions remain pending: for example, the exciting relations that the different textiles set up among them. They engage in a complicated dialogue of similarities and differences, sometimes within a single community but at other times on a larger scale within neighboring regions. Isluga and Cariquima, communities separated today by many rivalries, weave cloth that points to an ancient unity, their differences mere details of a formal and emblematical nature. In contrast, toward Bolivia, the Isluga complex of textiles is split: The sacks remain the same over wide regions in the highlands, whereas the talegas change abruptly on crossing the international frontier, which seems to reflect an ancient boundary line.

In the following discussion I attempt to subdivide the "whole" of the design, beginning with the presence of regularities in the "texts" of four hundred talegas. The elements that emerge from this subdivision define (without pretending to reach its most basic units) certain correlations between expression and content that at some future time may help us understand this language in its most intimate construction.

A matrix of woven space

THE INTERNAL SQUARE

The talega is woven as an extended rectangle. Once finished, it is folded and becomes a bag. It is sewn together on the outside: The stitch is a simple but dense basting. The four faces of the talega, two inside and two external, are identical except for two small differences, which may seem unimportant at first glance.

1. When the bag is viewed from the outside, the external basting allows us to see the whole design, none of which is hidden by the stitch that would be visible if it were sewn together from the inside. Weaving and design are so closely identified that the color reaches to the very border of the bag. Each of the details, no matter how small, must be revealed to the observer. The talega should be used "right side out" – "according to its face," as they say in Isluga – stressing the difference between the outside and the interior.

2. The great majority of talegas give the impression of a square. But if we measure them carefully we will find that few are equilateral. Sides may differ from one another by one or two centimeters. It is not easy to achieve a perfect square using a native loom if one undertakes to weave a highly detailed, centered, symmetrical design.[1] The women weavers keep in their heads a series of numbers and proportions. Some will admit that beyond these mathematical formulas they also use inherited measures that they call *tupus*. These consist of deliberately knotted woven wool (*q'aytu*). Such concern for exact measurement can only be understood if the final form of the square is considered significant. When we measured fifty talegas in an ethnographic collection, we found that forty-eight were slightly wider than they were long, by some 0.5 to 2.0 centimeters. The two other talegas were perfectly square.

How can we explain the tendency to increase the width of the talega? If we recall that the seam runs on the outside and subtract the material used for it, the width becomes equal to the length. There is thus a subtle difference between the bag's internal and external spaces. The perfect square faces inward. Glancing at it, one perceives the talega as square, but the weaver knows that the model's perfect representation lies only inside the womb of the bag.

Why should it lie inside? We should accept the notion that the symbolic form of the square exercises some effect on the bag's contents, that it influences the seed or food kept in it. The language of the talegas points to a double function: A message is inscribed on the fabric (a communication), but it is also a magical-religious rite that affects the objects inside.

How do the inhabitants of Isluga perceive the square? I will quote only one example:

"*Suma wayajja!*" ("A beautiful talega!"), said a friend from the herding station of Caraguano, looking at one of the talegas. And, with a sigh, he added: "*Esquinat-purapi,*" ("Such a rascal . . . ": *Pura* means both "between," as "between similar things," "between the two of you," "between friends"; but also "both," as with two eyes or legs). We asked what he meant by "between *esquinado.*" He explained: "I mean that its corners are equal. That they are all together and none flies off, alone. That, then, is what it means."

The square of our friend is almost a circle. The four corners are together and "none flies off, alone"; none separates itself; if all are kept united by a focal point.

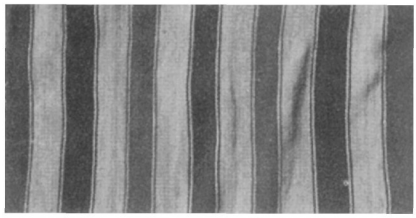
THE PRESENCE OF A CENTER

At first glance, the space determined by the weaving of a talega seems to be an organized space. The perception of a center is obvious, since a middle axis separates the bag into two halves. The design of the talegas is formed mostly through longish bands (see Fig. 10.1), their colors those of the natural hues of alpaca and llama fleeces. At closer view, one notices that the colors of the bands are repeated, two by two, in such a way that each has its pair on the opposite half of the bag, but since the number of bands is always odd, one of them remains without a pair, and sometimes it acts as a central axis (see Figure 10.2).

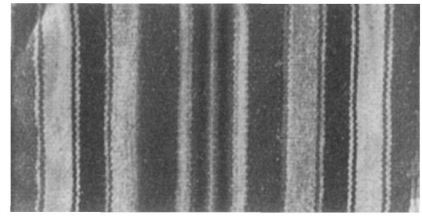
This odd band, found at the center of the talegas, is called a *chhima*, which means "heart" in the Aymara spoken in Isluga.[2] This heart is both the meeting place and the separating line of the two sides. It plays the ambivalent role of separator, creating two halves, and simultaneously it is the nexus, the common "territory." The center is thus defined as a point of articulation within the woven space – an axis, always sharp, that divides the bag lengthwise in the direction of the warp threads.

Among the talegas that are woven exclusively of natural colors, the center is perceptible only through the symmetrical disposition of the design. In this case the weavers seek to mark it more emphatically, selecting for the central band a tone that was not used in other bands. Or, if this is impossible, they choose a color that contrasts with neighboring bands. Thus in example 1 of Figure 10.1, the center is marked by a gray band of a tone that does not occur in the others. In the second example, the central color is similar to those used at the borders. Here white has been chosen to emphasize the central band.

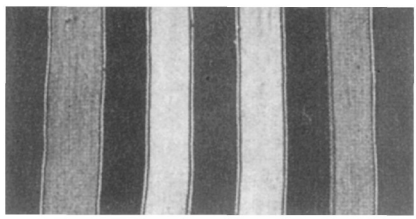
When artificial dyes are used, the center of the talega is developed gradually. First, streaks of vivid color, placed in chromatic order of decreasing intensity toward the edges, distinguish it and set it aside. These gradations are called *k'isas.*[3] Second, they penetrate the interior of the central band, following known rules. Thus, the heart becomes more complex and acquires a new "charge," adding to its value as a natural band. It may be developed even further if the dyed color gradations acquire figured motifs, called saltas.



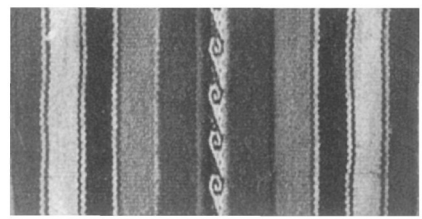
Example 1



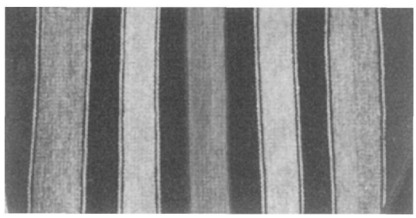
Example 6



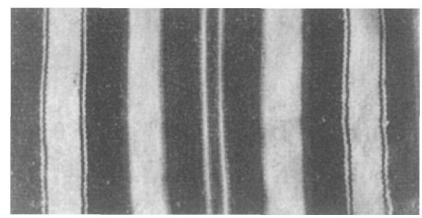
Example 2



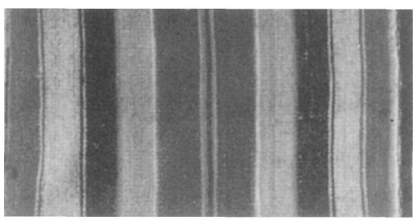
Example 7



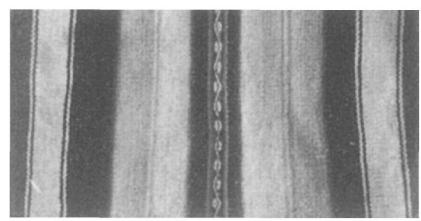
Example 3



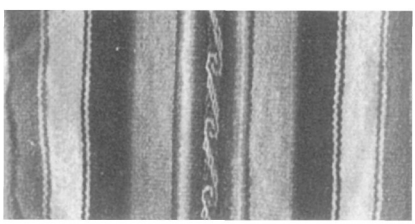
Example 8



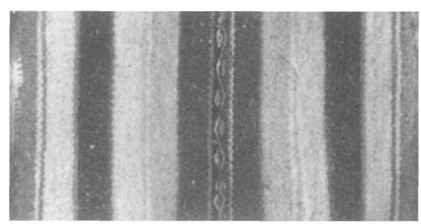
Example 4



Example 9

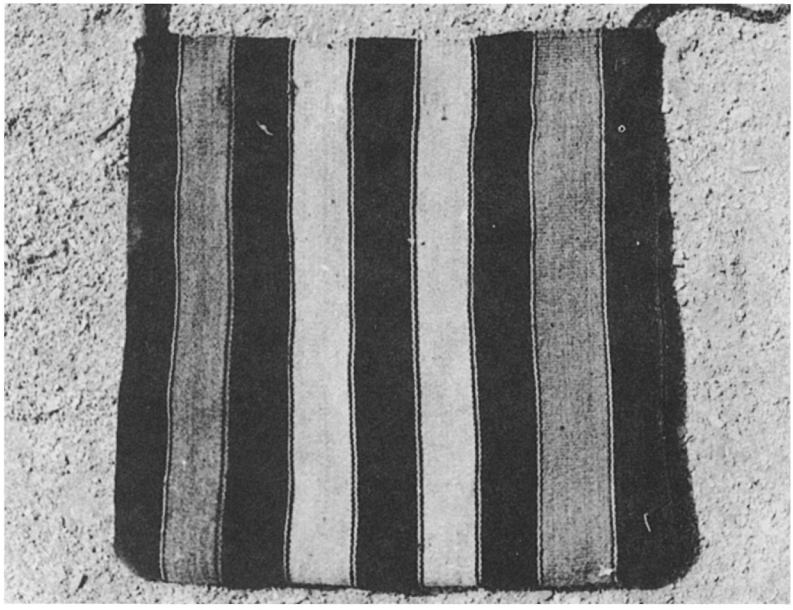


Example 5

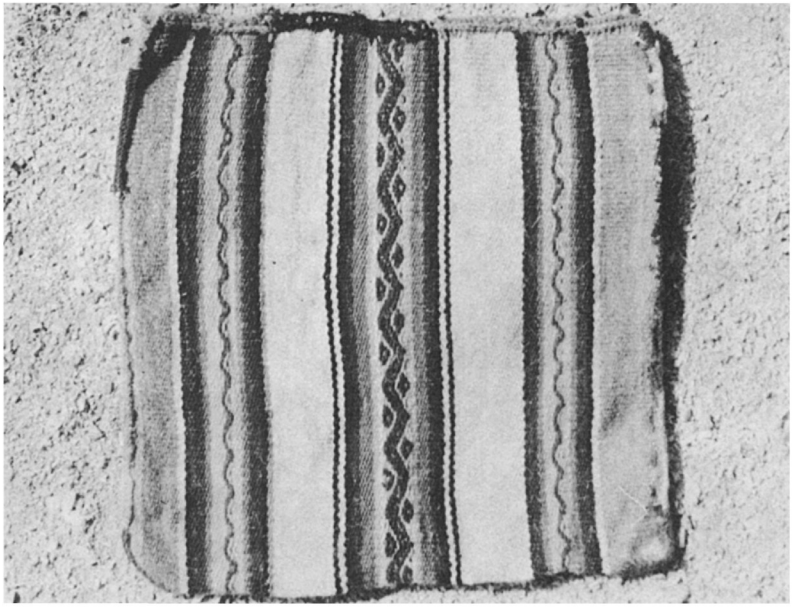


Example 10

Figure 10.1. Color sequences on ten different talegas.



A



B

Figure 10.2. Odd number of stripes on two telegas.

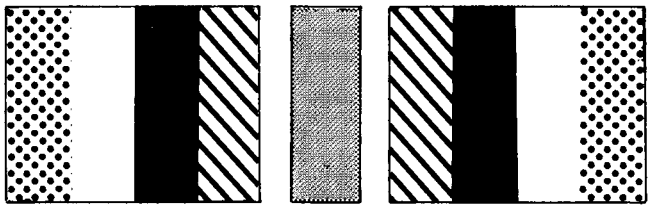


Figure 10.3. Color distribution on body of telega. All colors are natural. Cross-hatching indicates only one more color.

Examples 3, 4, and 5, in Figure 10.1, indicate the different degrees of development within the central band: 3 shows k'isas surrounding the center; in 4 dyed color has occupied the middle of the center so that the central band is widened to contain it; and in 5 the center is emphasized by a fringe of figures that can emerge only at this part of the bag and nowhere else.[4]

In this sense the space of the talegas is qualitatively differentiated. Some parts are more stable and change only in color from one bag to another. By contrast, other parts may undergo change. In this context, the center of the talegas articulates not only by separating or uniting the two sides: It is also the most sensitive area of the talega, the axis that registers, in the most delicate way, variations on the general theme expressed by the weaving.

It is interesting to note that during the course of her life each weaver weaves every type of talega; the only exception noted was a type of talega whose center had figured motifs, apparently a recent development. "One must have all kinds of talegas," say the women. In the kitchen, the storeroom, or the fields, the several kinds of talega set up a dialogue, suggesting a synchronic relationship among them in which each kind can be understood only as a fragment of a whole, which would be constituted by all the various talega designs.

Whatever they may claim about the need for all kinds of talegas, one hears frequently in Isluga that "way back" (i.e., three to four generations ago), talegas were woven only of natural colors; hence the centers did not stand out. "We have just now learned to weave this way," they say of the k'isas using dyed wool. We were unable to verify whether this was true, but what seems important is that according to the people of Isluga, the talegas manifest a diachronic development. Through time they developed in complexity: The unmarked center evolved and came to play a preponderant role.[5]

THE DUAL DIVISION

A central axis divides the bag into two halves. This duality is stated in the colors of the margins and repeated in the pairs of bands (Fig. 10.3),

thus forming two equal sides. The paired colors are equidistant from the center and occupy similar positions: In the schematic representation, each letter designates a color.

The two sides are symmetrical and, moving outward from the central axis, opposite each other. If we fold the bag along this axis, the two sides are mirror images.[6] Of what does this spatial organization remind us?

If we were to fold our bodies along a central longitudinal axis, we should find that the right shoulder touches the left, like the talega's borders. This is a structural symmetry, characteristic of living organisms. Is this a simple coincidence?

When asked what the sides of the talega are called, the weavers supplied some concrete evidence: "They are its body."[7] If one persisted, asking for the name of a given side, they said *chhula lado*, where *lado* is Spanish for "side." But *chhula* is Aymara and refers to half of a pair, normally occurring in nature but now missing its complement, such as a single ear or elbow. The talega, then, has a body with two sides, like any animal organism.

What kind of symmetry are we dealing with? Is it absolute or partial? Here we must distinguish between the ideal model that the weaver has in her mind and the concrete objects she produces. Fortuitous circumstances may bring forth an accidental asymmetry: The weaver may run out of fibers of a particular color that may affect a single specimen but does not alter the structure of talegas. In this article we do not consider such lapses but deal with the possibility of conscious and deliberate breaks in symmetry that would still conform with the talega model. Speaking broadly, within the standards of a domestic craft item the model involves utter symmetry, which, however, may be deliberately broken at times to produce two new relationships between the talega's sides.

1. *A slight disequilibrium*. This does not involve the natural hues or the formal elements used. It occurs only when chemical dyes are the source of color. Thus, two k'isas may appear to separate two bands but on one side only. One may be fuchsia, the other orange. On the opposite side of the bag the fuchsia is repeated, but the orange is replaced by various tones of green. Here the two halves are subtly different – one side charged with red, the other balanced between red and green. The two remain "equivalent" in that both have the same quantity of chemical dye (see example 6 in Fig. 10.1).

2. *Interlaced sides*. In this case the two sides of the bag show the same veins of dyed color, but there is a change in their position on each half of the artifact. The left side may have its green k'isa at the very center, with the fuchsia on the periphery, whereas the right side of the bag has the fuchsia placed at the center, with the green pushed outward. These colors on one side of the talega are inverted on the opposite side (example 7, Fig. 10.1).

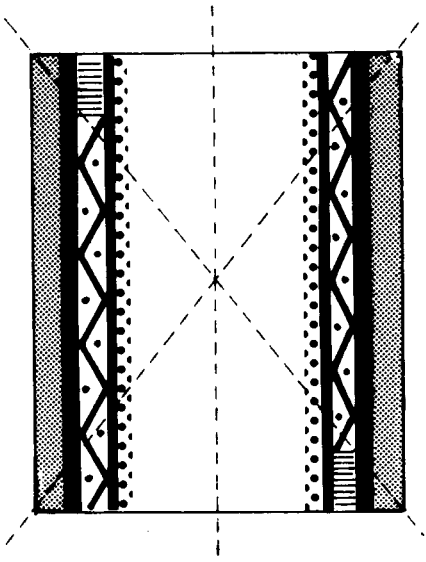


Figure 10.4. Symmetry of talega design, showing upper left and lower right starting and finishing places.

We can see that these talegas manifest two supplementary axes that abbreviate the design and interlace the sides. These talegas contain a latent "inversion," which, however, is openly expressed in all Isluga textiles with figurative stripes: The woven tails of such decorative bands are opposite each other in such a way that they unite the corners of the bag diagonally (see Fig. 10.4). The margins are thus not only symmetrically opposed but are also inverted.[8]

Therefore, whatever the variations, the talega space is organized according to a matrix. This grants them a central axis (the center) and two symmetrically opposed sides (dual division). If we recall that these traits are translated verbally as chhima – heart and body – it becomes difficult to resist the notion that at least metaphorically we are dealing here with an anthropomorphical or zoomorphical conception of woven space. The talegas are conceived as similar to a living being, something "animal," in a generic sense of the term; the talegas' "animality" appears in the common structure that they share. Of course, at first sight one may not be aware of all this.

How can we find other articulations or other particularly significant areas in the woven space? We might take as a guide the constant relationship between a given trait (formal and chromatic) and a particular placement in space. This is how we noted two new articulations.

THE ARTICULATION OF THE BORDER

The colors of the bags differ from one to another. If we survey a group of bags (examples 1 to 10, Fig. 10.1), however, we will note certain regularities. Although the more central designs may vary a good deal in appearance, the "border region" seems to stress a sequence of three tones: (1) a brown band at the very edge; (2) a white or other light tone; (3) a black band in the third position.

Within this sequence, which might be considered a classical formula for the outer regions of the bags, the color brown is the most stable, whereas the black, pressured by other elements of the signification, may slide toward the center or be replaced by another dark tone.

Three things should be noted about the brown border band. For one, it is always brown, although it may vary from light to dark. This is disturbing. Why is it never black, white, or light gray? On the other hand (with the exception of the center), this is the only band that may undergo interior transformation. Although this band remains brown, at times the very ends can show chestnut-colored streaks that can become lighter, turning eventually into ocher or white, thus reaching for light. Also, this band is named: In Aymara the Isluga weavers call it *laka*, mouth.[9]

The design of the bags is conceived entirely in a longitudinal direction. Bands, stripes, and veins follow the woven space in the direction of the warp threads. Doubtless a design is easiest to obtain in this longitudinal direction, given the type of interwoven threads used in these bags as well as in many other altiplano weavings. The longitudinal conception of the design leads to a special treatment of the four edges.[10] At both the upper and lower ends, the talegas seem to end roughly, in an imprecise manner; meanwhile, at the sides, there are always the brown stripes that define the space of woven cloth. It is at these edges that the bag articulates itself with "unwoven," outside space. These borders define the talegas' relationship to the world.

Why are the edges always brown? Let us look very briefly at the ethnoclassification of colors in Isluga. Within the strictly limited context of textiles, colors are grouped in two major categories: *k'ura*, the natural colors of camelid fleeces, and *p'ana*, the colors obtained from dyes. K'ura and p'ana are woven as if structurally opposed, which does not prevent their components' carrying out a dialogue or being mutually substitutional. Within this fundamental division, talegas are essentially k'ura artifacts, since although they may incorporate p'ana elements, they can do without them and still retain their specificity as talegas. Camelid fleeces provide a wide range of tones that make up the k'ura group, but the language of textiles orders them drastically into five hues: *chaara, janq'o, chumpi, qhosi,* and *oqe* – that is, black, white, brown, light ocher, and gray. Within this group black and white define the extremes of a continuum: One is darkness and absolute closure, whereas the other is light and openness. Brown occupies an intermediate posi-

tion, neither completely closed nor utterly open. It may in some contexts be identified with shadow. The brown of the margins, therefore, confronts us with an intermediate type of articulation, one that mediates between what lies inside and beyond the bag.

The particular hue of brown may vary from one talega to another. Those that are woven only with natural colors tend to have darker edges (see example 2). They display a limit that is more defined, though not totally closed, since brown is more "open" than black. It is as if the territory of a talega that lacks a developed center felt the need to be more clearly distinguishable from its outside surroundings. In contrast, the bags that contain dyed thread and stress the center have borders of a lighter brown and do not define the outer edges so sharply.[11]

When the k'isas are located in the heart of the talega, the mouth tends to be radically changed. One margin of the brown border, at the extreme outer margin, "the edge of the edge," displays a gradation of tones that become ever lighter, paling at times into white (see example 8).

Once I showed a talega of this type to a weaver from the settlement of Enquelga and asked her what the tendency to pale meant when it appeared at the border of the mouth. She took the bag in her hands, thought for a moment, and talking to the talega said mischievously: *kamsajtata wayajja*? Laughing, she translated this into Spanish: "What might you be saying in there, talega?" This defined the bag. To the verb *kamsana* ("to say that," in Aymara) the weaver added the suffix *tata*, which means "to move outward," "to expand." The talega "opens its mouth and speaks," or it "extends its territory" when the brown tone drifts toward light.

The brown hue may also have been selected because of its ability to substitute for red when dyes are used. For this reason a variety of belts that use the spectrum of colors called p'ana are also labeled laka and are in fact red. This confirms the symbolic relationship of "lips" suggested above. Brown would then occupy a mediating position shared by both red and green while contrasting with the darkness of the blue tones and the luminosity of the yellows.[12]

A FINAL ARTICULATION

Between the band that at times acts as the mouth and the one that constitutes the heart, we find three, four, or five intermediate bands of color that follow a particular sequence from light to dark. Among these bands that make up the "body" of the talega, a black band always stands out from the anonymous whole. This black stripe is the axis that defines the extreme darkness inside the bag. In the great majority of cases this dark band (the darkest of all), is almost mathematically located on each half of the bag, at the one-quarter and three-quarter width points of the talega. Sometimes it may be placed slightly more centrally, pushed toward the center by other problems created by the juxtaposition of colors. But at all times it provides the shadow point that divides the talega's

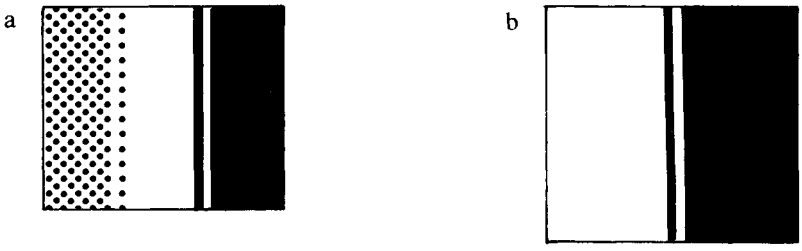


Figure 10.5. a. Positioning of the allqa inward from the border. b. The allqa alone.

body. This relationship between black (or lacking that color, the darkest hue available to the weaver) and a point in space between the mouth and the heart suggests another articulation. In this case we find an axis that can be somewhat mobile.

The place occupied by black is called the place of "the *allqa*." As a first approximation one might say that allqa designates the meeting place between daylight and maximum darkness among the naturally colored bands of the talega. Black is then the shadow of allqa, and white (or the lightest available color) represents the talega's luminosity.

Light and shade are indissolubly linked in the expression of the allqa concept. But it is black that defines both allqa's position and the breach it creates in space. We are not dealing only with the linguistic break, signaled by the term: From a comparison of several bags it becomes apparent that changes in design (such as the incorporation of dyed colors) affect particularly the space between the two black bands, away from the edges of the bag. The k'isas can be placed with some leeway at the very center or around it or can move from there toward the edges. But the k'isas stop suddenly at the black bands. Black seems to act as a barrier to gradations of color, the "novelty" in talega design. Only when the dyed colors prevailed could they jump occasionally over this barrier; they were then timidly placed at the periphery of the bag, in the area between the black band and the mouth. (Examples 9 and 10 show how black acts as a barrier to the dyed colors).

The allqa, thus, produces two new axes. The initial dual division is subtly subdivided. Four areas are created as each side is divided into two new halves. However, these new halves are no longer equivalent. Because black acts as a barrier to the "stronger" colors, the new spaces it creates are qualitatively different from each other: first, an internal area, between the two allqa, and then an external one, from each allqa to the respective edge of the bag. Thus the talega may be articulated in two, three, or four parts.[13]

Although the black of allqa can also act as an axis, it cannot be elaborated or transformed from the inside, nor does it incorporate any designs. The allqa's strength appears to reside precisely in this immutability.

The presence of this axis that divides the interior of each side is extremely interesting. It occurs not only in the talegas and other Isluga textiles (such as sacks, *chhusis*, and so forth), but it can also be seen in weaving from other regions and other historical periods. For example, the bag shown in Figure 10.2B comes from Pampa Lirima, a community to the south of Isluga. Beyond the central area we see two internal axes that are clearly marked by a figured stripe. The same formula (a center and subcenters) can be seen in talegas that come from archaeological sites, where spaces of uniform color are articulated in these three positions by dark parallel stripes.[14] Why should the allqa have been selected to define and communicate this pattern in the talegas of Isluga?

If one were to refer only to color, the allqa expresses the contrast between dark and light, between hues. Although it is used concretely to indicate a juxtaposition of opposite and complementary colors (black/white, red/green, and so forth), it goes beyond a mere chromatic signification. Today, in Isluga speech, the term *allqa* implies what Bertonio lists in his early seventeenth-century dictionary both under *allca* but also *auca*. It implies not only a contrast of colors but also an opposition in natural and social phenomena such as day and night, female and male, today and yesterday.[15] One possible meaning of the woven *allqa* is the image presented in Figure 10.5b. This is not so simple a structure as it may appear to be at first glance.

Observe the two stripes of mutually displacing colors that appear at the meeting point of the most antagonistic tones. If one surveys enough examples, the design of the talegas appears to consist essentially of an alternation of dark and light bands. In this design there is a constant search for contrast, which reaches its climax in the juxtaposition of white and black. In this sense one might consider the allqa to be one of the generative principles of the whole design.

"Jist'ata allqa" say some of the older people when they look at the talegas. This means a "locked-up allqa," one that is neither at the outer edge nor in the center but rather somewhere in the middle of each half. It is as if in this discreet position the allqa suggested an erotic element in the body of the talega.

The bag as animal

Why would a textile be conceived as if it was a living being in its most intimate structure?

THE SPLIT OR SPREAD-EAGLED REPRESENTATION

The body of the talega has both a right and left side, with the heart in the middle. It also has two mouths, one at each extremity of the bag. How was this body conceptualized so that its mouth can be divided into two and these halves placed at each border? From which angle has it been perceived?

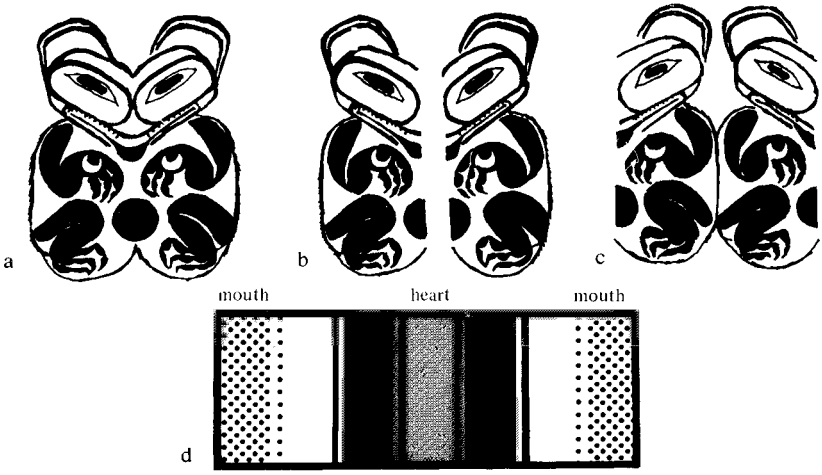


Figure 10.6. a. Painting from a house front representing a bear, Tsimshian (Boas 1927: 225). b. The bear split in two, along its median axis, to reveal its two profiles. c. The same Tsimshian bear, inverted, with profiles pointing outward. d. The structure of a *talega* from Isluga, similarly everted from the heart.

We must assume that the animal has been split along an axis that followed the length of its face, running along the nose and continuing downward; it parted the mouth so that each half was flung outward to the place usually occupied by our ears. The result is an animal with two profiles. The face looks "opened," parted into two mouths, while the body remains unified at the heart.

The talega is not the only example of a divided and spread-eagled "being." It closely resembles other animal representations from archaic cultures distant from one another both in space and in time. We are dealing with a "split representation" like those analyzed by Lévi-Strauss (1958) from data collected by Franz Boas on the Northwest Coast of America and others provided by Leonhard Adam, using archaic Chinese art (see Fig. 10.6).

If we examine the fundamental principles of these artistic motifs (rather than the external aspects of the pieces), they seem to coincide with those that underlie the woven animal representations from Isluga. Speaking of the art of the Haida and Tsimshian, Boas said:

> The animal is imagined cut into two from head to tail . . . the animals are represented as split in two so that the profiles are joined in the middle, or a front-view of the head is shown with two adjoining profiles of the body. . . .
>
> The circular hole in the middle of the design [is] the door of the

house. The animal is cut from back to front, so that only the front part of the head coheres. The two halves of the lower jaw do not touch each other... The Tsimshian call such a design "bears meeting," as though two bears had been represented. [1958: 273–4]

Lévi-Strauss adds two more examples to the Tsimshian and Chinese cases: Maori tatooing and the facial paintings of the Caduveo women, which manifest the same splitting of a plastic image. We are tempted now to add a fifth case: the zoomorphic conception in Isluga textiles. We are dealing here with more abstract and synthetic images than in the examples above, but even so it may be possible to detect a similar mental process at work that would produce similar results. Only the same "internal connection" could explain the continuity of a style or such contemporary similarities emerging in different cultures (ibid., p. 284).

The connection between the bag and the creature's representation in the talega is such that the animal is conceived as a bag and the bag as an animal. One cannot distinguish any limit separating the two. The bag modifies the representation of the living creature. The design must accommodate itself to a flat surface in a way that flattens and stretches the beast. The animal does not resemble the tanned skins that one often sees on the floor, its legs stretched out, the inert paws resting on the world. The talega-animal is not dead as the hide is; it has two mouths, which it needs to make contact and to carry on a dialogue with the world. The animal is not placed on the weaving like a painting on a canvas. It is the fabric itself. The two have no independent lives. With its mouths, the animal does not only adopt the form of the bag; it is also adapted to the technique by which the textile is produced, to the kinds of ties used (a rep type of warp thread), which allow an easier production of straight-line decorations.

The imprecise limit between the forms and techniques of the weaving and the animal that has been insinuated by the design presupposes an underlying concept beyond the plastic expression. The emotional fusion of being and fabric in the textiles woven by Isluga women imbues the textiles with qualities more complex than those possessed by cloths or rags in other cultures. Even within Isluga there is a difference between the textiles woven by the women and the amorphous fabrics that come out of the post-Hispanic pedal looms operated by the men.

We assume that our talega-animals were capable of fulfilling their tasks with as much efficacy as their homologues, the coffers made on the Amerindian Northwest Coast. According to Lévi-Strauss, "Northwest coast boxes are not simply containers decorated with an animal design, painted or carved. They are the animal itself, actively guarding the ceremonial ornaments with which it has been entrusted." For the talegas as for the coffers, "The final product is only one: the tool-ornament, the object-animal, the talking box" (1958: 287).

A question remains: Why the stress on mouths in the zoomorphic representation of the talegas? Why not the head, or the eyes?

The animal possesses a capacity for dialogue and also an appetite. A mouth is needed, then, more so than a profound gaze that the eyes might provide or a head that would confer intelligence: The talegas have the capacity to receive food and to speak. These are the qualities that reappear when we analyze the utilization and the functions of the talegas in daily life, particularly with respect to food and seeds.

THE DIFFUSE ANIMALITY

We have postponed defining our vision of the talega as either anthropomorphic or zoomorphic because we do not feel that the problem should be approached in those terms. The women do not mention an animal; they talk of its "body" or "mouth." They do not specify to whom the body belongs. The clearest response we were able to elicit was "its body" (literally, in Aymara, "of the talega, its body"). Hence it seems more accurate to speak of corporeal perception, the vision of an animal in the most abstract and generic sense, where no distinction is drawn between what is specifically human and that which is animal.

There is nevertheless one consideration that makes us think of animality as a quality of the vision that emerges from the design's structure.

The women of Isluga are master weavers, much as the men are masters of the musical instruments; in an unmistakable division along gender lines, men play every kind of antique and modern wind instrument, also percussion and stringed instruments. Until recently women played, exclusively, only the *trompe*, a small, simple, tongued instrument similar to one used by the Mapuche of southern Chile.[16] The women play it while resting from their agricultural chores; women say they do it "to entertain the men." On the trompe, the women can play all of the melodies known to their husbands: "*Sicureada, wayño*, they know how to play everything."

The trompe then, was a minor counterpart of traditional male music; it provided some continuity with "all of music," which was the masculine domain. In weaving there is a similar contrast: Although women weave many and complex fabrics on the waist and floor looms, men carry on an exclusive if minor craft that consists in braiding wool. And if female textiles are less than explicit about their zoomorphism, the men's braided objects (slings, ropes, festive ornaments) are systematically glossed as reptiles. An ornament used in Carnaval is called *culebrilla* (a small snake); one kind of rope is *muyutama*, a species of snake. This encourages us to assume that female textiles also possess a definite animality, which would balance the bulk of the women's textiles with their minor masculine counterpart.

A spatial structure, an animal image: Perhaps we are coming close to the Inkaic conception of inhabited territory through this spatial matrix of the talega. Such territory used to be perceived and structured as if it were an animal: The perception of the city of Cusco as a puma is well

documented. "It is said that the city had the form of a puma, with Sacsahuaman as its head" (Valcárcel 1945). According to Jiménez Borja (1972: 225) the neighborhoods of Ancash had anatomical names: "Back, front, buttocks. They all faced the plaza where once stood a *pupun*, which means "navel" and was a sacred place." And one recalls the vision of hell in Guaman Puma's *coronica*, mentioned by Wachtel: "The City of Hell has the aspect . . . of an animal, which resembles the jaguar and devours the condemned" (212).

In fact, the talega's space is sometimes "read" as if it were a territory. Whereas the women speak of body and heart, the men, without denying this corporeal quality, sometimes add their own gloss of the weaving. Of the talega's sides, they say, "This is Arajj Saya (the upper moiety), and this the Manqha Saya (the lower one)," and pointing to the chhima, "Here is where all of us meet, the town of Isluga." Women listen in silence to the explanation given by their husbands and continue talking in terms of body and heart.

Who is right?

The woven fabric is a woman's language. As oral metaphor, the talegas are essentially a body with a heart. We are confronting a unified conception of order that affects cultural space and social organization as well as the woven surface. These structures are homologous, and we may legitimately translate from one to another.

The language of forms

From the formal point of view the talega design consists basically of bands and stripes. These are sufficient to create a meaningful design on a k'ura bag (those woven of naturally colored fibers). Although it is true that other kinds of talega to some extent add elements of dyed color, a variation leading to the creation of new forms on the flat surface, this supplementary signification cannot be read without reference to a mostly chromatic level that lies beyond the limits of this paper.

THE BANDS (CHURUS)

The dark and light bands alternate in such a way that their tonal contrasts are diminished by two stripes that repeat the color of each band (see Fig. 10.7). This basic scheme identifies in Isluga a "family" of bags destined for storage and agriculture (sacks, talegas, wayuñas). It is a curious fact that despite the distinct dialogues among the textiles that characterize neighboring communities and distinguish one from another, the complex formula of bands and stripes crosses ethnic boundaries. The "striped face" sack or talega is found throughout the vast Aymara territory, even in those regions where Quechua is spoken today. We do not know why this design has so extensive a distribution, nor even where its limits may be. We have seen this same alternating pattern of bands and changing stripes on Moche figurines in the National Museum in Lima and even on bags classified as Tiwanaku (A. D. 1000) at the Museo de San Miguel of Azapa, near Arica, in Chile.

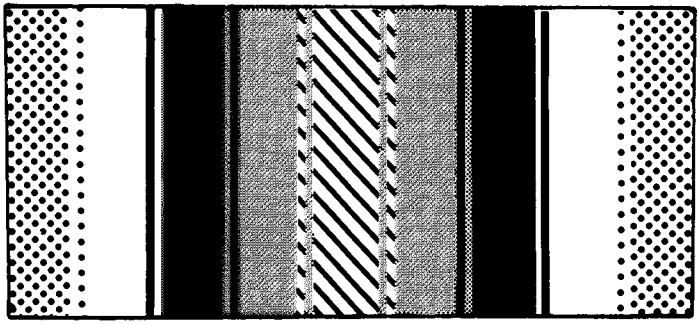


Figure 10.7. The distribution of bands and stripes.

The bands are long rectangles, reminiscent of a belt. They behave according to the following strict rules:

1. Within the same talega, they ideally tend to be the same width.
2. Although the width may vary from one talega to another, the bands always tend to create the impression of long narrow spaces dividing the bag from end to end. These run in the same direction as the warp threads.
3. The number of bands is variable, and although the minimum needed to structure the design is seven, the bags usually have nine to thirteen bands. There is always an odd number of bands, with one serving as the central axis.
4. The band's color is always natural. If dyed colors are added, these are placed outside the bands, with the exception of the middle one, where they may penetrate the center. Even in this case the band retains its specificity, since the dyed tones never dislodge the natural hue of the central band (see Fig. 10.1).
5. Most bands display single colors. Only three may contain gradations created by the use of dyes: the central one and the two *laka*.

When they refer to these bands, women call them *chhuru*. They speak of *chhur chhur janq'o, chhur chhur chumpi* (white or brown chhur). The repetition of *chhur* is used to denote the plural form, since the bands are always referred to collectively. If one indicates a particular band and asks for its name, one receives an answer like "I don't know how to talk that way." Why such reluctance? The explanation lies perhaps in the objection articulated to the women by an aging man: "That is not called a *chhuru*," he said emphatically. "It is called a *tayka*."

The women: "No, *tayka* is used for blankets." Actually, it is usually glossed as "mother." This equivalence of "band" and "mother" was suggested already at the beginning of the seventeenth century by Bertonio ([1612] 1956: 293).[17]

The lexical denomination of a textile feature (which is essentially

optical) only partially translates the semantic content of the utterance. This allows for the coexistence of several different names for the same element. In this case *chhuru* stresses the form aspect, whereas *tayka* refers to the emotionally charged color content of the shape. Either name can be used for the band.

In their chhuru aspect, the bands appear to embody two fundamental ideas:

1. We asked a friend how to say *chhuru* in Spanish. She thought for a long time and then said "cajona" ("box"). She meant that chhuru were like boxes in which one may place or store something. This answer deals with the textile's image. On some belts the small squares that enclose figurative motifs or a combination of colors in sequence are also called *chhuru*.

Outside the weaving context, the people of Isluga designate as *chhuru* the small, narrow shelters they use while tending the herds or the harvest. They use the same word to refer to the circular dwellings of their neighbors, the Chipaya.[18] These houses, each with a tiny door and a dark interior, produce a protective sensation, like the woven chhuru.

The chhuru, then, are always narrow and enclosed. Through this characteristic they are related not only to rooms or containers but also to furrows and raised ridges. In Isluga, in front of the church, there are still remains of small ritual gardens: "This land was called *ch'alla chhuru* . . . It was sandy (*ch'alla*) soil where all the households held a small arable patch, a *chhuru*" (Gabriel Martínez 1976).

Bertonio also noticed the relation between *chhuru* and agriculture: "small ridges": *cchuru* (vol. 1, p. 112); *churu*: "smaller ridges" (vol. 2, p. 94).

Actually the talegas, as well as the wayuña and the sacks that display the same design, are bags indispensable to agriculture. They carry the seed to the fields and play the same role in ceremonial offerings.

The first property of the chhuru, then, is to define the narrow, bounded spaces that enclose, store, or protect, as in a box, by fences or in a house. In the language of textiles, the chhuru has an opposite, the pampa. If in the topographical vocabulary *pampa* designates an extended plain, in weaving it is a wide, uninterrupted space of uniform color. Thus pampa is open, chhuru is closed, but also, beyond the weaving, pampa is natural, chhuru is cultural. One may also suggest that other paired oppositions such as continuous/discontinuous, natural hue/dyed color, wide/narrow, make up the system that underlies the design.

2. The chhuru appear always in direct succession. On Isluga textiles one cannot find a uniformly colored area suddenly interrupted by a lonely stripe of another color. Once inscribed in a space, the chhuru transforms it into discontinuity, creating a subdivided, packed, crafted surface. Given their collective nature, they too are opposed, as a collectivity, to the pampa:

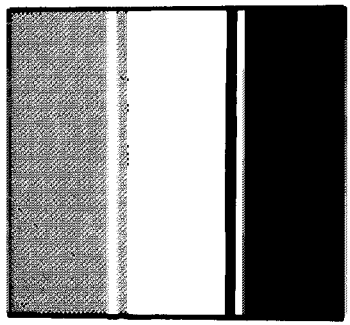


Figure 10.8. Color distribution of stripes (*qallu*).

Chhuru is discontinuous.	*Pampa* is continuous.
Chhuru is collective.	*Pampa* is singular.
Chhuru is full.	*Pampa* is empty.

THE STRIPES (QALLU)

In Figure 10.8, the stripes are in fact chhuru reduced to their minimal expression: veins just wide enough to be clearly visible. The color of a chhuru is repeated in a stripe, and this is then located as an alternating color to still another stripe in the space separating two chhuru. If, for example, we have a brown one, another white, and then a black chhuru, this will produce the following succession:

1. *chhuru*:brown
2. *qallu*:white
3. *qallu*:brown
4. *chhuru*:white
5. *qallu*:black
6. *qallu*:white
7. *chhuru*:black

The stripe that is the same color as a chhuru is called its *qallu*, glossed usually as "pup" or "offspring." The qallu then are somewhat like sons or daughters of the chhuru.

Why should there be qallu inserted between the chhuru? The role of the qallu seems ambivalent: They unify and separate, interlock and divide. If we look at Figure 10.8 we see how the stripes allow for a gradual passing from one color to another. From within the black, a fleeting stripe prepares the arrival of white. This produces a spark of light that is immediately softened by a last echo of black. Then one is surrounded by white. The qallu are like steps that allow us, jumping a little, to ascend or come down from brown to gray or from black to white.

Although the qallu provide a gradual shift from one color to another, they also prevent real contact between the chhuru. Located between

these, the "young" reproduce on a smaller scale the true clash of two different tones. An old man described it well: "The qallu keep the allqa apart," he said, and then added, "but they are their *wawa*, their 'children'."

Much like a conjugal pair, the chhuru are interwoven through their offspring. Each chhuru is part of another: The brown in the white, the latter within the brown, with the qallu constituting the links that impede their separation.

Although they are bound together, the chhuru do not lose their identity. They alternate from light to dark, and the qallu allow a stress on the luminosity of each: A dark stripe placed next to a light band provides a shadowed profile that then stands out. Elsewhere a light stripe may emphasize the darkness of an accompanying band. The weavers make use of these potentialities, darkening or lighting up the qallu if the chhuru hues seem insufficiently contrasted.

THE RELATIONSHIP BETWEEN THE CHHURU AND TAYKA DIMENSIONS

What the bands have so neatly enclosed and subdivided are the differences in illumination (a positive value) between the natural tones of the fleece. The allqa emerges from their succession in what can be real or barely suggested opposition. This was done not only to supply evidence of contrast but also to make plain a complex structure in which form and color are associated to express polar contrasts and beyond that the mediation that balances them. The tension created by the colors demands the mediating presence of the qallu; that way, the chhuru become fertile, acquiring their tayka dimension.

Each chhuru is given its precise and complementary opposite: A wide, light chhuru receives a narrow, dark qallu; a dark band is issued a light stripe. Equilibrium is thus achieved through an exchange of differences.

Mother and children imply fertility. Why then are there two tayka and two qallu, two women with their offspring, instead of a father and mother? The same gloss covers all the bands, but a gender difference is evoked by color. Apparently lightness implies the masculine and darkness the feminine, a contrast noted earlier in certain mythical tales and rituals.

Is there some bond between this message of the design and the practices and ceremonial tasks that a weaving must perform during its lifetime? If one considers all the textiles woven in Isluga as a single whole, they can be grouped into families according to their physical appearance. One of these groups is made up of three bags: the talega, the wayuña (identical with the first, but smaller), and the highland sack, which has a similar if cruder design.

The unity of this group of containers lies not only at the level of appearance but also in their functions. During the planting season the wayuña carry *quinua* seed, and the talegas are used to transport seed

potatoes. The sacks come and go, to and from the fields, eventually bringing in the harvest. Ceremonial offerings are made from the same containers: Potatoes appear carried in talegas, and the wayuña carry quinua. Once placed in granaries or kitchens, all three kinds of bags are used for storage. Thus they make up a family of containers dedicated to human food. This function seems to bear a direct relation to the design in which the chhuru may refer to furrows whereas the tayka-qallu symbol points, perhaps, to a seed's "descendants," to multiplication providing food. The seed is urged to germinate in the earth; let the food "be sufficient" in the storeroom.[19]

How does the signification of the forms relate to the corporeal conception of the weaving? Like a coating of makeup, the design probably converts the rather inexplicit animal-bag into a particular creature in the Andean environment; like a mask or tatoo, the design both hides and defines this personage.

IS THERE A TEXTILE CODE?

If the forms we have surveyed so far seem to be indissolubly tied to the chromatic and spatial traits that allow them to express specific meanings, these same forms may become dissociated from their positions on the woven surface and its colors. They may appear in new combinations, in other woven contexts. Thus one may "read" the forms independently of what we have perceived in other textile dimensions. One may also group these forms as basic organizing elements within Aymara thought ordering width, narrowness, and the like, well beyond the boundaries of the textile.

Archaeological artifacts and historical sources attest to the fact that bands and stripes have appeared frequently in both ancient and contemporary Andean design. The complex terminology found by Bertonio and enumerated under *betas* and *listas* in his 1612 *Vocabulario*, as well as the many names for procedures used in weaving or just to prepare the warp, make one aware of subtle distinctions among the separate textiles. Behind this proliferation lies the capacity of weavers to formulate signifiers using these distinctions.

A question arises: Is not the use of lines and stripes, as a way of expressing oneself, reminiscent of the language of *khipus*? To observe a khipu is to feel oneself caught up in a system of multiple relations. Just as in a weaving, each khipu string can be identified by several criteria:

1. Location: The strings form groups, each of which is knotted to its particular place.[20]
2. Color: A system orders the hues that tell us what the string signifies.
3. The "root": This also matters, since not all the strings are hung from the same "mother" cord; some are "grandsons" knotted to the filial cords.

In addition to such linear elements, khipus also use knots that are at different positions along the cords; knots may differ in kind and number. Craft details, such as the fiber used, the twist given the thread in spinning, its length, and the like, also vary.[21] The khipu system may appear to be arbitrary or indecipherable if one lacks an orientation point for the signs and for the rules of their combinations. Could this also be true for the understanding of Andean textiles?

Undeniably, textile signs reflect, at least in part, conventions that make them inaccessible at first sight. But along with this conventional, arbitrary quality, there is another "motivational" aspect: a relation to and between the signifier and the signified. In the notion of allqa, the shadow (linked to night and other themes) is truly darker, and its corresponding "light" is brighter; the chhima is in fact placed at the center, like any heart, and the tayka is indeed wider than its offspring. Thus the textile idiom is located somewhere between two extremes: At one end we find the purely arbitrary reference, whereas at the other there is a poetic commitment. It may be that these contrasts are only matters of degree, since the khipu also radiate an intimate beauty – the delicacy with which they were knotted does not seem indispensable to their informational function. The knots are ordered into patterns so perfect that one suspects that an aesthetic consideration may also have entered the knotting.

Like khipu, the textiles of Isluga bind light and shade, then condense these in the chhuru, the source of their fertility. The major contrast locked into the apparently monotonous alternation of bands emphasizes the miracle of the natural hues of the camelid fleece. In this way, the meaning of the message, the magic action of the symbols, and the incomparable beauty of the talegas are all inextricably blended.

Notes

1 The width of the bag is determined from the first warp thread. The bag will be half the size of this thread, taking into account the shrinkage of the material that occurs when it is removed from the loom. The weaver must continue to thread the loom within the determined width, being careful not to distort the complex symmetrical design.

2 *Chima* also refers to the inside of the body or to other inner organs. However, with reference to the talegas the weavers always translate chhima as *corazon* ("heart").

3 There are conventional chromatic scales that frequently appear in contemporary Andean textiles. The complex meaning of these, related to a principal of fusion linked to the rainbow in mythical thought, is beyond the scope of this paper.

4 The differences in the talega centers make it possible to have a precise taxonomy of talegas. Thus the types of talegas are distinguished by name: *k'ura talega, p'ana talega, k'isthapita talega, indir k'isa, salta*, etc.

5 The capacity for increase in complexity at the center of the talega is typical of an Aymara region, which now forms part of Chile. It occurs not only in

Isluga talegas but also in talegas from Cariquima and from places in the foothills of the Andes such as Chiapa and Sotoca. Throughout the Andes, the talega design, with its natural-colored bands interchanged with stripes of the same colors, is immediately recognizable and familiar. It can be seen in *costales* talegas, mantas, and so forth, in regions as distant as the surroundings of Lake Titicaca, Puno, Cusco, and Arequipa. As yet we have not been able to analyze the varying transformations of the center and have dealt only with material from the Chilean highlands, where the most numerous and complex variations occur in the talegas of Isluga.

6 See Platt, Chap. 13, this volume.

7 Men and women use the Spanish expression *cuerpo* (body) to refer to the talegas, although *chhima* and *laka* are used for "heart" and "mouth." When we pressed for a specific translation of *cuerpo*, we were given the word *purajja*.

8 To judge by its presence in blankets from the Paracas culture, if we consider the position of the figures on the borders this is a very old Andean formula.

9 *Laka* also means "edge" or "border." In referring to textiles, however, the weavers translate *laka* as "mouth" (Sp., *boca*).

10 Whether or not they form a bag, the four sides of the textiles are not considered to be equal. The horizontal edges that run in the direction of the weft are called *pulu*, not *laka*. There is no textile in Isluga that has a special design following the transverse edge. It is as though the limit of the woven piece, where it touches the unwoven world, demands definition only in a longitudinal direction (unless another element above it covers the four edges equally).

11 The production of talegas is a living process. New examples that might change the norms are created daily. But a selection of four hundred talegas made it possible to see tendencies that in some cases affect more than 95 percent of the examples. The gradation of brown in the *laka* that occurs when colored *k'isas* appear in the center is a tendency that was observed in 95 percent of the *k'isthapita* type of talega.

12 *K'ura* and *p'ana* interchange their colors and establish equivalences. Thus: black and blue, white and yellow, brown and green or red, depending on darkness, lightness, or intermediate values, may be equivalent.

13 There may be five parts if the center reaches such a degree of development that it almost becomes an independent unit. The talega acquires a spatial formula: edge–body–center–body–edge, which is typical of many shawls, although its external appearance may be very different.

14 This is the case in a talega of the Inka period disinterred from Cerro Esmeralda, Iquique, and of the talegas that belong to the National Anthropology Museum in Lima (example no. 0237).

15 "Contrary in colors and elements. Auca: and of other things that cannot be together. Black is contrary to white, fire to water, day to night, and sin to grace. Cchuara hankona aucapapi" (Bertonio, 140, vol 2).

16 The sexual division referred to here is relevant exclusively to instrumental music and not to singing.

17 "Striped or banded: *suko suko, tayca tayca*," vol. 2, p. 293; "Indian dress: *tayca tayca*, with stripes wider than those called *calluni*," vol. 1, p. 94.

18 Chipaya: ethnic group of Uru origin located south of Carangas in Bolivia, relatively close to Isluga.

19 Talegas are also used to transport food during journeys, for the dead as well

as the living: Talegas full of various foods are deposited on the chest of a corpse.

20 The ethnocategories of an actual khipu have been examined in Murra 1975, article 9.

21 A technical analysis of more than four hundred khipus in museums in many countries was undertaken by Marcia and Robert Ascher (1978) (in microfiche).

PART IV
Symbolic representations and practices

Recent years have witnessed a flowering of studies devoted to "Andean symbolism," the subject of a noted symposium, part of the 1976 Congress of Americanists (B. Isbell 1978). Many of these papers used a structural analysis, which has proved productive for the Andean world. Billie-Jean Isbell's assertion at the time, that the Andean peoples were spontaneous structuralists of astounding subtlety and sophistication, may well be accurate. To elucidate this involves methodological questions. It is not enough, after all, to describe the conscious functioning of Andean thought: An effective understanding of an ethnographic classification also depends on thorough awareness of the social morphology and the economic system. The very same principles guide not only practice but also the mental representations. The latter are not just "superstructures," more or less autonomous; they are active components in the reproduction of the total social universe.

Following on his work localizing the *ceque* lines and *ayllu* of the circum-Cusco area (1964 and later), R. T. Zuidema (Chap. 11, this volume) shows how the hydrographical network, tamed by the irrigation system, is also "humanized" by being fitted into upper and lower moieties. The same patterning governs the perception of the ecology, the location of social units, rituals, and myth.

The remaining articles of Part IV reveal phenomena of temporal or spatial transformation within some of the major structures.

In Chapter 12 Thérèse Bouysse-Cassagne attempts to rediscover the spatial organization of Andean groups before their inclusion in the Inka empire: Although it does not neglect ecological zoning and ethnic distribution in the Aymara landscape, her study of the Aymara's perception of space notes its alignment in a dual division that enforces a diametrical structure. This is oriented along an axis formed by the Azangaro River, Lake Titicaca, and the Desaguadero River. Bouysse-Cassagne discovered that this perception was slighted after Tawantinsuyu's expansion and underwent a transition, according to a stern logic, from diametrical segmentation to a concentric structure.

Relying on fieldwork in two neighboring ethnic groups (the Macha and the Laymi, who live in the northern part of Potosí), Tristan Platt (Chap. 13) and Olivia Harris (Chap. 14) find that both populations live according to Andean principles of embedded structures. But they also

point to contrasts between the two sets of data, due to another kind of transformation – the shift from dualism to tripartition.

In this context we note the suggestive importance of mirrored symmetries. Andean thought may not proceed dialectically; it discovers the ideal of unity of opposites in the reflection in a mirror – that is, in the symmetries of the body. It is a misleading perception: The left hand is not the right; a man is not a woman. This may explain the fact that exchanges that in reality are not equal can appear to Andeans experiencing them as equivalent. Thus, beyond an analysis of such structures, the essays in Part IV may help in the discovery of the functions, and perhaps also the meaning of these structures.

11
Inka dynasty and irrigation: another look at Andean concepts of history

R. T. Zuidema

Introduction

In my study entitled "The Ceque System of Cuzco: The Social Organization of the Capital of the Inca" (Zuidema 1964; Wachtel 1966) I described the Inka concepts of social and political organization in the framework of their history. Although it had always been recognized that this historical tradition included mythical and legendary elements, nonetheless Spanish chroniclers and later students accepted the general framework as a reasonable working hypothesis. Manco Capac, the mythical founder of the Inka dynasty, was succeeded by four kings belonging to Hurin, or Lower, Cusco – Sinchi Roca, Lloque Yupanqui, Mayta Capac, and Capac Yupanqui – followed by five kings of Hanan, or Upper Cusco – Inca Roca, Yahuar Huacac, Viracocha Inca, Pachacuti Inca, and Tupac Yupanqui. The last king before the Spanish conquest, Huayna Capac, did not die in Cusco and was not included in this dichotomy. It was during the civil war between his sons Huascar and Atahuallpa that the Spaniards, after the defeat of the latter in Cajamarca in 1532, conquered the country.

Here is an indication of a social dichotomy within a genealogical and historical framework, but what does this dichotomy mean in terms of sociopolitical organization, kinship, and territorial divisions?

I then came across the versions of Inka history by Polo de Ondegardo ([1571] 1916) and Gutierrez de Santa Clara ([1556] 1963–5). The first chronicler has always been considered as one of our most important and trustworthy sources. His data on Inka history, as we will see, can lead us out of a conjectural discussion about historical truth to a more realistic basis for understanding the relationship between Inka dynasty, on the one hand, and a territorial moiety division on the other. Polo saw the Hanan and Hurin dynasties as contemporaneous, and on the basis of his (and other) data I reconstructed the following dynastic scheme:

Manco Capac

Sinchi Roca	Inca Roca
Tarco Huaman	Yahuar Huacac

Lloque Yupanqui	Viracocha Inca
Mayta Capac	Pachacuti Inca
Capac Yupanqui	Tupac Yupanqui
Huayna Capac	
Huascar	Atahuallpa

The data of Gutierrez seemed to be even more extreme, from a traditional point of view, than those of Polo. Not Manco Capac but Pachacuti Inca and Tupac Yupanqui were considered as conquerors of Cusco, and the kings did not found their groups of descendants in a natural historical process, but the division of the nobility into these ten royal *ayllus* or *panacas* was imposed by Pachacuti Inca by assigning the government of each of these to his relatives according to their genealogical distance from him as the king.[1]

In retrospect, Polo and Gutierrez may have been talking from a similar point of view of Inca history. Polo mentions names of kings but not their historical deeds, and his interest was more in the function of their mummies on the horizontal plane of contemporary Inka society, especially in terms of war and agriculture (two activities seasonally related to each other). He says, in fact:

De las estatuas de los Yngas

Usaron Los Indios nombrar ciertas estatuas, o piedras en su nombre, para que en vida y en muerte se les hiziesse la misma veneracion que a ellos. Y cada ayllo, o linage tenia sus Idolos, o estatuas, de sus Yngas, las quales llevauan a la guerra y sacauan en procession para alcanzar agua y huenos temporales y les hazian diversas fiestas y sacrificios. Destos Idolos vuo gran summa en el Cuzco, y en su comarca; entiendese que a cessado del todo, o en gran parte la supersticion de adorar estas piedras despues que se descubrieron. Que fue la primera de Ynca Roca, cabeca de la principal parcialidad de los Yngas de Hanan Cozco. Y por su orden le succedieron Yahuarhuaqui, Viracocha Ynca, Pachacuti Ynca, Topa Ynca yupanqui, Huayna Capac, Huascar Ynca. De la parcialidad de Urin Cuzco se cuenta el primero, Cinchi Roca, tras el, capac Yupanqui, Lluqui Yupanqui, Mayta Capac, Tarco Huaman

El principio que estos indios senalan dizen, hauer sido Manco Capac, que despues del diluuio dizen aver sido progenitor y Padre de las gentes, y que este salio por vna ventana en el pueblo de Tambo. Y dicen averse despues convertido en piedra: a la qual hazian gran veneracion. Esta supersticion ha cessado del todo segun se entiende. [10–11]

About Ynga Statues

The Indians used to name certain statues or [other] stones by giv-

ing them their own names in order to receive the same reverence either alive or dead. And each ayllo or lineage had its idols or statues of their Ynga, which they took to war and out in processions to receive water and good weather and they offered them various celebrations and sacrifices. In Cuzco and its region there were many such idols; one hears that such adoration of stones has vanished completely or in great part since they were discovered. The first [stone] was that of Ynca Roca, head of the main moiety of the Ynga of Hanan Cozco. He was succeeded in turn by Yahuarhuaqui, Viracocha Ynca, Pachucuti Ynca, Topa Ynca Yupanqui, Huayni Capac, Huascar Ynca. Of the moiety of Urin Cuzco Cinchi Roca was counted as first and after him Capac Yupanqui, Lluqui Yupanqui, Mayta Capac, Tarco Huaman.

The beginning which these Indians indicate is said to have been Manco Capac who, it is said, after the Flood, was the progenitor and Father of these people and he emerged from a window in the town of Tambo. And they say that later he was changed into stone: for which they say there was great reverence. As we understand it this superstition has ceased.

We will find further support for such a view of the relationship between ancestor cult, social organization, agricultural calendar, and meteorological concepts in an anonymous description of the Inka calendar (Discurso, p. 150) where it is said of the same Pachacuti Inca who divided the government of the panacas over his relatives that

El ynga suscesor, llamada Ynga Yupangue, este puso mas horden en el Cuzco, como en cabeça de su Reyno y Corte. Hordeno y rrepartio en doze parcialidades de los Yngas, que cada parcialidad tuuiese quenta con su mes, tomando en si el apellido y nombre de tal mes lunar, y en lo que se avian de exercitar aquel mes; y estaba obligado el dia que entraua en su mes, de salir a la plaça publicando su mes, tocando bozinas y dando alaridos y bozes, para que fuese manifiesto a todos.

Turning the study away from pre-Spanish history to the subject of the organization of mummies gives us a way to study a part of Inka culture that still continued to function for some time in colonial society and about which the Spaniards give us some empirical data.

If now we take into account the data of Polo, Gutierrez, and the anonymous chronicler, we may ask whether we have any verifiable information about what "really" happened in Inka history. The problem is more acute in the Andes than in any other part of the world that became a center of high civilization. We do not have any independent indigenous historical literature from the Andes, either from the Inka or from the peoples conquered by them, that could represent contrasting views about the past. Whatever is available is influenced by the way the Spanish, in another language and influenced by their own concepts of

history developed in a long Christian tradition, understood these and wanted to reproduce them. We do not have any dated documents or monuments from pre-Spanish times against which to check any opinion about a pre-Spanish historical occurrence. Even though it seems that we can solve the problem of the pre-Spanish Inka calendar, so far there is no indication that it will solve any chronological problems for us. Rowe (1945) in his "Absolute Chronology in the Andean Area," argued for the believability of the date 1438 for the war of the Inka under Pachacuti Inca against the Chancas, and of subsequent dates, given only by one chronicler (Cabello Valboa). From a Western point of view these dates "make sense." But again, there is no way to check them and to make an explicit, reasoned argument for their trustworthiness. Even if we do believe them, they do not reveal any new techniques for getting to other datable facts.

Perhaps we are asking, therefore, the question of Inka history in the wrong way. Some will trust certain facts or dates of the Inka as historical, whereas others consider as more important how Inka concepts of their past might help to clarify Inka culture in general. In both cases nothing can be verified empirically. Even if a dual Inka dynasty might be preferred, comparing it to other Andean institutions outside Cusco, we do not know whether or how such a dual dynasty really did exist in Cusco. We can, however, redirect questions related to Inka concepts of their past in a way that would allow us to set up hypotheses that can be checked out empirically, giving us a growing corpus of data.

The hypothesis or proposition that I want to analyze here is one already indicated by Polo de Ondegardo: There exists a direct and intimate connection between, on the one hand, the Inka organization of ancestral mummies and *huacas* or sacred places and, on the other hand, their spatial concepts, as expressed through their systematized concern with water in its different manifestations: water leading away from Cusco; water leading to Cusco; and rain, snow, and hail coming from heaven. Perhaps this corpus of data will not help us immediately in deciding "what happened" in history, but it will show us one tangible reality for which the Inka put to use their concept of the past.

The ceque system

The connection between Inka concepts of history, space, and water was already alluded to in analyzing the organization of Cusco. The only full list of groups entering into its political organization is given in the description of the Citua ritual, during the month of Coya Raymi ("the feast of the queen"), related to the September equinox. Participants in the feast were the panacas – ten groups each descended from one of the former kings – and the *ayllu*, ten other groups not descended from the kings. During this ritual the non-Inka population had to leave town. In September, before the rains started, many illnesses afflicted the city. Warriors from each of the twenty groups positioned themselves on the

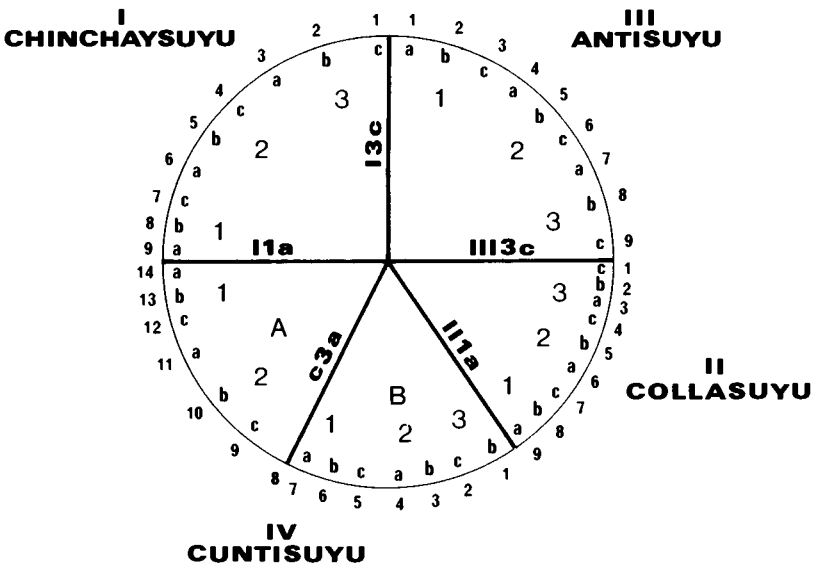


Figure 11.1. Schematic drawing of *ceque* system (Zuidema 1976). Outer numbers follow sequence as used by Cobo; inner numbers as introduced by Zuidema (1964).

central plaza and started to run, each group in its own direction, driving out the evil of illnesses with their lances. At certain points on the road this task was taken over by another, non-Inkaic group, until the last one could throw evil into one of the two major rivers near Cusco: the Vilcanota and the Apurimac. The same groups are also mentioned, although not as completely as here, in the conceptual organization of Cusco and its immediate surroundings by way of the system of *ceques*. In this organization, 328 sacred places (*huacas*) were organized as stations ("resting places," in similar modern examples) on forty-one directions, called *ceques* or "lines" (Zuidema 1977b).

This system enabled me to analyze the organization of panacas and ayllus as a self-contained system in which the mythical history of the royal dynasty served a metaphorical function for expressing the hierarchical relationships (Zuidema 1964). Later I elaborated on this theme by demonstrating the similarity of the dynastic model to the ayllu as a bilateral extended kin-group (Zuidema 1977a). It is therefore impossible to accept the panacas as built up into a genealogical dynasty, as we, or Spanish chroniclers, have done in analyzing official Inka history. A man could belong to different panacas at the same time or change from one to another, since panacas and ayllus were also professional or ritual groups, in some way similar to political parties or pressure groups. As such they seem to have lost their importance very early in colonial times;

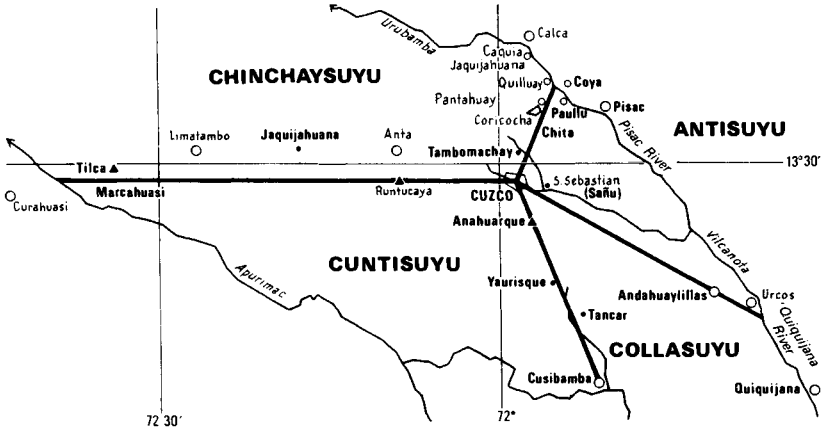


Figure 11.2. Geographical directions of the first *ceques* of Chinchaysuyu and of Antisuyu, and of the final ones in Collasuyu and Cuntisuyu (place-names in heavier print are those mentioned by Molina and Cobo).

at least we have hardly any information about them within colonial society.

I shall take a closer look at the ceques in relation to the Inka concern about water and place these in a wider cultural framework of Andean rituals and religion. It will be suggested that ceques had an important function in relation to dividing water for irrigation in the valley of Cusco and in relation to the water rights that regulated the cooperation in building and cleaning of irrigation canals and the subsequent use of water. The indigenous interests in water continue until today, and their history can be studied carefully. Political disputes about water rights form one dimension that structured the history of the Inka dynasty, especially that of Hanan Cusco. They can, therefore, be checked archaeologically, ethnohistorically, and ethnographically against data in the field. We may not discover "what happened in history," but we may develop an independent method of pursuing such an aim.[2]

Examples from outside Cusco concerning a relationship between sight lines and irrigation

No attention has been paid so far to the relationship of ceques to water. One reason may be the overriding concern of chroniclers and ethnohistorians alike with the conquest and political organization of the Inka empire and less with Inka agricultural rituals, religion, and calendar as a local concern. I will therefore first clarify the subject as it can be studied in modern Andean villages and in ethnohistorical documents.

Fieldwork conducted in various villages in the Rio Pampas area, department of Ayacucho,[3] allowed us to perceive that a primary reason

for preserving indigenous social divisions – ayllu, age classes, work groups, and so forth – within the village is the division of labor for the upkeep of irrigation ditches and of roads. Each group is in charge of a section of one canal during the communal work. Marriage decisions are greatly influenced by the access to water rights that can be obtained through the future marriage partner. Similar examples can be given from other regions in the Andes. I will concentrate here on two cases, one colonial, the other modern, which reveal a connection between these irrigational interests and sight lines from a central point of view.

The first example is from the village of Ocros (called Orcon in pre-Spanish times) in the valley of Ocros, the northern branch of the Pativillca Valley, near the north-central coast of Peru – as described by Hernandez Principe in 1622 ([1622] 1923: 50–64). The priest of Ocros had found in a subterranean tomb the mummies of a *curaca*, chief of Ocros, placed in a central position together with those of his descendants and his ancestors around his own mummy. According to the highly ritual and mythological story, he had been elevated into a new rank by the Inka king from Cusco and had been buried accordingly. The reasons for his distinction were these: First, he had built a new irrigation canal, organizing the labor force of surrounding villages. These villages had to build their own section of the canal, with which they then became identified. Leading the canal through a narrow gorge had been especially difficult; this part received most of the ritual and mythological attention. Second, the curaca's daughter had been an *aclla*, a "chosen virgin," without any physical blemish. Her father advised the Inka of this fact, and she was ordered to be sent to Cusco. After taking part in the solstitial rituals, the Inka did her father the honor of sending her back as a *capac hucha* ("royal sin"), a ritual in which the victim was buried alive. Her father carried this out on lands near his village that belonged to the Inka. These lands were located on top of a mountain that "guarded" the passage of the irrigation canal through the gorge below. Her sacrifice was dedicated to the canal that served the valley below the gorge. From then on, she was worshiped as an ancestress, a goddess of agricultural fertility, by the villages that had helped to build the canal. She was compared to Mama Huaco, who, with her brother Manco Capac, had been the mythical conqueror of Cusco. The mummy of Mama Huaco in Cusco played a similar role to that of the aclla in Ocros.

In the summer of 1977 I visited her place of sacrifice and the still visible irrigation canal that comes out of the gorge, toward the desert coastal mountain slopes. The description of Hernandez Principe reveals the following Andean concepts:

1. Political rank is linked to a critical point in an irrigation canal, such as a gorge or a diversion from a river.
2. Political subdivisions are linked to sections of a canal, which is of common interest to these villages as well as to the state.
3. The surrounding villages worshiped the tomb of the *capac hucha*

as it was visible from high places closest to their village. Thus they were connected to the central tomb by way of a system of sight lines.

4. The irrigation canal, together with the lands that it watered and the village to which it belonged, was "catalogued" in the imperial administration of Cusco by way of the capac hucha. The capac hucha ritual included the cosmological idea that the victim had to travel in a straight line, not over normal roads, from the place of dedication – in this case, Cusco – to the place of sacrifice (Molina [1555] 1968: 75–6). In this way the exact direction and the most direct relationship between both places was registered and confirmed. The capac hucha extends the concept of the sight lines mentioned in point 3.

Thomas Barthel (1959) gives an intriguing description of present-day rituals for cleaning the irrigation canals. These rituals initiate the agricultural season in October in the village of Socaire in northern Chile. The complete ceremony shows many similarities to the Citua ritual of Cusco. Here I shall concentrate on salient characteristics related to the theme under discussion. Two water judges assign the portions to be cleaned by the users of the canal. Each family cleans a stretch according to the size of its land. The canal starts some 2 kilometers southeast of Socaire from a narrow gorge at the foot of the mountain Chilique. Just below the mountain, where the valley widens, is a small flat place encircled by stones, called Merendero (where one eats the *merienda*), or Last Resting Place. Two big boulders at the northern and southern ends of the circle are called, respectively, Great Mountain and Chilique, the latter one named after the mountain nearby. On the morning after the cleaning, the workers and their families come together at the First Resting Place, near the place where the canal begins. Each head of a family in succession brings to the cult place his offering to the mountains of a bottle of *chicha* (maize beer) and then returns. A master of ceremonies and his student, the *cantales*, then address and drink to the surrounding mountains; the number of mountains honored depends on the number of bottles brought to them on that occasion. There is, however, a ritual order of the mountains. According to a former cantal, five mountains, all clearly visible from the Merendero, are addressed: the Chilique Mountain, where the canal itself starts, and four distant mountains, two towards the south southwest and south southeast, and two towards the northwest and the north. The distant mountains belong to other communities, but from there the water is said to "concentrate" on Chilique. According to another informant who had recently been a cantal, the master of ceremonies himself calls fifteen southern mountains or water sources, beginning in the east and going through the south to the west, while his student calls twelve other ones, going through the north. Their lists include the five mountains mentioned before. We do not know if in this case they enumerated all the mountains recognized for their potential power to contribute water or rain. But Barthel observes that when later in the day the heads of family unite at Merendero, there is

only room for some forty of the most important ones, each corresponding to one mountain. The others, with the rest of the participants, sit outside the ring.

In the ceremonies that follow, music is played, "imitating the sound of running water." A priest officiating at night sings the Talatur litany, a song in twelve couplets in the old Atacama language. Only the priest and his son have learned the song, each in one night, from the "singing" water at the upper end of the canal. Water, wells, and mountains are implored in the Talatur, since they bring clouds, thunder, and rain.

Later I shall mention some more specific correspondences between the ceremonies in Socaire and the ceque system in Cusco. Here I recapitulate only the basic concepts:

1. Mountains and wells, outside Socaire territory and in all directions, are addressed as providers of water. The process operates in two ways: first the mountains are related to specific wind directions – that is, to rains being pushed along by thunderstorms; second, water coming from these mountain slopes and wells is considered to join on mountain Chilique.
2. Sight lines are important in relation to Merendero. Four mountains can be seen toward the most important directions. Moreover, the boulder at the southern end of the Merendero is called after the volcano Chilique, because, as Barthel observes, its top is at the end of the sight direction towards the source of the irrigation canal (which cannot itself be seen from Merendero). Users of side canals also advise each other over long distances when they may start irrigating by way of smoke signals or by throwing earth into the air.
3. There is a direct relationship among land use, social divisions, and divisions of the irrigation canal.
4. Finally, there is a mystical relationship of mountains on the horizon as "birthplaces" (*nacimientos*) of water to ancestors who built up the present organization of irrigation and agriculture. Both influence the flow of water from Chilique. Music imitating the sound of water is the language with which one talks to them.

Thus, the data from Ocros and Socaire contain some fundamental similarities: Social divisions are related to segments of an irrigation canal. The particular cult places where a canal is worshiped are the source or sources of its water, the place where the canal diverges from the river, and the passage of the river or the canal through a narrow gorge.

In the case of Socaire, mountains are addressed as ancestors from the Merendero just below the gorge. In the case of Ocros, the capac hucha was identified with the mountain overlooking the gorge. Her father, buried in a similar shaft tomb, became the ancestor of a new lineage. Capac hucha were held in relation to the hierarchical and spatial

redefinition of political relationships within the whole Inka empire. This occurred every four years and at the ascent of each new king.

The capac hucha system thus extended sight lines beyond the immediate visible horizon. Moreover, the aclla, identified with a mountain as huaca, maintained a physical relationship to the Inka as the head of state within a cosmological conception of the empire. When she visited Cusco, the Inka rubbed his royal (*capac*) sins (*hucha*) off on her immaculate body. Carrying these sins, she was then returned and buried alive.

The ability of a huaca or canal to provide water was influenced by outside forces. In Socaire the mountains belonging to other political units provided this influence; in Ocros it was, the Inka himself on a grand scale who did this and on a smaller scale the villages mustered into cooperation for building the canal. Political subdivisions (moieties, ayllu, and so forth) of many Andean towns or villages are called after faraway places. In Inkaic Cusco it was the provinces of Chincha, Anti, Colla, and Cunti that gave their names to, respectively, the northwestern, northeastern, southeastern, and southwestern sections of town, called *suyu*.

Ceques and irrigation in Cusco

We can now turn to an analysis of the Cusco data. Our description of the ceque system is included in the late chronicle (1653) of Bernabe Cobo, who could not have done the primary research for his data. Two earlier chroniclers in Cusco after about 1560, however, claim to have given a full account of the ceque system. One of these, Polo de Ondegardo, a lawyer, presented his to the viceroy Toledo; the other one, Cristobal de Molina, "el Cuzqueño," presented his to Archbishop Lartaún de Cabrera. Molina also wrote a general chronicle on the Inka, now lost but used by later chroniclers, and an extensive description of the calendrical rituals in Cusco and the whole valley of Cusco as covered by the ceque system. We would expect an intimate connection between the data on the ceque system and those on rituals, but it is only through an intensive analysis of both sources that this can be demonstrated. The next best and most coherent description of the calendrical rituals in Cusco is again found in Cobo's chronicle. It gives the impression of having been collated from Molina's account and from another, similar and equally good source that shows, nonetheless, some systematic shifts in the data. I suspect, therefore, that Cobo consulted a now lost description of Polo's, whose extant works give only a condensed but valuable discussion of the calendrical rituals. I will base my analysis on these three sources and use other data against this background of consistent description.

Research performed since 1973 on the calendrical and astronomical system of the Inka in Cusco involved locating as many huacas as possible on all ceques (Zuidema 1976, 1977a, 1977b; Zuidema and Urton 1976).

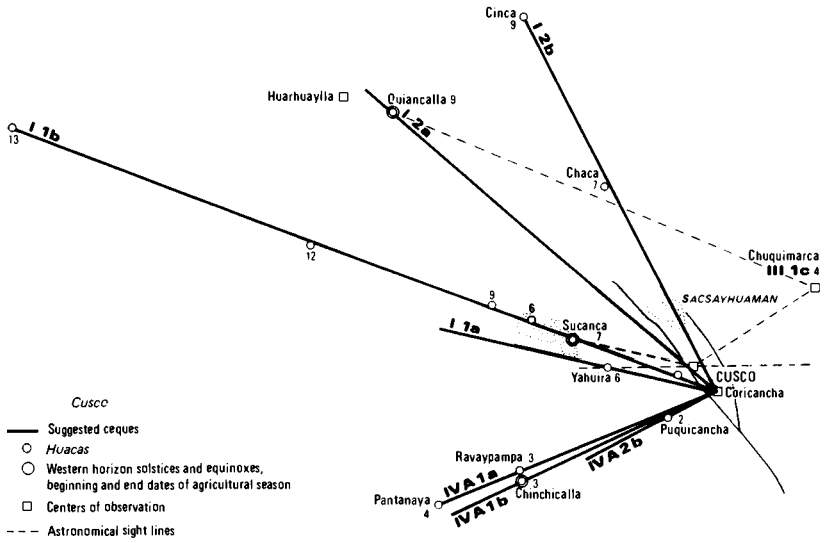


Figure 11.3. *Ceques* to the north and west of Cusco.

The findings support my earlier suggestion that the descending order of the ceques was from the west, through the north and through the south, to the east. In those places where I could identify different huacas on one ceque, they were situated on or close to a straight line. On the important ceque I 1 b (see Fig. 11.1), which has a high number of huacas (thirteen), five of them (nos. 4, 6, 9, 12, 13) could be pinpointed exactly and three others (3, 5, 7) located as to general area. The seventh huaca, called Sucanca, on the horizon from Cusco, was used for astronomical observation. The first six huacas lie under the sight line extending from the temple of the sun to this point. By way of the next three huacas, the ceque then passes over the nearby hills. From the ninth huaca on, there is again a sight line reaching to the last (thirteenth) huaca in the next valley.

The ceque system as a system of sight lines with their extensions does not coincide exactly with the system of astronomical observation. For example, the temple of the sun in southern Cusco was the single center of the ceque system (Fig. 11.3), but the only observations made from here were of the sun's rising and setting in its southern extremes during the December solstice. In these cases the ceques may coincide with astronomical sight lines. Sunrise and sunset during the equinoxes and when the sun goes through its zenith and nadir were observed on the eastern and western horizons from a ritual complex at the upper end of the main plaza in Cusco, called the Ushnu, some 500 meters northwest of Coricancha (the temple of the sun). In this case the ceques did not coincide with the astronomical sight lines. For instance, the huaca Sucanca was explicitly said to be observed from the Ushnu for a date in

August, an impossibility if it were observed from Coricancha along its own ceque. Sunrise and sunset at the northern June solstice were observed from a point north of Cusco near a place now called Lacco. At this place are many ruins, terraces, sculptured seats, and caves, indicating extensive ritual activity. Lacco probably can be identified with the Inka temple of Chuquimarca.

These three centers were ritually related to water. Coricancha was situated on a promontory at the confluence of the two rivers of Cusco, and in its courtyard there was a well. The most important ritual part of the Ushnu was a well where libations of chicha were given as drinks to the royal ancestors (See Molina [1572] 1959, p. 30; Albornoz, p. 26). From here, subterranean canals or tubes took the chicha to other temples. Lacco is situated at a point where a small river and a canal emerge from a gorge. It was said that the sun "came down to drink" in Coricancha and in Chuquimarca. This we can consider as a similar expression to the one used by Guaman Poma ([1615] 1936: 884), who said that during the solstices the sun "sits," respectively, in his southern and northern seats (rising and setting for some days at the same points on the horizon).

Another result of the fieldwork brings us to the analysis of the data to be discussed here. In the beginning of this article I referred to the ritual driving out of evil to the Vilcanota and Apurimac rivers during the Citua feast. We know the different stages of these four relay races, whose directions coincided with the divisions of the four suyus of Cusco and beyond. They extend respectively along the first (hierarchically highest) ceques of Chinchaysuyu and of Antisuyu, and the last (hierarchically last) ceques of Collasuyu and Cuntisuyu.[4]

In the case of the "running direction" to Chinchaysuyu, Hernandez Principe and Molina give the two most extensive descriptions of the capac hucha ritual in relation to this direction, which descriptions very well conform and complement each other. Hernandez Principe mentions that when the aclla arrived at the Apurimac River, she was escorted from there by the Inka to Cusco. It is probable that she later returned along this same route. Molina, on the other hand, after describing in general how capac hucha came from all directions to be redistributed by the Inka, explains how the capac hucha (without mentioning his change of subject he is now discussing a particular aclla as a capac hucha) went first to the initial stage of the running direction of Chinchaysuyu and then continued straight in the same direction (not following the normal road). Apparently capac hucha directions, running directions, and ceques were the same. (For further data supporting this conclusion, see Molina, pp. 69–78, and Albornoz [1580] 1967: 37–8).

A final clue as to the ritual importance of the ceques is given by Molina in his description of a messianic movement, the *taqui oncoy* (the "dancing illness"), which started in 1565 (at the time he did his research). Through extasis people would embody huacas that enabled them to fight and vanquish the Spaniards. The reason why these had been able to

conquer the country was that the Indians had abandoned the worship of their huacas. The sins of the people had made them sick, and driving out of illness was now imperative. This could be done by confession and by going to a river, especially to the confluence of two rivers, in order to throw away the illness.

Molina (pp. 29–32) and Cobo (Bk. 13, Chap. 29) describe two major functions for the ceques at the Citua feast.

1. The first was, as mentioned, driving out evil. After the four hundred runners had carried out this task in the four directions – directions that we could call ceques par excellence – other people from Cusco would go and wash off their illnesses in rivers and wells, "each person in his own ceque" (Cobo: 218). In fact, ceques (as far as we have been able to check) always ended just beyond the immediate horizon of Cusco. In the case of ceque I 1 b, mentioned above, the last huaca is a promontory above a river. Here there was an Inka structure built of skillfully dressed stones. In general the bathing was done at the end of the ceque, where the water could carry the illnesses away from Cusco.

2. The other function of the ceques was complementary to the first. After having driven out the illnesses, people would ritually clean their faces, the doors and the inside of their houses, and their food, using balls of roughly ground maize called *sanco*. When thrown into wells, the water used for this cleaning would *not* bring illnesses. In this case, then, it was water that came *into* Cusco, not water going out. Probably all the ceques include huacas – wells, bridges, and so forth – connected with water for the valley.[5] These data suggest that ceques were also directed to the sources that provided water for Cusco.

The running directions or ceques dividing the four suyus

So far, data from Molina and Cobo have given us a general idea about certain functions of the ceques, but do we also have more specific data on individual ceques to support these ideas? I shall approach the problem by looking first at the running directions as ceques dividing the four suyus. Officially they were said to extend in the four cardinal directions, but except for the route followed to Chinchaysuyu, they deviated from an exact east – west, north – south orientation. These deviations reflect the discrepancy between ideal and real structures in the ceque system. We discover that the reasons for this discrepancy were, in the first place, hydrological.

Our first problem concerns the division between Hanan Cusco (including Chinchaysuyu and Antisuyu) and Hurin Cusco (including Collasuyu and Cuntisuyu). Most clear is the reason for the direction between Antisuyu and Collasuyu. Cusco is at the northwestern end of a valley that slopes in a direction of about thirteen degrees south of east. The Huatanay River flows in this same direction, included by the section of the last ceques of Antisuyu and Collasuyu. After passing the Angostura

Gorge at the end of the valley, the river turns left out of the next valley and ends in the Vilcanota River. The last ceque of Collasuyu and its running direction were chosen in order to remain south of the Huatanay, to go through the Angostura, and to end farther up at the border of the main Vilcanota River.

The running direction and first ceque of Chinchaysuyu was conditioned by three factors. The first, as I mentioned, was apparently astronomical, the direction being straight west. The second factor had to do with the place on the Apurimac River where the runners stopped (discussed in more detail later in this chapter). The third and most important factor for the immediate situation in the valley of Cusco has to do with irrigation. Above Cusco the Huatanay River is called Saphi ("root"), and it comes into town from the northwest. It has small tributaries from the north, west, and south. The canal bordering this drainage system on the south was the last of the canals and tributaries flowing into the Huatanay River from the north. This canal was bordered by the first ceque of Chinchaysuyu.

The Hanan–Hurin division reveals itself, in the first place, as a division of right and left sides (facing upriver) of the Huatanay River, each side with its own tributaries and irrigation canals. This dichotomy determines the Inka concept of history, their mythology, their rituals and politics, and their architecture. The royal panacas deriving from the Hanan dynasty had their lands (because of their water rights there) to the right of the Huatanay. The mummies of kings and other members of this dynasty were also kept in this area. Similar associations existed between Hurin Cusco and the left side of the Huatanay.

Perhaps the most striking example of this dichotomy is the architectonical division of the valley as a whole into Hanan and Hurin. Fortresses such as Sacsayhuaman, Quenco Chico, and Pucapucara (their modern names), or structures and sculptured rocks like Concebidayoc, and Chacan, Lanlacuyoc, Ucu Ucu, Lacco, Cusilluyoc, and Susurpuquio (see Zuidema 1974–6) are found only on the right side of the Huatanay. Moreover, they all derive their importance from critical places in the canalization of the river and irrigation system. Irrigation canals coming from the south into the Huatanay were probably as important and were discussed in Inka mythology. But no structures of the type mentioned are found.

Divisions of right and left with respect to a river are also found in other political systems in Peru. In the case of Cusco, there was an interplay of two concepts: first, an astronomical one, in which Hanan and Hurin were related to an exact north–south dichotomy, and, second, a hydrological one that could only partially be adapted to the first. A similar situation still exists in Socaire. Here the division between master of ceremonies and student seems to correspond to that in Cusco of Hanan dynasty and Hurin dynasty. But in Socaire the master of ceremonies addresses the southern mountains, since the main canal comes from the southeast. Correspondingly, the hierarchical naming order of

the mountains is from east to west, unlike in Cusco, where the northern part is more important and the movement is from west to east.

Water and ceques III 1 a and I 2 b

So far I can conclude two things: (1) The major political and social dichotomy in Cusco society was determined by the division of waters draining into the Huatanay River from the north and south, and (2) in the case of certain ceques (ceques I 1 a and I 1 b were already mentioned, and to these III 1 a and I 2 b will be added), their use as sight lines from Coricancha to critical points in the water system, can also be confirmed.

The next question is, Could the ceques subdividing Hanan and Hurin Cusco into suyus also be used for similar political purposes as the principal division into Hanan and Hurin, these next subdivisions being operated by ceques III 1 a and IV B 3 b, the running directions to Antisuyu and Cuntisuyu? Here the data on Hanan Cusco are more elaborate and clearer; I will concentrate, in answering this question, on the problem of the division of Chinchaysuyu and Antisuyu. (For the problem of the division between Collasuyu and Cuntisuyu, related to ceques IV B 3b and II 1 a, see Zuidema and Urton 1976).

Molina describes how the warriors running to Antisuyu, following its first ceque, were succeeded in Chita, a small valley north northeast of Cusco, by men "from *Pisa*, who are those of Coya and *Paulo* [Paullu]. These brought it [the illness] to the river Pisa, and there they threw it away and they bathed, and they also bathed their weapons [the lances]." The wording of the phrase is curious and revealing. The modern town of Pisac, famous for its Inka ruins, is northeast of Cusco on the Urubamba (also known as Vilcanota or, as mentioned by Molina, Pisac) River. The illness, however, was brought not to Pisac itself but, rather, to a place farther downriver, apparently below the towns of Paullu, on the southern border of the river, and Coya, on its northern side. One of the last huacas of the first ceque of Antisuyu (III 1 a) is called Tambomachay, a name today applied to important Inka ruins in this direction to the north. Water is collected from various springs on Catunca Mountain (personal communication from Jeanette Sherbondy), forming a river (canalized from here by the Inka) that ultimately drains into the Huatanay River near San Sebastian. It is at this point that the most important irrigation canals of Antisuyu originate. Following the direction from Cusco to Tambomachay farther up, one passes first the mountain lake of Coricocha, then the nearby village of Patabamba, and finally reaches the Urubamba River. (The village of Quilluay located here belonged in the sixteenth century, as an ayllu, to the town of Coya (Rostworowski 1962: 159)). Although Coricocha is enclosed on all sides by mountains, and no rivers or canals derive their water directly from this lake, all the villages in the surrounding valleys believe that their water originates subterraneously from the lake (ibid.). Data from the

Inka ritual calendar in Cusco indicate that Paullu and Coya played a key role in Inka religious beliefs concerning agriculture. My aim at the moment, however, is to discuss the myth that shaped the dynastic tradition of Hanan Cusco. First, it indicates that relationship between ancestors and mountains as providers of water. Second, it shows that the direction of ceque III 1 a and the running direction to Antisuyu were chosen because of the importance of Coricocha and Tambomachay to the irrigation system of Antisuyu.

The village at Patabamba at the border of Lake Coricocha, but also overlooking the Urubamba River and the village of Paullu, was called in Inka times Patahuaillacan and was a political part of Paullu. According to Inka history, Inca Roca, the first king of Hanan Cusco, married a woman from Patahuaillacan, called Mama Micay. When she came to Cusco and saw how dry it was, she brought water to the valley. Her descendants were in charge of the irrigation of the Cusco Valley. Her son, the next Inka king, Yahuar Huacac, spent his youth in Paullu, and it was here that the Spaniards discovered his mummy. In an article on royal lands around Cusco, Maria Rostworowski (1962: 159–60) published a document from 1552 that mentions as landmarks near Patahuaillacan Micaypata (the terrace of Micay), Inca Paucar, and Cumo Caca (Cumo Caca, "the rock Cumo or Sumo") – names derived, respectively, from Mama Micay, from a brother of Yahuar Huacac, and from the father of Mama Micay, Capac Sumo. Although I have not yet identified the exact location of these place names, the description of them in the document makes it clear that they are close to Coricocha and to Patabamba.[6]

Originally Mama Micay had been promised in marriage to King Tocay Capac of the Ayarmaca people. In retaliation for the fact that Inca Roca had taken her instead, he stole her son Yahuar Huacac from Patahuaillacan with the enforced cooperation of these people. A woman from the town of Anta, however, revealed to Inca Roca that his son was being held in Maras, the capital of Tocay Capac. Inca Roca thus got back his son, who later married Tocay Capac's daughter. Because of the help of the Anta woman, Inca Roca made her people "relatives" to the Incas. Viracocha Inca, the son of Yahuar Huacac, married a woman from there, Mama Runtucaya. This name also belongs to a mountain near Anta, which was formerly the most important huaca, situated on the running direction to Chinchaysuyu as the extension of ceque I 1 a.

Inca Roca is related as explicitly to the discovery of irrigation water as is his wife, Mama Micay. Given that she, as a huaca, could be related to the first ceque of Antisuyu, we discover a similar mythological relationship of Inca Roca to another direction, the ceque I 2 b of Chinchaysuyu. At the moment when his ears had been pierced and opened for initiation, Inca Roca went out to a place called Chaca ("bridge"). Here he lay down, putting his left ear on the ground. Hearing water, he opened a hole in the ground with his arm and discovered the water

that fed the most important irrigation canal in Hanan Cusco. Chaca can be identified with the modern place name Chacan, a natural bridge over the Saphi River. A canal that leaves the river above Chacan first follows the western bank of the river, then crosses it over Chacan, and from there arrives at the lands above Sacsayhuaman, near Cusco. The ceque system mentions on ceque I 2 b, as the seventh huaca, a small mountain called Chacaguanacauri, which was also visited by the noble youths during their initiation rituals. The ninth and next-to-last huaca on this ceque was the mountain Cinca (today written as Senqa), "on the road to Yucay, . . . where there was a stone worshiped by the Indians of Ayamarca, as they believed that they had originated there." At the foot of Senqa is the source of the Saphi River, feeding the irrigation canal just mentioned. This was one of the most important sources of water for Cusco in colonial and modern times. Senqa, finally, counted as one of the six most sacred mountains of Cusco. The mountain is still very popular in folk beliefs of present-day Cusco. Observed against the skyline of the Corcor mountain range that separates the Cusco valley from Chinchero and Maras, it is said that clouds around Senqa announce the weather to be expected in the city of Cusco itself.

It is these facts about Chaca – as a critical place on the irrigation canal – and about Senqa – as the source of the river and in Inka times probably also known for its prediction of weather – that establish the direction of their common ceque I 2 b and that form the binding element of the three myths related to Inca Roca, that is, the initiation story, the rivalry with Tocay Capac over Mama Micay, and his later role as conqueror of the Ayarmaca and their capital of Maras. It should be recalled that at the end of their initiation ceremonies the noble youths went out to a *chacra*, a cultivated field, near a lake to have their ears pierced. Clearly the act was intended to inaugurate their "fertility," and closeness to water was a necessary condition. We can propose a similar function for Chaca or Chacan, since the place is explicitly mentioned in the initiation rituals. Elsewhere, Rostworowski (1969–70) and Zuidema (1964, 1977a) have already discussed the political extension of the Ayarmaca (a word also written as Ayamarca) kingdom from its center around Maras and Chinchero. Today an ayllu and hamlet called Ayarmaca, belonging to Chinchero, still exists just beyond Senqa, in the same direction of the ceque I 2 b but on the other side of Corcor. Seen within the local context of the Cusco Valley, the rivalry between Inca Roca and the Ayarmaca of Tocay Capac now obtains two dimensions, both dealing with the provision of water. The Ayarmaca, belonging to the other side of Corcor, considered Senqa as their place of origin, although the mountain stands on the Cusco side. It is as if Senqa, as a huaca and a mountain deity, had had the power to send its water to the Ayarmaca but instead decided to send it to Cusco. In the same way, Mama Micay, as a huaca above Lake Coricocha, could have decided to make other people and towns more powerful, but she married an Inka and gave her water to the Cusco Valley, probably by way of the canals

originating at Tambo Machay. It was this better access to water that enabled Cusco to overpower neighboring valleys and to launch itself on the conquest of an empire.

We now arrive at an interpretation that sets the stories in a mythological context, at a time when the geography of the country had not been settled and when it still could be used to construct different political units. At this time Manco Capac, the founder of the Inka dynasty, came out of a cave with his brothers and sisters. He settled the civil government in Cusco, but his brother, Ayar Cachi, a giant who "made valleys into mountains and mountains into valleys," was forced back into the cave of origin. This act fixed the geographical relationships of the lands belonging to the new state. Inca Roca, opening a big cave with his arm, must have been a giant himself. But even the story of Mama Micay has such a cosmological side to it.

Here I will recapitulate data I discussed elsewhere in another context in more detail (Zuidema [1978] 1982). Martin de Murúa ([1590] 1946, Bk. 1, Chap. 86) says that in the time of Pachacuti Inca, when during a month of heavy rains the earth was threatened with destruction (a flood, or *huno pachacuti*), a huge man in a long red dress, with a trumpet and a staff, appeared on a mountain pass to the north of Cusco, called Chitacaca ("the pass or gorge of Chita"). Pachacuti Inca asked him not to play the trumpet because the world would be destroyed if he did. Pachacuti Inca received his name because of this event; he later turned into stone. Chitacaca may be located above the valley of Chita; the document of 1552 (p. 159) mentions a Chitacaca in the neighborhood of the places Micaypata, Inca Paucar, and Cumocaca. The myth of Murúa, then, is concerned with the same weather direction as the myth of Mama Micay. He does not identify Pachacuti Inca, however, as the fourth king of Hanan Cusco (the ninth of the single Hurin–Hanan dynasty); rather, he lists him as a huaca and a son of Manco Capac, the mythical founder of the Inka dynasty. Nonetheless, the epic story of Pachacuti Inca, the king, because it has elements similar to Murúa's myth, also becomes clarified by it. According to Inka history, Viracocha Inca, the king, had been exiled as a boy by his father, Yahuar Huacac, to the valley of Chita. Later, when his son Pachacuti Inca defended Cusco against the Chancas, he fled back to the north, to a town called Caquia Jaquijahuana (today, in the archaeological literature, erroneously called Huchuy Cusco), north of Coricocha and close to Chitacaca and Micaypata. In one version of the Chanca war (Santa Cruz Pachacuti Yamqui [1613] 1968: 238), Viracocha Inca supported his son in a magical way. He sent to him a contingent of warriors, the Pururaucas ("the wild warriors"), who, after winning the war, turned into stones in Cusco.

A second myth clarifies even more the importance of the first ceque of Antisuyu in relation to king Pachacuti Inca. During a severe drought in his reign only the lands of his son Amaru Tupac (or Amaru Inca) were protected by clouds when in other parts of the valley crops were

burned by the sun. These lands, called Amaru in colonial times, then were incorporated into a hacienda north of Cusco. The palace or fortress of Amaru Tupac, where he kept the produce of his harvest, was called Amarumarcahuasi, the seventh huaca on the first ceque of Antisuyu (III 1 a). Tambomachay, the ninth huaca and the place of the wells, was also the house from where Inca Yupanqui (that is, Amaru Tupac's father, Pachacuti Inca) went hunting, apparently into the wild (*purun*) puna lands just north of it.

Two opposing forces are both related to ceque III 1 a and its running direction. It was from here that the king Viracocha Inca had sent his pururauca; from here that the giant (dressed in a manner also attributed to Viracocha Inca) had menaced to flood Cusco; and, finally, from here that Mama Micay came in order to irrigate the valley. But the ceque also crosses Tambomachay, the point where a river flowing in another direction becomes canalized – that is, where it is "civilized" – and where the first and most important canal begins. From the point of view of Cusco, these forces express, respectively, the visible, known, and trusted part of ceque III 1 a and beyond that its invisible, unknown, and feared part.

Perhaps, eventually, the ritual and mythological importance of the direction for each ceque may be understood. Different motives and reasons – climatological, hydrographical, atmospheric, astronomical, and political – seem to have influenced their choice.

Conclusions

In this chapter I projected the Inka dynastic tradition from a vertical time dimension onto a horizontal or topographical one. Such a projection does not in itself invalidate the historicity of the dynasty; even if, as I observed from Polo's description, the Inka seemed to be more interested in the ritual organization of their ancestral mummies than in the chronological order of the actual people's lives. In Ocros, it was a historical person, the aclla, sacrificed in relation to specific historical events (her visit to Cusco and the building of a canal) who became identified with a mountain in an atemporal religious topography. Hernandez Principe describes her and her father's exact genealogical relationship to their colonial descendants. This seems to be historically trustworthy, as compared with other genealogies given by Hernandez Principe (see Mariscotti 1970; Zuidema 1973a), even if some demonstrably ahistorical elements have operated on them. Archaeological analysis of her tomb and of the canal for which she was sacrificed could help to build up a critical historical method of analyzing these data.

A process similar to that which occurred in Ocros seems to have taken place in Cusco. Two types of data support this conclusion. The first deals with the royal mummies and the ways they were worshiped. Inca Roca's mummy, for instance, was regularly carried around in the fields above Cusco, where he was implored to induce rains. Viracocha

Inca's mummy was found by the Spaniards in Caquia Jaquijahuana, where it was still worshiped. His panaca was in charge of ceque III 1 a, extended by the running direction into Antisuyu. The myths that we have analyzed of this direction may explain the presence of the mummy there.

The second type of data discusses more generally how, as in Ocros, a person can be incorporated into a huaca or a huaca into a person. Molina, after discussing the capac hucha ritual, states that followers of the messianistic taqui oncoy ("dancing illness") movement of 1565 believed that "the time of the Inca was already coming back. The huacas were not hiding themselves anymore in the stones, nor in the clouds, or in the wells, since they wanted to speak. They incorporated themselves now into the Indians and made them speak. People should have their houses cleaned and in good order in case a huaca would like to reside in it" (p. 104). For an apostasy back to the huacas, "some people danced, giving to understand that they had the huaca in their body; others trembled, for the same reason, giving to understand that they had it (the huaca) also (in their body); others closed themselves up in their houses and howled; others threw themselves from high rocks and killed themselves and (finally) others threw themselves into the rivers, offering themselves to the huacas." The first quotation from Molina reminds us of the equinoctial feasts, when, during the Citua ritual, not only was evil thrown out but also wells and houses were cleaned with *sanco*. Guaman Poma (f. 253) refers to the taqui oncoy not as a historical event but in the calendrical context of the month of September, that is, the month of the equinox and of the Citua feast. As an example of the kind of behavior described in the second quotation, Hernandez Principe (p. 62) mentions an indigenous priest, again from Ocros, who in colonial times threw himself from a rock because, he said, he wanted to return to his huacas. Elsewhere (Zuidema 1978:) I discuss two examples similar to this one from Hernandez Principe, which refer to the end of the running direction of Chinchaysuyu on the Apurimac River (ceque I 1 a). The first is a version of the well-known myth in which a useful plant is said to grow out of the body of a person who has been killed and buried. The second example refers to the priestess of a celebrated temple and huaca on the Apurimac River, who, on the arrival of the Spaniards, threw herself from a rock into the river.[7]

Ocros, Socaire, and Cusco show a similar integration of history and religious topography. But here we come to the critical point of what we could call the main obstacle to our knowledge of Inka history and social organization. We have genealogical data on families from different towns or ayllus in Ocros, some covering ten generations. From Cusco we do not have any pre-Hispanic genealogical data on noble families outside the city and no genealogical data on the panacas that were descended from different kings, except for the single dynasty of the Inka kings themselves. This dynasty is completely integrated into a regular pattern of moieties, suyus, panacas, and ayllu. It seems as though the

Inka completely "burned their books" and showed to the outside world of the Spaniards and non-Inka subjects only their revised model as it reflected the existing political hierarchy. Myths like the ones discussed above from Inca Roca to Pachacuti Inca were also attached, with the same ahistorical unconcern, to later kings: Tupac Yupanqui, Huayna Capac, and Huascar and Atahuallpa – all still remembered by informants of the Spanish chroniclers. Mythological history continued to be constructed up to the time of the Conquest, when it merged with Western history (Zuidema 1973b). It is true that from Tupac Yupanqui on, the myths demonstrate a widening geographical interest and that from the point of view of military strategy one could construe a reasonable historical sequence of conquests. But these had nothing to do with the history of the Cusco and surrounding valleys. As myth is carried on until the time of Spanish conquest, we have to ask ourselves, How do we distinguish historicized myth that sounds reasonable in terms of history from real history, even where it concerns deeds of the last kings? We do not have to doubt that these persons existed, but there is every reason to be critical in accepting events in the generational sequence as given. Chroniclers writing after Molina and Polo de Ondegardo further modified this sequence to make it more and more "reasonable" to Western understanding.[8]

The same type of scandal also exists with regard to our knowledge of Inka social organization. We have a social model in which the hierarchical relationships between panacas and ayllus are given a more logical order by their relation to a cosmological structure. We know the metaphorical kinship idiom, used to describe these relationships. Elements of professional and political choice also played a role in the constitution of panacas and ayllu. People could change panacas or belong to more than one. Hanan and Hurin Cusco consisted of the "primary" and "secondary" children of the kings. But what decided the classification of a person as one or the other; what did it entail and what historical examples do we have?

I would like to suggest here a completely different approach to Inka social organization. In the case of the Hanan–Hurin division we concluded that the deciding factor was the hydrological division of the Cusco valley by way of the Huatanay River. The Chinchaysuyu–Antisuyu division seems to have been of the same kind. Each suyu has a completely different ecological and hydrological system. Although a modern Western surveyor could make a map of the actual topographical divisions as seen from above, the Inka were forced to use a horizon system, a system that in a country with such prominent geographical features did not prove to be less adequate for their needs. Irrigation systems were defined, not by way of a full description, on a map but by other critical points: gorges, rocks around which a canal had to proceed, and so forth, which marked subdivisions on these canals. All these critical points were organized by the central authority – the Irrigation Authority of the Valley of Cusco – by way of sight lines toward its center in the temple

of the sun. In this way the first ceque and running direction of Antisuyu defined sufficiently all the water that flowed through this whole division of the valley as seen from Coricancha. Ceque I 2 b in Chinchaysuyu, related to the mythology around Inca Roca, had a similar function for the most important irrigation system of Chinchaysuyu. In this context the primary function of ceque I 1 a was to define, along with ceque III 1 a, the boundary of this system.

Chinchaysuyu and Antisuyu, then, as geographical subdivisions of Hanan Cusco, are related to problems of water rights. We cannot study panacas and ayllus as kindreds originating with either a historical or a mythological ancestor, even if they are talked about by Inka informants or chroniclers in such a way. An anonymous but very well-informed chronicler takes a completely opposite point of view. Panacas are subdivisions of one political body, organized from above, twelve in number because of calendrical duties within the capital. We can see, then, panacas and ayllus as geographical divisions of the suyus, determined in the same way as subdivisions of Hanan and Hurin Cusco. Panacas and ayllus may have been defined in the first place as divisions of water rights within their suyu. Chinchaysuyu and Antisuyu give us good data of huacas subdividing irrigation systems into segments by way of the critical points discussed. Antisuyu, especially, provides us with abundant data about panaca and ayllu lands and the canals related to them.

An understanding of the panaca and ayllu system of Inkaic Cusco forms the backbone for an understanding of their political institutions and history. A study of the system of water rights in the valley, referring not only to the use of canals but also to the social obligations of building, repair, and cleaning of these canals may give us such an understanding.

Notes

1 A new and exhaustive analysis of the Spanish sources dealing with this problem is offered by P. Duviols (1979, 1980). His conclusions are that all the earlier versions we have of Inka history confirm Polo's position.

2 This study of the irrigation system in the Cusco and surrounding valleys was conducted by Jeanette Sherbondy (1979). I have made use of her data on Lake Coricocha and the canal of Tambo Machay. Fieldwork in Cusco, aimed at locating huacas and zeques and of studying Inca astronomy and calendars, was supported in 1973 by the National Science Foundation, in 1975 by the American Philosophical Society, in 1976 by the organization Earthwatch and by the Center of Latin American Studies of the University of Illinois, and in 1977 by the Social Science Research Council and again by Earthwatch (the latter supported the work of Dr. A. F. Aveni in both 1976 and 1977). I want to express to all of these organizations my gratitude for their support.

3 This fieldwork was carried out with my former students at the University of Huamanga, Ayacucho, Peru, and the University of Illinois. See "Bibliography of Published Sources," this volume, under Catacora, Earls, Isbell, Palomino, Pinto, and Quispe. For another example, see the study of the Chipaya by Wachtel (1976).

4 I should draw one technical distinction here. The horizon of the last ceques of Collasuyu and Antisuyu is far away, and the Ushnu and Coricancha are in a northwest–southwest orientation to each other. A sight line from either point to the southeast, therefore, does not make any practical difference. The northern and western horizons are, however, close to the city. Therefore, in the case of Chinchaysuyu, for instance, the runners would go from the Ushnu, to a final point on the Apurimac River, straight to Cusco. The first ceque of Chinchaysuyu, although it includes an important huaca on the outskirts of Cusco that lies directly west of the Ushnu, itself crosses the running direction, ending at a point near Cusco, just north of it.

5 As became clear during the fieldwork, the term *puquio* should be taken in a very broad sense, including also distinctive places on canals and rivers, for example, where a river is canalized or goes through a gorge or around a rock.

6 Sarmiento ([1572] 1943: Chap. 19, p. 20) mentions that Yahuar Huacac lived in his youth in Paulo (Paullu) or in the village of Micaocancha (of the Guaillacanes or of Pataguaillacan), which well could be read as Micaycancha. The document of 1552, on the other hand, mentions not only Micaypata but also some "old walls or ruins," that is, Patahuamancancha, Inca Paucar, Cumocaca (Sumocaca), "that border on some rocks of Paullo-vaillacan." When, with the Cusco archaeologist Percy Paz, I visited the village of Patabama in the summer of 1977, we discovered an important archaeological site with an apparently long occupation on the outskirts of the village, on a promontory next to where the path goes down to Paullu. Initial analysis of the sherds indicated pre-Inka styles related to Chanapata and Kilke. Possibly we can identify the promontory with the "rocks of Paullu-vaillacan" and the archaeological site with some of the old ruins mentioned in the document or with Micaypata or Micaycancha.

7 It should be remembered that this is the same place discussed by Thornton Wilder in his *Bridge of San Luis Rey*, a modern version of an older Peruvian tale expressing values similar to those expressed in the two other events.

8 A case in point is the significance of the Chanca war to Inka history. The earlier versions – such as Betanzos's relating it to times before the Flood – or the more indigenous ones – Guaman Poma's relating it to the time of Manco Capac, or Santa Cruz connecting it with Pachacuti Yamqui – have so many mythological overtones that it is difficult to separate fact from fantasy. The war is mostly associated with the king Pachacuti Inca; this is understandable, since the mythological character of this king – his name meaning "he who overturns the world" – does provide him with such a religious role of fundamental upheaval. The latter chroniclers make the story more and more "historical," although some of them relate it not to Pachacuti Inca but to Manco Capac, a sizable chronological difference. But in fact, we hardly know which historical event may have triggered the process of blowing it up to such epic dimensions. One anonymous chronicler (Jesuita Anonimo [1575] 1970: 162) relates the Chanca war to a rebellion of Inka priests and to conquests of the Chinchas, from the coast, deep into the mountains towards Cusco and Titicaca. Recently published documents demonstrate the economic power of Chincha traders up to the time of the Spanish conquest (Rostworowski 1977). But Rowe (Rowe and Menzel 1966), although unaware of the provenance of these data of the anonymous chronicler to which he and Menzel refer by citing Uhle, has conclusively proved on

archaeological grounds that there is no reason to believe that the Chinchas, or the Chancas for that matter, made military conquests corresponding to their economic power. It, therefore, becomes strange that Rowe hinges the historicity of Inca history on the date of the Chanca defeat in Cusco by Pachacuti Inca, a date, 1438, given only in the late chronicle of Cabello Valboa. As a suggestion to be checked out, made back in 1945, Rowe's idea was interesting, but the only effect it had on the more popular accounts of Inka culture was that of a falsely positivistic sense of historical security.

Sarmiento, whose work as a Spanish chronicler I would rate highest, fits the Inka dynasty into a framework of a thousand-year empire; Guaman Poma thinks in biblical terms of six thousand years (Zuidema 1964; Ossio 1977; Wachtel 1971b). Cabello Valboa himself has the Chanca defeat after an Inka dynastic history of five hundred years, a period also mentioned in relation to Inka history by Vasquez de Espinosa and Montesinos. Spanish medieval millennarian thoughts, recalling classical examples, may have influenced the construction of a "primitive" dynastic sequence just as well as indigenous Andean mythological concepts did. We may, therefore, consider the possibility that the date 1438 was chosen from the point of view of the end of a period, as also happened when the one thousand- or five hundred-year empire was defined. Such a consideration may have been the final defeat of Manco Inca in his bid for the reconquest of Cusco from the Spaniards. This occurred around 1538, a hundred years after the Chancas were defeated in Cusco, according to Cabello Valboa or his sources.

12
Urco and uma: Aymara concepts of space

Thérèse Bouysse-Cassagne

They have to return to Omapacha, who created them. [Dioses y Hombres de Huarochiri.]

The fox from below: "This lower world is mine, and it begins in yours." [José María Arguedas]

I, don Juan Santacruz Pachacuti Yamqui Salcamaygua, Christian by the Grace of God Our Lord, native of the towns of Santiago de Hananguayca and Huringuayca, in Canchi of Orcosuyu, between Canas and Canchis of Collasuyu, legitimate son of don Felipe Condorcanqui and doña Maria Guayotari. [Juan de Santa Cruz Pachacuti]

In 1613, eighty years after the Spanish invasion, the Andean chronicler Santa Cruz Pachacuti presented himself to his readers in terms that situate him in a universe still governed by indigenous categories of thought.[1] First he invoked his village (with its two moieties, Hanan and Hurin), then the region where he was born (Canas and Canchis), and finally the vast territory of the Collao (or the southern quarter of the Inka empire).

Is there a meaning in the sequence? What was the pre-Conquest significance of this set of nested structures? The minimal level (the village) and the maximal (the Inka empire) are well known; but the concept of Urcosuyu, applied to the intermediate level (the region of Canchis), has not yet become an object of study.

The notion of *suyu* had a wide range of occurrence. It generally referred to a "subdivision" or "distribution," without regard for scale: The individual's participation in a collective labor effort was a suyu, but so was a portion of land allocated or one of the four great divisions of the Inka state. In Quechua, Tawantinsuyu meant the unit with four quarters, and its Aymara equivalent, Pusisuu, denoted the universe.

Before the Spanish conquest, the southern quarter, or Collasuyu, where the regions of Canas and Canchis are located, had been one of the most densely populated and prosperous regions of the Andes and had seen the rise of the great Tiwanaku civilization during the first millennium of our era. It has therefore been the object of numerous studies, but neither archaeologists nor historians have mentioned the existence of internal divisions within the Collasuyu, in spite of the em-

phasis placed in 1585 by Luis Capoche – an author well known to specialists – on the presence of two suyus in the area.

> The Collasuyu was divided into two suyus, which bore the names of Urcosuyu and Umasuyu. Urcosuyu refers to the dwellers of the mountain peaks, called *urco* in this language [sic], whereas the umasuyus were those who inhabited the level lands below, beside lakes and rivers (*uma* means water); some say that urcusuyu implies a manly and courageous people, since *urcu* denotes the masculine sex, and *umasuyu* whatever is feminine and of less value. The urcosuyus have always had a higher reputation, and the Inka placed them at his right hand in public places; they were preferred to the umasuyus and were better thought of than them.[2]

The concepts translated by Capoche in this text are part of an Aymara mode of thought. The Aymara terminology, as we find it laid down by Ludovico Bertonio in the first dictionary of the language (published at Juli in 1612), allows us to recover an essential aspect of this people's world view, namely the nature of human insertion in space.

Before the Inka arrived in the Collao, the Aymara, distributed among numerous *señoríos* (chiefdoms), were the dominant ethnic group from both the numerical and the political point of view. According to the *visita* of Toledo (1575), they made up some 70 percent of the total population of the Collao, or around 260,000 individuals; their language was still at this date the most widely used, as is proved by the linguistic map of the Collao in the sixteenth century.[3] As to the location of population groups, both the *urcosuyu–umasuyu* division that interests us here and the pre-Inkaic *señoríos*, this can be determined by examining the lists furnished by Capoche of the *mitayos* sent to the silver mines of Potosí. They were grouped in *capitanías* – the area covered by a *capitanía* roughly corresponded to that of a preexisting Aymara *señorío*. The resulting map allows us to distinguish broadly between two principal groups. Starting at the town of Urcos (a few miles south of Cusco) we observe that the *urcosuyu* group occupies the highest regions of the altiplano, whereas that of the *umasuyus* constitutes a strip that flanks the eastern shore of Lake Titicaca. It is in the lakeside region that the division urco–uma seems most notable, since all the *señoríos* around the lake, with the exception of the Lupaqa, are bipartite (See Table 12.1 and Fig. 12.1).

To the south, from the latitude of Oruro and Santa Cruz, the cordillera of the Andes in Caracara territory (*caracara* means "mountain" in Aymara) receives a vast inflection that corresponds to a considerable broadening of the chain, particularly on the eastern side: an intermediary region is thus created, between the altiplano to the west and the eastern escarpment of the Andes. The Caracara, far away from the Amazonian lowlands, could thus – and following Capoche's argument – be categorized as *urcosuyu*.

Table 12.1. *Distribution of Aymara* señoríos *between* urco *and* uma

Urcosuyu	*Umasuyu*
Canchis	Canchis
Canas	Canas
Collas	
Lupacas	
Pacajes	Pacajes
	Soras
Carangas	
Quillacas	
	Charcas
Caracaras	Chuis[a]
	Chichas[a]

[a]Data are lacking for the Chui and Chicha *señoríos*.

It seems, therefore, that the distribution of the *señoríos* expresses and reflects the great ecological division between puna and valley, located on each side of an axis running northwest and southeast (the Azangaro River – Lake Titicaca – the Desaguadero River), and that this division permitted the formulation of a dualist model *urcosuyu/umasuyu*.

But a series of questions now arise. How was this model established in the Collao? To what degree does this spatial organization throw light on Aymara culture? Are we faced with only one model among others? And how did this structure change its meaning in the course of time?

The dual organization of Aymara space

THE ALTIPLANO

The Aymara lived on the highest part of the puna, before the arrival of the Inka in the Collao. They called their country *urco*, "high land," or *thaaña*, "cold land."[4] The puna that covered the greater part of the Collao was characterized by an essentially pastoral economy: Llamas and alpacas found nourishment among the plants and grasses that grew on these arid steppes, affected by violent extremes of temperature.

Like the Eskimos, or the eastern Siberians, the Aymara had developed a material culture adapted to extreme cold: Their agriculture and their techniques of food preparation and conservation bear witness to a sophisticated level of expertise reflected in the wealth and precision of Aymara terminology. Two hundred and fifty species of potato are taxonomically distinguished.[5] Conserved as *chuñu*, the potato was the basic food of the inhabitants of these cold lands, almost their bread, as Cobo observed.[6]

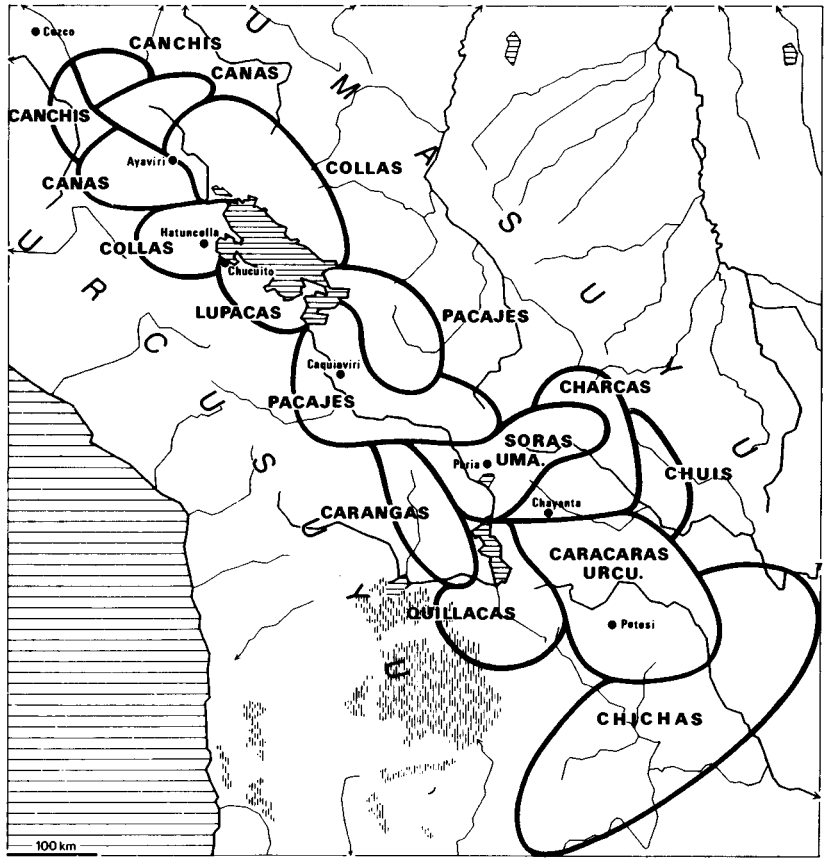


Figure 12.1. The Aymara *señoríos* (based on Capoche's list of *mitayos* at Potosí mines).

A variety of bitter tubers (*luk'i*) were exposed alternately to frost and sun; several weeks of this treatment resulted in a product that was long-lasting and easy to store. This dehydration process was also applied to other tubers, particularly to the oca from which was derived an equivalent product called *caui*. Meat was "jerked" through exposure to sun and cold, either in whole joints (*larata aycha*) or cut into strips (*matta*); fruit was also dried. The same techniques were applied to food previously cooked, which thus underwent a double treatment, first by fire and then by ice: The operation was called *thaarata* in Aymara, signifying "transform from wet to dry and from hot to cold."[7] Almost all preserved food on the puna was cold and dry, like the land that produced it. A type of biscuit was made from potato (*ccatitha*), quinoa (*accuhuchathaa*) or maize (*haku thaa*), first baked and then exposed to the wind of the puna (*thaa*). Quinoa flour (*huacaya haku*), toasted quinoa (*haku*), qui-

noa rissoles (traveler's food, light and of high nutritional value) are also to be included in this category of dry food.[8]

Urco harvests were deposited in granaries that should not be confused with the *colcas*, state warehouses of the Inka period built of stone and still visible over a vast area. The *sekhe* where *chuñu* was kept were open reed shelters, whereas the *piura* for quinoa and the *aycha uta* where meat was stored were built of adobe (a mixture of earth and *ichu*).[9]

Thus the pastoral and agricultural economy of Aymara communities was organized around the two reserves of food and energy that their land provided: the granaries and the vast flocks. All the chroniclers insist on the residential pattern specific to this period: fortified urban agglomerations situated at the highest points on the altiplano, in order to ensure the defense of men and wealth. The picture is the familiar one of the warrior society of *auca runa*, which documentary sources confirm for the Pakaq region, as does the archaeological work of Hyslop for the Lupaqa. Lupaqa sites corresponding to this period (Tanka-tanka, Anquicollo, Siriya B, Nuñamarca, Cutimbo), all of them fortified, are located on high ground appropriate for the rearing of camelids at more than 4,100 meters above sea level and several miles away from Lake Titicaca.

Nevertheless, although the term *urco* represents the highlands where the Aymaras lived, it also covers a far wider semantic field: that of the manliness associated with violence, aggression and war, the male domain par excellence. Thus it seems that an analogy was perceived between the space occupied by the ethnic group, and the image that group had of itself. According to Bertonio's dictionary, *urco* signified the masculine gender of all animals: *orco puma* meant "lion," *orco atahualpa* was the cock.[10] A flock of male llamas or a group of men was an *urcorara*.[11] In a family of boys, an only daughter was called *urcoma*, the male predominance obscuring, as it were, the female presence.[12] The word *urcoña* had various meanings: the curved stone used to crush the maize on the mortar; the principal cord of the lasso or *boleadora*, to which other smaller cords are attached, and that was used to hunt guanaco and vicuña; the central cord of the *quipu* accounting system, from which hung the knotted strings; but also the war leader, or whoever was a past master in the military art.[13] The epithet *chacha orco* was applied only to a mature and virile man, with all the qualities of a courageous warrior.[14] A phallic image, a word full of aggressive but highly esteemed connotations, *urco* represents the fundamental category that allows the Aymara to situate themselves conceptually both in space and in time.

In the era of the *auca runa* or *pachacuti runa* – in other words, the period of warfare – the battles waged between fortified hills seem to have been permanent on the altiplano. Men described as "barbarians" by Mercado de Peñalosa, observer of the Pakaq, would only submit to the "law of the stronger."[15] This bellicose attitude of the Collao peoples is further confirmed by the difficulties experienced by the Inka in their conquest of the Collas and Pukinas on the lake's northeastern shores.

However, once vanquished, the Collao peoples (and especially the Aymara) provided the Inka armies with crack troups that greatly eased the expansion of the Tawantinsuyu to the north.

Thus the Inka exempted the Charcas, Caracaras, Chuis, and Chichas from the "tribute" customarily paid by the conquered groups: These warriors from the south of the Collao paid a blood tax. The words of one of the Charca lords have been preserved: He bears witness to the strength of the Aymara's attachment to *urcoña* qualities:

> We were the most important lords of all; some commanded ten thousand vassals, other eight thousand, six thousand, or a thousand Indians, just like the dukes, counts, and marquesses of Spain, and this was so both before the Inka and after them. . . . We, men of the four nations, we were the conquerors. We were victorious against the Chachapoyas, the Cayambis, the Cañaris, the Quitos and Quillacingas who are peoples of Guayaquil and Popayan.[16]

Alone among the three Collao ethnic groups (Aymara, Pukina, Uru), the Aymara provided the Inka armies with contingents of regular or elite troops. This warrior image of the Aymara, which continued after the *aucarunas* during the Inka period, helped to confirm the Aymara in their ethnically dominant position.

Two sources suggest the absence of the Uru in battle, or at least their lack of combativeness. Polo de Ondegardo says that they never built buildings or took part in war; and Murua, who associates them with the Pukina, specifies that "the Incas only had recourse to them when they lacked troops; they forced them to follow the flags, since they scarcely knew how to hold a bow; they went to battle almost without arms, and, with many Pukinas, were killed like flies, and since they were not accustomed to weapons, they let themselves die like animals."[17]

If *urco* refers to a system of values and forms of behavior that define the Aymara as a homogenous human block, solidary within a particular space, this concept could only emerge in relation to other Collao ethnic groups (Uru and Pukina). Is this world of the Others conceived as closed territory beyond the Aymara frontiers, or as a shared space? How are the ethnic differences lived out? And how was an ordered coexistence achieved?

In contrast to the high *urco* lands are the valleys stretched out beneath. The term *uma-uma* used to refer to a set of neighboring valleys – the *valladas*, as Aymara peasants call them today – that seem to be limited to the eastern lowlands rather than the coastal valleys.[18] In fact, the latter do not constitute a homogeneous system, since they remain separated from one another by the Pacific desert, whereas on the Amazonian watershed the valleys are more or less interconnected.

The Lupaqa of the cold lands gave the name Umasuyu to the region situated to the east of Lake Titicaca. Further, the term *uma* was applied to both Lake Titicaca and the valleys of the Amazonian headwaters.

Thus Umasuyu covered the whole region falling between lake and valleys, particularly the Cordillera Real, which includes some of the highest peaks in the Collao. This mountain chain was to some extent obscured by the short distance between Lake Titicaca and the Amazonian valleys (scarcely more than two days' walk).[19] In Aymara, *uma* meant water and *uma haque* referred to the coast dwellers or the Uru (an ethnic group that occupied the lakes and watercourses before the arrival of the Inka in the Collao). As a rule, *uma* always refers to liquidity or to whatever does not have a firm, solid consistency. A very small baby is an *uma huahua*; mud or clay is *umachata*; snow or melted metal is *umaptatha*.[20] To the idea of liquidity is added that of hollowness (the hollowness of a furrow, of valleys, of lowlands, or the concave parts of an object); similarly, to walk in the lowlands or in the track of a furrow is phrased as *uma cata saratha*.[21] In the Collao, the water of Lake Titicaca, the bottom of the valleys, and the rut of the furrow all belong to the same category, the first because of its internal nature (the contained) and the others due to their form (the container). In contrast to the term *urcosuyu*, a masculine element used in connection with high, dry lands, the water of Lake Titicaca and the rich fertility of the low, concave valleys are associated with the idea of femininity.

Furthermore, the part of Lake Titicaca situated towards the east, on the far side of the Copacabana Peninsula, still bore in the eighteenth century the name Umamarca: the country of water;[22] furthermore, the term used by the Aymara for the Uru (*uma haque*, "water people") is only slightly different from the name they gave to the inhabitants of Larecaja (*umasuu haque*); "people of the *uma* side") (see Saignes, Chap. 16, this volume). It is as though there were two different domains: below, the country of the lake and the wet valleys belonging to the *uma haque* and the *umasuu haque*; and above, the realm of dry cold, belonging to the Aymara warriors.

Should we attribute this need to distinguish two territories simply to the tendency of every human group to recognize itself as different from all others? Insofar as the Aymara considered themselves the depositaries of all genuinely human virtues (*haque suu*, or "human beings," in contrast to all others), their symbolic representation of space also confirms their political predominance, since the Uru and the Pukina make up an inferior humanity from both topographical and semantic points of view.

Frequently associated in the Spanish texts of the sixteenth century, the two "lower" ethnic groups seem to have shared certain aquatic rites, particularly in connection with the shores of Titicaca (note that in the oldest texts, the lake is also referred to as the "Lake of Pukina"). Uru and Pukina regaled the lake with liquid offerings (*chicha*) or aquatic gifts (fish, *mullu*), as well as white llamas and young children. It was also here that the pilgrimage of the Pukina dead, destined "to suffer thirst, cold and fire," reached its culmination. It is true that the return to water is a pan-Andean theme – in the great narrative of Huarochiri, the dead took the road to the *umapacha*, the sea – but in the Collao,

given the presence of the lake and the watercourses, the theme acquired an exceptional importance.[23]

The existence of such beliefs and ritual practices, however, is insufficient evidence for us to assign the Pukina to the *umasuyu*. The work of the Peruvian linguist Alfredo Torero has, nevertheless, suggested a connection between this ethnic group and the great Tiwanaku culture that developed on the shores of Lake Titicaca.[24] If this is correct, we can affirm that the lowlands were occupied by a wave of migrants before the arrival of the Aymara. Although we are unable to determine precisely the areas of Pukina occupation before the Inka, we can nevertheless suggest that in the sixteenth century the Pukina were most densely concentrated in the *umasuyu* region and that this was where the Pukina language prevailed.[25]

Cieza de León observed their presence on the eastern shore where, together with the Collao, they had defied the Inka in their first attempt to penetrate the Collao. Their language, today extinct, was still spoken in the sixteenth century in the *encomiendas* of the eastern shore: Capachica, Coata, Guarina, Achacachi, Huancane, Mocomoco, Camata, Ancoraimes, Ambana, Carabuco, and Vilque. None of the sources examined record a Pukina presence in Urcosuyu territory.

> The Pukina live for the most part on the Omasuyu road, on the other side of the Lake, and they are naturally extremely dirty people, more than any others in these kingdoms; in comparison with them the devil himself could be considered clean. . . . From the town of Ayaviri, which, as we said, is the first of the Collao, taking the left fork, the road begins and enters the province called Omasuyu, which runs along the further side of the lake of Chucuito; this province is densely populated, and most of the people are Pukina; they are rich in flocks and pay more tribute in maize and wheat than those on the other shore, since the province of Larecaja further to the left is rich in both.[26]

This text of Lizarraga is one of the rare sources that refer specifically to this group, which is presented as a society of farmers and herders with access to the eastern valleys. The text is also significant because it attributes to the Pukina one of the defects commonly held against the Uru by the Aymara: dirtiness. In spite of their differences, Uru and Pukina are united in the same pejorative category. It is probable that for the Aymara both were part of the same universe, that of the Others.

In the case of the Uru, inhabitants of the water (*uma*), it seems that their symbiotic coexistence with the Aymara was, in several cases, the result of Inka policy. Thus in the Pakaq region, as Mercado de Peñalosa pointed out, it was with the clear aim of strategic and economic control that the Inka decided to dislodge the Aymara from the heights of the *urco* and the Uru from their home in the *uma*, in order to settle them not far from the routes of communication. Before, the Uru of this region had lived on Lake Titicaca:

The Inka made them come out of the water and live with the Aymara, who taught them to farm and till the earth; they were ordered to pay a tribute in fish and make wicker baskets; and because they have been in close contact with the highland Indians they have started to speak the Aymara language and have almost abandoned their own tongue, which was Pukina, and today they live in ordered fashion, in houses and towns, and they have their own chiefs and lords, and pay *tasa* like the other Aymara.[27]

Note that among the Lupaqa, who were neighbors of the Pakaq's, the seven pueblos built during the Inka period were constructed on the borders of the lake, in contrast with the Aymara fortresses of the previous age (Chucuito, Acora, Hilavi, Juli, Pomata, Cepita, Yunguyo).[28] Not only did this policy modify the spatial organization, but it also favored a closer relationship between the Aymara and the "lower" ethnic groups.

The era of the *señoríos* and the Inka period therefore represent two distinct stages in the construction and the conceptualization of the Collao. But the first stage is characterized by a series of basic images, presented in oppositional terms, that were founded on real spatial differences but also on ethnic antagonisms. How were these contradictions to be resolved?

Between *Urco* and *Uma* – a conceptual opposition as well as two independent regions – the intermediary zone, or *taypi*, was formed by Lake Titicaca itself.

As an element of Aymara thought, Lake Titicaca is not merely a specific geographical location: It is at once a centrifugal force that permits the differentiation of the two terms in opposition and a centripetal force that ensures their mediation. In the symbolic architecture, the *taypi*, place of convergence, is crucial to the equilibrium of the system.

In Aymara, *taypi* means whatever is situated in the middle: thus, *taypi lukana*, "middle finger"; *taypi huahua*, "second child of three"; *taypirana yapu*, "a field in between others"; everything of medium stature, neither tall nor short, is *taypi* (*taypi haque* means "a man of medium height").[29]

In fact, Titicaca is located in a fairly temperate climatic zone, where crops from the puna and from the warm lands can both be grown. The microclimatic features of its shores and islands permit the cultivation of certain varieties of potatoes, such as the *poqhoya* (belonging to the category of *cchoque* which was not used for *chuñu* preparation), as well as the tiny sacred maize of Copacabana.[30] Lake Titicaca, which belonged to neither the *urco* nor the valley lowlands, determined the internal division of the Colla and Pakaq *señoríos* whose lands were to be found on either shore. This bipartition was confirmed in Pakaq origin myths, which told of two migratory waves, one of which occupied the lakeside lands, whereas the other, coming from the Carangas region, established itself in the heights.[31]

Table 12.2. *The symbolic organization of the Collao*

	Location		
	Symbolic	Topographical	
Alaa yungas	High	Low	high –
Urcosuyu	High	High	high +
Umasuyu	Low	High	low +
Manca yungas	Low	Low	low –

As a prolongation of Titicaca, the *taypi* unfolded along the northwest–southeast axis constituted by the Azángaro River to the north and the Desaguadero River to the south. The whole Collao was thus ordered around a sort of natural *sekhe* ("alignment", in Aymara): On the one hand, the heights, male strength, social order, the Aymara; on the other, the depths, femininity, nature, the Pukina, and the Uru.

THE VALLEYS

Beyond the Collao, to the west and east, the Pacific valleys (*alaa yungas*, "upper valleys") and the Amazonian valleys (*mancas yungas*, "lower valleys") were included in the same classificatory logic. Human behavior – whether in *urco* or *uma*, Mancas or alaa yungas – was everywhere inscribed within a value system that articulated the spatial order to socioeconomic relationships.[32]

The *alaa yungas* appear ambiguously as "low," from a topographical point of view, and as "high" insofar as they share frontiers with the Urcosuyu. The *mancas yungas*, on the other hand, are double "low" – both topographically and symbolically (see Table 12.2).

The Urcosuyu man (*haque suu* or *pampa haque*) sees himself as lavishly generous: "He gives even when no one has asked him for anything."[33] On the other hand, he considers the inhabitants of the eastern valleys (*umasuu haque*, *itu haque*, *qheura haque*) as "mean people who avoid social contact, prefer to eat alone, and talk to no one, just like savages";[34] whereas the *koli haque* or *kapa haque* of the Pacific coast are thought of as "lively, intelligent and merry." Other racial associations simply accentuate the opposition between the two *yungas*: *manca yungas* women are said to have a withered complexion (*mala*) while the *koli* of the *alaa yungas* are dark-skinned (like black maize) (cf. Table 12.3).[35]

More sparsely populated than the highlands, the *mancas yungas* was characterized by a dispersed residential pattern: Smaller production units than on the altiplano, sometimes isolated households, tilled the earth on their own, and the need to share was less vital than on the puna. Possibly valley ecology influenced social practices to the point where it may partially explain the economic "egoism" of the *yunca*

Table 12.3. *Distinctive features of the main Collao regions*

SW			NE
High		Low	
Alaa yunga (High −)	*Urcosuyu* (High +)	*Omasuyu* (Low +)	*Manca yunga* (Low −)
Coastal valleys	Puna heights	Lakeside valleys	Amazonian valleys
	Man	Woman	
	Upper	Lower	
	Right	Left	
koli haque or *kappa haque*: lively, intelligent, and merry people	*haque suu pampa haque*: generous, lavish		*qheura haque*, *yunca haque*: poor, mean person who avoids social contact, prefers to eat alone, and talks to no one
koli, *cani*: women's epithet *koli*: black maize			*musi hanti haque*: savage people, rustics like those one finds in the *yunga*
			mala: women's epithet, woman with withered complexion

haque, but the difference that the people who provided our linguistic material, the Lupaqa of Urcosuyu, established between their own attitudes and those of the two valley systems derives undoubtedly from a different point of view. Opulence is a sign of power, and when the people of the heights speak of themselves as generous people, they are reproducing the language of the lords, of those in a position to ensure the redistribution of wealth. According to Bertonio, the word for "rich" (*ccapaca*) was also understood as "king" or "lord"[36]. When the Aymara of Urcosuyu talk of the *yunca haque* as "mean" and the *koli haque* as "merry," are they not referring to the mechanisms that regulate the exchange of goods? After all, what is "eating alone and not sharing one's food" (*cachuratha*) but the denial of the obligation to give (*churaatha*) and to return (*chura khaña*), in fact, to behave as an alien[37]? Beyond the image of the *yunca haque* as little better than the savages of the *anti*, and that of the urbane and civilized *koli*, we can detect through the Aymara definitions the forms of "a sort of jurisprudence,"

Table 12.4. *Lupaqa demography in 1575*

	Subgroups	Population
Urcosuyu nucleus	Aymara	10,779
	Uru	4,054
Alaa yungas colonies	Moquegua	304
	Çama	345
	Lachinchura	
Manca yungas colonies	Larecaja	72

in the phrase of Mauss, who has studied the mechanisms that regulate exchange.[38]

This particular conceptual system, which establishes privileged links between *urcosuyu* and *alaa yunga*, on the one hand, and between *umasuyu* and *yunga*, on the other, raises the question of whether the idea of the "archipelago," elaborated by J. Murra, can be rephrased in terms of Aymara classificatory logic.[39]

As far as the Lupaqa of *Urcosuyu* are concerned, the demographic information, though late (1575), shows that the coastal *mitimaes* (649) were numerically more important than the Amazonian *mitimaes* (cf. Table 12.4).[40]

What was the situation among the *umasuyu* chiefdoms on the other side of the lake? An unpublished list of *repartimientos* drawn up in 1561 at the instigation of Polo de Ondegardo confirms the link between *umasuyu* and *manca yunga*. Indeed, all the *umasuyu repartimientos* possessed coca plantations in the eastern valleys: Achacachi had theirs in Areyungas, Guarina in Yanacache, Viacha in Peri, and Guaqui, Laja, Guacho, Sicasica, and Calamarca in Chapis.[41] Further, we know that the *umasuyu* Pukina had maize cultivations in Larecaja, and that some agricultural *mitimaes* from *umasuyu* lived in the Carabaya region (Phara, Sandía, Mocomoco, and Coaza).[42]

According to this spatial logic, *alaa* seems to represent the lower part of *urcosuyu* and *manca* the lower part of *umasuyu*. This distribution of the *mitimaes* is eloquently confirmed by Polo de Ondegardo in a letter addressed to Licenciado Briviesca de Muñatones (consulted in the Biblioteca de la Real Academia de Madrid).This conclusive evidence has the merit of coming from one of the best observers of the first years of the Conquest and from the very man who demanded that their coastal *mitimaes* be restored to the Lupaqa.

All the Indians on the Omasuyo road have Indians in Carabaya for this purpose, and those of Urcosuyo have them on the coast; the Indians of Cochabamba have them in Mayapaya, and those of Pocona in the coca; and in general, all the Indians of this country

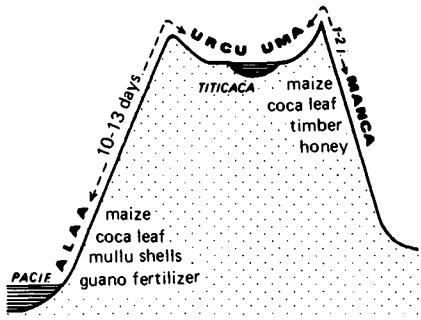


Figure 12.2. Aymara dualism and ecological complementarity (Murra 1972: 441).

have their *mitimaes*, and those whose organization has been changed in this respect suffer serious problems and can only feed themselves with difficulty; such are the Carangas, who were deprived of their *mitimaes* through failure to understand their function; they were included in an Arequipa *repartimiento*, and the same procedure was followed for the people of Chucuito until Marquess [Cañete] restored them on my advice.[43]

The actual location of the vertical archipelagoes in the two valley systems neatly confirms the symmetry of the Aymara model presented earlier (cf. Fig. 12.2). But this model was surely affected by the many changes provoked by the Inka domination. We have still to determine to what extent the latter modified the ecological equilibrium of the *señoríos* and altered the nature of Aymara dualism.

Ritual in symbolic space

Just as Aymara space and socioeconomic relationships are governed by a double dualism, certain ritual practices, such as the incorporation of children into the social order (and therefore into a coded space), employ the same symbolic grammar: Thus, through ritual mediation, a rupture is avoided between individuals, on the one hand, and the binary structure of the Aymara universe on the other.

The rite of passage *sucullu* is carried out at the moment of the potato harvest, a vital product whose calendar punctuates the flow of time. In contrast, the bastard, a child born outside society, was said to be a grain of *cañahua* (*isualla*) as though to indicate his or her relationship with wild plants and simultaneously situate the child outside the social space, which is to say outside the *pacha* where the triple agreement is celebrated between nature, society, and the individual.[44] But on the day of the *sucullu* festival, the child's maternal uncle (*lari*) smears on its face a transversal mark from cheek to cheek. The mark is inscribed with vicuña blood, collected from the stomach of the dead animal, and the meat is

distributed to the mothers. All *Urco* babies born during the previous year participated in this ceremony "celebrated in the center of the village."[45]

Let us first consider the choice of ritual animal, the vicuña (*wari*), which lives above the limits of agriculture (which is to say, the limits of potato cultivation), between 4,000 and 4,700 meters above sea level. The children of the cold land are marked with the blood of the wild animal best adapted to the raw climate of the heights: The Aymara said that the vicuña "only weeps when the time of the bitterest frosts approaches."[46] The blood marks the visible traces of a passage from one social state to another, and the sacrificed meat offered to the mother by the maternal uncle signifies in some way the abolition of the child's "wildness" and its insertion into society. In fact, the vicuña was considered as *suni aycha* (wild meat), and the term *lari* used for the maternal uncle also means, in its reduplicated form (*lari lari*), "he who has fled his community obligations to live on his own, from products of the hunt and uncooked food."[47]

According to the structure that emerges from the rite, the *lari*, the vicuña and the mother are the representatives of the wild world. In Aymara mythology, the *auca runa* (era of the warriors) was preceded by an era of "savagery," that of the *purua haque*, "men without faith, law nor king, who lived on their own, far from the duties of the city."[48] According to legend, in the era of the *purum* the earth "was plunged in darkness," "the sun did not exist, the land was virgin and most things unknown."[49] Just as this period of savagery preceded the social order, so the first phase of the ritual precedes the integration of the child into the world of the *aucaruna*, the civilized world organized into chiefdoms, where warfare, the domestication of plants, and the art of weaving appeared together.[50]

The *sucullu* represents the passage from the older humanity to the newer, from the wild state to the state of social being, and "it is the body that is designated by society as the only propitious bearer of a temporal sign, the trace of a passage, or the assignation of a destiny."[51] Each half of the face is symmetrical with the other (*yanantin*), and both are balanced by the axis of the nose (see Platt, Chap. 13, this volume). Thus the eyebrows, the eyes, the cheeks, the ears, and the lips are *yanantin*, or divided units, and one half by itself would be *chulla* (isolated).[52] By tracing the horizontal mark, the *lari* unites the two symmetrical halves across the axis of the nose: Their convergence (*taypi*) establishes a new facial geometry; if at first there were only two halves (right and left), we now have the four *tawantin* sectors (right above, left above, right below, left below), a symbolic quadripartition that can be related to the layout of the village. A mutual confirmation is achieved as it were, between the body of the child and the body politic.

The first part of the rite, which we have just analyzed, is common to both sexes; the second phase assigns children different roles according to their sex. Thus, the boy is dressed in a tunic marked vertically with

three stripes of color: The *sucullu cahua* covered the whole height of the body. The girl received a skirt (*huampaña*) decorated with a woven horizontal band, which covered the lower part of the body. What corresponds to men is tall and vertical; what corresponds to women is low and horizontal.

The union of man and woman corresponds to that of the two moieties; the twining of the woven threads corresponds to quadripartition. Here the role of the *lari* was fulfilled, and the socially recognized child was received by the paternal lineage (by the *ypa*, the paternal aunt). With a sign of blood on the face of a child, the Aymara spelled out their myths and gave birth to a new human being. In a few colored threads they wove the role that would belong to it in society. The writing system was concise: Everything was conceptually linked and could be inscribed in a ritual geometry.[53] Face and clothes bore signs of sharing and union, signs that distinguished high from low, man from woman, and right from left.

Dualism and its transformations

A certain logic thus regulates a schema that embraces both individuals and the whole of Aymara society. But the latter was composed of several chiefdoms that put into practice the same general principles, although each ethnic practice belonged to one of the two main transformational sets corresponding to *urco* and *uma*, according to whether the chiefdoms were oriented predominantly toward the Pacific coast or the Amazon basin. The Inka conquest united these diverse chiefdoms within a single state that henceforth imposed a new spatial organization in relation to its center at Cusco: What was the relation between the Aymara logic and the logic of the Inka?

First let us recall that the Tawantinsuyu was made up of four quarters that were opposed to each other in pairs. In other words, the Inka system is founded upon the same binary oppositions (high/low, +/−, left/right) as the Aymara: How, then, did it absorb the latter? The Aymara order is thenceforth integrated into a vaster whole, but at the price of an inversion of the dualism and of a displacement of the *taypi* (in Quechua, *chawpi*). *Urco*, above, +, and right in the Aymara system are all now subsumed within the Collasuyu, and the sequence becomes *urco*, below, +, and left. *Alaa*, which was previously above, −, and right, now slides into the Cuntisuyu and becomes below, −, and left. In the same way *Manca*, until then below, −, and left, slides into the Antisuyu and becomes above, −, and right (cf. Table 12.5 and Fig. 12.3).

Note that only one element remains with its matrix unchanged after the transposition from the Aymara to the Inka system, namely, the *uma*, since the Collasuyu occupies within the Tawantinsuyu the same position as *uma* in the previous arrangement: below and left.

The Aymara dual organization was dismantled: *urco* and *uma*, which had constituted two distinct *suyus*, were united in the Collasuyu; si-

Table 12.5 *The Aymara system and its transformation by the Inka system*

Direction	Aymara system			Inka system			
SW	*urcu*	above,	+, right	Collasuyu	*urcu*	below,	+, left
NE	*uma*	below,	+, left	below, +, left	*uma*	below,	+, left
SW	*alaa*	above,	−, right	Cuntisuyu		below,	−, left
NE	*manca*	below,	−, left	Antisuyu		above,	−, right

multaneously, each is separated from its respective partner, *alaa* and *manca*, which are integrated into two other "quarters" distinct from the Collasuyu. These transformations within the symbolic matrix express the conquest and predominance of the Inka.

In fact the whole of the Inka system is ordered around a center (*chawpi*) that is none other than Cusco itself, whereas Aymara space, as we have seen, was oriented around a northwest–southeast axis (the Azángaro River, Lake Titicaca, the Desaguadero River) and two parallel alignments provided by the Cordillera Real and the Cordillera Oriental. In the Tawantinsuyu, space is quadripartite too; but the *suyu*, considered as quadrants of a circle, are oriented in relation to the center, and it is the symbolic hierarchy of these quadrants that provides the main axis between the two moieties of the system: Their orientation inclines from northeast to southwest (cf. Fig. 12.4).

We can even suggest a link between the *taypi* of the Aymara and the *chawpi* of the Inka: Almost all the chroniclers – Betanzos, Murua, Zarate, Poma de Ayala, Gutierrez de Santa Clara, Montesinos – refer to Lake Titicaca as the point of origin of the migrations that led the Inka to Cusco. Two myths, one concerning the god Wirakocha and another concerning Manco Capac and Mama Ocllo, link the Collao to the heart of the empire.

The god Wirakocha, emerging from the waters of Lake Titicaca after having destroyed the humanity of the era of darkness, created the sky, the earth, and the stars, and then set off on the road that, starting at Tiwanaku and passing through a knot of mountains around Vilcanota and Urcos, would lead him to Cusco. The primordial couple, created by the sun on an island in Lake Titicaca and charged with the mission of civilizing humanity, followed the god's route. Carrying a gold staff that could be planted in the earth only at the place where he was to found the empire, Manco Capac and his wife, Mama Ocllo, took the northward route and did not stop until they reached Cusco.

Despite the mythical link, however, the *taypi/chawpi* changed its function and nature in the imperial contest. Cusco, place of mediation between the four *suyu*, is the fulcrum of a political, divine, and cosmic order that is sustained and directed by the Inka as son of the sun. This

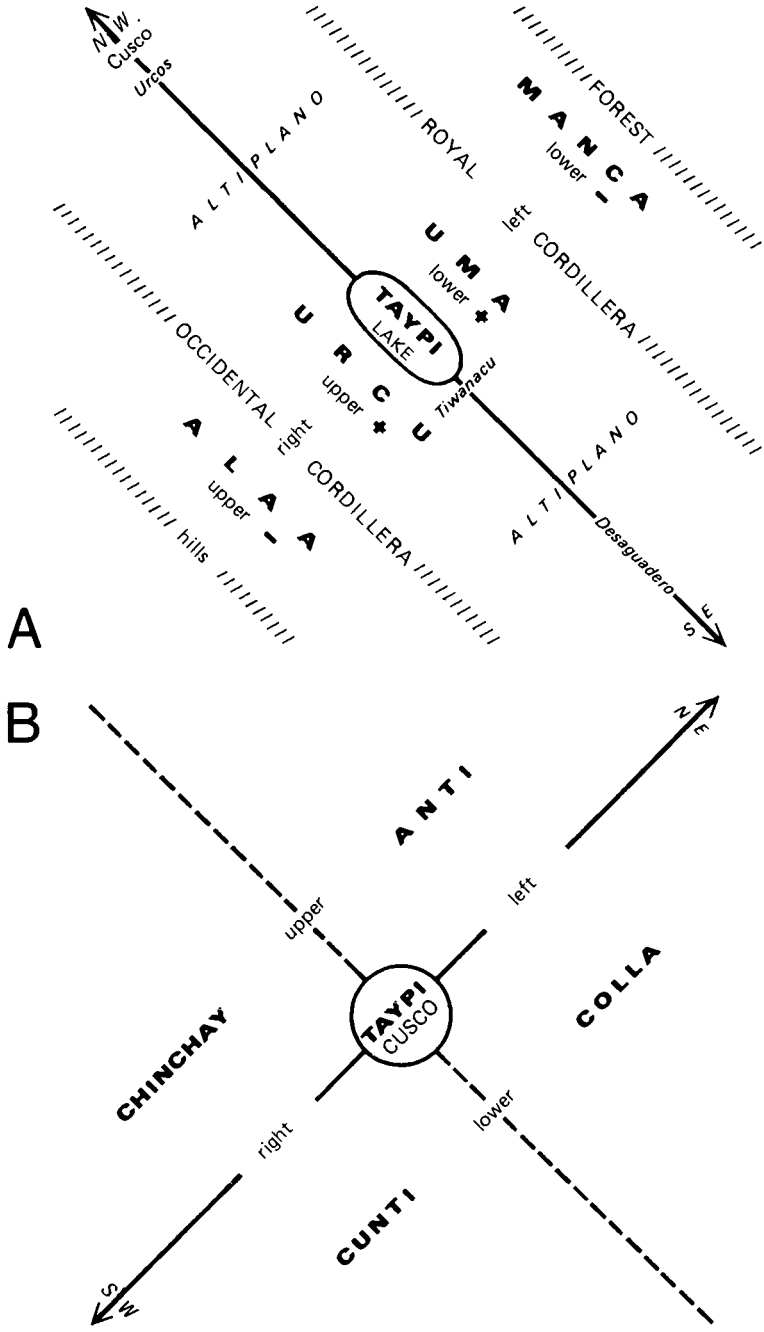


Figure 12.3. Spatial symbolism. A. Aymara double dualism. B. Inka quadripartition.

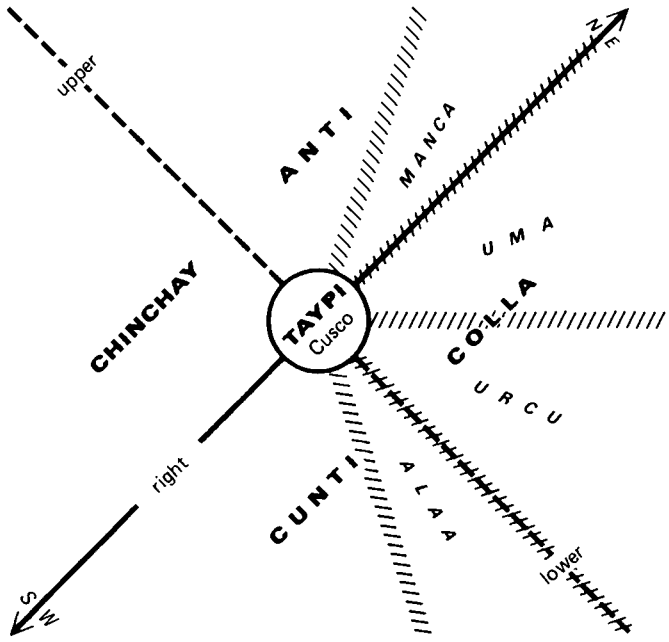


Figure 12.4. The Aymara system inserted within the Inka system (hatching and sloping print for the Aymara; heavy lines and upright print for the Inka).

celestial kinship legitimizes the political hierarchy that situates the Inka at its center and peak, permitting him to confer meaning on the symbols by the very fact that he wields the power of ordering space and time. This symbolic matrix was articulated in concrete terms to the whole infrastructure required by the expansion of the empire: calendar, *ceques*, irrigation, and roads (see Zuidema, Chap. 11, this volume).

Two roads traversed the Collao, one on each side of the central axis. In fact, we know that the empire was marked out by an extensive road network that stretched from the Huanca region in the north of Chinchaysuyu to the farthest borders of the Collasuyu. One of these routes skirted the coast from Tumbes to the south, and the other penetrated the highlands of the hinterlands. These main highways were often linked by secondary branch roads, but only rarely did one of the two principal roads divide into two. Only at two points did this occur: in the Chinchaysuyu, between Junin and Bombon and in the Collasuyu (cf. Fig. 12.5). Thus two roads flanked the lake, one on each side:

> It is at Cangalla Quiquijana . . . that the *umasuio* road separates from the *urcosuio* road, both of which lead toward Potosí: That of *urcosuio* is on the right hand as one leaves Cuzco and when the lake occupies the central area, whereas the other, called the *umasuio* road, runs to the left of the lake. *Urcosuyu* means that which

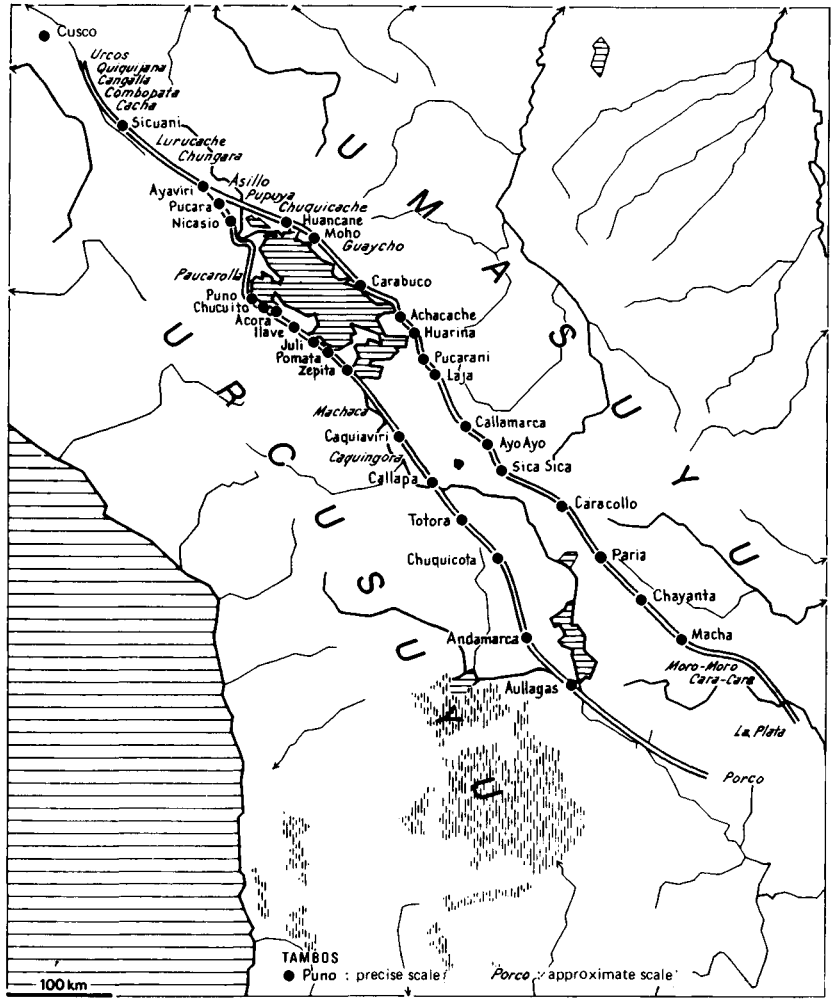


Figure 12.5. Inka roads and way stations (based on lists in Guaman Poma de Ayala and Cieza de León).

passes over the mountain heights; *omasuyu* means the waters below.[54]

Tambos were built at stages on these two roads; like the roads themselves, these state warehouses fulfilled a function at once strategic and economic. Cobo suggests that specialized storage according to the neighboring productive characteristics implied the possibility of exchange between the *tambos* of the lowlands and those on the highlands. If such an organizational concern existed, it would bear witness to an adaptation of vertical exchange practices at the level of the Inka state.[55]

These *tambos* also served as rallying points for different military contingents. The warriors of Caracara, Chicha, Chui, Charca, and Sora, for example, all met at the Sora *tambo* in Paria. These troops numbered more than twenty thousand, so Cusco housed them near successive warehouses, where they were provided with "food, drink, sandals, flour, quinoa, flocks, and women."[56]

Whereas the territorial framework of the *señoríos*, and the roads of *urcu* and *uma*, served as support for the administrative, economic, and military organization of the Tawantinsuyu, Inka power was deployed to remodel the hinterland. Thus the Inka resettlements (*reducciones*) in Lupaqa territory and those carried out by Topa Yupanqui (1471–93) among the Pakaq in Caquiaviri, Viacha, and Guaqui favored the integration of dispersed populations, and the weakening of interethnic groupings tended to create a homogenous space in the emerging Collasuyu (*urcu* and *uma* combined).[57] But these new administrative arrangements did not exclude the reutilization of the old Aymara divisions by provinces, as for example in the case of the Colla or the Pakaq, divided into the Inka provinces of Hatun Colla and Hurin Colla, Hatun Pakaq and Hurin Pakaq.[58] Neither should we exclude the possibility that one of the effects of the Inka administrative division was the extension to the "provinces" of the southern Collao of a dual organization that previously functioned mainly among the lakeside *señoríos*.

In contrast to the Collasuyu, the valleys underwent the fate of the *suyus* into which they had been incorporated; they represented heterogeneous zones that received a massive influx of alien populations through the implantation of new colonies. Whereas in the Collasuyu the great spatial lines of force were maintained and utilized as the basis of the empire, at the fringes (*manca* and *alaa yungas*) the old system began to disintegrate.

The Spanish colonial organization also made use of the two main Aymara subdivisions and the old framework provided by the *señoríos*. Spatial and political dimensions were inseparable and served once more to facilitate the economic exploitation of the conquered peoples. Thus the *urcu–uma* bipartition was used to recruit mining labor, and the *señoríos* were transformed into *capitanías* (often the traditional lords were *capitanes de mita*). The whole Collao space was reordered around a new center: Potosí. The *señoríos* lost their autonomy, owing to the centralist methods of the colonial administration, which only chose to preserve those features of the previous structure that were necessary to organize the recruitment of the mining work force. The Spanish resettlements (*reducciones*), like their Inka predecessors, tended to remodel the human landscape, producing the breakup of the old groupings. In 1572, 13,240 Indian *mitayos*, divided into *capitanías* that were themselves assigned to two divisions (*urcosuyo* and *umasuyo*), arrived at the great mining town. Potosí, at that time the largest urban center in all America, was at the heart of Spanish interests, but it was no Andean *taypi*; and although the chronicler Huaman Poma de Ayala placed Castile at the

center of his universe (Castilla taking the place of Cusco), this was only to show as clearly as possible the usurping role of Spanish colonialism.[59] From then on, the space was to be coded according to the norms of the new dominant order.

Remarkably long-lasting, the Collao space has been the scene of some of the greatest moments of Andean history; but as a succession of socially significant structures, it can be read in different ways at different periods.

Behind the appearances of Aymara dualism, and in the Inka system, we can detect, as though in a palimpset, the rules of a society that understood spatial relationships in triadic terms: two elements and a center. Each term implies the presence of its opposite, but the symmetry is imperfect (male predominates over female, above over below, right over left. Beyond the symbolic equilibrium of the text, as in the text inscribed on the body during rites of passage, there emerges a socio-political discourse whose sense is always determined by the dominant element.

In Aymara dualism each term is constituted by a matrix of distinctive features that determines its difference from its binary Other. But a question remains: How was the antagonism between the two moieties of a single chiefdom (the Colla and the Pakaq, for example) brought under social control? This question raises the whole problem of Aymara hegemony and the internal organization of the *señoríos*. The strategy of such a system allows the dominant element to be provided by one of two paired terms, whereas for the Inka, meaning is conferred from the center. As in other great empires – China or Japan, for example – the locus of power is merged with the center of the world: Cusco centralism establishes the basic principle of hierarchy, but it reutilizes the Aymara divisions. The reading changes, but the graphic system is constant.

The Spanish administration, in turn, adopted the methods tried out in the preceding epoch. That the Andean mentality could attribute to Castile the same structural position in its representation of the world as had previously been occupied by Cusco proves the extent to which the power of the *conquistadores* was channeled through the molds of the preexisting system. But the prolongation of this structure is due above all to the combination of two factors: The first is exogenous, and reflects a real affinity between the tactics of the Inka and Spanish states; the second is internal and characteristic of indigenous thought processes, insofar as the dualist system allowed Andean men and women to conceptualize not just society but the universe as well: the *pacha* (space and time).

Notes

1 Juan de Santa Cruz Pachacuti Yamqui, *Relación de antigüedades deste Reyno del Perú* (Madrid: Biblioteca de Autores Españoles, 1968), vol. 209, p. 281.

2 "Y la parte de Collasuyu, que es la del Collao, que está poblada de las

naciones contenidas en las capitanías, se dividían en dos bandos, que llamaron Urcusuyu y Umasuyu, que quiere decir (lo primero) gente que habita en los altos de los cerros, que tienen este nombre urcu, y los umasuyu en lo bajo y llano, riberas de las aguas que en esta lengua llaman uma; otros dicen que significan los urcusuyus gente varonil y esforzada, porque por este nombre de urcu se entiende lo masculino, y los umasuyus (lo) femenino y no para tanto. Y siempre fueron los urcusuyus de mejor presunción y mayor calidad, y el Inca les daba la mano derecha en los lugares públicos y eran preferidos a los umasuyus en reputación." Luis Capoche, *Relación general de la villa imperial de Potosi* (Madrid: BAE, 1959), pp. 139–40.

3 Thérèse Bouysse-Cassagne, "Pertenencia étnica, status económico y lengas en Charcas a fines del siglo XVI," in *Tasa de la Visita general de don Franciso de Toledo* (Lima: Univ. Nacional Mayor de San Marcos), 1975. On the basis of Viceroy Toledo's inspection and some unpublished data I have outlined in this study the ethnic and linguistic distribution in the Callao in the sixteenth century.

4 "Thaaña: páramo lugar frio." L. Bertonio, *Diccionario de la lengua aymara* (July, 1612), p. 347.

5 Weston La Barre, "Potato Taxonomy among the Aymara Indians of Bolivia," *Acta Americanas* (1947): 83–103.

6 Bernabé Cobo, *Historia del Nuevo Mundo*, pt. 1 (Madrid, BAE, 1964), vol. 91, Chap 13, p. 168.

7 Bertonio, *Diccionario*: "Lukhi: papas que resisten mucho al yelo" (cf. n. 30).
"Thaarata: resfriar lo caliente, y tomar fresco o aire" (p. 343)
"Thaafutha: secarse las cosas de barro recien hechas o la pared recien enlucida" (p. 342)
"Thaa: torta que hazen de papas cocidas, o quinua molida poniendo a resfriar o endurecer en un lugar ayroso."

8 *Ibid.*: "Hupa Hauha: pan de quinua"
"Tortas de papas cocidas y puestas al sereno: *ccatithaa.*"
"Tortillas de maïs puestas al sereno: *haku Haa.*"
"Tortas de quinuas puestas al sereno: *accu huchathaa.*"
"Huccha thaa: Tortilla de quinua o mais seco al hielo" (p. 454).

9 See Morris, Chap. 5, this volume.
Bertonio, *Diccionario*: "Trox para chuño: sekhe y es de cano o esteras."
"Sekhe: trox . . . que hazen con cana de cortadera."
"Meter en trox: *sekhettasitha.*"
"Colca: troxes juntas del Inca."
"Piura: trox para quinua o maiz" (p. 460).

10 *Ibid.*: "macho todos los animales del sexo masculino urco" (p. 302).
"Orco: el sexo masculino en todos los animales brutos y pajaros."
"Orcopuma: leon."
"Urco atahualpa: el gallo."
"Chaco orco: hombre ya hecho, maduro" (p. 239).

11 *Ibid.*: "Urcorara: manada grande, tracalado de hombres, o animales machos (p. 379).

12 *Ibid.*: "Urcoma: una mujer de muchos hermanos y ninguna hermana" (p. 239).

13 *Ibid.*: "Urcona: la piedra de arriva con que majan, machucan el mayz, y tiene forma de media luna" (p. 378).

"Urcoña: hilo trosdoblado muy fuerte" (p. 378).
"Urcoña: soga de donde cuelgan otras soguillas para caçar vicuñas, o venados, y el cordel de donde cuelgan otros, como el quipo de los contadores, o de los que se confiessan" (p. 379).

14 *Ibid.*: "Urcoña-chacha orco: varón fuerte, capitán de cuya valentia cuelgan otros, adialid en cualquier cosa.

15 Another source, the *Visita de los Pacajes*, by Mercado de Peñalosa, confirms the highland homes as well as the warlike disposition of these chiefdoms: "Poblaron en esta provincia en los cerros mas altos que hay en ella; y vivian a manera de beheteria, sin reconocer soñorio a nadie, sin pagar tributo, porque todo era traer guerra unos con otros, y el mas valiente y sabio entre ellos, ese los mandaba y reconoscan por señor." *Relaciones geográficas*, Madrid, BAE, T.1, 1965, p. 337.

16 "Nosotros las dichas cuatro naciones venciamos y teniamos victoria contra los chachapoyas, cayambis, cañaris, quitos y quillacingas, que son los de guayaquil y Popayan" Waldemar Espinoza Soriano, "El 'Memorial' de Charcas, cronica inédita de 1582," *Revista de la Universidad nacional de educación* (1969).

17 "Halláse asimismo memoria de otra suerte de gente, asi como collas, puquinas y uros; todos estos eran gente que servian al Inga en la guerra, después que conquistó la rica, grande provincia del Collao, y como tenian los nombres distintos, asi se diferenciaban en los hechos de la guerra y en el ejercicio de las armas. Los uros eran indios que el Inga mandaba hacer cuando se veia falto de ejercito y les forzaba a seguir las banderas, no sabiendo aun tomar el arco en las manos; los cuales casi sin armas iban a la pelea y mataban de ellos y de algunos de los poquinas como moscas porque no tenian ejercicio militar." Fray Martin De Morua, "Historia del origen y genealogia real de los reyes Incas del Peru," manuscript Loyola, Madrid, Instituto Gonzalo Fernandez de Oviedo, 1964, p. 184.

18 Bertonio, *Diccionario*: "Uma uma: los valles y qualesquera baxos, aun los que hay en la plata relevada," p. 375.

19 *Ibid.*: "Umasuu: los valles hazia Larecaja," p. 374.

20 *Ibid.*: "Uma: agua," p. 374.
"Uma haque: qualesquiera que trata en el mar, o laguna como los marineros y uros," p. 374.
"Uma huahua: niño tierno," p. 374.
"Umachata: hacer que el barro o la maçamorra este liquida," p. 374.
"Umaptatha: derretirse el metal, la nieve," p. 374.

21 *Ibid.*: Uma cata saratha: caminar por los baxos, o valles o entre los camellones de la tierra barbechada," p. 374.

22 Antonio Alcedo, *Diccionario geográfico, historico de las Indias occidentales o America* (Madrid: BAE, 1967), vol, 208, p. 140: "Umamarca: laguna grande de la provincia y corregimiento de Omasuyos en el Peru, dividida de la de Titicaca por la peninsula de Copacabana, dejándo sólo un estrecho."

23 *Dioses y hombres de Huarochiri* (Mexico: Siglo XXI), p. 110.

24 Alfredo Torero, "Linguistica e historia en la sociedad andina," *Anales Científicos*, Universidad Nacional Agraria 8 (1970): 231–64, Lima.

25 Thérèse Bouysse-Cassagne, "Comparative Maps of the Languages and Ethnic Groups of the Collao in *Tasa de la visita general de don Francisco de Toledo*, edited by N. David Cook (Lima: Universidad de San Marcos, 1975). Torero (n. 24) has noted that Bertonio does not mention the Omasuyu among the Aymara-speaking polities.

26 "Sólo a unos exceptuaba, llamados Puquinas, que viven la mayor parte en el camino de Omasuyo, que es la otra parte de la laguna, por ser gente, como de suyo es, muy sucia, mas que otra de estos reinos, como si el demonio fuera muy limpio." "desde el pueblo de Ayaviri, que dijimos ser el primero del Collao, tomando sobre la mano izquierda, comienza el camino y se sigue la provincia llamada Omasuyo, que corre por la otra parte de la laguna de Chucuito; esta provincia está muy poblada y por la mayor parte son Puquinas; son recios de ganados de la tierra, y participan de más maiz y trigo que los de la otra parte, por tener sobre mano izquierda la provincia de Larecaja, abundante de lo uno y de lo otro." Fray Reginaldo De Lizarraga, *Descripción breve de toda la tierra del Perú, Tucumán, Rio de La Plata y Chile* (Madrid: BAE, 1968), Chap 86, p. 68; Chap 89, p. 72.

27 "Cuando los Ingas vinieron conquistando esta provincia de los Pacaxes hicieron salir a estos indios uros de junto al agua y les hicieron vivir con los Aymaraes y les enseñaron a arar y cultivar la tierra, y les mandaron que pagasen de tributo pescado y hiciesen petacas de paja . . . y con la comunicación que han tenido con los indios serranos han venido a hablar la lengua aymara y casi han dejado su lengua que era puquina, y al presente tienen pulicia, y viven en casas y habitan en pueblos, y tienen sus caciques y principales y pagan tasa como los demas aymaras." Don Pedro Mercado De Peñalosa, "Relación de la Provincia de los Pacajes," in *Relaciónes geográficas del Perú*, ed. Marcos Jiménez de la Espada (Madrid, BAE, 1965), vol. 1, p. 336.

28 John Hyslop, "*An Archaeological Investigation of the Lupaca Kingdom and Its Origins*, Ph.D. thesis, Columbia University, 1976. We thank J. V. Murra, who in 1976 brought this unpublished work to our attention. See also *Histórica*, vol. 3, no. 1 (Lima: 1979).

29 "Taypi: cosa que esta en medio" (Bertonio, *op. cit.*, p. 340).
"Taypi lukana: dedo del medio" (p. 340).
"Taypi huahua: hijo del medio, o segundo cuando son tres" (p. 340).
"Taypirana yapu chacara: que esta en medio de otras" (p. 340).
"Taypi haque: mediano de cuerpo y asi se aplica a otras cosas" (p. 340).

30 The term *lukki* is used for varieties of bitter potatoes, with white skin, ovaloid in shape, resistant to frost, which can bear even above 4,000 meters. It is primarily used for making chuñu. The *cchoque*, the ordinary varieties, require no special handling. Among the Pacaq it is the generic word for all potatoes.

31 "Los cuales dichos indios Pacajes dijeron los indios antiguos haber tenido su origen, unos de la una parte de la laguna de Chucuito y otros de hacia la parte de los Carangas, de donde salieron y poblaron en esta provincia en los cerros mas altos que hay en ella." Mercado de Peñalosa, "Relación," p. 338.

32 "Alaa yunca: los valies calientes hacia el sur respeto desta tierra fria de los Lupacas."
"Manca yunca: la tierra o los valies calientes que estan llegando al norte."
"India tierra destos naturales: haque suu." Bertonio, *Diccionario*, p. 280.

33 "Pampa haque: dadivoso, liberal, o prodigo que no repara en dar."
"Pampa haque: uno que da todo lo que le piden aunque no hagan mas que significarselo." *Ibid.*, p. 247.

34 "Umasuu haque, itu haque, qherua haque, yunca haque: uno que no se hermana con nadie, y que gusta de comer a solas, ni habla con nadie, escaso, mesquino." *Ibid.*, p. 374.

35 "Koli haque, kapa haque: vivo, diligente, regocijado."
"Indio yunga: hacia Moquegua: Koli haque, indias mujeres de hazia Camata mala, y de Moquegua Cani vel koli."
"Mala india natural de los yungas de Larecaxa, porque tienen el color marchitado." *Ibid.*, pp. 56, 280, 212.

36 "Ccapaca rey o senor es vocablo antiguo que ya no se usa con esta significacion."
"Rico: ccapaca." *Ibid.*, pp. 42, 414.

37 "Churaatha: dar algo."
"Cachura: el que come a solas."
"Cachurachatha: comer sin acordarse de sus compañeros, no convidarios." *Ibid.*, pp. 93, 32.

38 See not only Mauss's reflections about the potlatch ("the obligation to give back is the whole of the potlatch"), which applies to the very texture of Urcosuyo society, but also the entire work, "Essai sur le don: Forme et raison de l'échange dans les sociétés archaique," in his *Sociologie et anthropologie* (Paris: 1950).

39 See J. V. Murra "El 'control vertical' de un máximo de pisos ecológicos," in *Formaciones económicas y políticas del mundo andino* (Lima: IEP, 1975).

40 We refer here to an unpublished manuscript from the Archivo General de la Nación, Buenos Aires, the "Visita de la provincia de Chucuito," by Gutiérrez Flores (1574), which we consulted.

41 "Relación de los naturales que ay en los repartimientos del Peru en la Nueva Castilla y Nuevo Toledo asi de todas hedades como tributarios conforme a la visita que por horden del visorrey marques de Cañete y el valor de los tributos que estan tasados hasta el año de 1561," Madrid, Real academia de la historia, Coll. Muñoz A–92 f° 58.

42 "Revisita de Oruro", Archivo general de la Nación de Buenos Aires; cf. Berthelot, Chap. 6, this volume.

43 "El Inca tuvo tan buena orden que a cada provincia dio medios para que tuviese lo necesario y cogiese sustentación para pasar la vida; asi cuando estan poblados en tierra fria repartio tierras en la ardiente aunque fuese lexos i hizo poner en ella indios de cada provincia para que embiasen i beneficiasen las semillas que se dan y cogen i ordenó que la comunidad embiase por ello en sus ganados, sin la cual orden no se pueden comodamente sustentar ni cada uno por se podria aprovechar ni intento porque se hizo como consta que todos los Indios de *camino del Omasuyo* que para este efecto tienen indios en *Calavaya*, i en *los de Urcosuyo que los tienen en la costa*, i en los de Cochabamba en Hayapaya, i los de Pocona en la coca y por la mayor parte todos los de la tierra y a los que esta orden se les quebrantó padescen necesidad y se sustentan con trabajo como a los Carangas, que se les quitaron sus mitimaes y por no entender la orden se repartieron en Arequipa, i con los de Chucuito se hizo lo mismo, hasta que el Marqués por información mia se los bolbio." (our emphasis). It was Polo de Ondegardo who mediated the return of their coastal archipelagos on behalf of the Lupaqas. They had become part of the encomienda of Juan de San Juan; when he had to give them up, he received half of the Orones and Ocona, near Arequipa; see Polo [1916], 1940.

44 "Semilla de quinua o trigo que genera en algo de su especie. Isu alla y aun llaman deste nombre a los bastardos y a los que no son legitimos isuallahupa quinua silvestre a las que llama canahua."

"Issu alla: hijo adulterino" Bertonio, *Diccionario*, p. 183.

45 Sucullu: El niño que sacavan a la placa en su cuna o tira, fajado y puesto en la plaça venian los moços de la caça que traya la fangre de las vicuñas metida en la pança dellas, con el tio, o Lari untava la cara del niño cruzandole la nariz de un carrillo a otro, y delpues repartia la carne de las vicuñas a las madres que auian traydo alla fus niños, para esta cerimonia, porque de ordinario juntauan para esto todos los niños que auian nacido aquel año; y folian hazer esto en acabando de coger fus papas, cuando los Christianos celebramos la fiesta de Corpus Cristi. Añadian a todo esto el vestir a los niños una camifeta negra, que tenia entretexidos tres hilos colorados, uno en el medio, y dos a los lados, de alto abaxo, y por delante, y detras. Lo mismo hazian con las niñas de aquel año, folamente se diferenciauan en el nombre porque fe llamauan Huampaña: y en los hilos colorados que eran muchos, y eran entretexidos no de alto abaxo, fino alderredor, y cayan en medio de su urquecillo o fayta, un poco mas abaxo de donde fe faxan las mugeres grandes: aunque las niñas de aquella edad no usan de faxa o huaka que llaman.
Sucullu ccahua: la camiseta que vestian al niño.
Sucullu urco: la fayta, o urquecito que vestian a la niña al tiepo de la dicha cerimonia, estado los niños en reglera en primer lugar, y las niñas tras ellos todos en sus cunas.
Sucullu apfutha, ichufutha. "Sacar asi el niño o niña; y era oficio este de la tia de parte del padre y a falta della hazia esto la muger de fu lari...". *Ibid.*, p. 323.

46 "Huari kassatha pacha: tiempo de grandes yelos, en que hasta las vicuñas lloran con ser animal de la *puna*." *Ibid.*, p. 151.

47 "Suni aycha: carne de animales silvestres, como de vicuñas, venados vanacos."
"Suni: tierra despoblada."
"Suni haque: salvage que nunca vive en poblado."
"Lari lari: gente de la *puna* que non reconocen cacique, cimarones."
"Choquela vel lari lari: gente cimarrona que vive en la *puna* sustentandose con la caça."
"Cchoque: crudo."
"Lari larikhatha: volverse ciarron, vivir a su voluntad como estos." *Ibid.*, pp. 323, 191, 89–90.

48 "Puruma haque: hombre por sujetar, que no tiene Ley, ni Rey."
"Pampa haque vel puruma haque: uno que no esta sujeto a nadie que vive a su alvedrio." *Ibid.*, p. 178.

49 "Puruma, vel cchamaca pacha: tiepo antiquifsimo, quando no avia sol, segun imaginauan los indios, ni muchas cofas de las que ay agora."
"Puruma camifa haque: el que no acude a las obligaciones del pueblo." *Ibid.*, p. 178.

50 This oral tradition is mentioned by both Joan de Santa Cruz Pachacuti, who was born in the Collao, and by Guaman Poma de Ayala.

51 Pierre Clastre, "A propos du marquage dans la société primitive," in *la Société contre l 'Etat* (Paris: Editions de Minuit, 1974).

52 See Platt, Chap. 13, this volume.

53 See Mary Douglas, *Purity and Danger* (London: 1966).

54 "El pueblo de Cangalla Quiquijana que atras queda referido se parten dos caminos el de Omasuio y el de Urcosuio a mano derecha yendo a el desde el Cuzco que dando la laguna en medio y el otro nombran omasuio a mano

izquierda della, el urcosuio quiere en nuestra lengua decir por lo alto de la serrania, y omasuio significa aguas bajas." Archives of duque of Infantado, "Discurso de gobiernos de virreyes y gobernadores del Peru."

55 Bernabé Cobo, *Historia del Nuevo Mundo* (Madrid: BAE, [1653] 1956), vol. 92, Bk. 12, Chap. 30, p. 126.

56 Espinoza Soriano, "El 'Memorial' de Charcas," p. 25.

57 "El repartimiento de guaqui quiere decir dame un poco" el cual nombre le puso el Inga Topa Yupanqui. Esta asentado junto a la cordillera que pase por el. Viacha . . . el poblador fue el inga Topa Yupanqui.
Caquiaviri esta asentado al pie de un cerro grande. Mercado de Peñalosa, *op. cit.*, pp. 335–337.

58 De La Vega, *Commentarios reales*, Bk. 11, Chap. 19, p. 66.

59 We refer here to the article by N. Wachtel, "Pensée sauvage et acculturation," in *Annales ESC* (1971) 3–4: 793–840.

13
Mirrors and maize: the concept of yanantin *among the Macha of Bolivia*

Tristan Platt

All margins are dangerous. If they are pulled this way or that, the shape of fundamental experience is altered. Any structure of ideas is vulnerable at its margins. [Mary Douglas]

Opposition is true friendship. [William Blake]

Since the renewed impulse to Andean studies given by the ethnohistorical work of Murra ([1955] 1980 et al.) and Zuidema (1964 et al.), the analysis of Andean systems of thought has entered a new stage. By insisting on the differing content of Andean institutions according to the scale and complexity of their social context, and by defining the specific ecological and social problems with which they were designed to cope, Murra revealed a unique perception and organization of Andean space consisting in the direct control of widely dispersed resources from the tropical forests to the Pacific coast by a single nucleus of power located at various levels in the highlands (1972). Zuidema, on the other hand, using an analysis of the social organization of the Inka capital,

Apart from a couple of references, I have made no change in the English original of the 1978 French version of this chapter. Although I would no doubt say things differently today, the essence of the argument has not, I think, outlived its usefulness. Field research carried out during 1970–71 was financed by the Social Science Research Council of Great Britain and by the Foreign Area Fellowship program of New York. I am especially grateful to my supervisor, Anthony Forge, of the London School of Economics, and to John V. Murra, of Cornell University, for their help and encouragement during the period of training and research. I would also like to thank Nathan Wachtel, with whom I have discussed many of the themes treated here and who made several helpful criticisms of an earlier draft of this paper. An oral version of this article was first presented at Cornell University in 1971, with the title "El *yanantin* entre los pobladores del Norte de Potosí," and later to a graduate seminar in the London School of Economics during 1972. A mimeographed version, in Spanish, has been obtainable from the Centro de Investigación y Promoción del Campesinado (CIPCA), La Paz, Bolivia, since 1976. Finally, I should like to thank most warmly Xavier Albó (director of CIPCA), Wagner Oporto (my field assistant), and Santiago Carvajal (my Puna host) for all the help they have given me on so many occasions.

Cusco, suggested that the Andean *ayllu* was not susceptible of any unitary definition. He located such ambiguities within the general Inka quadripartite organization of their capital as the central focus of a homologously quadripartite empire. By the early 1970s other investigators were beginning to extend one or another of these approaches (see, e.g., Fonseca 1972; Mayer 1972; Wachtel 1971a; Palomino 1971).

One objective of this chapter is to show how the quadripartite model is able to express the vertical organization of Andean space, appropriate to a region where the direct control of contrasting ecological zones has not been dissolved by market relations or *trueque*. In this area of Bolivia, Andean vertical organization was able to find a modus vivendi within the colonial and later republican orders. Consequently, ethnic identities have survived here on a scale beyond the local *cantón* or *provincia*. In such circumstances it may be possible to offer a unification of the two paths of research opened up by Murra and Zuidema.

I also seek to analyze the binary logic that constitutes the symbolic matrix of the quadripartite representation and that, in the linguistic sense, can therefore be said to "generate" the system of representations by which Andean nature and society are ordered. In order to substantiate, at the level of Andean studies as a whole, an argument based on local fieldwork, I have used lexical data from the sixteenth century dictionaries of Quechua, which I hope confirm the usefulness of this analysis as a basis for interregional comparison.

The continuities here argued for between the sixteenth century and today should not worry historians unduly. Domestic production has been a nucleus both of pre-Columbian peasant farming and of today's petty commodity producer; accordingly, it is from this nucleus that a wealth of ideological elaborations emerge. In spite of the potentially dissolvent effects on Macha "dual society" of an alien administrative structure and a declining agricultural base (Platt 1982a, 1982b), a nuclear duality in Andean thought – the man–woman opposition – continues to articulate the conditions of reproduction of the peasant household.

I

INTRODUCTORY SURVEY

Since the publication in 1969 of the sixteenth-century source entitled "El 'Memorial' de los Charcas," by Waldemar Espinoza, it has been possible to recognize in the modern Macha the descendants of the dominant ethnic group within the pre-Hispanic federation of the Karakara. This federation, whose population of some ten thousand householders was spread over an immense area as far south as the border with the Chicha in the basin of the Pilcomayo, was itself yoked in a dual organization with the neighboring federation of the Charka. Here the dominant ethnic group were the Sacaca, and the population is claimed to have been another ten thousand. The twin capitals of the confederation, whose total population may be estimated at approximately one hundred

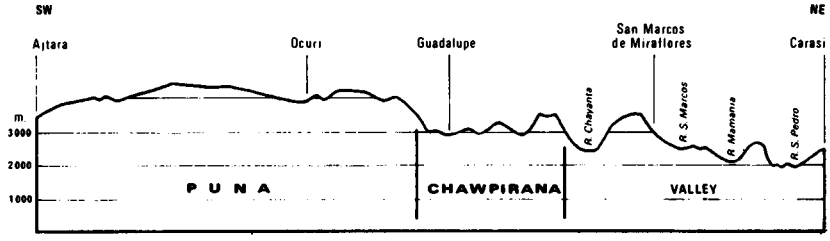


Figure 13.1. A transect through Macha territory.

thousand souls, were located in Sacaca and Macha, where the two principal lords had their seats.

The sixteenth century saw the progressive dismantling of the confederation, and the isolation of the ethnic groups that had composed it. The details need not concern us here: We should simply note that when the viceroy Francisco de Toledo came to resettle the Indians of Karakara in new towns (*reducciones*) between 1570 and 1575, we hear of the two towns – the highland San Pedro de Macha, on the puna, and San Marcos de Miraflores below, in the valley. Today these remain the economic, political, and religious centers for the Macha within their respective zones.[1] Indeed, in 1579 we find the Macha defending their right to maintain *uchucamayos* (hot-pepper cultivators) in the warm valleys near Karasi, where many Macha still reside. Ten uchucamayos are involved, one for each of the ten ayllu constituting the Macha:[2] Since these are still divided into ten ayllus, we have evidence of a basic institutional continuity from pre-Columbian times to the present.

The Macha, who today number more than ten thousand, resemble many other groups in the north of the Department of Potosí, in that the products of puna and valley circulate internally between those of their members who live in the warm valleys and those who reside in the cold puna. Today they claim as their territory a continuous strip of land passing from highland to lowland, more than 100 kilometers in length (see Fig. 13.1). The lower sections of the valley have been partially invaded by non-Macha farmers, who have also made inroads at other points in Macha territory; in the valley, this has resulted in an intense pressure on the remaining land available.

The largest unit of Macha society, a theoretically endogamous group with a precisely delimited territory, is the Macha ayllu itself. Since the term *ayllu* is used with four distinct denotations, I shall call this the *maximal ayllu*. It is divided into two moieties (*major ayllus*): Aransaya (or Alasaya), and Urinsaya (or Majasaya). These names mean "upper half" and "lower half" respectively, and are known to have been standardly employed throughout southern Peru and in Bolivia by the numerous dually organized societies that once flourished there. Each of these moie-

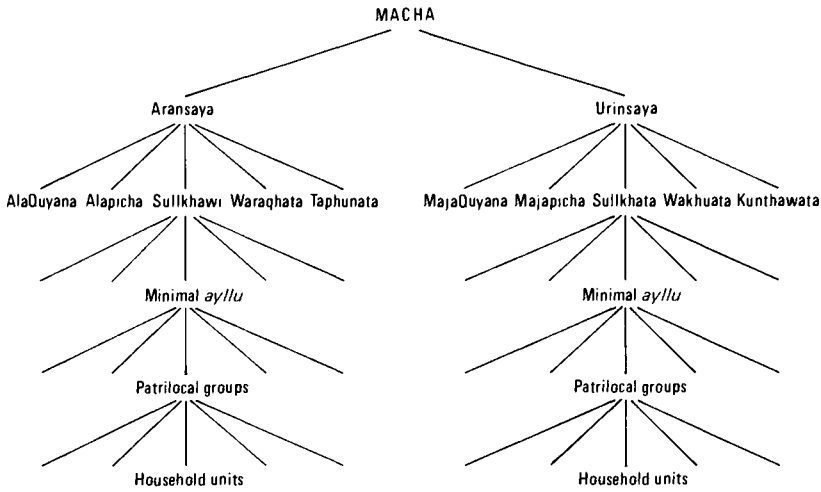


Figure 13.2. Institutional structure of the Macha.

ties is further subdivided into five *minor ayllus* – the ten mentioned in 1579 – each with its traditional name (see Fig. 13.2). Finally, these are in turn fragmented into a variable number of *minimal ayllus*, sometimes also called *cabildos*: Today, as during the colonial period, these are the basic units of taxation above the level of the household.

The members of each minimal ayllu are also, by definition, members of the corresponding minor and major ayllus. But none of these ayllus, at any level, forms a discrete territorial group: Each consists of land scattered between puna and valley. In the valley there are even some tiny tracts of land, sometimes occupied by a single household, that belong to a different minimal, minor and/or major ayllu than that of its surrounding neighbors. Although the details of this "island" formation cannot be gone into here,[3] it should be remembered that ideally, and generally in fact, the puna segment of each minimal ayllu has its counterpart in the valley, although the amount of land involved may vary considerably. Where direct tenure of land in both regions is not found, exchange relationships are established between consanguineal and affinal kin in the two zones.

During the dry season between May and August, when the harvests at both levels are under way, the puna men descend to the valley in search of maize, chili peppers, honey, and timber. They bring with them to exchange salt (from the puna licks and mines), *ch'uñu* (dehydrated potato), wool, cloth, clay, and other goods. At this time, countless llama trains can be seen passing down through the valley, even though the llama is a puna animal that is not raised in the valley. With slow-moving llamas, which find their own forage as they travel, the journey may take up to two weeks; without llamas, three or four days' walk is sufficient.

Rights of usufruct over land are inherited patrilineally, each son receiving a portion of the estate as he reaches the age of marriage; the youngest son normally remains in the father's house. The common practice is, then, virilocal marriage, but when there are no sons, land may be inherited by daughters, who then become highly sought-after marriage partners, with residence being accordingly uxorilocal. The brothers who have – in the ideal model – inherited parcels of their father's land form a corporate group, which may unite to defend the land of any of its members against the encroachment of neighbors. A minimal ayllu consists of a variable number of such groups. If a brother dies childless, his land normally reverts to the sibling group, and the widow is expected to return to her father's house. But the birth of children signals the growth in importance of the conjugal relationship, which at first is in constant tension with the principle of sibling group unity; such a widow will be permitted to stay on her husband's land, which she holds in trust for her children.

The *alcalde* (today frequently replaced in the valley by the union *dirigente*) is the minimal ayllu's Indian authority. He is rotated among ayllu members each year. Minor and major ayllus are represented by the (ten) *jilanqus* and (two) *kurakas* respectively: These are always chosen from among puna Macha, although theoretically their authority also extends to the valley. Here, as in legendary belief, the puna is dominant over the valley, which is said to be originally a "colony" sent out by the puna core.[4]

THE ECOLOGICAL DUALITY

We must now consider in more detail the regional segmentation of Macha society between puna and valley. Puna is sometimes called the "cold region" (*chirirana*) or "high country" (*patarana*), whereas the valley is correspondingly called the "hot region" (*q'unirana*) or the low (*ururana*): Thus the opposition of these two geographical regions forms a second dual division that crosscuts the ayllu and moiety organization. But although these categories are made possible by the Andean landscape, they do not simply designate observed natural discontinuities. The gradations between puna and valley are gentle; indeed, there are various microclimates within each region, and men try to allocate among their sons parcels from all the levels to which they have access.

Moreover, there is an intermediate zone, the *chawpirana* ("middle region"). The people of this area are sometimes crudely classified as puna people by the valley Indians, and as valley people by the puna Indians; in fact, the puna segments of some minimal ayllus are found in the higher reaches of the chawpirana, and some valley segments are found in its lower reaches. Conceptually speaking, however, a set of beliefs attempts to perfect a discontinuity that in nature is imperfect and thus render it viable as a principle of social organization.

An example of this occurred in a discussion between my assistant Wagner Oporto, a valley farmer, and my puna host, Santiago Carvajal,

concerning the preparation of ch'uñu. Ch'uñu is the result of lengthy exposure of tubers to the violent contrasts of temperature that are found on the puna, so as to produce a substance with a storage capacity many times greater than that of the original tuber. It is thought of as a product specific to the puna, although it can in fact be produced in the higher sublevels of the valley. When asked why ch'uñu was "only made on the puna," my puna host first claimed that there was no frost in the valley, but my assistant assured him that this was not so. He then said that there were not enough potatoes in the valley; but considerable quantities are in fact cultivated there, and my assistant assured him of this too. Finally, both puna and valley farmers agreed that one reason why so little ch'uñu was prepared in the valley was because the valley Indians believe that if one prepares ch'uñu there, then one's other crops may fail. Thus, the place of ch'uñu in the exchange relationships between puna and valley is upheld.

The interest of this lies in the fact that the division of products between puna and valley is only in part dictated by ecological factors: Cultural rules may be introduced to perfect a discontinuity that in nature is only sufficient to suggest itself as a principle of social organization, rather than constituting an incontrovertible natural restriction on the form of social institutions. This view is confirmed by other beliefs. Thus, if the fox (*atuj*) is seen going uphill in September (sowing time), the year will be productive on the puna; but if the fox is seen going downhill, the year will be good in the valley. Again, if the fox excretes potato peelings, then the puna will flourish, but if it excretes maize husks, then there will be a rich harvest in the valley. Further, two nebulas in the southern sky are associated with puna and valley, respectively: If one grows brighter than the other, it will be a good year in the corresponding region. But in none of these beliefs is there any mention of the chawpirana.

It can thus be argued that the Macha model of their environment is a dual one, in spite of the explicit terminological recognition given to the natural gradation that mediates, at the level of both facts and ideas, the fundamental polarity. It is interesting to note here the convergence between Macha ethnoecology and the models of Western geographers. In Carl Troll's diagram of geoecological variation in the Andes (p. 31A), the area occupied by the Macha appears bisected by a line that is defined as the downward limit of the shrub *t'ula* (Lepidophyllum). T'ula is in fact found in the higher reaches of the chawpirana, although its limits are not marked on the ground by any clear line: Troll's diagram is a model, not an aerial photograph. I suggest, therefore, that Troll's line dividing puna from valley is itself a formal representation of the intermediate zone called chawpirana by the Macha (Fig. 13.3). The reinforcement of the polar dualities is thus found echoed in the scientist's ecology: Troll and the Macha agree as to the crucial ecological features of the landscape. But whereas the scientist can reduce the chawpirana to a line on a map, the Macha must eliminate conceptually an area that

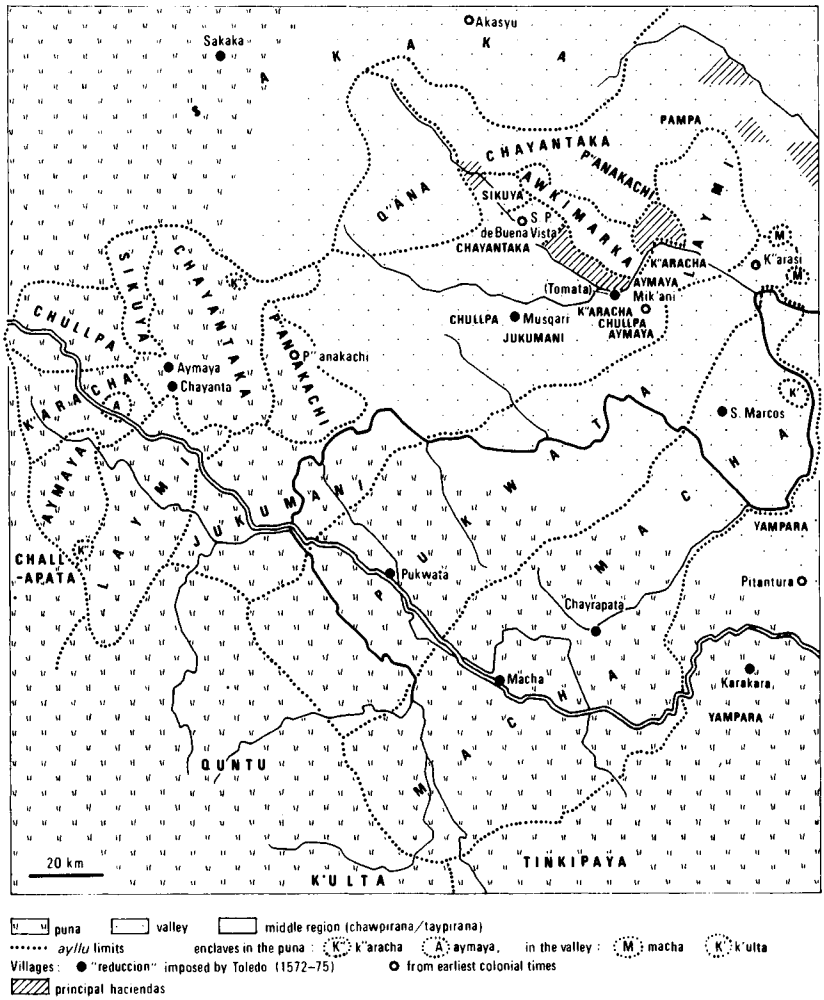


Figure 13.3. The northern Potosí region with locations of the Macha, Laymi, and other ethnic groups (map prepared by Olivia Harris and Tristan Platt).

has independent existence on the ground, through the reinforcement provided by additional contrasts that operate without mediation.

We can now propose the first of several quadripartite models, which focuses exclusively on the crosscutting of the two "dual organizations" within Macha society (see Fig. 13.4). In this the horizontal axis is the chawpirana of the Macha model and, simultaneously, the downward limit of t'ula established by Troll. The vertical axis represents the moiety division: The territorial subgroups that make up Aransaya and Urinsaya are scattered from one end of Macha territory to the other so that each moiety has its puna and its valley representatives. Since Aransaya and

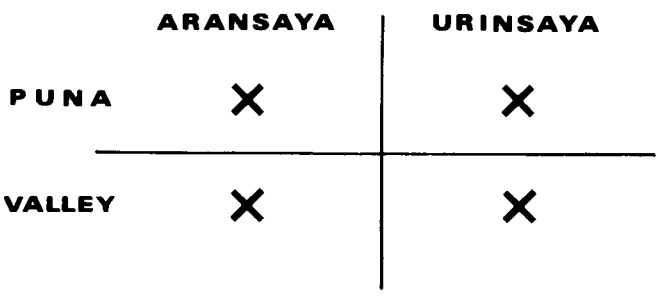


Figure 13.4. A general model of Macha society.

Urinsaya mean, respectively, "upper half" and "lower half," the fourfold system can be seen as the result of the double operation of a single opposition, high versus low.

MODELS OF MARRIAGE

In systematizing marriage preferences, we must remember that each of the four quarters of Figure 13.4 (e.g., puna Aransaya) in fact contains four further levels of organization nested within it: minor ayllu, minimal ayllu, patrilocal group, and households. Although the two last are exogamous, statements of ideal endogamy are heard in connection with minimal, minor, major, and maximal ayllus. This apparently redundant repetition of endogamous prescriptions is to be understood, I think, as expressive of the homology between the systems of organization at each level of the social structure. In the Macha model, each householding unit, patrilocal group, minimal ayllu, and minor ayllu on the puna has its valley counterpart; in practice, however, where there are only one or two households in the valley for a particular minimal ayllu, many of its members are forced to find other sources of maize, such as commercial relationships with other valley farmers or exchange with puna neighbors who have access to valley products. Thus, at each enlargement of the scale of organization under consideration the same norms apply, but their correspondence with reality increases.[5] Figure 13.5 shows this nesting of organizational levels: It will appear later that the very choice of squares rather than circles to formulate the principle is dictated by the Macha model.

In presenting the regulations surrounding marriage choices, we should first note the strong rule of moiety endogamy. This is explained by reference to the expected norm of hostility between the moieties. At ritual fights (*tinkus*) celebrated during certain fiestas, and at serious confrontations over land (*ch'ajwas*), the groups dominated by each node in the hierarchy of ayllus (see Fig. 13.2) unite when any one of their members is confronted by the members of another group dominated by a different node at the same level. This fusion of groups that in other

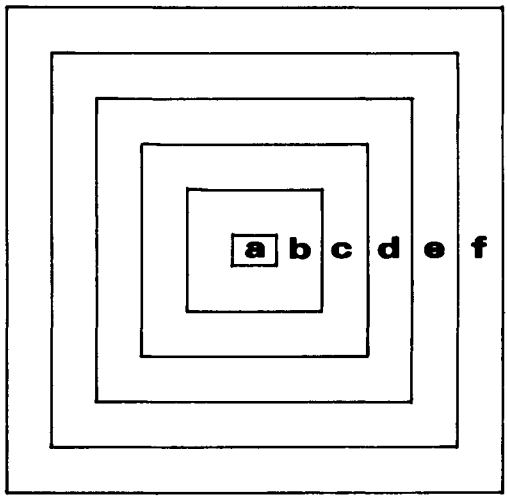


Figure 13.5. "Nesting" within Macha society. *a*. domestic units; *b*. Patrilocal groups (exogamous to the third degree); *c*. Minimal *ayllu*; *d*. Minor *ayllu* (moieties); *e*. Major *ayllu* (moieties); *f*. Maximal *ayllu* (the Macha).

contexts are segmented is reminiscent of the Nuer situation (see Evans-Pritchard 1940), but it occurs with corporate territorial groups in place of lineages. Within Macha territory, the process culminates with the confrontation of the moieties, as locally represented at each fiesta or confrontation. In connection with moiety endogamy, then, the statement often heard was "Why should we let out daughters go to them, so that their children will come and hit us?"

There is also a strongly stated preference for interregional marriage between puna and valley. It appears that only certain minimal ayllus are able to achieve this with any frequency (cf. n. 5), but analysis of the genealogies collected suggests that such marriages recur regularly enough through the generations to ensure for the members of the group continual direct or indirect access to the products of the other zone. At the level of ideas, however, this regulation is given greater prominence than any other, saving only the incest prohibition and the rule of moiety endogamy.

Further, there is some emphasis on the desirability of sister-exchange. If strangers meet at a drinking session, one approach to the end state of drunken intimacy is through offers to exchange sisters. Needless to say, this preference is encountered far more often as an ideal than in fact, although in some cases multiple sister exchanges do occur in the genealogies.

Figure 13.6 shows the combination of the three marriage preferences just mentioned: moiety endogamy, puna–valley inter-marriage, and sister exchange (the dominant principle of virilocality is assumed). The

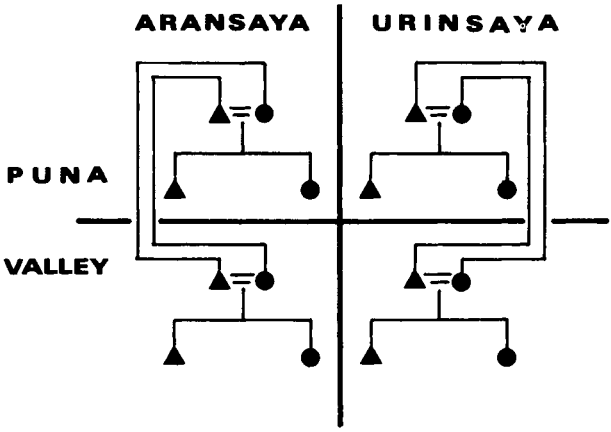


Figure 13.6. The ideal marriage system of the Macha.

combination of sister exchange with puna–valley intermarriage is supported by the use of the kin term *ermana* ("classificatory sister") by Puna men for any Puna woman they may meet in the valley, although on the puna the term is confined to women of the same generation, born into the same patrilocal group. This suggests a recognition of the ideally exogamous nature of puna and valley, even though in other contexts the exogamous unit may be more narrowly conceived. Figure 13.6 also shows the ideal family structure: Each household is sometimes said to be *tawantin* ("consisting of four elements"). Here, then, the initial quadripartition of Macha society, shown in Figure 13.4, contains in each of its segments a further quadripartition, linked interregionally within each moiety through the combination of the marriage preferences we have just discussed.

It is evident from the information presented so far that among the Macha the traditional problem presented by dually organized societies, that of reconciling the moiety division with the overall unity of society, is posed in an unusually acute form: The moieties do not intermarry and are further related by institutionalized hostility of extreme ferocity, whose manifestations will be briefly discussed in what follows.

II

So far I have been concerned with three empirical divisions within Macha society: ecological, moietal, and sexual. Their combination has resulted in an overall model of Macha society, as expressed in marriage and family structure, ecological complementarity, and moiety endogamy. Before pursuing the way in which the Macha conceive such dual oppositions at a more profound level, I shall present examples of other quadripartite structures clearly present in specific social contexts. I aim

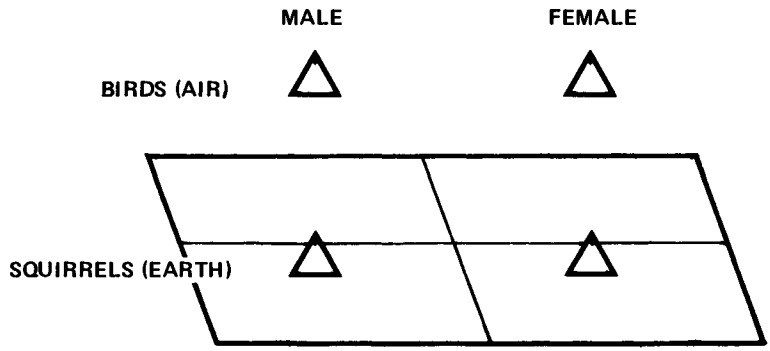


Figure 13.7. Household quadripartition.

to show that the emphasis placed on such structures in the preceding section is not merely an accident of the type of analysis applied but is a representation present in the minds of the Macha themselves.

TIYANOQAKU: HOUSE BUILDING

After a house has been completed, a white lamb is killed and its blood caught in two bowls in which are placed three leaves of coca. *Q'uwa* (an odoriferous plant used as incense) is added to the bowls, and the blood is then splashed against each of the four corners of the building: The blood is said to be "pointed" to them by coca leaves (*puntanampaj*).[6] A meal is prepared from the lamb with boiled maize and chili peppers. Coca leaf is then chewed, and the libations (*ch'allas*) begin. These are poured for all the parts of the house: The stones of the foundations and the corners are hailed as *inka mayku* ("Inka with authority"); The mud as *turta t'alla* ("cake woman" – the Inka's mate). The door, eaves, cross-beams, nails, and so forth, are also offered libations, as well as the floor (*pampa*), which is identified as a form of the *pachamama* (earth mother).

Then two men climb onto the roof, claiming to be a pair of birds (*chhiruchhiru*); they make a mock nest and proceed to squabble, "just as the chhiruchhirus do" (see Fig. 13.7). They take up pieces of clothing that are redeemed by those on the ground for white stones. These stones are later taken into the house and represent money. Meanwhile, other men pretend to be a pair of squirrels (*ch'ajchari*); they busy themselves carrying the possessions of the householder and his wife into the house. The completed house is thereafter called the "nest" (*thapa*) in ritual contexts; this is appropriate, given the presence of the birds and animals, and the statement that human couples – in particular, twins – are like birds. The curious explanation offered, that this is "because with birds it is difficult to distinguish between the sexes," will become clear later.

A further quadripartite model is thus clearly embodied in the ritual: above, a couple of birds (of the air); below, a pair of squirrels (of the

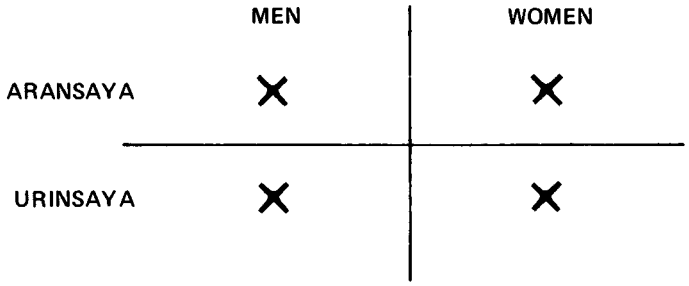


Figure 13.8. Quadripartition of the ritual battle.

land). The emphasis on the corners also provides us with another quadripartition in a different dimension.

TINKU/CH'AJWA: FIGHTING

I here discuss briefly the ritual fighting (*tinku*) that takes place in towns and villages throughout the region during important local fiestas. The sides are formed by the groups resident in the surrounding areas. The process of group fusion has been mentioned above; accordingly, the most important level of confrontation within Macha is that between the two moieties, as these are represented in each fiesta congregation.

After the participants have entered the village square in preparation for the conflict, libations are poured at the base of the church tower that flanks the square. The tower is called *turri mayku* ("tower with authority"), and it is regarded as male in relation to the female square below (*plasa t'alla*).[7] The square is also seen as a form of the *pachamama* (earth mother), and the tower takes on an overtly phallic significance during a rite in which small loaves of bread (*qurpa*) are thrown from the top of the tower onto the square below, to be picked up from the ground by the congregation as harbingers of abundant harvests and fertile flocks. Here, then, the male element (high) is mediated in relation to the female (low) by the fertile stream of seminal loaves. The phallic nature of the tower is reaffirmed in the statement that the libations poured to it are to keep the fighters hard and stiff in the battle.

During the final confrontation between the Aransaya and Urinsaya moieties, women as well as men participate, and I was told that the disposition of the groups should be as shown in Figure 13.8 (although in fact the fury of the moment generally interferes with the perfect realization of this ideal): Each moiety occupies one side of the square, with the women in each group uniting to confront the women of the other group, and the men uniting to face the opposing group of men.

The fights take place in a state of total drunkenness, and no one is

declared the winner of the tinku (though both moieties may claim to be so). In some cases when the national authorities are not present – especially during *ch'ajwas* – the ferocity of the conflict may reach such a pitch that victims may be torn apart with the bare hands – the use of a knife is disdained – and parts of them eaten: I have heard Macha speak with pride of their reputation as runamikhuj ("man-eaters"). The occasion is thus one for a total liberation of energy against the opposing moiety. In one case I was told that the members of Aransaya had grabbed the wife of the kuraka of Urinsaya and gang-raped her.

A detailed analysis and interpretation of the fights is impossible here: The important point relates simply to the sexual connotation of the two moieties, already implicit in the names "upper half" and "lower half," given the association just mentioned between above–below and male–female. The gang rape made explicit this relation; further, both eating and fighting are identified with copulation in countless stories, jokes, and riddles.

Such an interpretation, however, involves a symbolic copulation between opposing moiety members *of the same sex*. The problem thus posed is the same as that of the two male couples of birds and squirrels involved in the house-building ceremony. Both will be dealt with in a later section.

RITUAL PLOWING

At one point in the annual maize harvest fiesta, which takes place in the valley during the feast of Corpus Christi, the Indians accompanying each of the three *alfereces* (ritual sponsors) dress up as the various species of domestic animal (*uywa*; contrasted with *khuru*, "wild animals") possessed by the Macha. Some take the skins of sacrificed goats, which they drape over their shoulders; others tie to their backs a small load such as llamas have to carry; others, again, are sheep or cattle. Further, two men are yoked together to represent the plow team of oxen on which Macha agriculture is based today. At a certain moment in the ritual sequence, these two man-bulls are yoked to a plow, which they then drag up and down the square, followed by two girls (*imilla wawas*), who are attached to them by a belt. The entire foursome thus moves up and down as though they were plowing, guided by the corresponding *alferez*.

The two bulls of the plowing team were explicitly likened to the two moieties – an equation that introduces the further opposition right – left into the system of thought. Since, moreover, each is followed by a junior female partner, the overall structure of Macha society shown in Figure 13.4. is here given concrete embodiment: The two men represent the dominant puna sections of each moiety. The two women stand for the identification of the square with the pachamama (see the preceding section for the identification of the square with the pachamama), which is the fertile earth on which the Macha socioeconomic system depends (see Fig. 13.9).

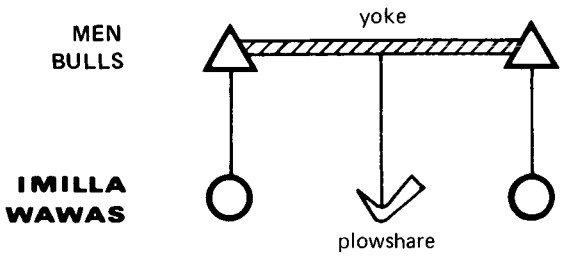


Figure 13.9. Quadripartition in plowing.

III

Many other examples of quadripartition could be cited – we shall deal shortly with its cosmological manifestation – but its significant persistence in Macha thought should by now be clear. However, in each example the four elements have been divisible into two subsidiary pairs, associated respectively with man–woman. This has been so even in cases such as the house-building ceremony, where the actors are in fact all men. Indeed, the sexual ambiguity of certain elements must not be evaded: In Figure 13.4, for example, Puna Aransaya is doubly male, since both puna and Aransaya are associated with "high"; but the Aransaya Valley is ambiguously male and female, since valley is low and Aransaya is high. Before attempting to reveal the function of such ambiguity, however, we must take a closer look at Macha dualism.

COSMOLOGICAL DUALISM

Tukuy ima qhariwarmi ("everything is man-and-woman"), I was told when I was trying to understand Macha religion. The context was that of certain sacred rocks (*wak'as*), some of which are male, others female; similarly, it became clear that the spirits who inhabit the mountain peaks (*jurq'us*) are male, whereas their wives (*warmi jurq'u*) are the springs of water that rise in the mountains and flow downward.

The sun (*tata inti*, "father sun") and the moon (*mama killa*, "mother moon") constitute another divine pair: The sun is also called *tata santisimu* ("holiest father") and the moon *mama santisima* ("holiest mother"), Maria. A further divine couple is to be found within the earth: *pachatata* ("earth father") and *pachamama* ("earth mother").

Certain rites are celebrated for pachamama in each household every three years, at the beginning of the agricultural calendar in August and September; these are thought to be necessary to ensure a rich harvest. Pachamama is also called *wirjin* (cf. Spanish *virgin* – but for the Macha the fertility of the Mother of God seems to have been more important than her chastity): Her local fragmentations, the *wirjines*, inhabit the cultivated fields. Pachatata is worshiped above all at Carnaval, and he

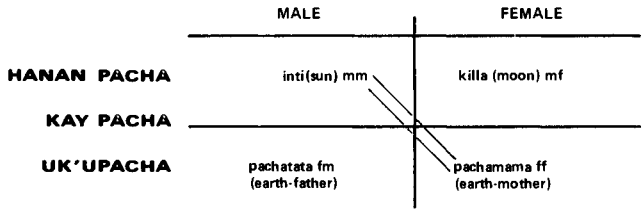


Figure 13.10. Cosmic quadripartition.

too is found in fragmented form in the numerous *tata pachaqas* (also called *tata wilakrus*; cf. Spanish *vera cruz*), whose shrines are to be seen on the crests of small hills all over Macha territory. Like the turri mayku (mentioned earlier), the tata wilakrus is considered a patron of the fights, and the cross kept in each shrine is dressed up in fighting gear (helmet, poncho, and so forth) for parading at the fiesta of the Cross (May 3). Like the church tower, his conjugal pair is a form of the pachamama: The tower's partner is the plasa t'alla; for the tata wilakrus, the wirjines.

In fact all these pairs are ordered within a further quadripartite model. The realm of the sun and the moon is called the "upper half" (*pata parti*), or upper dimension (*hanan pacha*), whereas the realm of pachatata and pachamama is called the "lower half" (*uru parti*) or "inner dimension" (*ukhu pacha*). The intermediary zone, where human, animal, and vegetable life exist, is called "this Dimension" (*kay pacha*). In this cosmology, the mountains rear upward to command the cultivated fields, just as the phallic tower dominates the square below. The configurations of the Andean landscape are thus assimilated to the relationship between the two earth divinities. Lightning, which may be from above (*gloria*) or below: the place that it has struck is left deadly: The shamans, who can talk with the mountain spirits and the wirjines, take up their office only after having been struck dead by lightning and reviving. Thus, kay pacha in Figure 13.10 occupies the same structural position as the chawpirana in Figure 13.4. But whereas within society the Macha attempt to perfect the duality of the model, this simply reflects, within the sphere of human intention, the fatal relation between human society and nature: Caught between the upper and lower divinities, the Macha must offer the appropriate dues to each ("Purajman haywayku," I was told: "We give to both sides"), in order to maintain their precarious position as mediators. The fundamental structure of the cosmos is dual, and mankind must therefore face both ways at once in order to benefit from the complementary yet antagonistic forces around them.

It will be noted that two of the elements in Figure 13.10 are sexually ambiguous, insofar as the "upper half" can be seen as generally male and the "lower half" as generally female. This allows us to understand how the Macha can simultaneously posit a union between the fertilizing

rays of the sun and the productive earth: tata inti is purely male, pachamama purely female, whereas their respective spouses are logically and symbolically imperfect.

THE MYTHICAL CHARTER OF THE MOIETIES

The equation between the two moieties and a human couple is further supported by the myths concerning the pre-Inkaic population, the Chullpas. In that era, it is said, there were no moieties as there are today. But there was another division: All men were called Mariano and all women Maria, since other names were all introduced by the Christian priests (doubtless a memory of the traumatic impact of baptism in the sixteenth century). Mariano is also the name of the condor in countless folktales, and the condor's is the form most often taken by the mountain spirits (*jurq'us*). Similarly, Maria is the name of the toad (*k'ayra maria*), whose corn beer never runs out – that is, the springs of water where the toad lives, and which we have seen are the wives of the mountain spirits (*warmi jurq'us*), never stop flowing. Why this identification between pre-Inkaic humanity and present-day divinities?

It is thought that the time of the Chullpas was a "restless time" (*inkyetu timpu*): Men and beasts readily took on each other's shape; both were of the same nature. In this Golden Age, before the domestication of animals and plants, the Chullpas' llama was the wild vicuña, their chicken the wild *p'isaqa* (partridge), their *quinua* a variety now considered wild, and their potatoes were those varieties associated with the highest and coldest levels of agriculture. Indeed, *jurq'u* means "wild place," as well as "mountain spirit." Thus, Mariano and Maria are located in a presocial state of nature, when there was continuity between men and gods and the only organizational principle was that based on sexual distinctions.

For the Macha, the moiety system dates from the arrival of the Inka, a sample of successful Inka propaganda that presented them as founders of civilization and that still endures today among the Andean peoples of Bolivia. In imposing the moiety system, the Inka were indeed thought to have founded society, one that stood to all previous ones much as the domestication of plants and animals was contrasted with the hunting and gathering supposedly practiced by the Chullpas. The barriers between gods and men became set; the gender duality was projected onto the newly established moieties as a principle of social rather than natural organization.

THE MARRIAGE CEREMONY

In this and the following section I shall argue that the purpose of the ritual that suffuses marriage and the joint life of men and women is directed toward ensuring the secure union of two opposites whose very opposition renders the union volatile, however important it may be from the economic and reproductive point of view.

Ideally, a Macha couple is married at least three times: once in the

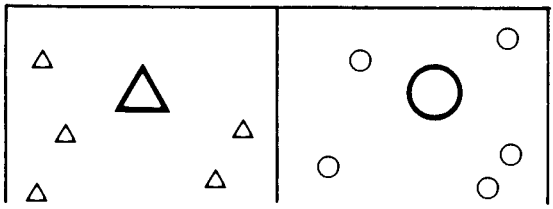


Figure 13.11. The marriage ceremony.

office of the civil registry, once in the church, and once, following the church wedding, at an Indian celebration. I say "at least," because, as in many parts of the Andes, a couple may start living together in trial marriage or concubinage before cementing the relationship with official wedding rituals. Thus, marriage among the Macha is more a continual process of progressive cementation, which takes place as much through prolonged economic cooperation and the birth of children as through a series of ceremonial confirmations of which the three mentioned are merely the most important.

At the Andean celebration, quantities of chicha are prepared, animals are slaughtered, and the wedding is attended by bilateral kin and neighbors. The pair is escorted from the church with singing and dancing by godparents and siblings. The sisters have prepared large, roughly made dolls (sometimes figures of birds) at the end of long poles (*arkus*), which they carry while chanting the marriage hymn to music provided by their unmarried brothers. Various objects are suspended on these dolls in pairs: two plates, two loaves, two knives and spoons, two mirrors. Libations are poured, as usual, from two pairs of "bull-cups" (*turu wasus*), which are ritual wooden bowls, each with the figures of a yoke of bulls carved inside, so that the liquid swills around the bodies of the bulls. They are made, bought, and – with one exception to be mentioned shortly – used in pairs. The man and woman are then made to sit down in the two recesses of an E-shaped structure made of green branches of *molle* (the evergreen pepper tree) and draped with ponchos. The man sits to the right of the woman, divided from her by the central wall (see Fig. 13.11). Each is accompanied and waited on by ritual and nonritual kin of the same sex, so that groups of men gather in one recess and groups of women in the other. No conversation is allowed between the two until the food is finished. Then the pair come out of their respective recesses, join hands, and lead a dance.

Notice that the pair to be united are first kept separate, and their gender is affirmed by the presence of their companions, even though all are embraced by the outer walls of the structure. Two boxes, one male and the other female, but sharing a wall; the relationship is solemnized by (among other things) a taboo on speech between the boxes. We shall see later that the figure of two boxes that share a wall is not

fortuitous; on the contrary, it is the geometrical representation of the ideal union between man and woman. The two may be opposites, but the mediation that this requires has been reduced – like the chawpirana on Troll's map – to a mere line.

YANANTIN

When libations are poured, the action of spilling a few drops on the ground (ch'alla) with the name of the receiving divinity is performed twice. This is explained as being *yanantin*, "for your conjugal pair." Again, when coca leaves are offered to a guest or participant in a ritual, two handfuls are offered to each person, who must receive them in two cupped hands. This likewise is explained as yanantin. An alternative to the paired bull-cups are double cups whose component bowls are joined by a hollow channel, so that the chicha can flow freely from one bowl to the other. In all such cases, the pairing and the repetitions are explained as being yanantin.

The term *yanantin* is made up of the stem *yana-* ("help-"; cf. *yanapay*, "help") and the termination *-ntin*: according to Solá (1978), *-ntin* is "inclusive in nature, with implications of totality, spatial inclusion of one thing in another, or identification of two elements as members of the same category." Yanantin can thus be strictly translated as "helper and helped united to form a unique category." But the gloss given by the Macha to the word is "pair" (par) or "man-and-woman" (*qhariwarmi*).

Yanantin, however, is also used to characterize eyes, because they come in pairs; hands, ears, and legs are likewise yanantin. Moreover, breasts and testicles are yanantin, too, and although this confirms the impression that one model of things yanantin is the left–right symmetry of the body, it simultaneously adds confusion, for it is not immediately clear how breasts and testicles can be considered "man-and-woman." The confusion is further compounded by the belief that twins are, above all, yanantin, even if they are of the same sex. It is clear, then, that the word cannot mean "man-and-woman" in any simple sense.

Yanantin is contrasted with another concept, *chhulla*: Chhulla means "once, of things which should be twice." It describes the ceremonies performed for the recent dead, in which libations, gestures, and bull-cups are kept single rather than repeated. Similarly, a single eye in a man's head would be chhulla, since there should normally be two; but a nose is not chhulla, because there is naturally only one nose in a face.

It appears, then, that the human couple is conceived in the same terms as the symmetry of the body. Left–right is one of the basic dualities covered by yanantin, and since we know that man is associated with right and woman with left (see the disposition of the sexes in the E-shaped marriage construction, an ordering repeated in many other ceremonies presided over by man and wife), it seems possible to interpret the ritual repetition designated yanantin as an attempt to assimilate the conjugal pair to the perfect duality provided by the model of the human

body. According to this interpretation, then, it is less that yanantin *means* "man-and-woman" than that men and women *ought to be* yanantin – that is, they should partake of that perfect union achieved by the two halves of the human body.

Support for this view can be adduced by comparing Macha beliefs concerning twins with the account given in the sixteenth century by informants of Francisco de Avila concerning the birth rites performed at that time for twins in the region of Waruchiri in Peru. Avila transcribes, "Now we will summarize what we have just said: If they were born both male or both female, people said 'It will be a bad time. It will be a time of great suffering.' But if they were born as man-and-woman, they took it as a good sign."[8] The Macha today also attach great significance to the birth of twins. A woman who gives birth to twins is thought to be able to curse others: Twins are said to be from the "devil," that is, from the earth divinities. Again, it is said that if a woman suffers a severe fright by thunder and lightning while she is pregnant, the child in her womb will divide. Sometimes twins are said to be born with split lips: This too is attributed to fright caused by the thunder and lightning. Twins are further said to share lives, one sickening when the other sickens and dying when the other dies. Most significant of all, if twins are of the opposite sex, then it is said that they should marry, regardless of the incest prohibition.

Notice that twins are said to be the result of *division*, and the reference to the split lips confirms that the image is that of division between the two halves of the body. That is, twins are a perfect pair, because in spite of being ostensibly two individuals, they are also related to each other from birth as the two halves of one body. On the other hand, most men and women are born singly, and therefore require ritual *conversion* into a right–left pair. In both Macha and Waruchiri belief, then, opposite-sex twins seem to be considered portentous embodiments of the ideal model of unity between the sexes.

We have seen, however, that yanantin is also used of same-sex twins; yet if the right side of the body is male and the left side female, how can two men or two women be assimilated to this model? The answer to this question will simultaneously provide answers to a number of other questions that have already been indicated. Thus, if the two moieties are as male to female, how can their puna segments and their valley segments be represented, as during the plowing of the square, by two men and two women respectively? Why were pairs of birds and squirrels acted by men during the house-building ceremony? Why do men battle with men and women with women during the tinku, if I am right in seeing the encounter as in part a ritual copulation between male and female moieties? Fortunately, such problems and their solution are condensed by the Macha into a single symbol, already mentioned in our discussion of the marriage ritual: the mirror.[9]

An interesting congruence should be noticed between the ritual use of mirrors and the contrast between yanantin and chhulla. According

	MAN	WOMAN
MAN	mm	mw
WOMAN	wm	ww

Figure 13.12. The twofold designation of gender.

to informants, mirrors should not be looked into during the night, since the night is the time of the soul (*alma*), and mirrors are "the enemies of our soul." The same is said of water: Lakes and mirrors both reflect, and indeed, during the funeral ceremonies, a dog is sacrificed so that it will accompany the dead man's soul and carry it across the sea. On one occasion, when a man was close to dying, a group of his friends and relatives went to the cemetery when it was feared his soul might have strayed prematurely, chased it out, and magically "closed" the entrance by placing various objects across it – among them a mirror. In contrast, we have already seen how, at the marriage ceremony, the dolls (arkus) prepared for the couple by their siblings are decorated with various objects in duplicate, among them mirrors. The use of mirrors during courting is also documented for other parts of the Andean world.[10] Thus the mirror seems to be positively associated with the conjugal duality (like yanantin) and negatively associated with the lonely dead (like chhulla).

To understand the relation between the mirror and yanantin, we have only to consider what a mirror does. Mirrors do not merely duplicate an object; rather, they invert it with precision, so that the resulting image relates to the original object as left to right or as right to left. Only in the case of objects that are themselves completely symmetrical, such as a bull-cup, will the mirror image be a literal reduplication. Evidently, then, the mirror is ideally suited to symbolize the relationship of corporal symmetry designated as yanantin. But in the logic of mirrors, the union of man with woman is anomalous: Male and female physiognomies are both symmetrical, so that the mirror image of a male and female body will in fact be another body of the same sex. We see, then, how same-sex twins can be naturally considered yanantin. The problem then becomes one of conceiving the possibility of union between man and woman.

The number of pairs that can be generated by the combination of the two elements "man" and "woman" are in fact four: Indeed, if we apply them as the double matrix of a quadripartite structure, we will be faced with the same ambiguous designation of elements already mentioned at the beginning of section III. That is to say, Figure 13.12 shows us four possible entities, which are the transformational precipitates of the initial opposition between man and woman: male men, male women, female

men, and female women. The very ambiguity of the middle two elements allows them to be represented, not illogically, by men and women respectively. And we can by now understand the ideality of such an arrangement: Two actors of the same sex can affirm the relationship of mirrored symmetry that *should* pertain, in real life, to the conjugal pair.

The Macha emphasis on quadripartition can therefore be understood as a conceptual solution to a more fundamental problem, that posed by a conception of dual oppositions that reduces the possibility of their internal unity to the model of mirrored symmetry offered by the two sides of the human body. Within the terms of this solution, it becomes perfectly intelligible that the puna segments of the two moieties should be represented by two men, whereas their valley segments are represented by two women. Equally logical is the confrontation during tinkus between male (men) and male (women), on the one hand, and between female (men) and female (women), on the other. Similarly, during the house-building ceremony, the two birds on the rooftop can be acted by two men, between whom it is indeed "difficult to distinguish sexually"; strictly speaking, however, my explanation would predict two women on the ground in the role of the two squirrels, a prediction not borne out by the facts. I leave this exception as a problem to be faced by those who wish to delve deeper into the historical or logical deviations from the basic model I propose.

IV

The concept of yanantin as a relation of mirrored symmetry has made it possible to envisage an ideal of unity between the sexes. But the frenetic duplication of ritual elements and gestures during ceremonies, like the E-shaped construction of the Macha marriage celebration, correspond to a second moment in which it is hoped to correct the polar antagonism between the sexes. It is reduced by ritual means to the model of the two sides of the body, whose only mediation is the theoretical line down the center of the body.[11]

We will now try to amplify our vision of these two moments – the conception of the ideal, and the ritual means adopted to achieve it – by involving material from the early Quechua lexicons. By noting the correspondences between the picture thence derived and the model proposed on the basis of the Macha data, we will be able to offer proof that the semantic field centered on yanantin is in fact a phenomenon of pan-Andean occurrence, whose variations at both historical and regional levels await comparative study by specialists in the area.

In Table 13.1 I have isolated a lexical field consisting of five stems and acting as a bridge between the sixteenth and twentieth centuries, the stem *yana-*. I have indicated links, both those based on similarities of sense and those based on the lexicographer's explicit citation, between entries corresponding to different stems. The three lexicographers em-

ployed are Fray Domingo de Santo Tomás (1560), Antonio Ricardo (1586), and Diego González Holguin (1608).

YANA- AND CHHULLA

According to Santo Tomás, *yanantin* means "pair of two equal things" (D.5 in Table 13.1), and a first example of such "equality" is given by Ricardo (D.6) as "gloves." Further examples given by Holguin are "eyes" (D.9) and "shoes" (D.10), and he contrasts the former with *chhulla ñawi*, "one-eyed person" (E.6): *chhulla* appears clearly in various entries as "inequality" or "odd," thus confirming the Macha ethnography. By inference from E.7 and E.8, then, we can infer that hands and ears are other examples of things yanantin, reiterating the general impression that, as with the Macha, the sixteenth-century informants also saw the relation between the two sides of the body as a model of yanantin.

González Holguin gives one curious example of something chhulla: a "candlestick" or "wine vessel" (E.2). Why should such implements as these be considered "unequal"? The answer can be inferred from the characteristics of Macha ritual practice already mentioned, namely the use of pairs and repetition for pouring libations in ceremonies that are yanantin: Only for the dead is chhulla the rule. Christian ritual, however, places no such emphasis on the pairedness of the sacred implements, and Holguin, whose lexicon is full of proselytizing tags, may be supposed here to be emphasizing the usefulness of the word chhulla for clarifying Christian ritual to the Andean populations. Candelabras and wine vessels are chhulla because, against all Indian expectation, they appear alone and not in pairs.

But in his entry on chhulla (E.2), González Holguin not only defines the word as "something that does not come with another" but also as "something that does not correspond in size or proportion." This notion is crystallized in E.3, where *chhulla chhulla* is translated simply as "inequality"; and in E.4, we find *chhulla ymagen* given as "two images, out of proportion." Notice that here we are no longer dealing with a single object: There are two images, but they are unequal. So too in E.5: *chhulla runa andaspac* is translated as "They are not of the same height for [carrying] platforms." The *andas* are in fact the platforms on which saints' images are placed for parading round the town or square during religious festivals. Men of equal height are required to do this; otherwise they are not truly two: They are merely one and another.

PACTA-, CUZCA-, PAMPA-

Yanantin is said by Santo Tomás to be synonymous with *pacta pura*. *Pura* is an interactive suffix, and *pacta* is translated by Santo Tomás (C.1) as "a perfect fit, something that fits perfectly with something else." Moreover, *pactachani* is given as "to pair up unequal things" (C.3), where *cha-* is a factive infix. Here, the link with yanantin is clear, but

Table 13.1. *Lexicographical data concerning the concept of* yanantin

A. *PAMPA*

1. *pampa*: *cosa comun* (things in common) (R)
   cosa comun y universal things in common and [held] by all (H)
2. *pampa pampalla*: *cosa en comun no distinta* (things in common without distinction)
3. *pampa*: *plaça, lugar donde no hay casas* (square, a place where there are no houses) (ST)
   campo raso como vega (a flat place, like a field) (ST)
   plaza, suelo llano (flat place, field, flat space) (R)
   plaça, suelo llano, çavana (square, flat space, savannah) (H)
4. *pampa*: cosa llana generalmente (something flat, generally) (ST)
5. *pampayruna*: *muger publica comun a todos* (a public woman, held in common by all) (H)
6. *pampaychani*: *allanar el suelo* (to level the soil) (R)
7. *pampani*: *allanar* (to level)
8. *pampachasca*:
9. *pampachani*:
10. *pampachani*: *quebrantar la ley, precepto)* (to break a law, a rule) (H,R)
11. *pampachani*: *perdonar, absolver* (to pardon, to acquit) (H, R)
12. *pampachani*: *borrar lo escripto* (to erase something written) (H)

B. *CUZCA*

1. *cuzca*
2. *cuzca cuzcalla*: *cosa ygual, llana* (an equal thing, flat) (H)
3. *cuzcalla*: *cosa ygual* (an equal thing) (R)
4. *cuzcachini*
5. *cuzcachani*: *emparejar lo desygual* (to pair up unequal things) (R)
6. *cuzcachini*: *emparejar alguna cosa* (to pair something up)
7. *cuzcachani*:
8. *cuzcachasca*: *cosa emparejada assi* (something paired up this way) (ST)
9. *cuzca cachani*: *emparejar lo desygual* (to pair up what is unequal) (H)
10. *cuzcachani*: *allanar o acabar negocios, riñas, dificultades* (to solve or to terminate some business, a dispute, some difficulties) (H)
11. *huchacta camacta cuzcachani*: *juzgar o hacer justicia* (to judge, to provide justice) (H)
12. *cuzcachaytucuni*: *ser juzgado o sentenciado* (to be judged or sentenced) (H)

a new element has been introduced, that of rendering equal two things that before were unequal. This notion of the *physical correction of inequalities* evidently corresponds to the second, active moment defined above. Other entries under A and B further amplify the range of meaning to which it can be extended.

Pactachani is cited by Santo Tomás as a synonym for *cuzcachani/ cuzcachini* (C.3, B.6–7): All three are translated as "to pair up something." But *cuzca* is also equated with *pampa* by the same lexicographer (A.4), both being translated as "generally, something flat." The introduction of this new element, flatness, makes clear the connection with *pampa*: This is given in A.3 as "flat area of ground" and thereby connected with the common sense of "square." Further, the notion of *cuzca* as "equal" (B.2–3) can also be connected with the entries that translate *pampa* as "something common or universal" (A.1–2) and as "square": The square, the place with no houses (A.3), is the place to which all have *equal* access; it is the land of the community (cf. the section on the ritual fighting). Given, then, that *pactachani*, *cuzcachani*, and *cuzcachini* all appear to include the notion of "to make flat," as well as "to

C. *PACTA*

1. *pacta*: cabal, lo que cabe a cada uno (just, perfect; which fits everyone) (ST)
2. *pacta pura*
3. *pactachani*
4. *pactachani*: *emparejar cosa desigual* (to level unequal things (ST)

D. *YANA*

1. *yana*: *criado, moço de servicio* (servent, serving boy)
2. *yanayoc*: *el que tiene servicio* (someone with a servant (H)
3. *yanacuna*: *los criados o un criado* (the servants or one servant) (H)
4. *yanapani*: *ayudar* (to help) (all dictionaries)
5. *yanantin*: *par, de dos cosas yguales* (pair, two equal things) (ST)
6. *yanantin yanantillan*: *dos cosas hermanadas como guantes* (two very similar things like gloves) (R)
7. *yanantin yanantillan*: *dos cosas hermanadas* (two very similar, paired things) (H)
8. *yanantinpa chullan*: *la una de dos cosas pareadas* (one item of two, normally paired) (H)
9. *yanantin ñawi*: *entrambos ojos* (both eyes) (H)
10. *huc yanantin capato*: *un par de zapatos* (a pair of shoes) (H)
11. *yanachani, -gui*: *abrazarase dos mugeres desnudas* (two naked women who embrace) (ST)
12. *yanachacuni*: *servirse un hombre de otro o el demonio o el pecado del hombre*: (a man who uses another, or the devil or man's sin) (H)

E. *CHHULLA*

1. *chhulla*: *una cosa sin compañera entre cosas pareadas* (Something missing its partner among pairs) (H)
2. *chhula*: *candelero, vinagero, cosa desigual o que no viene con oltra o no corresponde en tamaño o en proporcion* (candlestick, wine vessel, some unequal thing which does not match in size or proportion) (H)
3. *chulla chulla*: *lo desigual* (something unequal) (?)
4. *chhulla ymagen*: *dos ymagenes no parejos en proporcion* (two images, out of proportion) (H)
5. *chhulla runa andaspac*: *no son yguales para llevar andas* (unequal in size for litter bearing) (H)
6. *chulla ñawi*: *el de un ojo no mas, el tuerto* (the one-eyed one) (H)
7. *chhulla maqui*: *el manco de una mano* (the one-handed one)
8. *chhulla rinri*: *el de una oreja* (the one-eared one)

Note: ST = Domingo de Santa Tomás, 1560; *R* = Antonio Ricardo, 1568; *H* = Diego González Holguin, 1608).

pair up," we can infer that such "pairing up" is to be conceived as a *concrete matching of (previously) irregular surfaces*.

It will be seen that the model is acquiring a fundamentally geometrical quality: The elements to be paired must first be "pared" to achieve the "perfect fit." Here, the crucial notion is that of the *sharing of boundaries* in order to create a harmonious coexistence. The extension of this geometrical model to the social and moral order is attested in entries A.9–12 and B.10–12. All present the roots *pampa* and *cuzca* as part of a legal terminology.

An immediate question that presents itself here concerns the ambivalence of the term *pampachani* in entries A.10 and A.11, where it is translated both as "to pardon" and "to break the law": Thus the dispensation of justice appears to be equated with the provocation of legal sanctions. The easiest solution takes in what is the literal meaning of the Quechua: "to flatten." In leveling ground, one breaks obtrusions; in breaking the law, one does the same, the obtrusion here being the social norm that is in conflict with the actor's behavior (cf. the English

phrase "to ride roughshod over"). But the same metaphor is applicable to the dispensation of justice. Here it is profitable to compare the Macha with the Tiv of Nigeria (see Bohannon 1957). In both cases, justice is viewed more as the reconciliation of the disputing parties than as the imposition of sanctions by an authority that can invoke force to back up his decisions. Even where sacred rulers, such as the Inka, can impose divinely authorized sanctions, the concept appears to be one in which jarring notes in the sociocosmic fabric are eliminated and harmony restored, rather than any idea of secular "punishment." Thus, in the entry under discussion, the obtrusion to be flattened is the dispute that threatens the smooth running of the system. Entry B.11 (literally "to flatten the creator of a crime") can be understood in the same terms: The wrongdoer is restored to social acceptance. He or she is "brought back into line" with the social order.

YANACHANI/YANACHACUNI

I have chosen to isolate these two entries (D.11–12) since they appear to prove the importance given in the previous section to yanantin as the root relationship whose ambiguities underlie the emphasis given by the Macha and other Andean societies to quadripartition.

In asking how man-and-woman can be assimilated to the model of handedness, we suggested that the ideal pair of each, according to the logic of mirrors, would be another partner of the same sex. And now we find precisely this homosexual relationship attested in the sixteenth-century evidence. D.11 gives *yanachan* (literally, "I make *yana*") as "one woman embrace another naked"; and D.12 translates *yanachacuni* as "one man to make use of another, or the devil, or the sin of man." We can therefore conclude that homosexual union is indeed one of the relevant transformations implicit in the concept *yana-*.

To summarize: Our analysis of the sixteenth-century evidence has confirmed and amplified our understanding of the contemporary Macha data. Although the perfect pair must be composed of congruent individuals (cf. D.5), man-and-woman in fact lacks this congruence. Their union must be forged, their disparities countered. At the level of social organization and economic activity, daily cooperation makes them interdependent (as is symbolized in the clothes each makes for the other). The birth of children qualifies them as the apex of a new descent group: It is in relation to them that succeeding generations will justify their claims to land and unite in the face of an external menace. Their progressive cementation is marked by the several stages of their marriage and reaffirmed at every ceremony in which they duplicate gestures and implements in the cause of yanantin.

V

The same problem we have been discussing at the level of human couples, that of reconciling division with unity, is also to be found at the

level of the endogamous moieties, as mentioned in Section I. With human couples, we have seen that this mediation can be achieved without prejudice to the unity that is the object of the exercise only by invoking quadripartition. In the same way, the moieties achieve their union to produce the totality of Macha society only by a further subdivision within each between their puna and valley segments.

As the seat of authority and the traditional core of cultural consciousness, Puna Aranasaya and Urinsaya are alike in their preeminence over the valley; yet there is an implicit hierarchy between them, since one is "high" and the other is "low." Once again, the proof of this relationship is to be found in a sixteenth-century testimony, that of Juan de Matienzo,[12] who shows how this relationship, today merely implicit in the structure of Macha ideas, was originally made ritually explicit:

> The *kuraka* of the moiety of Hanansaya is the chief of the whole province and is obeyed in everything that he says by the other kuraka of Hurinsaya. The kuraka of Hanansaya has the best place of residence and in everything else, which in this matter conforms to their order of precedence. Those of the moiety of Hanansaya seat themselves at the right hand and those of Hurinsaya at the left hand, each according to their order: those of Hurinsaya at the left behind their principal leader, and those of Hanansaya at the right hand, behind their kuraka.

We see here that the moieties, like human couples, were associated in the time of Matienzo with the symmetry of handedness, a relationship that we have seen expressed among the modern Macha during the ritual plowing of the square. But in fact men have the edge over women, in that political authority is vested in them, just as puna has the edge over valley (and originally Aransaya over Urinsaya), in that the moiety authorities above the level of the minimal ayllu alcaldes are always chosen from among the puna inhabitants. Thus, in the case of the Macha, the supremacy of the right hand can be clearly linked to the sociological fact that in each pair it is the male pole of the binary opposition that monopolizes political authority.

The emphasis placed in our analysis on rectilinearity is, of course, also to be found in innumerable Andean styles of weaving, painting, sculpture, and masonry: Perhaps the most extreme case is to be found in Tiwanaku. Kubler (1962) has written of Tiwanaku iconography:

> The style of Tiwanaku belongs to the Andean tradition of conventional signs ordered more by semantic needs than by mimetic relationships; [they] are rectilinear and balanced. . . . These motifs are as rigid and schematic as if drawn by compass and ruler. The human figure, reduced to the simplest geometric components, serves as the armature for a decoration of small-scale animal appendages and inserts, including male and female condor heads, pumas, fish, snails. . . . The conventional meanings of these figures are un-

known. . . . One writer imagines mystic brotherhoods keeping vigil over the "inviolable orthogonal" of the Tiwanaku religion.

Again, the same problems we have discussed here in terms of the concept of yanantin – the problems involving symmetry, mediation, and quadripartition – have also been treated independently by Verónica Cereceda in her semiological analyses of the highly rectilinear textile designs produced by contemporary weavers in Isluga (northern Chile)(Chap. 10, this volume). The final issue I shall discuss here, then, concerns the rectilinearity of the models we have employed in the course of this chapter (Fig. 13.5), and in particular the ritual treatment given by the Macha to corners.

We have already seen how, during the house-building ceremony, blood from sacrificed animals is sprinkled against the corners of the building. Further, the word *iskina* (cf. Spanish *esquina*, "corner") may be used to refer to the house itself, and when visitors are sitting chewing coca it is thought courteous to place a leaf of coca on the floor, with the words "iskinapaj tatay" ("for the corner, sir"). One man I knew had his first house struck by lightning, and since the place was now dangerous and sacred, he chose to construct a new house a little way off. This was his *musuj iskina*, "new corner," but on ceremonial occasions the family would return to the ruins of the old house (*jatun iskina*, "great corner"), to pour libations and sacrifice animals.

Iskina is also used to refer to the brushwood enclosures built up around the valley town of San Marcos during the great maize festival of Corpus Christi, where the three sponsors of the fiesta (alfereces) prepare chicha and food. These sponsorships are rotated among the minimal ayllus corresponding to the appropriate minor and major ayllus, but the brushwood enclosures are always built at places specific to each minor ayllu involved and are considered the iskinas of that ayllu. Some informants said that their ayllu also had its iskina on the puna.

The corners of the square are also given great ritual emphasis, both as part of the Catholic tradition and as part of the Andean ceremonies. For example, the patron saint is borne from corner to corner during the day of his fiesta, and the priest intones prayers and sprinkles incense at each corner. At one point during Corpus Christi in San Marcos, the Indians of the respective minor ayllus accompany their ritual sponsor around the square, disguised as domestic animals, and dance at each corner while libations are poured. In this context, then, we can observe a precise homology between Catholic and Andean ritual structures.

Iskina is also found as a place-name, particularly when designating an important *mojon* (pile of stones marking a boundary between ayllus). The Quechua word for "corners" appears to be *kuchu* (translated by Ricardo as *canton*, esquina, *cosa cuadrada*: "canton," "corner," "rectangular thing"). Santo Tomás translates *cuchuc* as "corner, or inner corner of a house." This word also survives as a place-name. It occurs

in the same circumstances as iskina, designating an important place on the interayllu boundaries.

I can suggest, therefore, that organizational nesting in Macha society is conceived as a series of Chinese boxes, which have overt expression at the level of the house or square but only formal existence at the level of the ayllus. But I can push the argument one stage farther. In our discussion of yanantin, it was argued that the semantic field surrounding it included notions of cutting, paring, flattening, as an empirical metaphor for the activity of ritual and symbolic correction of the asymmetrical relation between men and women. Cuchuni is given by both Ricardo and Santo Tomás as "cut"; derivatively, *cuchusca* is translated by Santo Tomás as "something cut or trimmed generally" ("Cortada o cercenada cosa generalmente"). In the light of our discussion in the last section, this link between cutting and rectangularity cannot be taken as a coincidence. A kuchu or iskina is a corner of a house, more generally a corner of anything square, and finally even something literally square. The terms are applied at various organizational levels, up to the maximal level of Macha society, whereas the square is a microcosmical model of the theoretically rectangular object that is Macha. The perfection of this model is possible only by cutting, trimming, paring, and correcting the imperfections of nature through physical labor (as in laying out a town square) or through symbolic and ritual methods (yanantin and quadripartition).

It has been argued (Murra [1955] 1980 et al.) that the Inka organized their empire by invoking the same principles that governed community organization at the level of the state. We can therefore assume that before the arrival of the Spanish the ideal pattern of organizational nesting that has been described here for the Macha continued, through several intermediary stages (see Cereceda, Chap. 10, this volume), up to the final social quadripartition that was the Tawantinsuyu, and thence to the macrocosmic level of religion and cosmology.

Conclusion

In order to draw out the implications of the word *yanantin*, I have tried to locate it within a lexical field and also within a behavioral context. The resulting picture has shown an essential ambiguity of reference that is crucial to its function in Macha thought. None of this will surprise anthropological structuralists; what is perhaps less usual is that here the analyst does not need to invoke an unstated structure that is inherent in the cultural materials that he or she is considering, as in all the products of the human mind, but is conveniently provided with the conceptual tool explicitly stated by the people themselves. As we have seen, the relationship indicated by yanantin is in fact a geometrical one. It underlies the Andean propensity to think in squares; it exemplifies

what Lévi-Strauss has called a "logic of forms," as opposed to a "logic of qualities" (Lévi-Strauss 1956).

The use of formal geometrical shapes for "thinking-with" has, of course, parallels in our own society: Compare the use in archaic English of "fitting" and "meet" to express both spatial and ethical relationships. What is surprising about the Andes is to find these patterns of thought maintained at the level of socioeconomic organization on the scale offered by the Tawantinsuyu. In the case of the Macha, I have suggested that moiety endogamy is to be understood in relation to the dispersal of ayllus over great distances and across different ecological zones. I suspect that Inka formal models of the imperial organization will be found to be inseparable from the nature of the mathematical and census techniques employed to control and direct demographic resources in a context of increasing specialization in productive activities.

We have seen that even in the case of that perfect model produced by the binary structure of the human body, a submerged relation of hierarchy is present, in that right predominates over left. I take this to be a confirmation of the thesis put forward by Lévi-Strauss (1966), that true duality is perpetually elusive and is to be understood simply as the limiting case of a triadic structure. However, in his terminology, which contrasts concentric with diametrical dualism, Lévi-Strauss seems to have been particularly constrained by the circular models of specific ethnographies; the Andean models, whose expression is predominantly orthogonal, therefore escaped his classification. The choice of lines and squares, rather than arcs and circles, is the result of a specific sociocultural history. It compels us to ask what shaped that choice, thus defining a problem for comparative research by archaeologists and ethnologists.

For Andean specialists, there remains one obvious direction in which this investigation might be extended in future investigations. The ambiguity here discussed in connection with yanantin is also found, at a different level, in the case of other *yana-* compounds. Yanantin may indicate a pair of perfect symmetry and equality; but it may also serve as an ideological disguise for a relationship that is in fact unequal, such as that between man and woman. Similarly, *yanapay* means "to help" (see D.4 in Table 13.1) and is commonly used of reciprocal labor services between equals. But *yana* also means "servant" (D.1–3), a relationship that is asymmetrical and unequal. This would lead us to an investigation of different "kinds of reciprocity between equivalent or hierarchically arranged groups" (Murra 1966: 9). Murra and Godelier have shown how the idiom of communal reciprocity was used under the Inka state to disguise relationships of exploitation and domination, which therefore appeared justified in the eyes of the population (Murra [1955] 1980, and 1972; Godelier 1973: 83–92, 343–355). Our analysis of yanantin suggests a similar mechanism that represents as symmetrical and equal a relationship that in fact lacks that symmetry. Thus the inequality between man and woman, crystallized in the male monopoly of political power,

is presented as a purely logical problem for which logico-symbolic treatment alone is appropriate. In this case, the growth of exploitation beneath a mask of reciprocity under the great Andean states and kingdoms is to be seen as an aggravation, a projection onto the emergent class societies, of an antagonism already present in the heart of the preexisting Andean communities, at the very center of the productive process: within the household. Such reflections should indicate the ramifications that the concept of yanantin may have when its function and history is sought within the totality of Andean society, and not – as here – exclusively within the domain of community ideology.

Notes

PRIMARY ARCHIVAL SOURCES CITED
Archivo Nacional de Bolivia, Sucre
Tierras de Indios 46
Casa de la Moneda, Potosí
Cajas Reales 18

1 Cajas Reales 18, Casa de la Moneda, Potosí (Cajas Reales 18). *Libro donde se asientan las tasas de los indios* [1575].

2 See "Tierras de Indios, E año 1579," no. 46, in the Archivo Nacional de Bolivia, Sucre: "Juicio entre los indios de Macha y Alonso Diaz sobre las tierras de Carasibamba," f. 149.

> *Visitase quales este t*[estigo] *vido . . . iez yndios con sus casas hechas . . . su . . . os y mugeres de cada ayllo de los yndios d . . . Macha un yndio porque son los dichos yndios diez ayllos y estos diez yndios estavan y rresidian y sembravan y beneficiavan las* d[ichas] *tierras a la continua aquellos yndios los llamavan los uchucamayos.*

3 Minimal ayllus on the puna form discrete territorial units; their extensions in the valley may be small or may consist of a single household. Within the valley territory of the Macha, there is a small island of K'ulta, another maximal ayllu whose puna lands bound the Macha to the northwest. Each island is expected to fight on behalf of the subgroup dominating the neighborhood in which it is settled. On this formation in pre-Columbian times, see Murra 1972.

4 In one legend, the maximal ayllus of Macha, Pukwata, and Laymi joined hands on the puna and descended toward the valley, placing their lower limits at Mizque, not far from the coca leaf plantations exploited by the Charka and Karakara in the sixteenth century (see Harris 1978a).

5 A house-to-house survey of Amutara, the valley section of minimal ayllu Pichhichuas (minor ayllu AlaQuyana, Aransaya moiety), showed that twenty-two out of thirty marriages were endogamous within the minimal ayllu; almost three-quarters of these were of the puna/valley type. A nineteenth-century sample compiled from church marriage registers between 1880 and 1892 showed only 69 percent minimal ayllu endogamy, and the civil marriage registers from 1940 to 1971 revealed only 54 percent. The implication is that where sufficient valley lands exist, minimal ayllu endogamy

is complied with. Some minimal ayllus have very few valley members and may have to chose between a puna marriage or a valley alliance with a different minimal ayllu. Moiety endogamy, on the other hand, was found to obtain in 81 percent of the cases in the civil registers and 89 percent of the nineteenth-century church marriages.

6 We shall return to the significance of "corners" (*iskinas*) later, toward the end of Section V.

7 We have previously met with the opposition *mayku/t'alla* in the section on house building: Its basic connotation is male–female, but it also includes the dimensions of above–below and senior–junior. The opposition is of fundamental importance in the symbolic thought of the southern Andean region (see Martínez 1976).

8 The original recorded in Waruchiri by Avila says: "Chaymantan ñatah ñaqa nisqanchista tinkuchisun: qhari pura yurihtinqa pana warmi pura yurihtimpas, 'manan alli pachachu kanqa. Ancha muchuy pacha kanqa,' nispan nih karqanku. Chaymanta qhari warmi rikurihtinmi, allipah unancharqanku." I am grateful to Jorge Urioste, of the University of Nevada, Las Vegas, for access to a new translation of this text, *Hijos de Pariya Qaqa: La Tradición Oral de Waru Chiri* (Syracuse: 1983).

9 For an archaeological review of pre-Columbian mirrors, see Muelle 1940.

10 I am grateful to Xavier Albó for information on this point.

11 The Andean term for this theoretical line would appear to be *tinku*. Gonzalez Holguin ([1608] 1952) offers *ñauiptincu* as "the midbrow division of the eyes" ("la entreceja, division de los ojos"). Further, Arriaga ([1621] 1968: 276) gives *tincunacuspa* as the premarital "meeting" of couples for sexual intercourse. Thus, our interpretation of the ritual battles (also tinku) as a meeting of the two moieties as man and woman receives an additional confirmation.

12 Matienzo ([1567] 1967), Chap. 6, p. 20, where he specifies:

> El curaca de la parcialidad de hanansaya es el principal de toda la provincia . . . a quien el otro curaca de hurinsaya obedece en las cosas que dice el. Tiene el de hanansaya el mexor lugar de los asientos y en todo lo demas, que en esto guardan su orden. Los de la parcialidad de hanansaya se asientan a la mano derecha y los de hurinsaya a la izquierda . . . cada uno por su orden: los de hurinsaya a la izquierda tras su cacique principal, y los de hanansaya a la mano derecha tras su curaca.

Matienzo was a judge (*oidor*) in La Plata (now called Sucre), only a short distance from Macha territory. He is said to have conducted an inspection of Macha, probably in the 1570s, but this protocol has not yet been found (see Cajas Reales 18, [1575], f. 216). His description therefore probably took into account Macha behavior. Compare with Garcilaso de la Vega's statement ([1609] 1960), Bk. 1, Chap. 16, p. 28:

> Solo quiso el Inca que hubiese esta division de pueblo y diferencia de nombres alto y bajo, para que quedase perpetua memoria de que a los unos habia convocado el rey, y a los otros la reina; y mandó que entre ellos hubiese sola una diferencia y reconocimiento de superioridad; . . . y en suma, fuesen como el brazo izquierdo y el derecho en cualquiera preeminencia de lugar y oficio por haber sido los del alto atraidos por el varon, los del bajo por la hembra. A semejanza de esto hubo después

esta misma división en todos los pueblos grandes o chicos de nuestro imperio.

The last phrase should be attributed to the Inkaic propaganda that tried to present so many pre-Inkaic features as results of imperial genius.

14
From asymmetry to triangle: symbolic transformations in northern Potosí

Olivia Harris

In studying the system of representations of Andean peoples, the major symbolic preoccupations and overall cultural repertoire have first to be established. The work of the last decade or so, both ethnographic and ethnohistorical, has gone a long way toward achieving this aim; however, as the general contours of the symbolic structure are made precise it becomes both possible and necessary to extend the analysis to the variations of each locality and ethnic group. Insofar as we can talk of Andean symbolic structures, this simultaneously implies that there are transformations within the general structures. In what follows I shall draw on Tristan Platt's work (see Chap. 13, this volume) to discuss such variation in symbolism between two neighboring ethnic groups of northern Potosí, Bolivia. Following on directly from Platt's study of the Macha, I made a study of the Laymi – an Aymara-speaking group numbering in all about eight thousand, whose borders touch those of the Macha at their northeastern end. One of my aims is, then, to document the forms of ethnic variation.

Early European observers were impressed by the systematic ways in which Andean groups proclaimed their identity. According to various sources, the Inka decreed that each ethnic group within the empire have a distinctive appearance. The utility of such a regulation is obvious in a world where obligations of the individual to the state were assessed by ethnic group, and where geographical mobility outside a given region was forbidden without express permission (see Cobo [1653], 1956; Bk. 12, Chap. 26, p. 117). But systematic differences between social groups cannot be ascribed simply to the dictates of a lawgiver: They both predate and outlive the uses that a particular state system may make of them.

Today in northern Potosí at any large fiesta there is wide variation in both the appearance and in the music of the participants, although

The data on which this article is based were collected in the course of two years of fieldwork in northern Potosí, financed by the Social Science Research Council of Great Britain and by the Central Research Fund of the University of London. My debt to Tristan Platt will be obvious, a product of many discussions over the last six years. I wish to thank him especially, and also Nathan Wachtel and John Murra, for their comments on earlier versions.

to the untutored eye there is no immediate basis for distinguishing one group from another. All were formerly part of the pre-Spanish confederation of the Charka and Qharaqhara (see W. Espinoza Soriano [1582] 1969, and the next section of this chapter). They have similar experiences of history and a common ecology and are all looked down on by the town dwellers. Part of the interest in studying and comparing the symbolic systems of the Macha and the Laymi, then, derives from the similarity of their social organization, a similarity that highlights the differences between them.

Since Lévi-Strauss's study of the transformations to which a corpus of myth is subject, it is no longer possible to invoke a notion of randomness to explain particular symbolic forms. However, to move from the relatively discrete realm of myth to wider symbolic discourse produces problems of comparability and makes the notion of transformations harder to apply. In comparing the Macha with the Laymi, some of the problems can be avoided by following the symbolic matrices laid out in Platt's analysis. The two *ayllus* seem to use similar elements to perform distinct logical operations: The importance that Platt attaches to the concept of *yanantin*, to symmetry and quadripartition, as the bases of Macha symbolism seems to be less pronounced for the Laymi, who rather stress asymmetry in dyadic relations and for whom triads and tripartition provide the framework of symbolic integration. This emphasis provides support for Lévi-Strauss's thesis on dual organizations, which argues that dualism is but a limiting case of triadism (see Lévi-Strauss 1956).

In what follows I wish both to explore the forms of Laymi symbolism and to outline the processes of transformation by which it is related to that of the Macha. In order to do this, it will be necessary to show the ways in which certain symbolic forms are embedded in the lived reality of social relationships and also how the concrete, the anthropomorphic, is transcended in other, more abstract symbols. Finally this raises the problem of the degree to which symbolic discourse is autonomous and the nature of its relationship with the social forms that give it life.

Social organization

THE ETHNIC GROUPS OF CHAYANTA

The Laymi are an ayllu of Chayanta: This is both the way they are referred to in colonial documents and the way they classify themselves today. In the sixteenth century Chayanta was a political unit, one of the *parcialidades* of the Charka Indians, whose *cabecera* or capital was to the northwest in Sacaca.[1] Chayanta, like Sacaca, was a town into which the Andean population was concentrated under the Toledan reforms of 1572 and soon replaced the latter as the regional seat of colonial administration – the *corregimiento*. The document called "Memorial de Charcas" makes it plain that the Charka (of which the Chayanta, and thus the Laymi, were a part) were linked politically with the Qharaqhara,

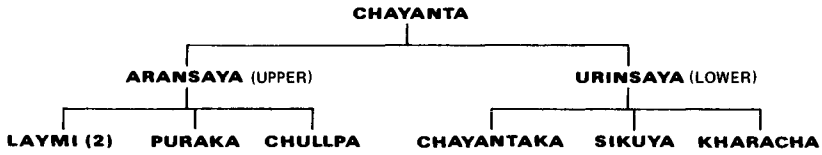


Figure 14.1. Location of Laymi within Chayanta.

whose cabecera was in Macha, the town that is still today the administrative center of the highland Macha. The inference is that in the pre-Spanish disposition of ethnic groups, Laymi and Macha were members of opposite moieties in a wider confederation.

A study of the present disposition of ethnic groups in northern Potosí is revealing: on the map (Fig. 13.3) it can be seen that three large ethnic units – Macha, Pukwata, and Sacaca – each extend over a territory that embraces a continuous strip running from high altitudes in the southwest to the low-lying region bordering the Caine River in the northeast. Until today, each of these three groups has had its two *kurakas*, the authorities of the upper and lower moieties, respectively, who reside in or near the eponymous town of the group and are responsible for collecting the land tax. The territory that lies between that of Pukwata and Sakaka may, judging from the map, have formed a similar but larger unit of Chayanta. Today, however, this strip is subdivided into many different units, with no overarching indigenous political authorities at the center. The territory of the Laymi is one of the largest of these units, and, as can be seen from the map, their territory is discontinuous: They have no access to the intermediate ecological zone, and a journey of several days' walking separates the lower maize lands, known in Aymara as *likina*, from the *suni* – the Aymara term for the highland punas that specialize in tuber production and provide pasture for the llamas and most of the sheep owned by the Laymi.

Although the colonial breakup of a hypothetical unit of Chayanta makes it hard to guess what its form of internal organization might have been, the town of Chayanta is still the parish, and thus the ritual center, for some of the surrounding ayllus. These, following the common Andean pattern, are arranged spatially around the square plaza at the center of the town, divided into an upper and a lower moiety, with three groups in each (see Fig. 14.1), and the tripartite structure of the moieties is repeated again within at least one of the Laymi moieties, also called Laymi (see Fig. 14.2).[2] The ayllus attached today to the parish of Chayanta are probably only a part of a pre-Spanish ethnic grouping of Chayanta; their tripartite disposition in the two moieties today may be a recent pattern. One factor, however, suggests a conscious manipulation in order to achieve this paired tripartite structure, which if taken into account allows us to suppose a long-term adherence to a triadic principle.

It will be noted by comparing Figures 14.1 and 14.2 that Laymi and

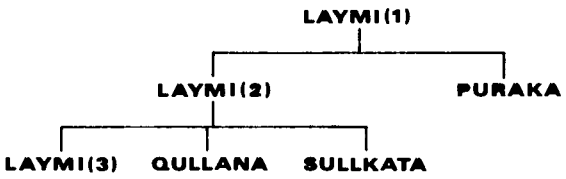


Figure 14.2. Chayanta moieties, showing tripartite structure. I have numbered the units named Laymi in order to make explicit the way that the same name is used to refer to groups at different levels of social organization.

Puraka are treated as distinct units in the tripartite organization of the town of Chayanta (Fig. 14.1), whereas in Figure 14.2 these same units are moieties of a higher-level unity. The other four groups in the sixfold division of Chayanta are discrete territorial blocs, whereas the overriding unity of the moieties Laymi (2) and Puraka is demonstrated not only by their spatial mixing within Laymi (1) territory as a whole but also by their sense of identity as a single group. The six units of Chayanta are thus not all at the same organizational level: The clear territorial identity of the other four does not apply in the case of the Laymi moieties.[3] Does this structure of paired tripartition in the town of Chayanta, formed through a mixing of levels, reflect well-established patterns of organization? I shall discuss below various rituals whose form lends weight to such a hypothesis.

THE LAYMI

Only a small proportion of the Laymi and Puraka reside in Chayanta itself. Throughout the rest of their territory they are separated from the mestizo and white population, and this spatial separation goes together with a relative economic self-sufficiency and political autonomy. This has to be understood in terms of their landholding practices and also as a function of the history of the Bolivian state: In 1953 the agrarian reform redistributed large landholdings to those who worked them, but in northern Potosí there were few haciendas, and the assignation of individual landholdings has not yet extended much beyond those that were appropriated at the time. In the case of the Laymi, this means that there is still a significant degree of community control over land: In the high suni, landholdings are large, inherited by ultimogeniture and worked by the members of a shallow patrilineal group. In contrast with the suni, land in the likina is not fallowed but cultivated continuously, so that the processes of distribution are different. Nonetheless, in both ecological tiers, access to land, of a quality and quantity to guarantee subsistence, is the right of all those residing in Laymi territory. Those who do not have direct access through kin borrow land in return for a couple of days' labor each year. Pasture is owned by each local community.

"Community control" over land is exercized at the level of the smallest political and tax-paying unit, the cabildo, presided over by a *jilanqu* (headman), whose office rotates annually among adult male landholders. In the suni, each of the three subdivisions of Laymi (2) is divided into cabildos, as is the Puraka moiety. In each moiety, all the cabildos are jointly under the authority of a *segunda mayor*, who regulates disputes, collects taxes, and provides leadership of the moiety, again by rotation.[4] In the likina, political units are less clearly defined. After 1953, the indigenous authority system was replaced by the nonrotating permanent offices of the national peasant union. Even in the pre-1953 system, however, the cabildos in the lower ecological tier seem only to have reflected the moiety division, with the lands of the lower subdivisions of Laymi (2) being all mixed up within each cabildo. Although the precise nature of pre-1953 relations between the ecological tiers is not clear, it seems that the authority of the two segundas mayores, who resided in the suni, extended at least partially over the likina also.[5]

Relationships between the two ecological tiers are maintained over the generations through ties of kinship, which are restructured through time by marriage exchange. There is a continual movement of people between tiers; some households cultivate in both suni and likina, and others provide seed that is cultivated on their behalf by close kin in the other tier. Those whose kinship links with the other tier are more distant have the right to obtain its produce from their kin through the exchange of gifts and through direct purchase at preferential rates.[6] About two-thirds of the Laymi population dwell in the suni at any one time, and it is their need for maize that predominates in interzonal exchange. Although the two zones are far apart, however, most Laymi in the course of their lives will have experience of living and cultivating in both. Marriage sometimes facilitates more preferential access to the other zone when kin ties are distant.

The two tiers of Laymi territory are thus still united by economic and kinship ties, even though they are separated politically. It is the way the "vertical economy" has been maintained, guaranteeing access to the produce of the varied ecological conditions, that defines the subsistence economy of the Laymi. Even though their territory lies close to the large tin-mining complex of Catavi, Siglo XX, and Uncia, the Laymi sell produce only after their subsistence needs have been met. Their need for cash goods is steady but small. The predominant form of migrant labor found among them is not to work in the mining centers, but to make a much longer journey to work in agriculture in other ecological settings, where they are paid largely in kind, in produce that cannot be obtained within their own territory.

The relative autonomy of the Laymi as a whole is formally repeated at the level of the moieties. As well as having their lands spread over all the varying ecology of Laymi (1) territory, each moiety is theoretically endogamous. As at the moiety level, the territory of each of the three subdivisions of Laymi (2) in theory encompasses all the major ecological

variation of the Laymi; in one important respect, however, the relationship among the moieties is different from that among the tripartite divisions within one moiety. This, expressed in the very duality of the moieties, is the ritual battle, or *tinku*, that takes place at certain fiestas throughout the year. The tinku is between moieties, although obviously not all members of the moiety are present for any particular battle. It is not fought between tripartite divisions. This is also true at the level of Chayanta as a whole: When Laymi (2) and Puraka fight each other in the tinku, they do so as moieties of Laymi (1), and when they join together to fight in the tinku in the town of Chayanta, they do so as part of the upper moiety, which is pitted together against the whole of the lower moiety.

The Laymi moieties, then, are parallel and opposed in economic and political organization, and in ritual. In practice, this separate identity is crosscut both by their territorial mixing and by the cooperation that takes place among close kin. Although the lower subdivisions are also territorially distinct (at least in the suni) and have some separate ritual functions, they are not opposed but are, rather, united in the person of the moiety head. In the context of these Andean forms of social organization and self-sufficiency, let us turn to the ways in which economic and social relationships are employed in symbolic representations of this social order.

Asymmetrical dualism

MAN AND WOMAN

Let us start with the representation of the two separate ecological zones that define the organization of the Laymi economy. The Laymi concur with the Macha in likening the relationship between the zones to that between male and female, but strikingly they invert the Macha representation. That the Laymi should see the high suni as female and the warm maize lands as male is the more surprising because the economic complementarity between zones appears to be similar for both groups. Moreover, the Laymi concur with the Macha in seeing the highland zone as politically dominant in the traditional system, a factor that is important in Platt's explanation.[7] To understand the Laymi interpretation of this at first sight paradoxical representation requires a preliminary account of how relationships between the sexes are organized and perceived.

A major organizational unit of Laymi economy is the nuclear household, composed primarily of a single married couple and their children, plus at times parents and unmarried siblings of the pair. A new unit is usually founded after the final marriage rituals are completed and is thus based on the economic cooperation of a woman and a man. Although in some productive tasks the sexual division of labor is flexible, in others, notably the production of cloth, it is strict and enjoins a clear complementarity. Both men and women spin and weave, but they use

different looms and produce distinctive types of cloth. The women's weaving, on horizontal looms pegged to the ground, is strong and intricately patterned; women produce carrying cloths (*awayu*), ponchos, blankets, belts, and bags. Men, on upright looms, weave lighter, plainer cloth (*bayeta*) that is used to make most items of clothing. The different cloths produced by each are needed by both sexes; in fact the mutual interdependence of the sexes for meeting their cloth requirement is often quoted by the Laymi to illustrate the desirability of marriage.

The household as a production unit is premised on the matching of each sex's contribution. For example, although it is recognized that in intensive and heavy work men contribute more than women, the superior strength of the man is said to be balanced by the longer hours worked by women in physically less demanding tasks. In particular, domestic tasks are performed largely, though not entirely, by women; women have the final responsibility for the care of children and the preparation of food. The equal weight that is accorded to the different labor contributions of women and men is exemplified by the system of labor prestations: The household is the unit for the exchange of labor, and although the superior strength of men is explicitly recognized, nonetheless the contribution of a woman is accounted equal to that of a man and is treated as a fair exchange for the prestation of male labor.

The economic importance of the married couple as a cooperating unit is restated at a symbolic level by the ritual insistence on the couple. They must perform most ritual actions together, and in cases where a ritual sponsor has no spouse, he or she must find a sexual complement from among his or her close kin in order for the ritual to be performed properly. At a central moment in many rituals the pair stand together in between the seated women and men of the community, the man on the right and the woman on the left, and together pour libations for the ongoing fertility of all: the crops, livestock, and human beings. The survival of the community is thus symbolically incarnated in the conjugal pair, who both directly reproduce its members and whose labor brings earth and animals to fruit. As Platt points out (Chap. 13, this volume), the ritual importance of the conjugal pair is matched cosmologically by the sexual coupling of supernatural beings.[8]

How does this picture help us to understand the Laymi representation of the suni–likina relationship? The key lies in agricultural practice. Whereas in the suni most land is cultivated in rotation for three years, followed by a fallow period of at least six years, in the likina cultivation is continuous, even though there is virtually no irrigation.

Also, the productivity of likina lands is greater than that of the suni. Although today only about one-third of the Laymi reside in the lower zone, they produce nearly enough maize not only for their own consumption but also to cover the needs of their suni kin. In Laymi terms, then, the likina is the "stronger" of the two zones. In the highlands the land is "weaker": Its productivity is less, and it needs to rest from its labors for long periods.

The parallel is clear. The comparison made between the productive capacity of the two ecological zones is echoed in Laymi thought by the capacity for labor of the two sexes: Men are said to be more productive in agriculture than women. But the suni is thought to have been politically dominant in the traditional system over the likina, and Laymi say that within the household the woman "gives orders" to her husband in the same way as the suni used to give orders to the likina. The woman is responsible both for small children and for the preparation of food, and as such takes the initiative in day-to-day managerial decisions. The parallel is made explicit by the Laymi through the use of the same Aymara term, *kamachi*, to describe both the wife's position in the household and the relationship of suni to likina. In neither case is the relation seen as coercive: In this interpretation, the high zone never dominated the low zone but merely provided the locus of political authority. Similarly, within the household any predominance of the woman is relative and to be understood in terms of the overall mutuality of the relationship. Balance in the ideal Laymi household is based on the difference and complementarity of the contributing members.

In drawing this comparison it will be noted that Laymi territory as a whole is treated as homologous with the structure of an individual household, an identification that is repeated in terms of the two distinct buildings, a kitchen and a storeroom, of which each house is composed. At this level, too, sexual differentiation is marked since the kitchen is the female house and the storehouse is male. In practice, of course, both sexes use both buildings, but the ascription of gender derives from the woman's major role as food producer, which makes the kitchen her special domain. A direct comparison is made with the relationship between ecological zones; the more productive likina is said to be the storehouse from which food is taken to the suni kitchen to be processed and consumed by the larger proportion of Laymi residing there.[9] Of course, it is also the woman's role as food processor that makes her the manager of the household.

BROTHERS

In the literature on symbolic opposition it is common enough to find male and female used, as in the Laymi case, to represent other phenomena but less common to find examples of how male and female are themselves symbolized. The left and right hands provide one model, and as in the rest of the Andes, right is male and left female for the Laymi. Male-and-female, however, is also said by the Laymi to be a relationship of seniority versus juniority. The Aymara term is *jilasullk'a*, and its primary referent is the relationship between two brothers.[10] In drawing this analogy, the male is senior, the older brother, and the female is junior, the younger brother.

The relationship between brothers is one of similarity, in most respects. At least until they marry, their circle of kin is the same; although they should and generally do cooperate, they perform the same tasks

and in some respects are in competition for the same resources. The elder brother has the advantage of age, but the practice of ultimogeniture means that the younger retains control of both the patrimonial land and the parental home. This clarifies an aspect of the male–female relationship: Physical superiority – of strength, in the latter case, of age in the former – is matched by the social ascription of managerial status to the junior partner. In the relation of *jilasullk'a*, however, the dimension of complementarity is not emphasized as much as the asymmetry of like elements. "Senior" and "junior" betoken the overall similarity of the two terms that are placed in a hierarchical relationship. The two moieties, Puraka and Laymi (2), are said to be jilasullk'a rather than male–female. Again it is the opposition of like categories that is signaled rather than the complementarity of unlike.

Hierarchy and competition are defining elements in the relation of jilasullk'a, but in real life these aspects are muted. Laymi brothers should, ideally, share all their resources and cooperate in every activity, so that any failure to live up to this ideal is glossed over, even though it is seen as normal. Brothers also have sisters, however, and the relationship instituted through the mediation of sister/wife, also a jilasullk'a relationship, is one in which hierarchy and competition are explicit. In this relationship, the sister's husband, the wife-taker, is the "senior" partner, and the wife's brother the "junior."

BROTHERS-IN-LAW

The senior status of the wife-taker is illustrated in a commonly told myth in which the condor, the huge carrion bird of the Andes, carries off an unmarried girl from her home and later eats her. The condor is called *mallku* – lordly – in Aymara and is thought to be a manifestation of the mountain peaks who are the guardians of Laymi society. In a ritual that forms part of the main annual feast, the sister's husband of the ritual sponsor must dress up as a condor, with the head and wings of a dead condor as a hat, and carry his wife's brother around the plaza on his back. In this ritual he is termed *mallku*, or lord.

At one level the ritual carrying of the wife's brother by his condor affine is clearly a transformation of the myth, substituting the girl's brother for the girl herself. But in line with the analysis of dyadic relations given already, the "superiority" of the sister's husband is conditional and limited. The ritual carrying of his wife's brother is not an isolated event but one of a number of ritual services that the sister's husband must perform for the rest of his life. He can be called upon to attend all the rituals performed by his wife's brother and in most of them is allotted special tasks, such as the serving of food and drink to all participants in the ritual. On other occasions he must play a special drum when ritual offerings are made to the earth and mountain spirits.

On many occasions, then, the "senior" partner – the sister's husband – must serve the "junior." There is, however, another dimension of the affinal relationship in which the comparison with an older and a younger

brother is more direct. When a woman marries, she retains rights in her family's land, and in cases where her husband's land is insufficient her brother must lend land to him. This loan of land is unidirectional: A man lends land not to his wife's brother but only to his sister's husband. The relationship is thus confirmed as one of asymmetry, not of direct reciprocity. The way the junior partner, the wife's brother, lends land to the senior parallels the youngest son's managerial control of the patrimony and the land that he allocates to his older brothers. Again, the seniority of the sister's husband is mediated both by the services he owes his junior partner throughout his life and by his potential dependence on his wife's brother for land.

Another feature of the relationship between brothers-in-law is one of outright antagonism, based on their opposed relationships to the woman who links them. It is a commonplace among the Laymi that husbands mistreat their wives, and it is the express obligation of a man to defend his sister against such mistreatment. The institutionalized hostility between brothers-in-law often begins in the marriage ceremony itself, when the wife's brother may physically attack his affine for all the future mistreatment of his sister that is bound to occur, lamenting the day that he allowed himself to be tricked into giving her up to an outsider.

It might be argued that the asymmetry between brothers-in-law can be rectified by the form of marriage known as sister exchange, in which male affines stand to each other simultaneously as wife-givers and wife-takers. This form of marriage appears, indeed, to be an ideal of some Andean groups, including the Macha. The Laymi, on the other hand, regard it as a bad match, even though it is occasionally practiced, and tell stories of the misfortunes that have befallen couples united in this way. This is significant for my argument, particularly since sister exchange provides a model of Macha quadripartition.

TOWARD FORMALIZATION

Taking as a point of departure the Laymi inversion of the Macha representation of ecological duality, I have examined three different relationships, all characterized by asymmetry, where the perceived superiority of one partner is compensated for by other mechanisms. I wish, however, to insist against a reductionist interpretation in which the relationships described are seen merely as transformations of a principle of asymmetry. It is clear that the Laymi models of duality are not isomorphic: They are not mutually interchangeable, nor are they reversible transformations of one another. In the case of the two cross-cutting divisions of Laymi society, for example, it is significant that the ecological relationship is characterized as male–female, whereas that between the moieties is called *jilasullk'a*.[11] But even different dyadic relationships that are termed *jilasullk'a* cannot always be directly compared with each other. For example, in a marriage alliance, two new

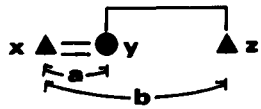


Figure 14.3. Husband (x) occupies *jila* position in relation to both wife (y) and her brother (z).

relationships are instituted, one between the wife and husband, and the other between wife-giver and wife-taker.

In Figure 14.3 one can see that the husband (*x*) occupies the same position – *jila* – vis-à-vis both his wife (*y* and his wife's brother (*z*) and that the latter two are the junior partners – *sullk'a* – in relations *a* and *b* respectively. Nonetheless, the sister's husband–wife's brother relation is never directly compared with that of husband–wife; they are brought into indirect relation only through the mediation of the senior–junior couple.

Another example of this noncomparability can be found in the relations of antagonism mentioned earlier. That there are disputes between husband and wife is unsurprising, but in Laymi society there is no institutional means of resolving them within the household. Insofar as the antagonism is projected onto a third party – the wife's brother – the two relationships are bound together by a fundamental complementarity. Even though the relationship between brothers-in-law is brought into being only through the mediation of a woman, it is an essential extension of the marital relationship, within which antagonism is problematical in both practical and conceptual terms.

Distinguishing among different types of dualism provides an extension of Platt's analysis of the concept of yanantin for the Macha. He is careful to note the possibility that yanantin includes a notion of volatile asymmetry; indeed, his whole discussion of quadripartition in Macha symbolism suggests a form of symbolic correction for the asymmetries to be found in the male–female relationship. Laymi representations reveal similar preoccupations but are differently formalized. The concept of yanantin (*yanani*, in Aymara) is not unknown to the Laymi. They use it, for example, to describe paired ritual offerings or the paired drinking bowls identical to those described for the Macha. But it is not used of a married couple, even in the context of marriage rituals, and most of the forms of quadripartition described by Platt are not found among the Laymi. The case of sister exchange has already been mentioned; in the following section I shall discuss other examples.

In the course of the preceding discussion I have drawn on forms of economic organization, on property relationships, as well as on ritual practice and myth, as the Laymi themselves do in explaining the significance of these relationships. The way they are structured is dependent on their formal representation and, in turn, sets the parameters acted

out in practice. But although, in the structural logic of the relationships that I have described, the practices of inheritance, marriage, and the division of labor are central to the exposition, there are other levels of symbolic discourse that are less related to economic exigency and are tied only to the practice of ritual. Since Laymi society is represented in terms of human relationships, the contrasted pairs appear locked in perpetual asymmetry. In ritual, however, this anthropomorphism is restructured and transcended.

The logic of tripartition

In his discussion of dual organization, Lévi-Strauss distinguishes two types of dualism, diametric and concentric, of which the latter forms a mediating link between binary and ternary forms; according to Lévi-Strauss (1956), diametric dualism, fundamentally undynamic, is only a limiting case of tripartition.[12] Some of the relations I have outlined fit this schema: The moieties and the representation of the relationship between brothers (jilasullk'a) are clearly diametric. On the other hand, that between woman and man does not so clearly fit the concept of concentric dualism, which is defined primarily by a spatial arrangement (for example inner–outer) or by the opposition of terms of different logical orders. At a more general level, however, the Laymi provide a very interesting example of the relation between dualism, asymmetry, and tripartition within a single society, thus providing support for Lévi-Strauss's interpretation of what he calls "the mysterious phenomenon of dual inequality." In order to point up the contrast with the Macha, I shall refer to some of the same rituals discussed by Platt.

ROOFING RITUAL

A particularly evocative case of the relationship between triads and what Lévi-Strauss terms "concentric dualism" is to be found in the ritual associated with house building. In the rectangular houses built in Laymi territory today, the focal ritual activity takes place when the roof beams are put into place. The ridge beam is supported by sets of paired diagonal beams, of which there are three in the body of the house, each held in place by a cross-beam. During the ritual, clothing is hung over the three inner cross-beams – on the central one male clothing, and on the outer two female clothing. When all the clothing is in place, the husband and wife for whom the house is being built must go inside and make offerings of incense for its future prosperity. The ritual is schematized in Figure 14.4.

A new household is set up after a couple marries, and it remains identified with the conjugal pair. In the representation of the central cross-beam as male and the two flanking ones as female, we can detect perhaps a transformation of the relationship between male and female that I outlined above: In this example, the male term is central but is counterbalanced by two outer female terms. A parallel can be drawn

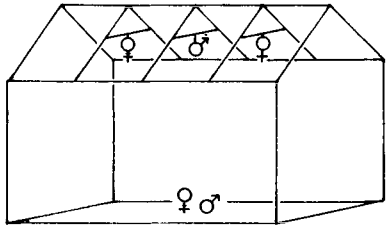


Figure 14.4. Roof beams identified by clothing.

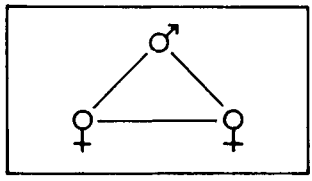


Figure 14.5. Recent square house – as in Figure 14.4.

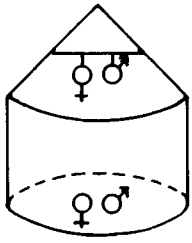


Figure 14.6. Clothes hung from rafters in old-style round house.

to the two-thirds of the Laymi population who live in the female suni and the smaller but more productive number who live in the male likina. The relationship can be represented as shown in Figure 14.5.

Rectangular houses are a recent innovation in Laymi territory. Only a few more than half of Laymi houses are rectangular: The rest are circular.[13] The oldest people in the community can still remember how round houses were built, and according to them, in the ritual of roofing, only two sets of clothing – one male and one female – were suspended from the single central cross-beam. If this is represented as shown in Figure 14.6, the transformation is clear. When confronted with corners, the Laymi response is antidualistic; within a circular structure, on the other hand, a simple pair is conceptually acceptable.

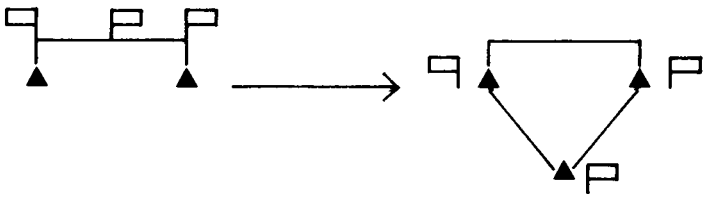


Figure 14.7. Two positions of flags during plowing.

PLOWING RITUAL

For the next example let us turn to the ritual described by Platt in which yoked men symbolically plow the plaza (Chap. 13, Sec, II, this volume). A similar ritual is performed by the Laymi at the beginning of the sowing season in order to secure fertility. Two young men are yoked to a plow and driven by a third. Two teams go together, as they do in the real labor of sowing the fields. The first, called *surka*, is followed by a woman who scatters or places the seed; behind them comes the second team, the *simpra*, turning the furrow back over the seed. This configuration differs from the similar ritual performed by the Macha, where it will be remembered that each team is followed by two girls; the pair of bulls is said by the Macha to represent the two moieties of Macha society, and in Platt's analysis the ritual provides a clear example of quadripartition.

The Macha ritual appears to depart from the actual labor process of plowing, in which girls do not follow the bulls in pairs but, rather, a single sower follows the man driving the plow; so the Laymi ritual conforms more closely to reality. Does it, then, have a symbolic significance comparable to that of the Macha ritual? I think it does, but only if one selects different elements from those described for the Macha. In the Laymi ritual, the girl sowing is in one sense marginal, but instead the two men driving the teams are incorporated into the structure. During the plowing, three flags are attached to the yoke; and when the ritual ends, one flag is given to each of the "bulls," and the third goes to their driver (Fig. 14.7). Each pair of teams, identified by the three flags, must remain together in the drinking that follows. Thus an archetypal *pair* – the team of plowing bulls – becomes tripartite, and the tripartite structure is itself paired in the two teams that must perform the ritual together.

A homology between this and the roofing ritual immediately suggests itself. First, within the tripartite structure, two is counterbalanced by one (the driver controls the bulls), in the same way as I have suggested that in the roofing ritual the single, central, set of male clothing is balanced by the two sets of female clothing that flank it. Second, bearing in mind that each house necessarily consists of two buildings, the tripartition within the individual house structure is itself paired at the level

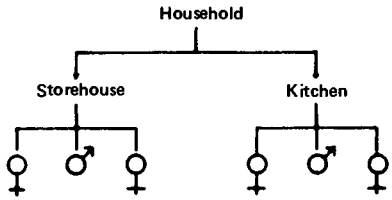


Figure 14.8. Tripartition of individual house, separated into cooking and living quarters.

of household organization, as shown in Figure 14.8. This structure again bears a striking resemblance not only to the ritual plowing but also to the organization of the ethnic groups within the town of Chayanta and, as I suggested above, possibly to the organization of Laymi (1) (see Figs. 14.1 and 14.2, and n. 2).

MARRIAGE RITUAL

I have twice used a triangle to represent a triad found in ritual. This is perhaps an obvious formalization, but one that is supported by the use of a triangle in what is surely the central ritual for understanding Laymi dualism and its transformation into triadic structures: that of marriage. In the Macha marriage ceremony, two significant features are, first, the E-shaped cabin in which the pair sit, and second, the *arku* – the figures on long poles that are made by the husband's sisters and carried by them in a circular dance before being presented to him.

In Laymi ritual a cabin is built only for the husband and the godfather (*padrino*): The wife and the godmother (*madrina*) sit on the ground, as women invariably do, facing the men on the other side of the ritual table and enclosed by no structure. The padrino sits to the right of the bridegroom and the madrina to the left of the bride, so that during the prolonged ritual drinking the new couple face each other, and their godparents, who should also be a married couple, sit similarly, with the husband facing his wife. Such an arrangement would seem to provide perfect material for an analysis of the quadripartite resolution of male–female asymmetry, in accordance with Platt's account of Macha symbolism, but as I shall suggest, in Laymi weddings the pair is instead transformed into a triad and a sixfold structure.

Let us look at the *arkus*, or ritual gifts, that are made by the husband's sisters and classificatory sisters and carried around on long poles in a circular dance. Whereas among the Macha the arku takes the form of a doll in which left matches right in perfect symmetry, the Laymi equivalent is a triangular shape made of a wooden frame, to which are attached skeins of colored wool that will be kept by the bridegroom. The *arkus* are referred to as "flowers" – a term used frequently by Laymi as a

metaphor for fertility – and while the bridegroom's sisters dance, they sing a wedding song about planting their arkus to grow into tall trees.

The way the arkus are decorated also points to the same theme: On the triangle of woolen skeins are sewn round woolen "eyes," a common motif in weaving. The symbolism of eyes has many connotations: In this context they are, among other things, an expression of multiplicity, since the same term is used in Aymara to refer to the eyes of potatoes from which the new tubers grow and to grains of the different cereals that are used as seeds.[14]

In Platt's analysis the Macha arku represents *within a single human form* the perfect symmetry of yanantin that the human couple imperfectly approximates. The Laymi arku replaces anthropomorphism with an abstract triangle transcending the metonymy of the human frame, but the allusion to multiplicity found in its "eyes" refers us to the fruitful joining of the new couple for whom it has been made. In the arku the pair has become both one and many, transcending the rigid opposition of a pure dualism, just as a single tree, to which the arku is compared in the wedding song, reproduces itself many times over. The Laymi, like other Andean peoples, classify their main cultigens as male and female (Lévi-Strauss 1956: 121), imposing on the plant world a model of fertility taken from the animal world.[15] In the symbolism of the wedding arku, the logical process is reversed by using the fertility of plants to symbolize the human couple (though in this case the latter is transformed metonymically into *uncultivated* flowers or trees, which reproduce themselves entirely without human intervention).

If the pair as such is repressed in the form of the arku, in most of the wedding ritual the human couple plays the central role; however, again at several points in the long ceremony the bride and groom are transformed by tripartition. On the wedding night, for example, candles are lit, three for the man, three for the woman. These are held, two each by the bride and groom, and one each by their padrinos, during a series of libations. Here we have a vivid example of paired tripartition that ignores the implicit quadripartition of the two pairs of actors in the ceremonial drinking. In holding candles, it seems that the padrinos are merely needed to supplement the inadequacies of the human frame, which has only two hands. One man was quite explicit on this point, explaining that each member of the new couple should have three candles ("sapa mayni kinsani").

At another point in the marriage ceremony this double tripartition is linked with the arku. Those who give arkus are thanked by the bride and groom, who offer three cups each of alcohol to the donors; they, in turn, pour a libation for the well-being of the couple from each of the six cupfuls before they drink. Thus, for example, the man's sister who has celebrated the couple's fertility with a triangular gift now invokes good luck for them with six libations, three male and three female (Fig. 14.9). As far as I know, this is the only occasion on which libations are made in this form, and so its importance for understanding the Laymi

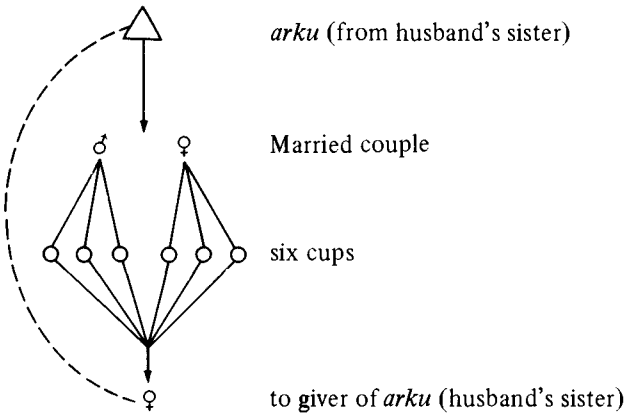


Figure 14.9. Marriage gifts.

representation of marriage is considerable. In this action the new spouses each become triadic and are simultaneously reunited in the single person who mediates the human and the divine on their behalf by offering libations. Although in the example of the candles the duality of the human frame is transcended by using the hands of the godparents, in the sixfold offering of alcohol the pair becomes both many and one, in such a way as to minimize anthropomorphism and thus also the asymmetry that is integral to the human condition.

Conclusion

In my interpretation, as in Platt's, dualism is related to the inevitable asymmetry of human relationships, which is clearly articulated in Laymi symbolism. I have identified a variety of ways in which this assymetry may be resolved, for example at the economic level by a careful balancing of functions, or in ritual by various forms of tripartition. In both plowing and roofing rituals the triad appears as a transformation of a dualistic structure, male–female in the former, jilasullk'a in the latter, and in both cases one of the three terms was in a commanding position over the other two. If represented in the form of a triangle, the "superior" point is counterbalanced by two "inferior" points.

Different forms of dualism appear to be clearly distinguished in Laymi thought and brought into relation only through the mechanism of tripartition. In the wedding arku the pair is represented in triangular form, but in this case duality is abandoned altogether, replaced by a geometrical form in which the couple is fused with the world of wild plants that need no pairing for their reproduction. The triangular arku expresses multiplicity – an apt illustration of Lévi-Strauss's suggestion that "three stands for any number except two." In the rituals described, the

binary, transformed into a triad, becomes paired again at another level in the balancing of three against three. Dualism has incorporated triads, thus multiplicity, within itself. This movement occurs with both the types of dyadic relations identified in this discussion. The same logical resolution is used, even though the asymmetry takes different forms.

In household organization there is a clear ideology of complementarity, and in practice male and female contributions are also to a certain extent balanced. At the level of the collectivity, however, there is a marked disparity between the sexes: For example, women are excluded from formal political activity. When the Laymi say that the suni zone is politically dominant over the likina in the same way as the woman gives orders to her husband, this is true only at the level of an individual household: In each local community or cabildo, and also at the level of the ethnic group as a whole, it is men as a group who take the decisions and take their turns as jilanqu within the community (see Harris 1978b). Men *as a group* exert control over women in a way that cannot be contained within the symbolic representation of male and female as a relationship between individuals. The homology that I have described between the individual household and the society as a whole may also suppress the recognition of inequalities – whether demographic, political, or economic – between the different units into which the Laymi are divided.

To return to my point of departure: What can the comparison between the Laymi and the Macha tell us about the nature of ethnic differentiation? At the beginning I underlined the similarities between the two groups, but there are also significant differences. Today the Laymi speak mostly Aymara, whereas the Macha speak Quechua. In the pre-Spanish political organization, the Laymi and the Macha were probably members of distinct groups – Charka and Qharaqhara. It may be that the differences I have described relate ultimately to the dual organization of the wider confederacy to which both the Laymi and the Macha apparently belonged before its destruction by the Europeans.[16]

According to some Laymi, they share with the Macha the reputation of being the best fighters and the best weavers of the region that today comprises northern Potosí. If this opinion is found to have a more general acceptance, it may be that these two groups represent the clearest expression of symbolic transformation and differentiation within this region. Again, the fact that the ethnographer of the Macha is male whereas the ethnographer of the Laymi is female adds a particular dimension to the discussion, given that the symbolic forms we describe are clearly two of a kind. What is interesting in the analysis of these differences in symbolic forms is to see both how an apparently innocent inversion in the representation of ecological duality forms part of a systematic and far-reaching series of transformations and how within Laymi society these proclamations of difference are integrated within a single material practice.

Notes

1 See Espinoza S. and also the map (Fig. 13.3). The earliest documentary evidence I have found of the "aillo Laime" is Archivo Nacional (Sucre), Tierras y Indios, no. 149, of 1592.

2 It is possible that formerly the Puraka moiety was also tripartite. Evidence is circumstantial but has to do with the articulation of political offices within each moiety and the changing functions of the smallest political unit – the *cabildo* (see the following section of this chapter, on the Laymi). A substantial proportion of the Puraka moiety is concentrated within a single settlement of about a thousand inhabitants called Qalaqala, and these are divided into three different cabildos. I was told on various occasions that in former times the three subdivisions of the Laymi (2) moiety were each a single cabildo, not, as at present, subdivided into various such units.

3 Nonetheless, in demographic terms each of the Laymi moieties is as large as three of the other ethnic groups of the town of Chayanta. Only the Chayantaka moiety is comparable in size to that of the Laymi. Hereafter, when I use the term *Laymi* I shall be referring to the ethnic group as a whole: Laymi (1), unless stated explicitly to the contrary (cf. Fig. 14.2).

4 Thus today the three subdivisions of Laymi (2) have no overt political or administrative function (but cf. n. 2).

5 Since the beginning of the century the two tiers have belonged to different provinces of the department of Potosí, and so in terms of state administration they come under the jurisdiction of different subprefects.

6 See Murra (1972) for the article that first brought to attention the "vertical economy" of the Andes. I have given an account of the contemporary Laymi economy in Harris 1978a.

7 A pattern that appears to have been quite common in the area covered by the Inka Qullasuyu, for example, among the Lupaqa (Murra 1975).

8 The term used in Aymara to speak of the couple, man-and-woman, as a unit, is *chachawarmi*. See also Harris 1978b.

9 In practice, suni food, especially ch'uñu, is also taken to be prepared and consumed in the likina but to a far lesser extent.

10 See the *Vocabulario dela lengua aymara* of Lodovico Bertonio, published in 1612 (1956): "*hila*; hermano mayor," and "*sullca*. Hermano menor, dize el varon a su hermano."

11 In discussing these relationships with the Laymi, I wished to discover whether alternative characterizations were also possible, that is, whether the moieties were also male–female and the two ecological floors jilasullk'a. I was never met by an outright denial, but such identifications seemed nonetheless never to be made spontaneously by the Laymi.

12 Lévi-Strauss admits that there are cases of truly symmetrical dualism but adds that they are extremely rare. His category of diametric dualism also includes superior–inferior and older–younger.

13 For examples of the historical significance of round houses, see Hyslop 1976, pp. 104–6, and Wachtel 1971b, p. 215.

14 See Bertonio 1612: "*Nayra*. Un grano de alguna semilla."

15 Thus potatoes are female, and maize is male – a representation that is based not only on the obvious significance of their shapes but also on the fact that maize is produced in the male tier – the *likina* – and potatoes in the female.

16 There remains the question of wider Andean parallels to the transformations

outlined here. Platt's exposition makes use of traditional Andean iconography and Inkaic social organization to support this analysis, and the work of Tom Zuidema (1964) shows that tripartition too was important in Inkaic organization (cf. also Wachtel 1966). It is worth reiterating that circular structures were predominant in altiplano architecture for a long time; Laymi symbolism suggests both that tripartition can be a transformation of a circle and that it can be represented as a triangle. It is also, as Gisbert has recently pointed out, a recurring motif in colonial painting in contexts characterized by indigenous Andean symbolism and preoccupations (Gisbert 1980).

PART V
From ethnic polities to communities

After the collapse of the Inka state, Andean societies had to endure a new kind of subordination that shattered the polities and gradually eroded ethnic differences. While these processes played themselves out, the ethnic leadership was coopted to buttress colonial rule. Annually *capitanes* assembled and led thousands of miners drafted for the mines of Potosí; until late in the seventeenth century they were still in charge of recognizable ethnic cohorts (such as the Carangas, the Pacajes, or the Lupaqa). It is worth asking at what point in colonial history the *corregimientos* still reflected ethnic lines.

Each of the polities was fragmented at a distinct historical rhythm: Changes, but also continuities, differed from region to region; even today there are differences of scale among social units, according to country. Ecuador and Bolivia tolerate larger, multivillage units, whereas "community" legislation has pulverized them in Peru.

In Part V we do not attempt to offer a survey of the many problems emerging from the imposition of a colonial system. This would require a volume of its own, if not more. The three chapters here explore a particular issue covering the whole period from the sixteenth century to our own times – namely, the transformation of a multi-ethnic world, full of large-scale societies, into "indigenous communities."

In fact, the "community" is a colonial creation, heir to the policy, after 1570, of deporting the Andean population into *reducciones*, strategic villages that deprived the population of ready access to their shrines and widely dispersed landholdings. Although many European institutions and saints were imposed, the reducciones continued to be divided into moieties; *ayllu* and other kin ties were respected; reciprocal labor services reemerged. We still do not know how this restructuring of Andean societies took place or what preexisting ethnic affiliations were salvaged.

The ethnic lords, transformed into caciques, acted as links between the new communities and the European sector growing up around the mines. Their activities deserve a separate chapter. But it would be a mistake to ignore the leadership role in traditional activities that these caciques could still exercise. Aware of this, the *corregidores* tried to impose their choices; the archives are full of petitions against illegitimates and mestizos appointed to such posts.

The forced resettlement policy also had other consequences – long-distance migration and vagabondage; people tried to avoid the mining draft and the tribute. Some ended up as serfs on early European-owned haciendas, growing the food and coca leaf needed at the mines; others simply absconded, sidestepping obligations and becoming "outsiders" elsewhere. In the southern Andes, by the end of the seventeenth century, there were more *forasteros* than *originarios*; Viceroy de la Palata kept wondering why this separation, a patent anachronism, was still observed by the administration. All this added up to increasing heterogeneity of the Andean world; gradually the dividing lines were no longer ethnic but social. The countryside became "Indian," whereas the towns were increasingly part of what would eventually be a "national" culture (see Sánchez-Albornoz 1978).

Given this protracted process of erosion, one wonders how to explain the continued existence today of "indigenous communities." Beyond what to outsiders' eyes seems a paradox, are we witnessing a last stand in defense of ethnic identity?

Two of the essays in this final section approach Andean continuities through marginal populations: the lacustrine Uru and the lowlanders on the eastern slopes. A redefinition of who was considered Uru, how they seemed to vanish only to reappear in a new context, is now possible. Similarly, a new interest in the populations occupying the wet, eastern slopes of the Andes reveals that connections with the highlanders were constant through the centuries, even if the migrants never returned. But Uru fishermen and *yunga* coca leaf gardeners can be seen now as indispensable parts of the Andean repertoire.

The final essay, by Antoinette Molinié-Fioravanti, inquires into the fate of Andean peasantries in the twentieth century when suddenly *comunidades* replace ethnic groups. Andean ways of life are still cultures in the making.

15
Men of the water: the Uru problem (sixteenth and seventeenth centuries)

Nathan Wachtel

Within the Andean area, and even in the whole of South America, the Uru are a true enigma, both historical and ethnographic (LaBarre 1941: 493). They have virtually vanished in our time, but in the sixteenth century they occupied a vast region, strung out along a watery axis that crossed the high plateau (the Azángaro River, Lake Titicaca, the Desaguadero River, Lake Poopó, the Lacajahuira River, and Lake Coipasa). Within this narrow belt they were about a quarter of the population.[1] According to traditional stereotyping, which reaches us from the European eyewitnesses of the sixteenth century and was echoed by later travelers and even ethnologists, we deal here with Indians who were rough, barbarian, the kind most likely to be labeled "primitive" – different, it was alleged, from all other Andean populations. It was claimed that they could be recognized by their physical features (dolichocephaly, darker color), their language, clothing, and particularly their life-style. To use the evolutionary vocabulary, whereas their Aymara neighbors had reached a herding and farming stage, the Uru lingered behind, subsisting by fishing, hunting waterfowl, and gathering. Thus they were the object of a truly racist rejection, not only by other Indians but even by the best of our sources, who place them at the very edge of humanity. Thus, the Jesuit José de Acosta: "These Uru are so brutish that they do not consider themselves human. I am told that when asked who they were, they answered that they were not men but Uru, as if we were talking of a kind of animal" ([1590] 1954: Bk. 2, Chap. 6, p. 44). Who were these strange, even monstrous beings?

There is some agreement that the Uru are the "leftover of a very early, pre-Aymara population" who had been pushed into less desirable ecozones. When? Under what circumstances? The history of the several waves peopling South America is not fine-tuned. In 1925, in an article that has since become notorious, G. de Créqui-Montfort and Paul Rivet dealt from a linguistic standpoint with the Uru question, which they described as "one of the most important in American ethnology"; they identified the Uru language as a Puquina branch.[2] This, in turn, they classified as Arawak, a stock of Caribbean origin that later spread all the way to Paraguay, the mouth of the Amazon, and the eastern slopes of the Andes. All of this led them to explain the unusual life-style of the Uru, "abnormal among the Andean peoples," by deriving

them from an Amazonian background (pp. 212, 241–2). This hypothesis has its attractions, but it remains unconfirmed by later work (Métraux 1935, 1936a, 1936b; LaBarre 1941; Palavecino 1949; Vellard 1951, 1957–8, 1959–60). The identification of the Uru as Puquina is still in doubt, and in any case a linguistic classification is not enough to define an ethnic group.[3] This may well be the time to take a new look at the Uru question, using a newer, more historical approach.

One wonders, for example, if the cliché of Uru savagery, prevalent for centuries, does not hide the low status of the group. Already in 1612, Ludovico Bertonio, compiling the first Aymara dictionary, used the following definitions of the word "Uru": "A nation of Indians, those most contemptible, usually fishermen and of lesser intelligence," and: "Those who are dirty, in rags, false, hillbillies, rustic, are called Uru" (1879: vol. 2, 380).

This reflects a pejorative Aymara view. This group also used the term *uru* as a way of distinguishing wild from domesticated animals. As for the Uru of Lake Titicaca, they refer to themselves as Kot'suñs, "people of the lake," and the Chipaya think they are Jas-shoni, "water people," to be distinguished from "dry folk" (Vellard 1954: 80; comments on the Chipaya are based on my field observations). These self-references are more complementary than contradictory: We are witnessing here one of those complex situations where the definition partakes of ethnicity, lakeside specialization, and social stratification.

Research on the Uru question has until recently followed two paths: the occasional references by the early eyewitnesses and the more recent but still sparse mentions by travelers and ethnologists. The abundant archival sources of the Spanish administration had not been used, but we centered our efforts on them. We do not refer here to problems of origin and language, which would require the collaboration of other disciplines, but limit ourselves to questions of Uru social and economic history during the sixteenth and seventeenth centuries. Were they, as Murra suggested (1975: 230–1), a human category similar to the *yana*, those who are removed from their ethnic milieu and assigned to serve either their ethnic lords or the Inka? Were they all lakeside folk, devoting themselves exclusively to fishing, hunting, and gathering? Did they form a homogeneous body of people? Archival sources rarely deal with the Uru alone and are usually fragmentary and dispersed; still, the patient gathering of such bits of information, combined with fieldwork experience, allows us to present a rather unexpected picture. The traditional view of the Uru has long remained in thrall to commonplace references – a kind of ethnographic myth that historical analysis can dissipate, allowing new questions to emerge.

Let us define the geographical framework of our inquiry. During the sixteenth century, the Uru population was concentrated along the already mentioned watery axis, stretching from Lake Titicaca to Lake Coipasa, some 800 kilometers. The "general" inspection ordered by

Viceroy Francisco de Toledo from 1573 to 1575 revealed that this axis reached much farther north than had been supposed. It includes the Azangaro River basin, all the way to the Nudo de Vilcanota.[4] Beyond this home core area, one also hears of so-called Uru much farther away: southward to the icy mountains of Lipes, and westward along the arid Pacific coast, from Arica to Cobija. Such faraway groups raise separate questions of documentation and identification: They should receive separate study.[5] The present study is limited to eight administrative units (the *corregimientos* of Azangaro, Cavana, Paucarcolla, Chucuito, Omasuyo, Pacajes, Carangas, and Paria) that in colonial times were the Uru of the altiplano (see Figs. 15.1 and 15.2).

According to Toledo's census, there were in this area 69,664 households owing tribute, of whom 52,623 were Aymara and 16,950 Uru (see Figs. 15.3 and 15.4).[6] If we multiply these figures by five, we get an approximate population of 350,000 inhabitants, 80,000 of them Uru, some 24.3 percent of the indigenous population.[7] Their density varied: Challacollo reported that north of Lake Poopó, 67 percent were Uru; north and east of Lake Titicaca, at Coata, 100 percent; at Saman, 57 percent; and at Carabuco, 48 percent. Farther north the percentages dropped: 14 percent at Ayaviri, 8.6 percent at Orurillo, 3.4 percent at Nuñoa.[8] One of the questions these figures raise is the differential status bestowed on the Uru, according to local density.

If we want a representative sample and a situation where the information is more copious, a good example is the province of Chucuito, the ancient kingdom of the Lupaqa, on the western shore of Lake Titicaca. In his inspection of 1567, Garci Diez questioned, among others, the two principal lords, don Martin Cari and don Martin Cusi, who were in charge of the upper and lower moieties, respectively. According to a *khipu* from Inka times, the first moiety had 500 Uru out of 1,733 households (28.9 percent), whereas the second counted 347 Uru out of 1,731 (20 percent) (Garci Diez [1567] 1964: 64–5). Qualitatively, each was made up of seventeen ayllus, listed in the following order: ten Aymara ayllus, one of silversmiths, another of potters; and five ayllus of Uru (ibid., pp. 14–15, 27). Thus the fundamental social units, based on kin ties, were defined as using mixed, ethnic, and economic criteria, arranged in a hierarchical order. The two lords explicitly described the Aymara as the "better people," "those more notable," whereas the Uru "are poor folk, who do not cultivate and live only by fishing and roaming about the lake" (14, 27).

Although they were assigned to lower status, can it be said that the Uru were in some ways like the yana? Don Martin Cari and his lower-moiety equivalent did have at their disposal some yana whose origin is not indicated. But better information is available from another part of the province, Hilave, where, according to the same khipu, there were 1,070 Uru households, some 42 percent (ibid., pp. 64–5). Here, the centenarian lord of the upper moiety, don Francisco Vilcacutipa, indicated that of the 30 yana of his father, 20 had been Uru and the rest

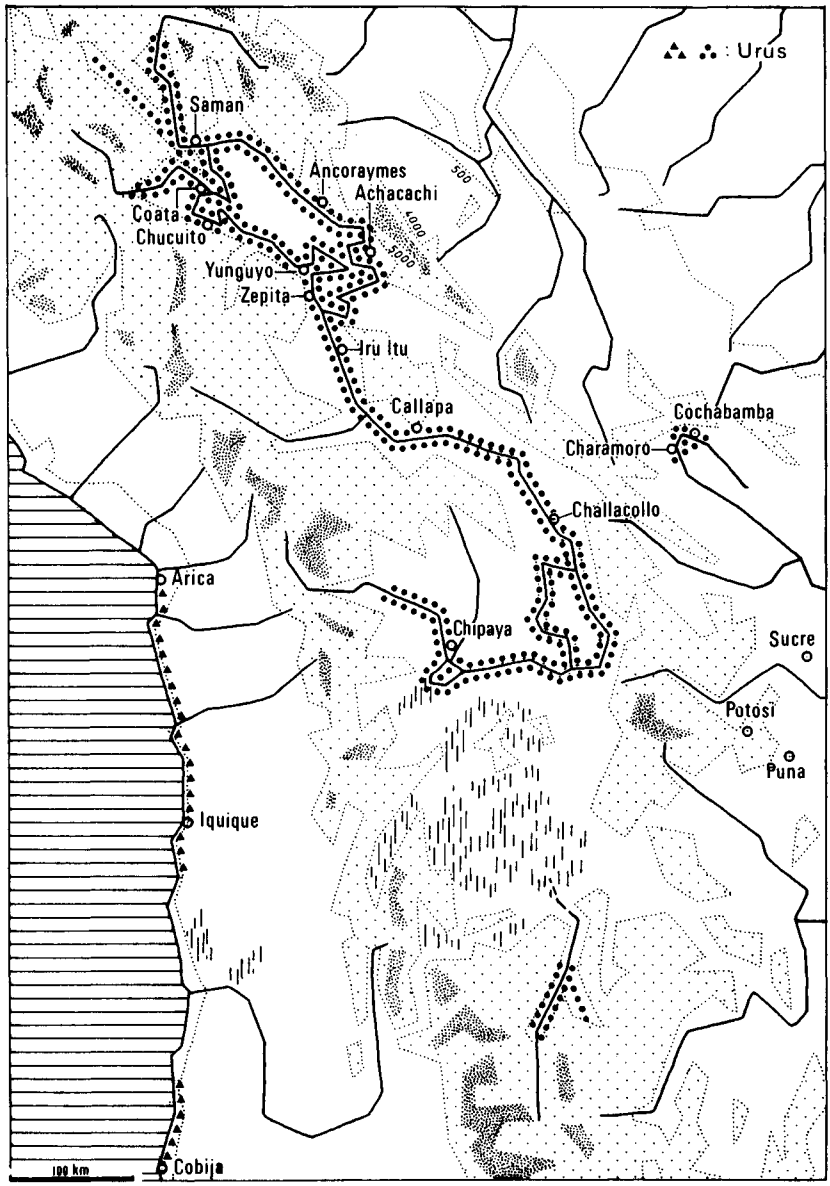


Figure 15.1. The distribution of Uru in the southern Andes (sixteenth century).

Aymara (107). His lower-moiety counterpart, don Garcia Calçomaquera, still had access to 8 Aymara and 7 Uru (111). This would indicate that "servant Indians" could come from either ethnic group, with a slight preponderance of Uru. The European settlers testifying during

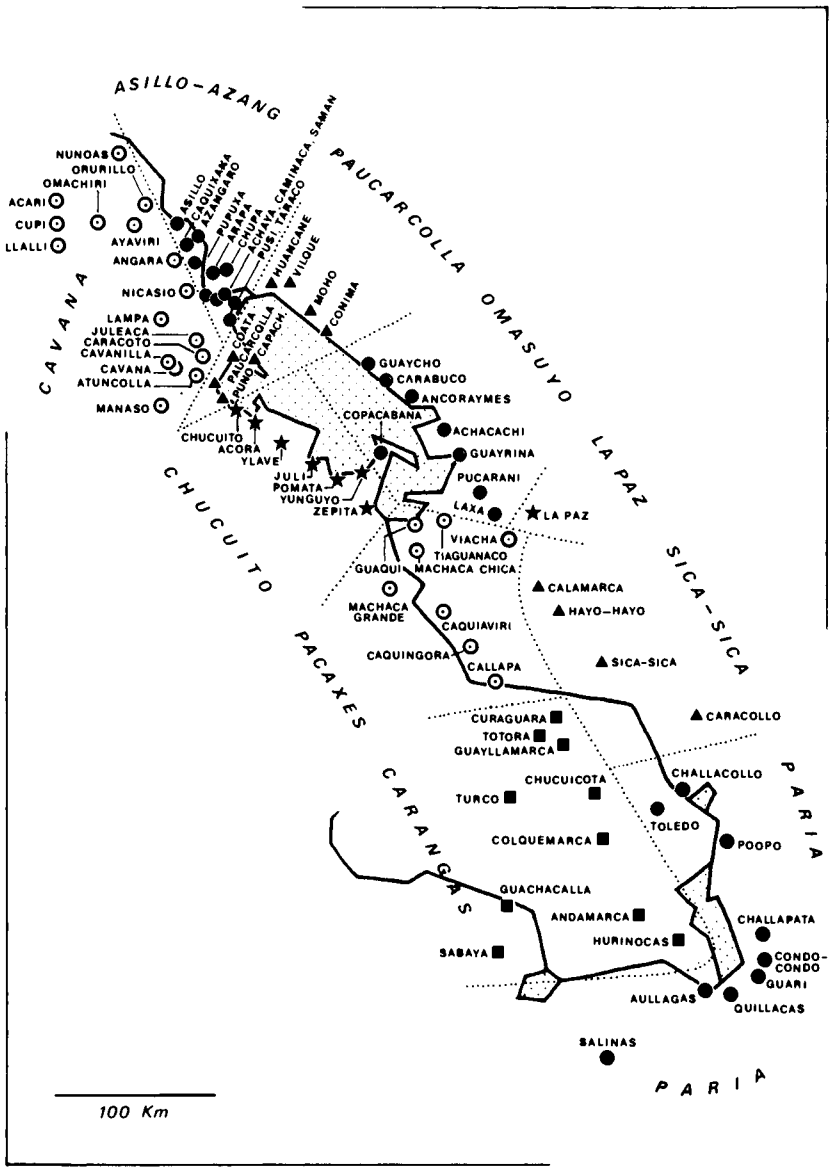


Figure 15.2. The "aquatic axis" and the colonial *corregimientos*.

the inquiry had harsh words for the severe oppression of the Uru by the lords: "If the caciques and the principal chiefs exempt the Uru from tribute, it is only to use them themselves and profit thereby" (122).

One of the best-known chroniclers, Polo de Ondegardo, confirms that in Inka times the Uru paid no tribute, nor were they made to build

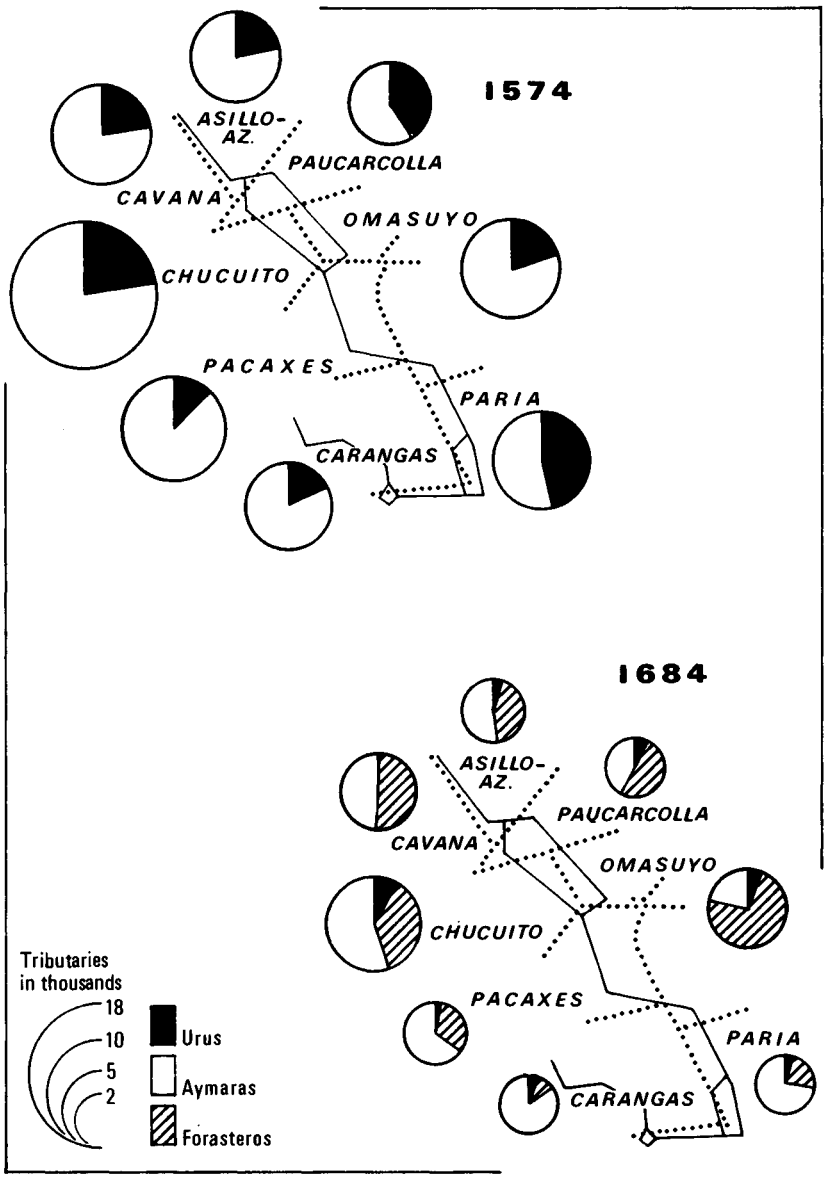


Figure 15.3. The distribution of Uru and Aymara in 1574 and 1684.

walls or fight wars: "They amounted to nothing at all" (Polo [1571] 1916: 164–5). But if they were not taxpayers to the state, this was because they were already in the service of a lord, who had reduced them to dependent status (164). Polo adds, "They were never taken for men and did not consider themselves as such." This odd statement can be

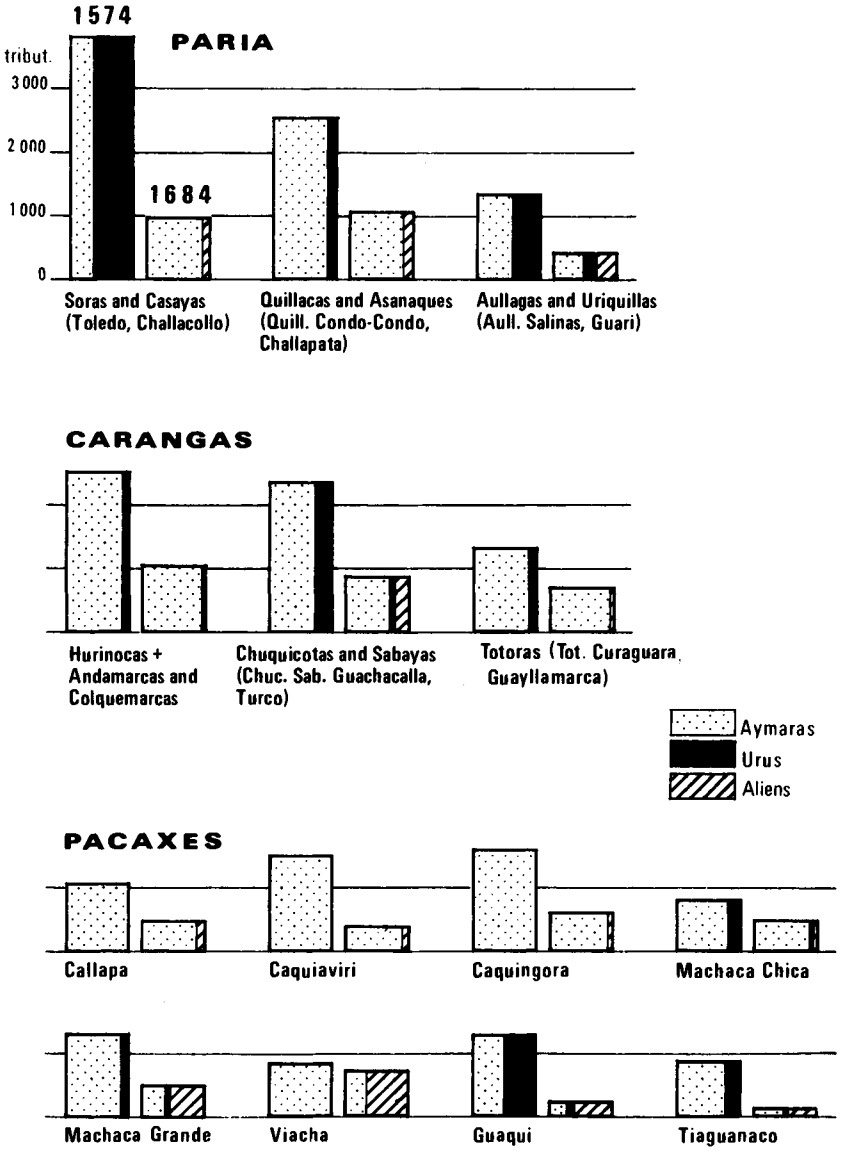


Figure 15.4. Changes in the proportions of the ethnic groups from 1574 (Toledo's inspection) and 1684 (La Palata's inspection). See location of the groups in Fig. 15.3.

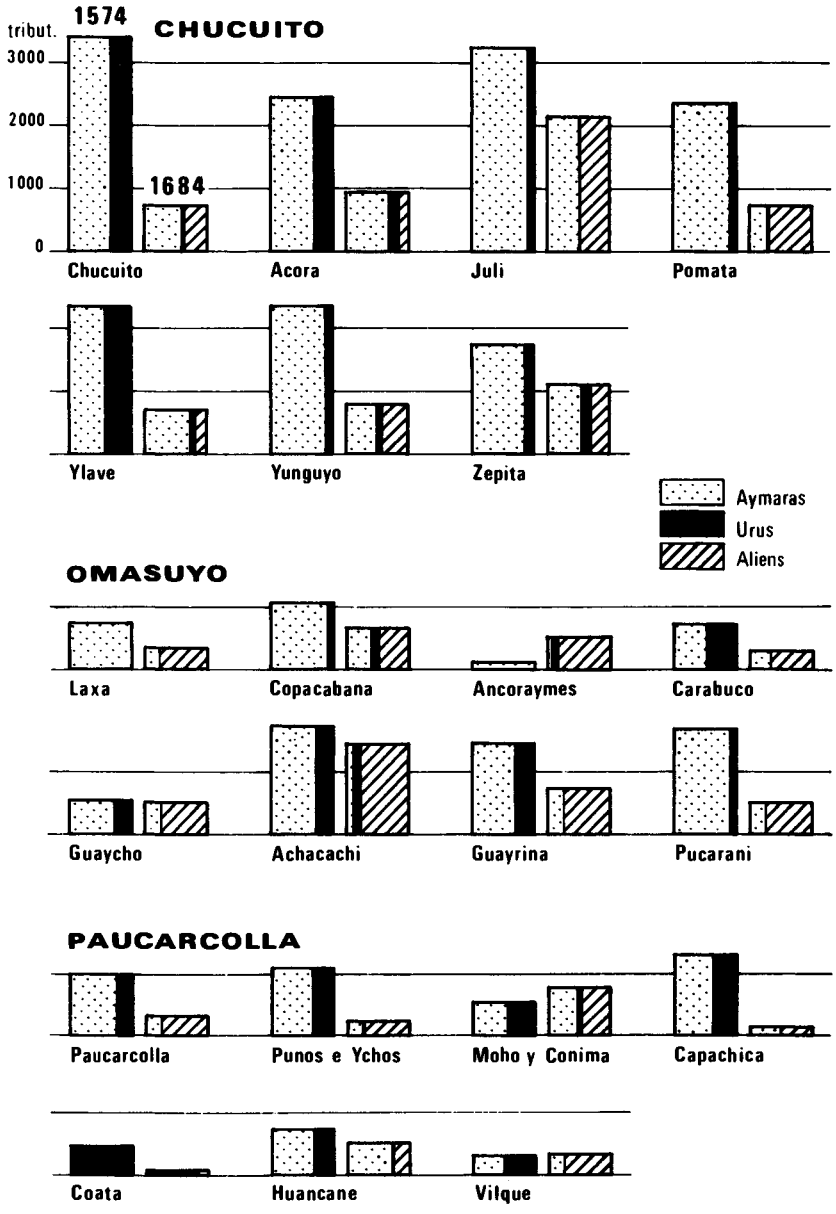


Figure 15.4 (*cont.*).

clarified if we note that in this context, apparently, "man" is synonymous with "taxpayer." Only a few lines earlier Polo had observed that "they are people like everybody else" (159); quoting Polo some twenty years later, Acosta distorted the meaning of this passage. In doing so,

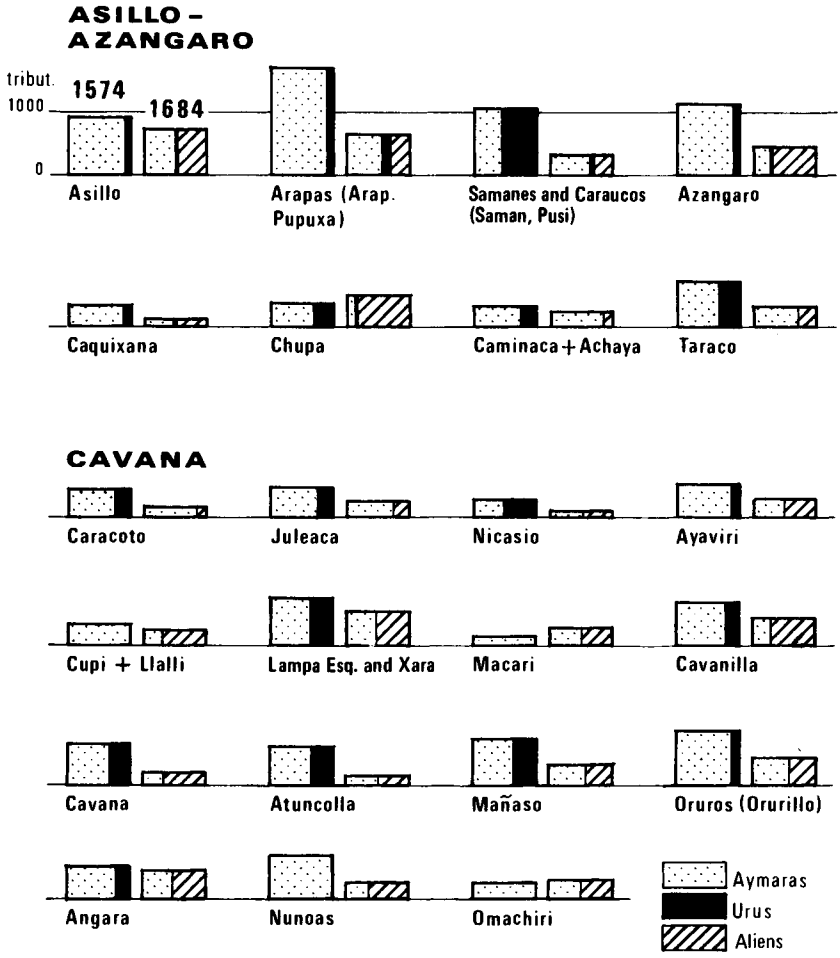


Figure 15.4 (*cont.*).

he helped create a stereotype of the Uru that has endured for centuries.

If they were exploited, it may be worth asking, what for? If the Uru were such a sorry lot, what could they do for the Aymara? First, they inhabited a different ecozone, with distinct and complementary resources from those of the puna. The Uru provided the lords with lake products. Polo notes that beyond these, they also wove and made baskets (164). Speaking of his Uru yana, don Garcia Calçomaquera added that "although they serve at whatever they are ordered to do." (Garci Diez, p. 111). Was such diversified ability peculiar only to the Uru who had become yana, or were they all so skilled? The inspection of 1567 provides

us with remarkable detail on Uru skills that corrects the statements of the Chucuito lords, as well as the familiar claims of received wisdom (200). One of our best informants, the Spanish trader Melchor de Alarcon, specified, "The Uru have no less intelligence or capacity than the Aymara. . . . The witness has seen them get to work, and nothing is planted in this province without their being the first to undertake it" (140).

Repeated testimony by both natives and Spaniards confirmed Alarcon's claims. Part of the communal labor provided by all (not just the yana) on the lands of the lords was for the benefit of this don Garcia Calçomaquera: Of his twenty-five *tupu*, ten were planted by his Aymara, five by the Uru, and ten by both (111). Of the ten tupu held by don Francisco Vilcacutipa, of the other moiety, five were cultivated by the Aymara and the rest by the Uru. Further testimony by don Garcia clarified the issue: "All the Aymara and some among the Uru cultivate fields of potatoes, of *quinua*, and of other crops of this country, and *those Uru Indians who do not plant for themselves work for others in order to clothe themselves, since they are poor.*" (112). The first conclusion we reach is then obvious: The Uru were not exclusively lacustrian, they also practiced agriculture, generally in the service of the Aymara (and particularly their lords), constituting a significant part of the labor force.

Still, one should avoid simplification: Both ethnic groups were affected by stratification. If the lowest strata of indigenous society frequently coincided with the Uru, this condition was not absolute. Some of the Uru had been favored and even owned land, and there were Aymara who were quite poor (fully half of them owned no herds, according to don Garcia) and provided some of the yana. All of this implies shades of social condition and leads to the question, Were all the Uru personally dependent? Melchor de Alarcon pointed to the Uru of Coata, at the northern shore of the lake, who he thought were becoming "civilized" and "sensible folk," since "*they had no Aymara or Puquina lord, but a cacique of their own kind.*" (114).[9] Here, the Uru made up the whole of the population, with their own authorities, and did not occupy a subordinate position as they did at Chucuito. Other Uru, like those of Corquemarca, in Caranga country, where they made up 11.4 percent of the population, seem to have lived in endogamous ayllus dispersed among the Aymara.[10] Such diversity in political structure, combined with varying densities and economic inequalities, suggest that rather distinct categories may well have coexisted within the complex known as Uru.

The Spanish administration imposed on the Uru a tribute half of what they expected from the Aymara. This was not really a privilege but reflected the awareness that taken as a whole the Uru were poorer and less fit for work; thus, their lower status was ratified. The taxation of the eight corregimientos, ordered by Francisco de Toledo in 1574–5,

prescribed three kinds of duties: prestations in silver (sometimes in gold), prestations in work (the *mitayos* for the the mines at Potosí), and prestations in kind. Obligations in cash varied by region and amounted to 5.0 to 7.0 pesos per household for the Aymara but only to 1.5 to 3.0 pesos for the Uru.[11] Similar differentiation prevailed for the mitayos: The Aymara of La Plata were expected to send 17 percent of their number each year, those of La Paz 16 percent, and those of the Cusco region 15 percent; a formula of counting "two for one" was used for the Uru.[12] This does not mean that the Uru were to provide two miners for each sent by the Aymara but that two Uru were considered the equivalent of a single Aymara; their obligations had been cut in half.[13] Of the fifty-one repartimientos that reported Uru populations, there was, however, one exception: those of Paria, resettled at Challacollo, who sent to the mines a percentage identical to that sent by the Aymara.[14]

As for the tribute in kind, the Uru never owed maize, coca leaf, or cattle; they were expected to provide dried fish, textiles (if the *encomendero* supplied the wool), and in ten cases out of the fifty-one repartimientos, freeze-dried potatoes. This list confirms their lakeside skills but also points to the fact that in some places the Uru had access to agricultural facilities.

The 1574 inspection of Chucuito Province provides additional detail. At that time the province had 17,779 tribute-owing households: 13,725 Aymara and 4,054 Uru.[15] They were expected to send 2,200 mitayos to Potosí annually, 1,800 of them Aymara (a proportion of 13.1 percent) and 400 Uru (9.9 percent); in addition, the first owed a tribute of 18 pesos each, annually, but the second owed only 16. Those not sent to the mines in a given year owed 3 pesos each if they were Aymara, half of that if Uru. A comparison with the actual figures for a given year reveals that as many as 660 tribute-owing Uru could be missing roll call. Who were they?

We discover that 579 of the Uru, those from Yunguyo and Zepita, were distinguished from the rest and placed in a category taxed at 3.0 pesos a head, like the Aymara (Cook 1975: 79). Pedro Gutierrez Flores, the new inspector, provides an explanation that upsets the clichés: "*They should be paying as much as the Aymara, since they are very much like them*; they have the ability to earn and acquire their own food and the tribute, *because they own herds and plenty of land*, and in bad years they can get their food from their lake" (AGI, *Contaduria* 1,887, f. 28r). We recognize in this account the privileged Uru mentioned earlier by don Garcia Calçomaquera: While continuing to use the lake, they also practiced herding and farming on their own behalf. Thus they gained some economic autonomy, weakened the bonds of dependence, and eventually became assimilated to the Aymara.

What is more, says the inspector, "These Uru are similar to the Aymara because they look like them and display intelligence, aptitudes, activities, and resources like the said Aymara; they *have even offered*

to pay more tribute than the latter" (Cook 1975: 79). What is the meaning of such striving, this unlikely eagerness to pay a higher tax? We face here the profound logic of Andean societies: Members of the community have rights only with reference to their obligations; they acquire prestige and status in proportion to the communal obligations that they shoulder. For an Uru to pay 3 pesos was a way to wipe out the original blemish, to be recognized by the collectivity as a full-fledged member. To pay more than 3 pesos was the realization of a fabulous dream, a kind of revenge: to be more Aymara than the Aymara.

That leaves 91 Uru, enumerated separately, living near the Desaguadero, at Zepita. They also differed from the bulk of Uru, but in the opposite way. They paid only 0.5 pesos per household; neither did they weave or work in the mines. The tribute they paid was virtually symbolic. These exceptional people were known as Urus Ochosumas or Uruquillos Ochosumas and are described as particularly miserable, rustic, and of lesser capacity than all the others: "Even today, all they know is how to fish in the lake; they eat the roots of reeds growing there."[16]

Here, at last, are Uru exclusively fishermen, hunters, and gatherers, hence "savages" and living up to the stereotype. These 91 had recently been resettled near Zepita as part of the general uprooting of the Andean population, leaving an uncounted number still hiding in the reeds. We hear complaints about those resettled, since they try to get back to their lake and return to heathen ways. Gutierrez Flores, the 1574 inspector, advocated a sedentarization policy involving grants of land: "The principal caciques of Zepita have been ordered to distribute land to them, *just as they do to other Uru and Aymara*, and to make sure that they plant and cultivate, without pushing them into servitude." (AGI, *Contaduria* 1887, f. 31r). This policy is reminiscent of that followed by the Inka, who had sent Captain Casica Capa to extricate the Uru from Lake Paria and resettle them among the neighboring Aymara. According to a document cited by Vellard, this policy had failed, since the resettled Uru turned out to be thievish and had done so much damage that they were pushed back onto the lake and prohibited, under penalty of death, from emerging again.[17]

Thus, the Indians labeled as Uru in the sixteenth century constituted in Chucuito Province a heterogeneous assemblage. Eventually the Spanish administration learned to group them into three categories, hierarchically differentiated: The middle group included most of the 2,978 Uru, who paid half as much tribute as the Aymara. At either extreme they found minorities: at the top an elite of 559 Uru (virtually included in the Aymara mass and paying the same tribute) and at the bottom the 91 recently resettled and virtually exempt.

How can we explain such disparities? The situation was complex, and its dynamics should not be neglected. The enumerators grouped the Uru into three categories, for convenience, although it is likely that several more varieties could be found between the extremes. Although all Uru displayed some lacustrian skills, these could be exercised more or less

actively. At the two extremes we can indeed speak of a "wet" or "dry" community: Some were becoming more and more land oriented and thus aymarized. At the other end of the continuum were the "savages," insisting on life in the reeds, "inside" the lake. The drift from one to the other had begun before the arrival of the Spaniards, an acculturation phenomenon within the indigenous world. The Europeans encouraged a policy that provided from below for the replacement of a labor force that drifted away at the top.

The very existence of "rich" Uru, owning lands and herds, is so startling, so unexpected, that they deserve some additional reflection: Were the 559 privileged households from Yunguyo and Zepita an exception, or can similar groups be found elsewhere, undergoing aymarization in the sixteenth century?

Although the information is hard to come by, there is some additional evidence. First, at Saman, north of the lake. In 1574, the Uru made up more than half of the population – 589 households out of 1,031, some 57 percent (Cook 1975: 88). Around 1608, as part of litigation with their neighbors at Taraco, the lords filed a complaint in the name of their Uru, those of the Quequercia ayllu. The latter had held lands, but the titles had been in dispute "since Inka times: They had inherited them from their parents and ancestors, and the said Uru have always worked and cultivated them, from those days and until now . . . and their herds found their forage there."[18] Although no further details are available, we know that the decision was favorable to the Uru.

Another case, even more remarkable, concerns the Uru of Challacollo, north of Lake Poopó, in the province of Paria. In 1574 they constituted more than two-thirds of the population in this area; the proportion that they sent to the mines was the same as that of the Aymara (Cook 1975: 15). The relative density of the Uru population in this region may explain this proportion, but remembering the example of Yunguyo we can also draw an analogy of a similar "privilege." We do not know whether this was simply imposed or had been asked for. A somewhat later document, which we found in the archives of the courthouse at Poopó, dated 1593, offers both confirmation and something of a surprise: It confirms that the Uru of Challacollo were also landholders and that some of this acreage was a hundred kilometers away, at Charamoco, in the warm valleys of Cochabamba.[19] The source includes details about the setting of boundaries, so thorough that if one surveyed the area text in hand one could draw its map. The surface involved was not negligible: There were almost 30 *fanegas* of irrigated maize lands and twice that amount dependent on rain, plus pastures 1 league wide, amounting to some 3,750 hectares. Amazingly, the Uru of Challacollo and those of Charamoco formed a single repartimiento until well into the eighteenth century: We have the evidence here for one more "archipelago," with its nucleus located on the altiplano and the outliers dispersed in ways permitting the simultaneous use of different

and complementary ecozones.[20] Since this is the first archipelago to be reported for the Uru, the question of how it was constituted is pertinent.

The answer can be found in another document that we located in the archives at Cochabamba, part of the evidence introduced during litigation in the 1570s opposing the illustrious Polo de Ondegardo, who held the *encomienda* of Santiago del Paso, and the Uru of Challacollo.[21] Among the papers introduced as evidence is one dated 1566, which turned out to be of exceptional interest.[22]

We learn that the penultimate Inka, called Wayna Qhapaq, had spent time in Cochabamba in person and had ordered profound changes in its demographic and organizational order. The native population (the Cota and the Chui) were expelled and resettled to the east, near Pocona, to strengthen the "frontier" against the Chiriguano. The lands they left behind were appropriated by the state.[23] To solve the question of a labor force, Wayna Qhapaq transferred 14,000 Indians "from all nations" on the altiplano, but also some from as far away as the Cusco region and present-day Chile. Some of these were settled permanently in Cochabamba, becoming *mitmaq*, whereas others came and went as needed, according to a *mita*. Each "nation" was assigned several strips, or *suyos*, traversing the whole valley, 44 *brazas* (some 70 meters) wide and varying in length, since they extended "from one cordillera to the other."[24]

All the maize harvested on this acreage was stored until it could be taken on llama-back to the *tambo* of Paria, to be forwarded to Cusco. Of special relevance in this context is the presence, among the "nations" listed, of the Uru of Challacollo. This indicates that as early as the beginning of the sixteenth century they were considered fit for farming in the service of the Inka. Such inclusion was not automatic: They owed their access to the lands at Cochabamba to the king's intercession. He had fitted them into his vast state archipelago.

Inka policy guaranteed significant advantages to the *mitmaq*: Since they were expected to feed themselves, some of the strips (apparently two out of sixteen) were harvested for their benefit. Other strips were assigned to the households of their ethnic lords, who later redistributed the products. The *mitmaq* had additional rights in marginal fields, part of the state acreage. The population transplanted to the Cochabamba Valley thus acquired rights in new lands lost to the original inhabitants. When the Spanish arrived twenty or thirty years later, some of the *mitmaq* returned to their original homes, but others stayed on, trespassing on state lands or taking advantage of those abandoned by repatriated colonists. Among those who stayed on were the Uru of Paria, glad to hang onto their maize lands.

They were also affected by peculiar twists of local history: The Uru of Paria had at first been granted in encomienda to an unusual man, Lorenzo de Aldana, a soft-hearted conquistador who, in his will, left his fortune to his Indians. He created the "Pious Works" of Paria, which provided for the organization of a hospital for the Indians to be administered by the Augustinian friars of Challacollo (Calancha [1639], vol.

1, p. 29). In later years this Pious Works, deflected from its original purpose, functioned until the eighteenth century as a banking institution (whose study still remains to be done). The restitution by Lorenzo de Aldana explicitly confirmed the rights of the Uru of Challacollo in the lands of Charamoco, in the Cochabamba Valley.

A further detail: A curious document is filed in the same archive. It purports to be a copy of Aldana's notorious will.[25] The falsification is rather eloquent: In this version, the conquistador expresses his gratitude to some Uru, particularly one Ana Cuchallo, who was supposed to have helped Aldana find a treasure and to whom he now was leaving all his fortune. It is not important whether this claim was wholly false or whether it had some substance: It was cited in 1680 by doña Andrea Biraca, who claimed to be the ruler of the Quillacas and Asanaques, an important chiefdom south of Lake Poopó. How did she come by the testament? She claimed to be the daughter of don Juan Biraca, "cacique of the Uru of Challacollo," and granddaughter of the mysterious Ana Cuchallo. Beyond the anecdote and its tortuous details, we can discern the process by which some rich Uru could become Aymara lords, through marriage, in three generations.

One wonders whether these acculturative processes affected only the most integrated Uru or whether it reached many of them. Would it be possible to quantify a study of Uru aymarization?

We shall use the still unpublished account of the inspection carried out in 1683–5 by the viceroy, the Duke of La Palata, covering the provinces liable to the *mita* to Potosí (AGI, *Charcas* 270). By comparing this census with the one made by Francisco de Toledo a century earlier, we can analyze the demographic evolution as well as the ethnographic and social changes in the indigenous population. Already in the sixteenth and on into the seventeenth century, the *mita* engendered extensive migratory movements and transformed the human occupation of the altiplano.

Both inspections enumerate Uru and Aymara separately, but in La Palata's time a further subdivision made its appearance, resulting in the separate listing of *originarios* (who still lived in the ayllu of their forefathers); of residents in Potosí (whose ancestors had come to the mines as mitayos and had become urbanized); and of *forasteros*, strangers, who had left their ancestral homes to escape the *mita* and to pay a lower tribute. For the eight corregimientos studied here the results are shown in Table 15.1.[26]

Even after the demographic catastrophe that followed the Spanish conquest, the seventeenth century is a long record of depression: Total population declines some 54 percent even if we include the urban residents in the Aymara total. What is impressive is that 42 percent of the total population are recorded as *forasteros*, living away from their ethnic homes. This shift is most notable in the peripheral zones of Larecaja, Mizque, and Yamparaes, which were not subject to the mining *mita*.

Table 15.1. *Proportions of Uru and Aymara, a century apart*

		Aymara			Uru	
Source	Total	(Originarios)	In Potosí	Forasteros	(Owing tribute)	(Exempted)
Toledo, 1573–5	69,664	52,623	—	—	16,950	91
La Palata, 1683–5	31,669	16,589	(3,968)	13,533	1,243	304

Within this overall pattern, what was the part played by the Uru? Their numbers go down from almost 17,000 to 1,243, a loss of 92.66 percent: They have evaporated in the span of a century. Whereas they had made up a quarter of the population in Toledo's time, they were only 3.9 percent when enumerated by La Palata.[27] Since the Uru were as likely to migrate as the rest of the Andean population, one should compare Uru figures only with those of Aymara originarios, which go down from 52,000 to 16,000, a loss of 68 percent, but even this slower rate requires explanation. One possible answer would be greater Uru population loss due to sensitivity to epidemics. Another would be a lower birth rate. None of these hypotheses can be verified at this time, but neither is likely. A further possibility would be a differential drift of Uru to the mines or into *forastero* status.[28] There is no way to check this, but one should note that if they mixed with such uprooted groups, their Uru condition was in danger. The fact is that if their numbers melted precipitously, most of those "lost" had become acculturated enough to be counted as Aymara, even if they did not migrate.

If one examines these figures in detail, one notes that the greatest losses were felt in the two corregimientos located at the two extremes of the watery axis (a decrease of 99.3 percent at Cavana, in the north, and of 97.3 percent at Paria, in the south). So geographical location had at least something to do with aymarization. If we now look again at some of the places discussed earlier, we find that at Saman, Viceroy Toledo had enumerated as Uru 57 percent of the population; a century later their numbers have fallen from 589 to 19 (AGI, *Charcas* 270, f. 261r). Even more spectacular were the events at Challacollo: Whereas the Uru had made up 67 percent of the population in Toledo's time, a century later they have disappeared. The census taker made note of the fact and was explicit about what had happened: "The Uru have died out or have been absorbed": a fusion with the Aymara.

Beyond geographical marginality, we see that two factors – a relatively high proportion of Uru in the local population, and access to land – seem to have accelerated their acculturation. But the logic involved is not simple: These factors can combine and reinforce a trend, but they can also clash and annul it. The Uru of Coata are a case in point. Though poor, they had certain advantages: They formed the whole of Coata's population, and their leaders were neither Aymara or Puquina. Although their numbers also go down (449 to 63), the rate is only 86 percent, lower than the Uru average (AGI, *Charcas* 270, ff. 222v–223r). Acculturation seems to have been restrained, because there were locally no Aymara to receive them.

The province of Chucuito again provides the data needed for a better understanding of what was happening. For this area we have an additional census ordered by Viceroy Martin Enriquez (1581–3), fewer than six years after Toledo's (AGI, *Charcas* 45, "Parecer de Diego Lopez de Zuñiga"). In such a brief time, the Uru record a loss of 14.3 percent (about 1.6 percent annually), whereas the Aymara lose 5.3 percent (only

Table 15.2. *The population of the altiplano in 1574 and 1684*

Inspection by TOLEDO (1574)					Inspection by LA PALATA (1684)						
Corregimientos and pueblos	Aymara	Uru paying	Uru not paying	Total	Corregimientos and pueblos	Aymara (origin.)	Uru paying	Uru not paying	Potosi	Aliens	Total
PARIA					PARIA						
Soras y Casayas	1 243	2 558		3 801	Toledo	624			86		624
					Challacollo	270			72	97	367
					Poopo					201	201
Quillacas y Asanaques	2 141	400		2 541	Quillacas	87			22	119	206
					Condo-Condo	540			44	48	588
					Challapata	247			92	12	259
Aullagas y Uriquillas	790	581		1 371	Aullagas	36	96		14	75	207
					Salinas	71			42	59	130
					Guari	82			14	12	94
Total	4 174	3 539		7 713	Total	1 957	96		386	623	2 676
CARANGAS					CARANGAS						
Hurinocas	211	53		264	Hurinocas	130			36	3	133
Andamarcas y Colquemarcas	2 001	266		2 267	Andamarca	334			70		334
					Colquemarca	481	68		246	18	567
Chuquicotas y Sabayas	1 783	602		2 385	Chuquicota	211			78	30	241
					Sabaya	94			17	124	218
					Guachacalla	109	64		34		173
					Turco	147	20		46	34	201
Totoras	1 138	200		1 338	Totora	216			85		216
					Curaguara	303			68		303
					Guayllamarca	160			50	33	193
Total	5 133	1 121		6 254	Total	2 185	152		730	242	2 579
PACAXES					PACAXES						
Callapas	1 028			1 028	Callapa	393		5	118	79	472
Caquiaviris	1 513			1 513	Caquiaviri	359			60	35	394
Caquingoras	1 615			1 615	Caquingora	577			172	34	611
Machaca Chica	650	157		807	Machaca Chica	429	32	7	70	34	502
Machaca Grande	1 144	161		1 305	Machaca Grande	186	36		67	278	500
Viachas	850			850	Viacha	258			47	466	724
Guaquis	654	632		1 286	Guaqui	94		29	29	141	235
Tiaguanacos	672	206		878	Tiaguanaco	82	12		29	81	175
Total	8 126	1 156		9 282	Total	2 378	80	41	592	1 148	3 647
CHUCUITO					CHUCUITO						
Chucuito	2 251	1 156		3 407	Chucuito	447	33		71	271	751
Acora	1 731	710		2 441	Acora	642	152		81	163	957
Juli	2 910	306		3 216	Juli	1 107	54		62	993	2 154
Pomata	2 124	255		2 379	Pomata	227	28		29	512	767
Ylave	1 401	977		2 378	Ylave	516	71		47	134	721
Yunguyo	1 997	381		2 378	Yunguyo	414	26	37	32	330	807
Zepita	1 485	188	91	1 764	Zepita	624		160	50	318	1 102
Total	13 899	3 973	91	17 963	Total	3 977	364	197	372	2 721	7 259
OMASUYO					OMASUYO						
Laxa	750			750	Laxa	82			18	297	379
Copacabana	953	88		1 041	Copacabana	263	91		107	291	645
Ancoraymes	151			151	Ancoraymes	22		66	18	406	494
Carabucos	377	350		727	Carabuco	103			56	195	298
Guaychos	403	162		565	Guaycho	144			37	382	526
Achacaches	1 271	442		1 713	Achacachi	173	131[a]		38	1 113	1 417
Guayrinas	975	444		1 419	Guayrina	171			51	553	724
Pucaranis	1 709	148		1 857	Pucarani	116			61	379	495
Total	6 589	1 634		8 223	Total	1 074	222	66	386	3 616	4 978
PAUCARCOLLA					PAUCARCOLLA						
Paucarcolla	752	245		997	Paucarcolla	89			40	267	356
Punos e Ychos	703	380		1 083	Puno	56	11		8	162	229
Moho y Conima	343	242		585	Moho	365	93		114	342	800
Capachicas	788	515		1 303	Capachica	78			27	87	165
Coata		449		449	Coata		63			15	78
Huancane	482	271		753	Huancane	397	11			129	537
Vilque	156	169		325	Vilque	79				284	363
Total	3 224	2 271		5 495	Total	1 064	178		189	1 286	2 528

0.6 percent annually). If we prolong this inquiry to LaPalata's census, the losses are 91.1 and 71.4 percent (the latter figure counts only the originarios among the Aymara (see Tables 15.2 and 15.3). If we concern ourselves only with those Uru who sent mitayos to Potosí, we find that those from Zepita disappeared completely, those of Yunguyo lost 93.2 percent, and the rest of the province recorded a decrease of 90.1 percent: The acculturation of the Uru who were described a century earlier as most Aymara-like was indeed more rapid.

As for the Ochosuma, the "barbarians" listed in 1575, they are the only Uru whose numbers increase. At that time 91 were recorded, but six years later they were 164 (an 80 percent rise), and a century later

Table 15.2 (*cont.*)

Inspection by TOLEDO (1574)					Inspection by LA PALATA (1684)						
Corregimientos and pueblos	Aymara	Uru paying	Uru not paying	Total	Corregimientos and pueblos	Aymara (origin.)	Uru paying	Uru not paying	Potosi	Aliens	Total
ASILLO-AZANGARO					ASILLO-AZANGARO						
Asillos	860	75		935	Asillo	396	23		57	340	759
Arapas	1 530	149		1 679	Arapa	121			35	51	172
					Pupuxa	234	56		126	156	446
Samanes y Caraucos	442	589		1 031	Saman	90	19		45	87	196
					Pusi	131			28	10	141
Azangaro	1 031	91		1 122	Azangaro	129	13		67	301	443
Caquixanes	307	46		353	Caquixana	17	9		59	78	164
Chupas	268	128		396	Chupa	69	19		30	415	503
Caminacas	126			126	Caminaca	127			34	29	156
Achayas	168	94		262	Acheya	70			26	16	86
Taracos	490	275		765	Taraco	265			133	101	366
Total	5 222	1 447		6 669	Total	1 709	139		640	1 584	3 432
CAVANA					CAVANA						
Caracotos	332	108		440	Caracoto	162			96	28	190
Juleacas	367	120		487	Juleaca	201			56	63	264
Nicasios	133	159		292	Nicasio	61			23	60	121
Ayaviris	479	79		558	Ayaviri	152			20	158	310
Cupies	160			160	Cupi	32[b]				76	108
Lampes Esq. y Xaras	490	294		784	Lampe Esq. y Xara	247			63	328	575
Macaries	172			172	Macari	153			73	131	284
LLallis	205			205	LLalli	44			11	90	134
Cavanillas	533	141		674	Cavanilla	124[c]			9	304	428
Cavanas	407	216		623	Cavana	71			15	129	200
Atuncollas	391	210		601	Atuncolla	94			42	94	188
Mañasos	488	276		764	Mañaso	196			55	134	330
Oruros	795	75		870	Orurillo	236	12		78	167	415
Angaras	424	109		533	Angara	227			38	251	478
Nuñoas	630	22		652	Nuñoas	92			49	158	250
Omachiris	250			250	Omachiri	53[d]			45	142	295
Total	6 256	1 809		8 065	Total	2 245	12		673	2 313	4 570

Note: Repartimientos are listed in the plural in 1574, implying ethnic multiplicity, but in the singular in 1684, referring now to village locations.

a. There are 131 Uru "Quinaquitaras."
b. Also included, 30 "mitmas canas."
c. Also included, 25 "mitmas urcos."
d. Also included, 45 "mitmas . . . como naturales."

Table 15.3. *The total of eight* corregimientos

	TOLEDO				LA PALATA					
Corregimientos	Aymara	Uru paying	Uru not paying	Total	Aymara	Uru paying	Uru not paying	Potosi	Aliens	Total
Paria	4 174	3 539		7 713	1 957	96		386	623	2 676
Carangas	5 133	1 121		6 254	2 185	152		730	242	2 579
Pacaxes	8 126	1 156		9 282	2 378	80	41	592	1 148	3 647
Chucuito	13 899	3 973	91	17 963	3 977	364	197	372	2 721	7 259
Omasuyo	6 589	1 634		8 223	1 074	222	66	386	3 616	4 978
Paucarcolla	3 224	2 271		5 495	1 064	178		189	1 286	2 528
Asillo	5 222	1 447		6 669	1 709	139		640	1 584	3 432
Cavana	6 256	1 809		8 065	2 245	12		673	2 313	4 570
Total	52 623	16 950	91	69 664	16 589	1 243	304	3 968	13 533	31 669

197. In a context of generalized depression and demographic loss, such increases may seem paradoxical. Was their birthrate higher, their mortality less? Probably not. The explanation is to be found in the fact that these Uru were the "savages" recently settled on the mainland. If their numbers rose, it was because they continued to emerge from the lake.

We do not think that this was an exceptional situation. In La Palata's time, Uru, exempt from the *mita*, appear for the first time in the census at several new places along the aquatic axis. On the eastern shore of Lake Titicaca, at Ancoraymes, 66 Uru were enumerated, and the census specified that "none of this quality had been located" by Francisco de Toledo. At Callapa, at the Desaguadero River, there also had been no Uru in 1575; a century later, 5 are recorded: 3 of them "river crossers," and 2 "descended from the Inka's hunters." Nearby, at Jesus de Ma-

chaca, Toledo recorded 139 Uru liable to the *mita*; only 39 were counted by La Palata, and of these, "7 were Iru-Itu, who should be deducted, since they were not liable to the *mita*." The Iru-Itu maintained a rebellious stance throughout the seventeeth century, as we shall see; the 7 mentioned were the very first of this group to have been pacified.

Thus, the Uru of lowest status increase from one census to the next: from 91 to 304. These are incomplete figures, since we cannot know the proportion that remained rebellious, or "inside the lake." Even when they are enumerated, this does not necessarily mean that they gave up the water: Many continued to fish, but they had given up "savagery," which meant that they accepted domination by the Aymara lords and joined the indigenous society on its lowest rung.

The demographic evolution of the Uru, all through the seventeenth century, can be summarized as a matter of suffering losses at the top (through aymarization) and gaining recruits (by leaving the lakes). Since the first of these trends is much the more pervasive, the totals record net losses: They were on their way to extinction. Spatially, the heaviest losses are at the peripheries of the watery axis, whereas the growth emerges at the center, the south shore of Lake Titicaca. This looks like a central crater where the Uru emerge, only to spread out centrifugally and vanish at the edges.

The acculturation of the Uru during the seventeenth century took place against a background that can now be outlined: The center of the watery axis (essentially the Desaguadero and Lake Poopó) is also the hearth of continuous rebellion.

We hear of many complaints: Hidden in swamps, inaccessible in their reeds, groups of Ochosuma and Iru-Itu managed to escape control by the Aymara lords. Nor were they content with hiding and defending their freedom: They even dared to attack neighboring villages, robbed travelers, and poached on harvests and herds. (Although they were said to be fish eaters, who also caught waterfowl and ate grasses and roots, they turn out, according to these accounts, to have been very hungry for meat.) Along the major route from Cusco to Potosí, which crosses the Desaguadero, the Uru created a state of constant insecurity: More than once the Aymara of Guaqui or of Tiahuanaco were forced to take refuge away from the lake. From time to time the authorities organized punitive expeditions. These disturbances may not have reached the scale of the peripheral wars that the viceroys had to fight against the Araucanians or the Chiriguano, which lingered well into the nineteenth century. The Uru of the Desaguadero, much less numerous, taking root at the very heart of the colonial territory and embarking on the road to acculturation should not be thought of as offering this kind of resistance: Still, they were the *Indios bravos* of the interior.

These are obscure and poorly documented battles. One event, best known from its description by Calancha and also mentioned in a letter from the Audiencia to the king, took place in 1632–3.[29] The Ochosuma

had raided several settlements; the lord of Chucuito had ordered them to stop. "They answered, scandalously, that they were not Christians, that they did not intend to obey the king and that they would give in only if the viceroy withdrew" (Calancha [1639] 1972, vol. 1, p. 294). At this point, five Ochosuma, along with Juan Pachacayo, their leader, were captured, and executed on the plaza of Zepita, and their heads were exhibited at the entrance to the bridge over the Desaguadero. The Ochosuma named a new chief, Pedro Laime (the son of their main sorcerer), who attacked the bridge and rescued the five heads. Calancha, horrified, adds: "They licked the blood on the stakes on which the heads had been exposed with so much passion that they left the wood polished and white, washed of any trace of blood" (264). The lord of Chucuito tried again: According to ancient Andean ways, "He begged them to obey him." They answered with insults, calling him a "mestizo." This epithet is rich in echoes: According to the Uru, by collaborating with the Spaniards the lord had excluded himself from the traditional ties of reciprocity.

The Aymara tried a new assault: They reached several floating reed islands and captured, according to Calancha, seven hundred pigs and thirty llamas. This, too, is remarkable: In the early seventeenth century even the most "savage," the most backward, Uru had already adopted a European domesticate and carried on an elaborate aquatic animal husbandry.[30]

More fighting: The lord of Chucuito sailed twenty rafts on the Desaguadero, while he followed along the shore with two hundred men. During a naval battle, the Ochosuma drowned their enemies. "They slunk through the reeds with incredible skill, through the openings they had built among the reeds." The corregidor of Pacajes then joined the battle with seventy horsemen; a squad of twelve caught sight of the Ochosuma on shore and pursued them. The squad fell into a trap, all twelve were killed, and the corregidor was forced to retreat to Tiahuanaco – a disaster. He called for reinforcements from Oruro, Potosí, Cochabamba, La Plata. A handful of three hundred Ochosuma held up the whole Audiencia de Charcas.

The repression came soon enough, bloody and evoking long-lasting hatreds. The Uru kept up their rebellion to the end of the seventeenth century. A well-placed witness, Francisco Ortiz Coloma, a scribe at Chucuito, has left us an account dated 1678. He recalled that for forty years the Ochosuma and Iru-Ito had devastated the province (AGI, *Charcas* 106), and he described their ways of fighting. They used pikes made with the aid of captured swords and daggers; using their *liwi*, or *boleadora*, made of three cords with stones tied to the ends, they brought down the horses by swinging the weighted ropes at their legs. (This weapon is still associated with the Uru today.) Once the horseman fell, they killed him with their *viche*, a kind of hammer. Their homes in the reeds were protected by canals and other defenses forming unassailable labyrinths. Several more expeditions were organized against these lacustrian fortresses. One, led by another corregidor of Jesus de Machaca, killed twenty-five

Ochosuma men and executed eight more, and their wives and children were dispersed "to different parts of the province to extirpate their very roots."[31]

Toward 1677, the then corregidores of Chucuito and Pacajes led a campaign against the Iru-Itu that settled the issue: Some Uru were hanged, and the rest were sentenced to forced labor in the silver mines of Esquilache (AGI, *Charcas* 132). One of the victims was their leader; native witnesses from Juli, Hilave, and Zepita stated that "the corregidor had captured and hanged the one they had chosen as king." Why "king"? Since the title appears frequently, it raises questions: One would like to have further information, and one wonders if a messianic cult may not have arisen among those Uru who had refused acculturation.

At about the same time, the corregidor of Paria organized an expedition against the rebel Uru of Lake Poopó, described in 1688 as the Vili-Vili.[32] This time we hear their own voices, since some thirty of them were interrogated "in their Uru mother tongue" after capture. They said that they were born on the island of Choro and now formed some sixty households. Others lived even farther within the lake, on the islands of Cari Cari, Puxpu, and Pansa. Not all of them were Vili-Vili: They had been joined by a band of drifters and runaways "from many provinces." All of them admitted that they accepted no one's rule and had never paid tribute. Once the cacique of Challacollo had disembarked on the island and had tried to establish his authority: He had had to flee to save his life.

Did these Uru ever venture onto the mainland? Some ten or twelve at a time, they looted neighboring settlements or attacked travelers. All the witnesses were still heathens: They gathered far into the lake and there sacrificed "black rabbits" (probably *tojos*) to the waters; they sent bloody libations to their gods. They did not attend mass and refused to confess, but they did accept baptism. They married each other; the dead were buried in the lake and sometimes in the chapel at Coro, 3 leagues away. They wanted to be free, according to the doctrine taught by their old sorcerer, or "prophet," called Salvador.[33] When his turn came to be interrogated, he denied the evidence, claiming to be only a curer; he was searched, and they found a mixed bag of unfamiliar objects but also powders, strings with colored knots, garlic cloves, and leaves of coca, all of which he used in secret rituals.

Had the Vili-Vili really been free all of that time? No doubt. If their customs seem to have been affected by European borrowing, there is no reason to doubt that they had been integrated within a truly indigenous logic, much as some of the imported paraphernalia of the curer had been. Still, one detail in that testimony seems odd: Some of the prisoners – Pedro Quaria, Sebastian Cayo, and others – declared that "some twenty Indians go every year to help don Pedro Colquicayo and don Diego Challapa at their planting." Who were these beneficiaries? They turn out to be Aymara, some of them caciques of Challacollo. Thus, some of the Uru of Poopó, despite their "savagery," maintained ties to their neighbors, if of a rather personal and pacific kind, providing

some of the labor force in agriculture. This seems to have been a complex situation, reminding us of what had been reported a century earlier for Chucuito. Are we facing an analogous process of acculturation?

As an epilogue, let us go beyond the chronological limits set originally, in order to follow the fate of the fierce Vili-Vili. The information is scarce but allows us to confirm the previously mentioned ties of the Uru to the chapel at Coro, west of the lake. Thirty years later, in 1718, as part of the testimony collected during litigation between the Indians of Toledo and those from Corquemarca, we hear that some Uru had settled next to that chapel.[34] The judge inquired whence they had come. They had been literally "extracted out of the lake" by a priest. The inspector, fray Thomas de la Torre, granted them proper title to land so as to avert their return to the reeds and to paganism.

A century later, in 1838, the *estancia* of Coro had twenty-two tribute-owing Uru who paid a tax of 3.0 pesos, whereas an Aymara originario at Corquemarca paid more than 9.0.[35] Later censuses show no change, beyond some increase in the number of tribute-owing households. In 1860, the census suddenly recorded two originarios Uru who, like the Aymara, paid 9.1 pesos each, whereas forty-four "landless" Uru continued to pay 3.0: A small elite had emerged. In 1871, their number had risen to seven, whereas those still paying 3.0 pesos were now forty-seven. The seven paying 9.1 pesos were no longer enumerated as Uru. We witness here an acculturating process and can even watch it as if through a looking glass: One Inocensio Machaca, twenty-two, was recorded twice – first in the originario category, with a footnote saying, "Comes from the Uru," and again in the Uru column, where his name is crossed out, with the mention "has passed to the originarios." A few decades later, the second category has been absorbed into the first. Today all inhabitants of Coro consider themselves Aymara and resent as insulting any suggestion that some of them may descend from the Uru.

Still, other Uru continued to live "inside the lake": These are the Moratos, truly the last. Until recently they were inaccessible and had not been the subject of any ethnographic inquiry.[36] When I visited them in December 1976, I was able to converse at length with their leader, a man of about fifty, who displayed admirable wisdom and intelligence. He told me he had spent his childhood on the floating islands, amid the reeds: He and his kinfolk ran away if strangers appeared. Later the level of the lake had risen, drowning the reeds; a drought followed, and the level dropped: Eventually the reeds disappeared, and the Moratos were forced onto the beach. All of this happened approximately in 1930–40.

People thought that only a few score Moratos were left; in fact, the number was closer to five hundred. They have lost their ancient language except for a few kin terms and words describing the lake's fauna. For several generations they have spoken only Aymara: Their neighbors

have forced them to abandon their "barbarous chatter." Even now their children are not admitted into the local schools. Contempt and segregation have contributed to preserve their identity as Moratos. Can they survive? Today they find themselves in an absurd and tragic situation: Their Aymara neighbors have incorporated as fishing enterprises and been granted fishing rights to the lake; now the Moratos find themselves defending even their fishing rights. After having been, forever, deprived of land use, they may yet be prohibited from using their own lake.

The Uru one meets today are heirs to a complicated history. At first, in the sixteenth century, they formed a heterogeneous collectivity, given a false unity by the label "Uru," which actually hid ethnic, social, and economic variability. The Indians it referred to formed quite differentiated groups, who tended to fall between two extremes: those already aymarized and owning land, and those devoting themselves exclusively to fishing, who tended to be rebellious. Most of the Uru at that time could be found between these two poles; they provided the Aymara with a low-status labor force as well as with lacustrian products complementary to those of the puna. It is tempting to see them as an internal limit to the Andean model of archipelagoes.

During the seventeenth and eighteenth centuries we witness three trends confronting one another:

1. Most Uru followed the Aymara route, which they completed by 1680.
2. The Indians leaving the lake, trying to integrate themselves in the colonial system, provided a constant if small contribution to the composition of that system.
3. Those who remained Uru became even more marginalized, since the rest had become Aymara and intermediate categories had disappeared.

This combination of acculturation and marginality contributed to a simplified picture in which the residual Uru seem to be fossils, different from the rest of the Andean population. The term *uru* was emptied of its many meanings and came to refer to only the lowest stratum, that of "savages." All the conditions are now at hand for the emergence of what we have called an ethnographic myth. The early chroniclers had recorded the point of view of the Aymara, and the image they transmitted was that of a dominant group. Their descriptions are very partial and apply only to those Uru always marginalized, like the Ochosuma, the Iru-Itu, or the Vili-Vili.

Beginning with the eighteenth century, travelers and ethnologists did meet Indians who seemed to match those early descriptions; they had no way of knowing about the initial diversity that had long since been wiped out. They did not suspect the historical transformations that had created the populations they now observed. In fact, Uru "primitivity" melts away as soon as one surveys their history. Uru backwardness, like

that of many other peoples, is the end product of a long process of domination and rejection (see Lévi-Strauss 1952: 113–32).

Briefly, the complexity of the Uru problem is the result of the fact that these people are the "vanquished of the vanquished." The issue of their origin has not been faced here: It would require multidisciplinary inquiries by archaeologists, linguists, biologists, historians, and anthropologists. It is plain today, however, that the processes outlined here were initiated long before the sixteenth century. It was an acculturating process, internal to the indigenous world.

Born of a colonial context, studies in acculturation usually have limited themselves to an analysis of the relations between the West and non-European societies. The result may seem paradoxical: Although such studies attempt to view time and cultures from a relativist point of view, they tend to remain locked into Europo-centric perspectives. A more generalized theory of cultural change would expand to include analogous phenomena within aboriginal societies, whether these are incorporated into a colonial situation or not. After the Spanish conquest, the Uru found themselves within a much vaster system dominated by the West – but from their own point of view they found themselves at the bottom of a waterfall, with Aymara, caciques, mestizos, and Spaniards overwhelming them. The indigenous structures did endure partially, if altered in many ways; the colonial situation speeds up earlier processes even while introducing completely new factors. In the midst of the upheavals suffered under Spanish domination, we note the perpetuation of one of the profound logics of Andean history.

Notes

Archivo General de Indias, Seville
Charcas 132, 270
Lima 44–5
Contaduria 1887
Archivo Histórico de Cochabamba
Legajos 1,481, 1570
Archivo Nacional de Bolivia, Sucre
Cajas Reales 1,750
Expedientes Coloniales 1689, no. 402
Revisitas, libro 175
Archivo del Tribunal de Oruro
Derechos Reales, Registro de comprobantes de Poopó
Archivo del Tribunal de Poopó
Expedientes 10

1 Only about 2,000 Uru are identifiable today. Four or five groups, each isolated from the others, have been located. The most significant nucleus, some 1,200, live at Chipaya, near Lake Coipasa. I have done fieldwork there on three occasions: July–September 1973, July–October 1974, and October–

November 1976. I have also visited the Moratos of Lake Poopó (some 500 people) and made contact with the Iru-Itu of the Desaguadero (some 130). Others are reported from the Peruvian side of Lake Titicaca, near Puno, and most likely at Pomata.

2 Like the Quechua and Aymara languages, Puquina was recognized in the sixteenth century as one of the *lenguas generales* of the viceroyalty.

3 New research approaches have renewed interest in the hypothesis of some relation between Uru and Arawak: Blood group testing points to analogies between the Chipaya and the Matsiguenga, who live in the Peruvian *montaña* and speak an Arawak language (personal communication from J. Ruffié and J-C. Quillici).

4 See Cook 1975, which reproduces Manuscript 1,787 of the *Contaduría* series in the Archivo General de Indias (henceforth *AGI*) in Seville. See also the article by Bouysse-Cassagne (1975), which is included in Cook's edition and offers a map of the new information. I have also used another version of Toledo's *Visita*, which is limited to Charcas alone but frequently includes additional detail; it is located in the *Cajas Reales* series in the Archivo Histórico of Potosí. The same information was discussed a century later, in 1684, during a census conducted by the Duke de La Palata, to be found in AGI, series *Charcas*, no. 270.

5 See "Carta del factor de Potosi Juan Lozano Machuca . . . describe la provincia de Lipes," 1581, in Jiménez de la Espada 1965, pp. 59–63. According to Lozano, there were one thousand Uru to four thousand Aymara in that jurisdiction, which would extend the watery axis southward to the salt lake of Uyuni. The same Lozano reported around a thousand Uru in the Arequipa area and still others at Pisagua, Iquique, and even Cobija. It is unclear if these early reports of Uru refer to the same population listed as Chango by much later travelers. Cúneo-Vidal (1913) argues that they are the same.

6 My calculations are based on the three sources cited in n. 4, with minor differences from others using them.

7 When the sources offering total population figures are compared with those listing numbers of households, we find that in sixteenth-century Peru the size of the household varied from four to six.

8 At Challacollo, 3,801 tribute-owing households (1,243 Aymara, the rest Uru); at Coata, all were Uru; at Carabuco, 350 Uru out of 727 households; at Ayaviri, 79 out of 718; at Nuñoa, 22 Uru out of 652. All these figures are from Cook 1975 and are confirmed by those offered by the other accounts.

9 The full text of the quotations from Garci Diez's *Visita* are also reproduced in the notes of the French original in *Annales* 33, nos. 5–6 (1978). Emphasis added.

10 These data come from one of the oldest baptismal records available for Bolivia, 1581–1618.

11 For example, in the *repartimiento* of Chuquicota and Sabaya (which included Chipaya), the Aymara paid 6.5 pesos and the Uru only 1.5 pesos per household; at Puno, the figures were 5.0 and 2.5, respectively.

12 AGI, series *Charcas* 270, "Libro y relacion sumaria," 1684, ff. 4v–5r.

13 See Vellard 1959–60, p. 34; also Bouysse-Cassagne 1976, p. 106. The repartimiento of Chuquicota and Sabaya had 2,385 tribute-owing households in all, 602 of them Uru; they sent to the mines 313 Aymara (17.55 percent) and 66 Uru (10.96 percent).

14 The figure of fifty-one is the result of counting separately the seven pueblos

of Chucuito Province, a procedure followed by the census of La Palata in 1684. In both 1567 and 1574 the seven were still enumerated as one.

15 The figures of the *Tasa de la visita general* differ slightly from those of Gutierrez Flores's enumeration.

16 See, for example, the *parecer* of Diego Lopez de Cuniga (1583): "Huros Indians of lesser ability and capacity, who are also called Huruquillas, whose settlement and homes are at some 3 leagues from Cepita . . . in between some reeds" (AGI, *Charcas* 45).

17 Vellard 1959–60, pp. 32-3. We were unable to trace this reference, which was offered to Vellard by Raúl Porras Barrenechea.

18 Archivo Nacional de Bolivia, Sucre, *Expedientes Coloniales* no. 402 (1610), f. 27.

19 Archives of the courthouse at Poopó, *Expediente* no. 10, 1593–1679. See, for example, "Amojonamiento entre los yndios soras y los yndios huros de Charamoco" (f. 141r) or "Amojonamiento entre los yndios de Tapacari y los huros" (f. 143v).

20 "And these Indians come to plant in these valleys on the lands that they hold among the Indians of Charamoco, since they are all one and belong to a single repartimiento . . . and thus they all benefit from them as their own and belong [to one] governor who sends all the Indians from Challacollo and Charamoco, and the lands are all held jointly" (ibid.). Also see Murra 1975, article 3.

21 Archivo Histórico de Cochabamba, AR 1,570.

22 Archivo Histórico de Cochabamba, legajo 1,481, quoting one "Joan Gomes who was once an inspector in the Cochabamba Valley whose testimony was copied at the request of don Hernando Asocalla Iord of the subdivision of Paria on 22 November 1556 whose lands these were and which were given to them by the ynga Huayna Capac and his captains." [legajo has no numbers on pages or folios].

23 One of the witnesses, Alonso Chuquiguanca, who had been a child when the resettlement had taken place, declared that he had heard his father say at the time . . . that those Sipe Sipe were natives of this valley of Cochabamba . . . and that the said ynga Huayna Capac had thrown [these natives] out of this valley."

24 An article based on this extraordinary source is available in English, in the collection *The Inca and Aztec States: 1400–1800* (New York: Academic Press, 1982), pp. 199–235, edited by George A. Collier, Renato I. Rosaldo, and John D. Wirth.

25 Archivo Histórico de Cochabamba, *legajo* 1,481, covering events from 1675.

26 See Wachtel 1977, pp. 86–98 (Harvester Press, Hassocks, Sussex). In Table 15.1, the Aymara column includes all Indians residing at Potosí.

27 The numbers here include those Uru paying tribute, descendants of those enumerated by Toledo. Were we to include the Uru who were exempt from the mita, the total becomes 1,243 + 304 = 1,547, which is about 4.9 percent of the entire population.

28 None of the Indians enumerated at Potosí is recorded as being Uru.

29 It may be noteworthy that in several sources, Uru revolts are mentioned in the context of those of the Calchaqui from Tucuman, in what today is Argentina. See AGI *Lima* no. 44, a letter of viceroy count of Chinchon to the king, May 10, 1633.

30 Even today, pig breeding in the water remains one of the main economic activities of the Chipaya.

31 Archivo Nacional de Bolivia, *Cajas Reales* 1,750, letter of corregidor of Pacajes to the Real Audiencia, sitting in La Plata.
32 Archivo Nacional de Bolivia, *Expedientes Coloniales* 1,689, no. 2, f. 74. Gunnar Mendoza has partially published this document (1944). According to my Chipaya informants, *willi-willi* is a pejorative term applied to eaters of waterfowl.
33 Archivo Nacional de Bolivia, Sucre, *Expedientes Coloniales* 1,689, no. 2, f. 56v to 57r, statements of "sorcerer" Salvador Cayo.
34 Archives of the court in Oruro, *Derechos Reales*, Registro de comprobantes de Poopó (1,939-40), f. 158r.
35 Archivo Nacional de Bolivia, Sucre, *Revisitas*, libro no. 175, ff. 14r to 15r.
36 Vellard 1954, p. 205: "The Moratos avoid other people; we saw some at a distance but were unable to approach them."

16
The ethnic groups in the valleys of Larecaja: from descent to residence

Thierry Saignes

It takes a day's journey to reach the valleys of Larecaja from Lake Titicaca. Starting from its eastern shores (at 3,800 meters), one climbs several hundred meters higher to reach the crests (between 4,100 and 4,600 meters) and crosses the punas. The descent of the first slope follows, and from 3,600 to 2,700 meters one finds the level spots to which the towns cling.

These two ecological zones (the hills surrounding the lake, and the upper valleys) are stepped and near each other. They supply the complementary agricultural products indispensable for human life. Wool and *charqui* come from above; also fish, many varieties of tubers and legumes; other varieties of the very same crops come from below, along with maize. This complementarity has allowed the peasants to achieve simultaneous access even today: This happens because communities either maintain their own lands both above and below or obtain them through links of alliance between households on the two tiers. Even today, communities in the puna still maintain their rights in the *valladas*, some of them very far away; some achieve this communally (like the Macha, in northern Potosí) or as individuals, as do some of the Quillaca, from Lake Poopó.[1]

Such complementarity can no longer be found in Larecaja: if the exchange of produce from the altiplano and the valleys takes place in contemporary markets, this occurs as barter or for money. The participants have forgotten any past kin ties or common origin.[2] Only certain place-names, mute and obstinate witnesses, recall the long-ago settlement in the low country of ancestors who came from the puna.[3]

For the decades following the Spanish conquest, the so-called *visitas* of the colonial administration confirm that Andean polities and kingdoms occupied discontinuous territories through the association of highland nuclei (where the authorities had their seats) with their peripheral outliers located at diverse altitudes and distances. For example, the

My work in the valleys of Larecaja during 1975–7 was sponsored by the Institut Français d'Etudes Andines (Casilla 278, Lima 18, Peru), and the results were published in the institute's *Bulletin*, vol. 10, nos. 3–4 (1981), pp. 141–76.

Lupaqa of the western shore of Lake Titicaca had lands on both the Pacific and the Amazonic slopes (Larecaja, *yungas* Chapi).

We still do not know when they obtained such direct access: Was it in the Late Intermediate period or during the Inka horizon (see Lorandi, Chap. 3, this volume)? Nor do we know whether such marginal outliers benefited primarily the lords or also the ethnic groups, the moieties, and the lineages (*haatha*).[4] While analyzing these "vertical archipelagoes," J. V. Murra raises the issue of their origins and of their relations to the great Andean states (Chimu, Wari, Tiwanacu) and the transformations they suffered during Inka times and Iberian colonization.[5]

In Spanish times we find various strata of settlement, born of the contrary pressures of forest populations meeting the farmers descending from the Andes. All share the eastern valleys: Some are aboriginals (called *yungas*); others are highland colonists (sent out by the lakeside kingdoms); still others are highlanders resettled by the Cusco state; some arrived even after 1532. At what time did these several *mitmaq* waves settle the lowlands? How could so many ethnic groups coexist in the same valleys?[6]

Differences in the policies of highland power centers would explain the separate strategies used in the colonization of the slopes. After 1532, the ties between the colonies and their highland nuclei, distributed as far apart as Cusco and Potosí, underwent a slow process of disengagement. As we unravel the stages of the break between valleys and punas, we reexamine the bases of their ancient solidarity.

The few sources published so far have reflected the point of view of "those in the highlands," the power centers on the altiplano. Here I offer a contrary perspective: How does the history of the valleys affect the forms and the processes of settlement on the eastern slopes of the Andes? What led to a fragmentation of the ethnic polities? How did the present communities emerge out of this protracted process of disintegration?

Peripheral settlements have their own characteristics, tied to local geographical conditions. How did the colonists take advantage of the ecological potential of the Larecaja valleys?

This whole province is made up of deep gulleys, high peaks, precipitous crags. . . . Its sky is beautiful, though heavy with grey clouds that hide the clear horizon. Its temperament, both dry and humid, is favorable to human health, owing also to the good nutrition in their crops. Its inhabitants strive in the fields, where year-in, year-out, they harvest more than 40,000 *fanegas* of maize and wheat. They raise all kinds of Castillian fruit, vegetables, poultry, sweet-smelling flowers, abundant medicinal plants and herbs. Small animals and cattle are not absent but not numerous, given the limited pastures left over by the many farming plots. The mountains in between please the viewer, covered as they are by leafy cedars, heavy walnut trees, laurels, and precious wood. . . .

This noble province, famed for its lavish climate and the generous fame of its name, has twelve towns of Indians, taught by the Spaniards who live there to resist the invasions of forest savages at their borders, who are so close as to threaten some of the fields.

This is how the bishop of La Paz described the qualities of the province in 1651.[7]

The fragmented quality of the relief and the dispersion of the waters, on the one hand, and the extension of forests with a concentration on grain crops that limit pastures, on the other, define the originality of the Larecaja valleys. Arranged in an amphitheater converging on the ravine of the Llica River (at 1,000 meters above sea level), the valleys reach from the upper punas all the way to the narrow, hot bottom of the canyon. The higher portions of the small valleys, grouped in a semicircle open to the east, receive long exposure to the sun and adequate but unequally distributed water, in between the cordilleras.[8]

Key elements in the human occupation, these upper reaches bring together two highland sectors:

1. Above, the terraces carved into the rising slopes, with unstable soils. These are divided into vertical and parallel bands (*aynoka* or *suyu*, in Aymara), where in successive years two tubers (potatoes, oca) are raised, mixed with plants of quinua and a legume. A long "rest" begins in the third year and lasts from six to ten years. In each zone the households own lots (*kallpa*) whose rotation is communal. The Indians stressed their lots' potential as agricultural land and contrasted this with Spanish cupidity, which aimed to transform them into pastures. On August 19, 1618, "the principals and leaders of *yunga ayllus* Pocovayas Thahuanas," of Hilabaya, answered in the following way the claims of a *vecino* of La Paz:

> These are lands for our natural sustenance, where we plant potatoes and ocas and other vegetables like *quinua*, to support and maintain us, and . . . it is natural and right, since we plant the maize to pay the rates and tributes; and in sterile years we make up a good bit of the rates with the *chuñu* we harvest from said lands.[9]

We see here a double use for tubers: in their natural state, for local consumption, and freeze-dried as a reserve and to pay the new taxes.

2. Below, fanning out, are many flatlands, planted to grains (maize, and later wheat, barley, even some oats), which involve less difficult communal obligations: Each family was installed on a cultivated *sayaña*, in Aymara, where they also built their home. Such increasingly individualized strategies lead to a growing number of isolated households. This rule of dispersion, fundamental for the Andean peasantry, minimizes the risks of weather (frosts, drought): A vast number of "pockets" (in valleys and pampas) and of creeks encourages the dispersal of fields. Unlike in the dry western valleys, no network of irrigation canals is

required. Each farming unit is content with the local trickle, present everywhere and not specialized.

This sector of upper valleys, producing both grains and tubers, corresponds to the *chaupi* of the Quechua or to the *taypi* in Aymara,[10] and makes up an essential zone of the archipelago. It does not impose a separation but reinforces active complementarities. In this zone one finds towns, built usually at an elevation of between 3,600 and 3,300 meters and taking advantage of this isochrone, balanced access to both tiers, which can be reached in less than an hour's walk.

Because of the conditions of soils and moisture, this whole tier is worked in small units, forming a mosaic of notable variety and mobility, which also manifest themselves in patterns of occupation. Agricultural plots and jurisdictions or ethnic, social, and legal affiliations are all interconnected – from the most isolated household to the towns, all are laced together in a system whose complexities can be revealed only through anthropological fieldwork.

The upper valleys extend in two directions: upward to the punas and downriver to the yungas.

Puna lands provided supplementary resources: *polylepis* groves, the herding of camelids, more tubers. Gold and silver mines on the upper reaches of the amphitheater were worked in Inka and colonial times.[11] It is generally assumed that these punas belonged to the Omasuyu, dwellers on the eastern shore of Lake Titicaca ever since Tiwanacu times, who, according to the early written sources, spoke Puquina.[12]

The lower reaches, true canyons with vertical walls, dry yungas of suffocating heat, are most of them inhospitable and empty of people, because of both insecurity and endemic fevers.[13] Their inhabitants, to whom the term *yungas* was also applied by outsiders,[14] originated in a population wave coming from the forest (possibly Arawak). Could they be the originators of the "Mollo culture"? Assigned to the Late Intermediate period, this culture has left many traces at fortified points built at the entry to the valleys – probably as defenses against the ferocious *chunchos*.[15] The monumental complex at Iskanwaya,[16] at only 1,700 meters, shows evidences of a political organization whose geographical and ethnic limits have not been determined: Did Iskanwaya include any puna dwellers? To what extent could they maintain their autonomy against these highlanders?

At the cost of strenuous efforts, they were also able to harvest dry coca leaf[17] to supplement the wet gardens on the eastern slopes. The dry fields were planted in the *palla yunga* of the Copani and Llica river terraces to supplement wet leaf production; these dry fields were destroyed in the second half of the sixteenth century because of the health dangers threatening the cultivators;[18] another kind of danger threatened those growing the leaf in the rainy lowlands: Proximity to the forests brought the threat of being kidnapped by Amazonian savages.[19]

The dry ravines were no obstacle to travel: Rope bridges spanning

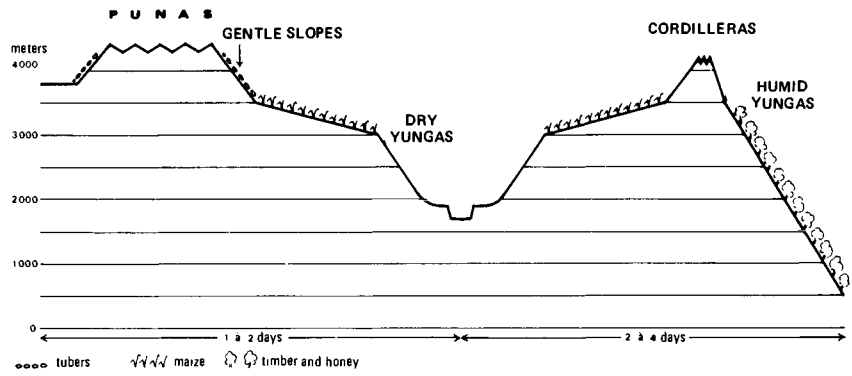


Figure 16.1. Transverse cut, pointing northeast, through the valleys of Larecaja from Lake Titicaca to the Amazonic forest, indicating altitude and products.

the Copani and Llica rivers connected the watersheds of the amphitheater.[20] Given the articulation of the landscapes, everything points to a profound geographical continuity within a span that was easy to traverse: From the highest punas to the lowlands, one can descend the entire watershed in a few hours or take a long day to walk up (see Fig. 16.1).[21]

The discontinuity of settlement patterns contrasts with this physical continuity of puna with valley (see Fig. 16.2). The ethnic units, dispersed along the slopes like so many islands, and as unstable as so many bubbles, to use the metaphors of Murra and Platt,[22] are actually grouped through a complex set of links. As the geographical span grows, so does the segmentation of groups, the multitude of legal definitions varying with the forms of personal dependence, the overlapping rights in land: All these become manifest in unexpected combinations.

Thus colonists of the most disparate antecedents met face to face below, some growing maize and coca leaf; others washing for gold in the rivers or extracting it from the rock; still others gathering wild honey and the feathers of forest birds or felling tropical timber. This multiethnic rubbing of shoulders[23] in the exploitation of local resources deserves analysis from several points of view.

If we allow for a pre-Inkaic peopling of the valleys by populations from the nearby punas,[24] how did these define their relations to the lowland natives? Litigation between Omasuyu Indians and the yunga from the middle of the sixteenth century reflects much older tensions.[25] How did these earlier migrants receive the later settlers, such as the Lupaqas or Pacajes, coming from more distant punas?[26] After the fall of Tawantinsuyu, we witness conflicts that shed light on still earlier violence that was part of the efforts to control eastern lands.[27]

On the other hand, how did lowland products reach the altiplano? Who guaranteed them free transit to highland nuclei, while crossing so many "alien" territories? The redistributional network could plausibly

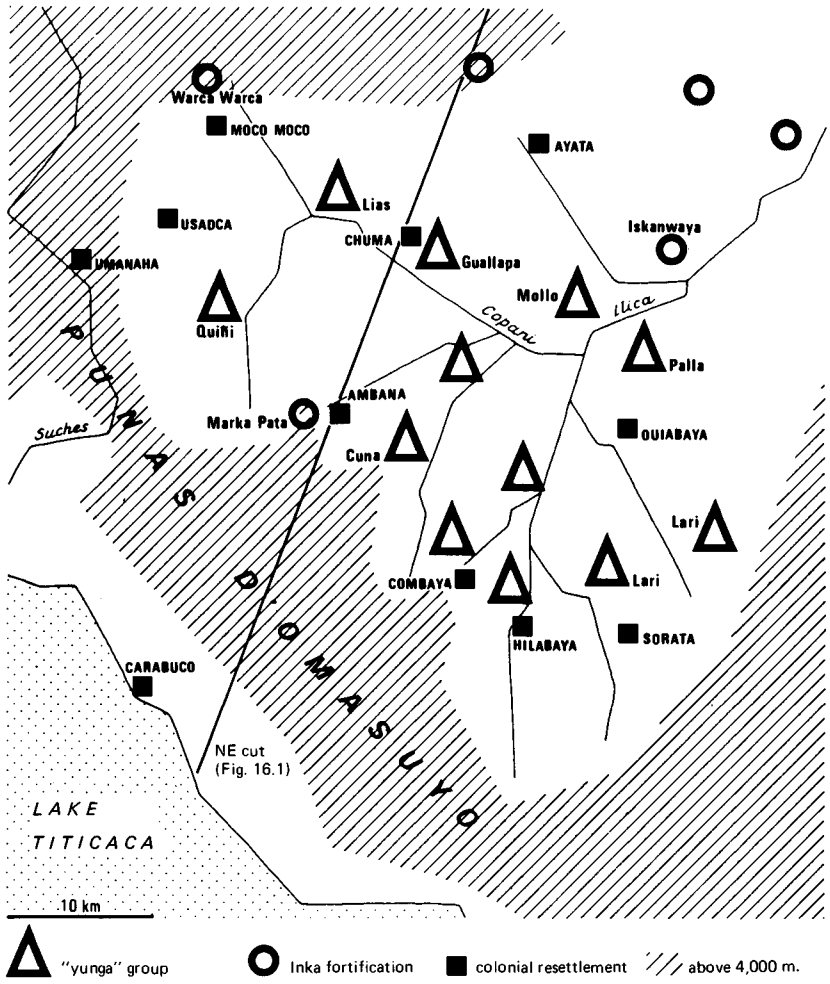


Figure 16.2. The valley of Larecaja, showing the transverse cut of Figure 16.1, as well as the location of ethnic groups and the later colonial resettlements.

have been organized by the household directly, using kin ties, or through a federation of more or less centralized polities. In the long run, is it not indispensable to assume some kind of state guarantee?[28]

All of these still unfathomed dimensions of the settlement pattern, of the circulation of goods and people, are complicated by what we still do not understand about Inka rule. Were the *cusqueños* content with confirming, restating, and delimiting the polities they found in the valleys and that now owed them services and allegiance, or did the Inka resettle them according to new policies? We can distinguish three such

new dispensations: those affecting the autochtonous lowlanders, those concerned with nearby puna dwellers, and those affecting faraway highlanders.

The local yunga groups seem to have been favored: Not only were they not deported, as was done with most of the inhabitants of the Cochabamba Valley,[29] but they were granted a territory inhabited by three polities: the chiefdoms of Carabaya in the north,[30] the "province" of Ambana at the center,[31] and that of Larecaja (in a strict sense this corresponds to the valley of Larecaja) in the south. In the last instance, the yungas were "given" gold mines on the slopes of Illampu.[32] According to some papers from the sixteenth century,[33] the "province" of Larecaja (understood now to include all three of the above chiefdoms) reached to the very shores of Lake Titicaca – a surprising extension, the result, we assume, of imperial favors.

Such a "generous" policy toward the yungas stood in sharp contrast with the repression suffered by the inhabitants of the eastern shores of the lake – their spirited resistance to the Inka surprised the European chroniclers.[34] Several of the ethnic groups of Omasuyu were resettled as *mitmaq* in the fortresses of the eastern frontier, a hostile and unhealthy region (see Fig. 16.3).[35]

Since they could neither absorb the Aymara-speaking population within the empire nor deport all of them to the periphery, Inka policy attempted to infiltrate their territory in the Collao and its lower outliers. They were surrounded and watched by resettled state colonies brought from afar.[36] Chinchaysuyu households from northern Peru were installed on both sides of the lake, facing each other[37]; Charcas garrisons and some from Yampara were placed on the northern shore and Huanca colonies on the eastern (see Fig. 16.3).[38] J. V. Murra has stressed this reutilization of an ancient Andean practice whose very meaning was changed, since such long-distance resettlement makes it difficult if not impossible for the colonists to continue exercising their traditional rights at their ancestral homes.[39]

At the same time, these long-distance *mitmaq* did receive lands in the nearby Larecaja valleys, thus taking advantage of their "vertical complementarity" expectations and correcting some of the distortions inflicted by distance.[40] By granting them lands in nearby valleys, the Inka offered the resettled colonists a measure of new autonomy, which allowed them to reproduce at a local level some of the benefits they had enjoyed at their original nucleus.[41]

Still, the Inka did modify the very environment. They resettled the Lupaca in seven main towns on the shore of the lake[42]; in Larecaja, they also sent down some of the farmers from their highland aeries to much lower administrative centers.[43] How did these multi-ethnic administrative centers work when used as watchdogs of revenues and as census takers? The only insight into these matters comes from much later complaints by the descendants of such authorities. In 1586 the

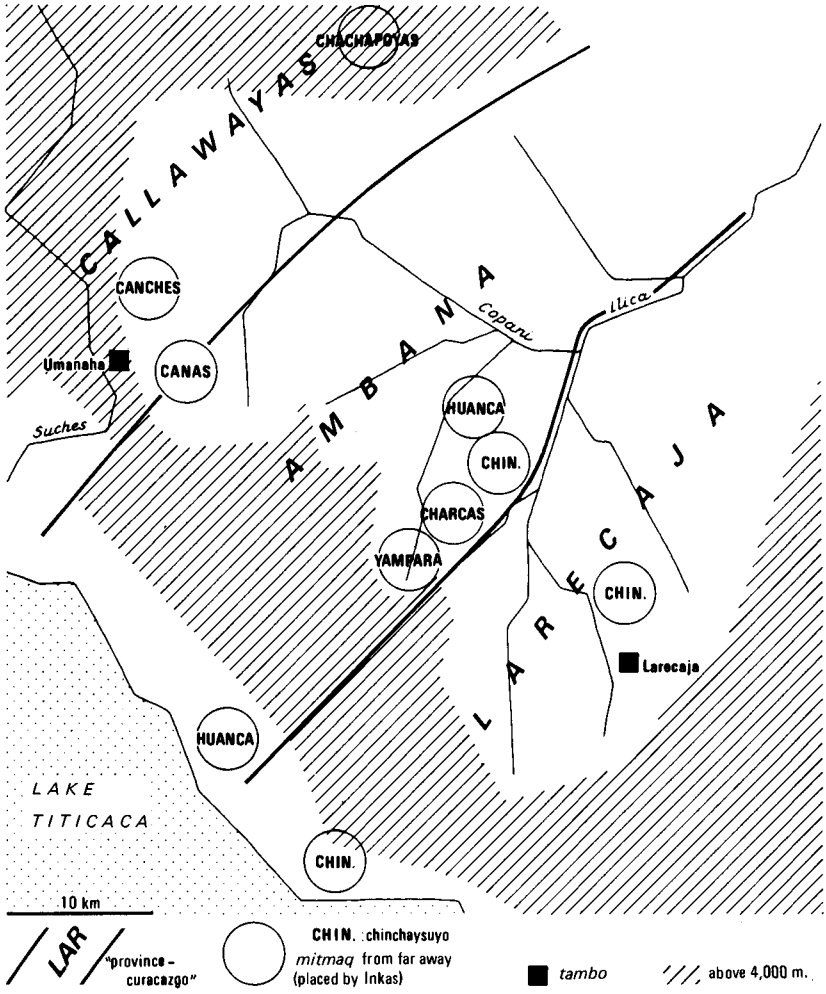


Figure 16.3. Topographical sketch of territorial divisions under Inka rule, indicating the places of relocation of state *mitmaq*.

governor of Hilabaya and Combaya recalled with some bitterness the changes that had accompanied the fall of Tawantisuyo:

Taking into account the lineage, authority, and qualifications of my father, the other Inkas, Topa Inka Yupangui, father of Guayna Capac, named my father as lord and governor of the said towns and many other nations of Indians that at the time lived in the province and neighborhood of Larecaja. Later on, the local chiefs refused to recognize the dependence that as *mitmaq* they owe me in matters of rule and succession and have gone about without order.[44]

The *mitmaq* rejected any local supervision that could interfere with their *direct* access to their original nuclei. During the interviews with aged witnesses conducted in 1586, the *corregidor* of Larecaja confirmed the separateness of the colonists:

Since they were *mitimaes* and *llagtaruna*, natives of various towns and *repartimientos* in this kingdom, they had no cacique principal to govern them. Each *ayllu* of Indians had its own headman, who did not obey one another: Hence all kinds of inconvenience were the result for the good government of the said town.[45]

Such testimony makes up for the absence of inspection records for these valleys, providing independent evidence of the dispersed pattern for the households and hamlets belonging to the ethnic ayllus, as well as of the interdigitation of local and regional dependencies.[46]

The multi-ethnic settlements of Larecaja reveal some novel characteristics when they are compared with the Pacific coastal outliers of the Lupaca, described by Murra (see Table 16.1).[47] The lord of Hilabaya could still recall the whole migratory process:

In the old days, all the valleys were settled with puna Indians, and in this, my town of Ylabaya, we not only received newcomers from Guarina, Hachacache, Carabuco, Guancane, Copacavana, from this bishopric, but also some from that of Cusco, like those of Taraco, Saman, and other towns. Although they were natives of those towns, they moved here to Ylabaya, where they were received as if they were their own Indians, adopting them as such; and although at the time they paid their tribute to their original lords, in everything else they were subjects of the town of Ylabaya, as their adoptive mother.[48]

Through this suggestive metaphor of adoption, the lord reveals the limits of the Andean model of archipelagoes: How to maintain an equilibrium between links to the puna and the resettlement in the valleys? The adjustments that followed may have been unstable, but they were also flexible and permitted the coexistence of such multi-ethnic archipelagoes with simultaneous access to the tiered productivity of the centers in the highlands. The installation of distant state colonies, with the enumeration of the colonists in the new towns, urged them to reformulate the settlement patterns, helping, somehow, to freeze them.

Once Iberian domination introduced its ruptures and disorganization, can one still recognize the ethnic and political architecture of the discontinuous mosaic making up the whole of the Larecaja valleys? The different reactions to the colonial impact give us retrospective insights into the original forms of pre-Hispanic arrangements of the space to the east.

After the Conquest, the Spaniards tried hard to impose a radically different organization of space. By attempting to tie the Indians to their place of residence, they aggravated some of the contradictions intro-

Table 16.1. *Comparison of characteristics of* mitimaes *sent out by the Lupaca, western versus eastern*

Mitmaq	Distance from nucleus	Size	Multi-ethnicity	Double registry	Specialization
Pacific coast (47)	Up to 10 days	Hundreds of households	†	?	Agriculture and crafts
Larecaja	2 days	Tens of households	†	†	Only agriculture

duced by Inka policies. Ethnic groups were now fragmented into separate tributary units (known as *repartimientos*), each granted to a separate *encomendero*. Thus the Collaguas, the Lupaca, and the Carangas (among others) lost their control of the *mitmaq* on the Pacific coast.[49]

During the early colonial period (1532–65), these grants did not yet affect the traditional organization of the eastern valleys.[50] Francisco Pizarro took for his very own the Indians of the repartimiento of Chuquiyabo (La Paz), which at the time included four hundred *mitmaq* in Larecaja.[51] The historical record suggests an early divergence in the evolution of European rule on the western and eastern sides of the mountains. On the western slopes, Spanish occupation began along the coast and moved up the valleys, which were then the first to be granted. On the eastern side, in contrast, the grants began on the puna and descended the valleys, thus continuing an earlier Andean trend.

The division of the viceroyalty of Peru after 1565 broke up the unity of the eastern domain: A province of Omasuyu was created, above and to the west, and another in Larecaja, below and to the east. The line of division used by the colonial administration coincided with the continental divide that separated the waters rushing down to the Amazon from those flowing to Lake Titicaca: Until that moment the crests had not been used to interrupt the continuity between the two watersheds. From that time on, the new separation was to mutilate the punas. It flies in the face of claims by the Omasuyu Indians that they had continued to control their maize-growing zone by favoring Spanish domination of the lands and inhabitants of Larecaja. Some years later, Viceroy Toledo came in person to supervise the rearrangement of the native population.[52] We still lack the details of how the new towns or settlement schemes were founded; in some ways, such population centers were as artificial as the Inka administrative centers. They may well have had difficulties combining the joint residence of the native population with the several waves of migrants.

A notable fact: Though designed by Spaniards, the new towns were systematically mapped according to a dual division. How could such moieties be reconciled with the multi-ethnic character of the population? Thus the reduccion (resettlement) of Hilabaya observed the dual division: The "upper" half included the ayllus of Arapa, Capisi, Chupa, Sayra, Taraco, Saman, and Achacachi; the "lower" one, those of Checa Acina (belonging to Carabuco), Guancane, Moho, and Cchejje. All these names refer to the peoples' original homes on the puna. But inside each ayllu there was no homogeneity: Thus, Cchejje included families of aboriginal yungas, *mitimaes* from Huaringa, and the yanacona retainers of the local lords.[53] The traditional Andean categories (above and below, right and left, senior and junior) are woven into a pattern that is simultaneously symbolic, ethnic, and geographical; it reorients space and overlaps the multiple human "islands."[54]

Within this new framework, the *mitimaes* still paid their tribute to

their puna lords (this included sending *mitayos* to the mines at Potosí), even though they had not been relieved of the obligations associated with their new residences in the valleys. These included additional *mita* services on European haciendas[55]; chores owed the *corregidor*, the church, and the *tambo*; the salary of the European priest; and taking their turns as *alfereces* of church-sponsored societies.[56] Such full participation at their place of residence was the result of new solidarities in the new neighborhoods; it validated their rights to valley lands.[57]

How was it possible for the *mitimaes* to fulfill all these obligations, both above and below? How were they chosen for each chore? The sources at our disposal stress their statements claiming that they were much too few to be able to comply with the mining *mita*:

> We are cultivators and few, and the share of each is about four, three, and sometimes five per ayllu, and the most it ever is is thirty, and it takes too much work to also plant and harvest the fields of all the Spaniards in these valleys and also our own from which we pay our obligations in maize and fowl to the highland lords, and this is the only way we recognize them, since, as we have claimed, we were resettled in these valleys and hot country, and here we were given house plots in the reducciones of our towns of Sorata, Quiabaya, and Cumbaya, and Ylabaya, and we were given neither fields, nor house plots, nor pastures in the puna towns, since we were *mitimaes* yungas. If we were to be removed to the puna, our persons would be threatened, but also since there are so few of us, these reducciones and towns would be lost, and thus it would be impossible to pay the salaries of the corregidor, of the priests, and the other duties we pay, nor would there be food to keep the city of La Paz going or the provinces of Chucuito, Omasuyu, and Urcosuyu, which are fed through our work and from the maize that we harvest in this valley.[58]

The recruitment of the *mitimaes* continues to raise questions for colonial times, much as it does for earlier ones. Were they selected at the moiety level or at that of the ayllu? Did each unit supply a number of workers proportional to its size, or were there fixed quotas? We note, for example, that there were seventy Lupaqa among the *mitimaes* in Larecaja: Can we assume that each of the main subdivisions had sent ten colonists (see Fig. 16.4)?[59] When one generation of colonists died out, did the puna lord name their successors from among their heirs, or did he send down a new contingent? Such dependence of the *mitimaes* on the lord evokes an analogy with the status of the *yana*.[60] According to testimony by don Francisco Vilcacutipa, the centenarian lord of Ilave, when one yana died he was replaced by his eldest son.[61] What was the destiny of the *mitimaes* after the Spanish conquest and the establishment of the reducciones?

Fortunately, two lists assembled twenty years apart, in 1575 and 1594, are available: Both include details about the *mitimaes* claimed by the

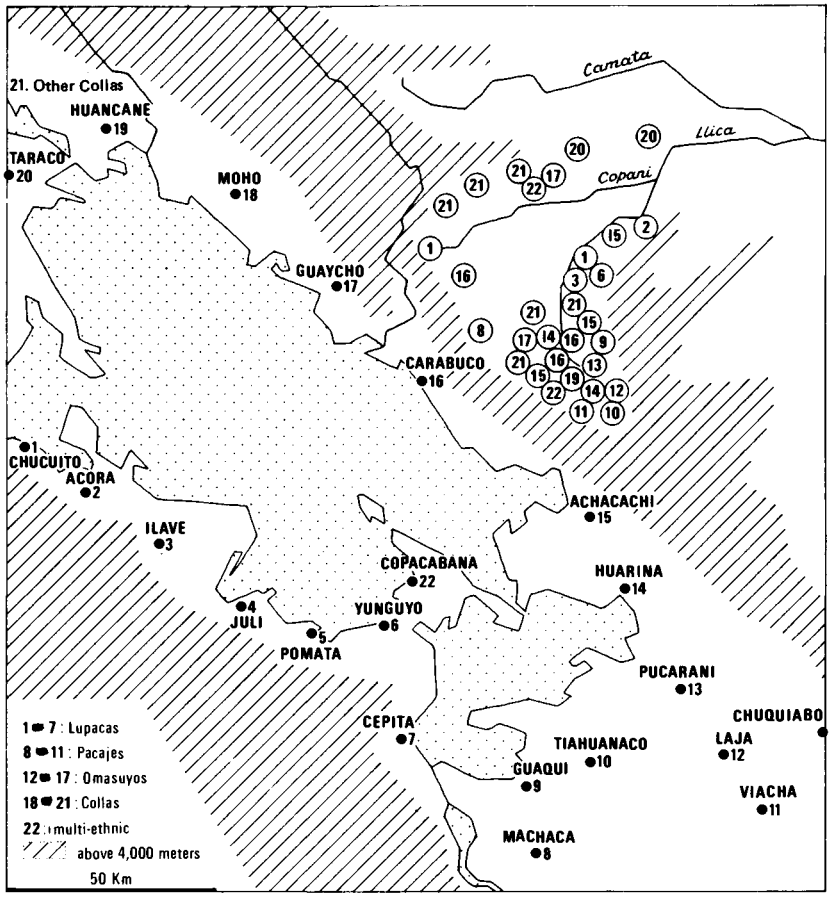


Figure 16.4. Altiplano ethnic colonies in Larecaja region.

puna lords and the actual Indians located in the valleys. The figures, arranged by towns and moieties, are summarized in Table 16.2.

The five families now living in the pastures of Pallava, near Sorata, had been sent by four ayllus of the lower moiety of Laja, but the ayllus of origin do not coincide on the two lists. Those who had been listed as children in 1575 were enumerated as married in 1594; they were now liable to the *mita* in Potosí and were leaving with their wives and llamas.[62] The nuclei of origin do not report consistent figures: they sometimes give numbers that may or may not coincide with those quoted by the lords (see Table 16.2). The Uru of Huarina provided some notable detail: there are two ayllus in each moiety, and the *mitimaes* they sent to Sorata show proportions similar to those sent by the Aymara. In 1594 these Uru *mitimaes* also left for Potosí, along with their families, beasts

Table 16.2 *Numbers of* mitimaes *from the puna actually located in Sorata*

Places of origin	Laja		Huarina				Pucarani		Guaqui	
Moieties	Hanan	Hurin	Hanan		Hurin		Hanan	Hurin	Unknown	
Ethnic groups			Aymara	Uru	Aymara	Uru	—	—	Aymara	Uru
1575, listed in the puna	3	5	11	7	29	5	—	—	—	—
1575, actually in Sorata	0	5	7	3	11	—	13	—	1	1
1594, listed in the puna	0	5	8	5	14	5	12	7	23	—
1594, actually in Sorata	0	5	8	5	14		7	5	—	—

Source: Lists in ANB/EC 1595, no. 189, ff. 8–124. See f. 17: "The Larecaja record claimed that they belonged to it, whereas in the highland lists it is said that they were born in the mountains."

of burden, and maize loads.[63] This matches the process of aymarization discussed by Wachtel (Chap. 15, this volume).

Even these few examples suggest that that the *mitimaes* were eventually replaced through succession by the eldest son. Were the discrepancies in numbers and the changes in the affiliation of *mitimaes* a symptom of demographic changes, or do they point to a crisis in the Andean system? What happened to the other children of *mitimae* households? Did they return to their ayllu of origin to regain rights and obligations? Did they become "strangers" resettled in still other towns? The inspection of 1575, already quoted, mentions some recent arrivals in Ambana: "Beyond those already mentioned, we also found in the same repartimiento 210 tributary Indians, called *llactarunas*, who owe tribute and are natives in other places, although they do help those of Ambana with their farming."[64] Who were these *llactarunas*, a name that in Quechua means "townsmen"? Polo de Ondegardo refers to them as seasonal migrants who came down into the valleys to help the *mitimaes* with agricultural chores. They stayed for several months, although there was a risk that they might be enumerated locally by abusive officials.[65]

Are these migrants the manifestation of ancient practices occurring seasonally, or do they reflect new economic pressures? The same Polo, as well as the *Relaciones geográficas*, claim that these repeated trips by puna Indians were for the purpose of acquiring grain in exchange for cold-country produce or for their labor.[66] The wealth of the highlands rested on their control of the animal transport that connected agricultural areas with the consuming centers at La Paz, but particularly with Potosí.[67] The eastern valleys were converted to grain storehouses in response to this demand for food in the second half of the sixteenth century: The "democratized" use of maize and also coca leaf, along with benefits to be reaped through their commercialization, are the bases of a cereal-harvesting destiny for Larecaja.[68] The encomenderos of the eastern shore of Lake Titicaca rented their Indians to the Spanish *hacendados* of Larecaja.[69] Valley authorities, both Indian and Spanish, welcomed the fugitives or migrants, trying to settle them on a permanent basis, granting them acreage near their towns.[70]

According to the figures of Toledo's inspection, there was a serious shortage of workers in the eastern valleys. The yungas and the assimilated *mitimaes* did not meet all the requirements: There were fewer than a thousand tributaries (see Table 16.3). A later list, from 1583, confirms this proportion for the natives but reports a different number of "strangers." It claims that the latter were twice as numerous as the local population.[71]

The obligations listed by the same inspection do not always distinguish between natives and outsiders: In Larecaja and Usadca, the natives and *mitimaes* were paying the same tribute, which included money as well as maize and fowl.[72] Such equality may point to an assimilation of the two categories.

Twenty years later there was no longer any doubt: When the puna

Table 16.3. *Tribute-owing households in the province of Larecaja, located and enumerated during the inspection of Toledo in 1575*

	Autocthonous				Strangers		
Repartimientos	Towns before and after the *reducciones*	*Yungas*	*Mitimaes* taxed with the natives	Strangers listed and taxed with the natives	*Mitimaes* listed and taxed at *encomiendas* in the puna	Strangers listed and taxed at *encomiendas* in the puna	*Mitimaes* listed but not taxed, summary of 1583
Larecaja	8 1	58	36	—	70 Lupacas	—	1,200
Usadca	11 1	—	29	106	—	—	300
Calabaya[a]							
la Chica	13 3	621	—	—	—	—	—
Ambana	5 1	140	—	—	—	210	400
Ayata	? 1	—	—	—	41	—	—
Hilabaya	? 1	—	—	—	34 (?)	—	—
Subtotals		819	65	106	145	210	1,900
Totals			990			335	

[a]Excluding *Carijana* (coca leaf).

Source: Cook 1975; figures in right-hand column originally from "Relación de los corregimientos y otros oficios que se proveen en los reynos e provincias del Piru. Corregimiento de los Yungas e provincia de La Recaxa," in Maúrtua, 1906, t. 1, pp. 184–5.

lords arrived in 1594, looking for their subjects residing in Larecaja in order to fill out the mining quota for which they were liable, their claim was rejected.[73] According to the "captain" of the Omasuyu Indians, he was short four hundred of "his" Indians. The lords from the puna denounced the deliberate confusion of having *mitimaes* of highland origin, who had been enumerated as such in the census of 1575, passed for true yungas (who were free of mita duties). The lords accused the authorities of Larecaja: "The said corregidor and headman resettle them and then use them in their own transactions." The highland lords reminded the authorities "that the viceroy don Francisco de Toledo completed the assignments he made to the ore mills, mines, salt works, and of the services owed to the city of Chuquiabo, to tambos and the other destinations of personal services owed by the said *mitimaes*"[74]

But even when locked in the stocks, the descendants of such *mitimaes* protested; they demanded that the exemptions from the *mita* granted to the natives of the valleys be extended to them:

> We are *mitimaes* resettled by the grandfathers and great-grandfathers of the last Incas, and from generation to generation we have been born and raised in the said warm valleys among the native yungas, and we are as native to these valleys as the yungas, . . . and thus [Toledo] issued his ordinances in which he orders that the Indians from the hot country should not leave for the highlands, which are cold, . . . and they did not give us home sites, lands, or pastures in the puna towns, because we were yunga *mitimaes*.[75]

Spanish testimony supported these claims, insisting on the local origin of the plaintiffs and thus denying the rights of the puna lords to their former subjects. These are *mitimaes*, they declare, "placed here since Inca times to be responsible for the fields. . . . They pay no freeze-dried potatoes or llamas, no cloth or *quinua*. . . . They have no herds or any other commercial activities."[76] This economic consideration is the chief argument they made against the puna dwellers: How can one cultivate the valleys with only the labor of the natives, who are so few?

Why was it that the migrants, be they old or recent in the valleys, rejected any return to the punas (some stating that they had not left Larecaja for six years)? Dispersed all over the eastern slopes, were they avoiding the epidemics that were depopulating Charcas in the 1590s?[77] Or were they avoiding the heavy obligations endured by the highlanders?

The Spaniards and Indians living in Larecaja chose the solution that would keep this useful labor force in the valleys: The claim of the puna lords for the return of their subjects was denied. To do this, a subterfuge was used, which granted the migrants a status that was not theirs (see Table 16.4).[78] Given the importance of mining, the arguments of the migrants and of their protectors did not prevail. The decision read, "If one were to excuse some *mitimaes* Indians from these mines, all others would make the same claim, and this would mean total bankruptcy and

Table 16.4. *The identification of migrants from the puna residing in the valleys in 1594, according to colonial sources*

	Ecological Tier				
	Valleys			Puna	
Status of those describing migrants	Authorities	*Mitimaes*	*Llactarunas*	Lords	Royal officials
Term applied to migrant	*Maroons*	*yungas*	*mitimaes*	*llactarunas*	*mitimaes*

Source: Archivo Histórico de La Paz, Bolivia, unclassified documents for Sorata, November 21, 1594, f. 127r.

ruin for all these kingdoms."[79] On the January 21, 1595, the order was received to send the *mitimaes* to Potosí.

But this did not end the competition between the puna lords, backed by the Audiencia, and those from the valleys over who would control the *mitimaes*. In 1603, when don Juan Poma Catari, "governor" of the province of Chucuito, came to the valleys with instructions from the viceroy to recoup the six thousand Lupaqa who had taken refuge below, a new episode opens.[80] This time even the records of the Audiencia reflect the *mitimaes*' fear: One of them had committed suicide, and others threatened to run away to the country of the savages.[81] Recalling that the ancestors of these migrants had descended into the valleys long before Toledo and were now "naturalized in that climate," this time the Audiencia defended lowland interests. Beyond the older antagonism between puna and valley, the conflict was also between mine owners and hacendados who were litigating over the same labor force.[82] The latter counted on the support of the clergy, who wanted to stabilize the population to improve their own evangelical reach and to avoid sharing tithes and services among several parishes.

The Audiencia had created a serious precedent when it granted yunga status to some *mitimaes* of Inkaic origin who had petitioned for it: Thus, six northerners from Ancoraimes, resettled in Sorata, "had received a writ from this royal Audiencia stating that they were yungas."[83] A census conducted in 1620 of yungas in Larecaja included some ayllus from Canchis (in Cusco Province) who were living in Usadca but had been repeatedly claimed by the lords of their original home; others were Aymara living in Combaya and in Quiabaya. The census of 1683–4 also listed them as yungas, even though their distant alien affiliation is recalled.[84]

Such an opposition between the real status and a fictitious one can also be accounted for by the rules of Andean classificatory thought: One is always someone else's *mitmaq*. Each status enjoys only temporary recognition: The equilibrium is unstable; it is likely to slide from one category to another, depending on where power rests. The colonial context and the demographic crisis of the sixteenth century only exasperated this relational logic.

Whether owing to depopulation or to arbitrary decisions by colonial authorities, after the early (1575–94) challenge to a continuation of the archipelagoes we see a gradual erosion of the islands. In the first half of the seventeenth century, the so-called *composiciones de tierras* deprived the indigenous communities in the valleys of their land.[85] The *memorial* of the Indians of Combaya recalled how the inspecting judges, bribed by the hacendados, sold their lands: "Thus our own people, as well as the *mitimaes*, had to go elsewhere, to become yanacona of the Spaniards for a piece of land that the Spaniards gave them".[86] The headman of Hilabaya restated the implications of such a status: "The yanacona is an Indian who is like a hacienda serf because he is allowed to sow and he is not liable to any service to the town or to the cacique."[87]

This was the hacienda's victory: It freed a man of his communal obligations, and it did grant a measure of security.[88]

The puna lords did resist: In October 1647

> . . . don Graviel Agnocuti and don Martin Vichi, lords and governors of the town of Achacachi, [did appear] in our name and in that of the other town in the province of Omasuio . . . on behalf of the lands that were granted to us for our support and also so that we could pay our obligations.[89]

They denounced the land grab against their *mitimaes* ordered by the judge-inspector Tello de Meneses. The judge replied that he had never denied such rights but that he had been concerned with "some so-called llactarunas, who were alien squatters serving some Spaniards, [who] had taken residence in the province, and their obligations were paid elsewhere and not here."[90]

Ten years later, when an inspection intended to remedy and to reduce the burdens had been ordered, the highland lords appeared to testify. According to don Juan Condori, "principal lord and governor of Pucarani":

> The *mitimae* Indians of the said place of Tacache supplied the Indians of my said town of Pucarani with food, [particularly] those who went to Potosí, and they paid the obligations with maize, and ever since the Spaniards have deprived them of said lands they have stopped paying, and I and my partner [lord of the second moiety] have paid in cash and on our own. And all the *mitimae* Indians have left, since they had no place to plant for their own maintenance and to pay their obligations.[91]

Even the restoration of some lands and favorable boundary limits did little to slow a trend that by now was almost a century old. One inspector wrote, in 1660, "The headmen and Indians rent out the fields and pastures that were given back to them by General Geronimo Luis de Cabrera. They do it to both Spaniards and natives from various provinces, thus losing a benefit that had been granted them."[92]

When, in 1683, the duke of La Palata ordered a new census, and the corregidor looked for the *mitmaq* ayllu from Chucuito in the region of Sorata, "there were no Indians to list for this aillo, . . . since long ago none were left, and the lands they held were apparently sold in past land composiciones." Near Sorata the enumerator was able to locate fifteen families from Hilave and three from Yunguio; at Quiabaya there were ten from Acora and ten more from Hilave. Many more households of Lupaqa origin were recorded as "strangers" or as yanacona of the Europeans.[93]

Some of the puna lords had foreseen this threat to their outliers and changed them to private properties. Thus the records for 1683 list haciendas belonging to the Lupaca lords of Acora located in Combaya and Quiabaya, settled by yanacona, some of whom did not come from the same town as their masters. Those of Copacabana had their yanacona

in Hilabaya and Ayata; the Pacajes of Machaca settled theirs in Sorata and Ambana.[94] The sources at our disposal do not allow us to decide whether such installations were ways of protecting with community accord the acreage coveted by Spaniards or whether they were simply a maneuver by the lords to privatize the resources.

When, in the first half of the eighteenth century, the altiplano lords of Huarina tried to have their *mitimaes* pass for yanacona, this met with the opposition of lowland headmen. A century of weakened ties between puna and valleys, culminating in the 1689 decision by the duke of La Palata that all Indians should pay their tribute at their place of residence, convinced the lowlanders that the *mitimaes* of Huarina were no longer adoptive sons but natives, "and, really, today they are natives, since for more than a hundred years they have all been born in Hilavaya without any tie to Guarina or its lord beyond descent, in the same way as Adam and us."[95]

Conclusion

Colonial pressures broke the continuity between the peoples of Larecaja and their kinsmen on the puna. As part of this process, the valleys never stopped playing an important supply role by sending their agricultural products to help reproduce labor energy in the highlands. Despite it, this role became most equivocal.

Born of a pre-Inkaic, multi-ethnic colonization drive, part of the outreach of highland kingdoms, the valleys became the site of endless alliances and confrontations between natives and outsiders, as well as between colonists of the most diverse origins. Dedicated, simultaneously, to a meeting of ethnicities but also to a recognition of their differences, the valleys asserted themselves as bearers of heterogeneity.

Facing the geographical continuity that unites valleys and punas, we find discontinuities in settlement: Conglomerates of colonies sent by highland polities from as far away as the Cusco basin to the Charcas plateau coexist in Larecaja. It is significant, I think, that none of these valleys has even been a dependency of another eastern valley.

As the eastern slopes absorbed the expansion, integrating their territories into Tawantinsuyu, they now loomed also as a protective outpost, acting not only as a jumping-off place for the conquest of the Amazonian piedmont but also as a place from which to watch the central altiplano. The gardens of maize and coca leaf, crops that until then had been grown primarily for ritual purposes (the lords of the puna had used them to fulfill their "generosity" obligations), were now expanded, through irrigation and terracing, to supply the colonists, the soldiers, and the officials of the state.

The archipelago may outline the perimeter of such spatial complementarity, but once it is under state control, it loses some of its fluidity and dynamism.

The Spanish occupation burst the rigid limits of Inkaic control. The

new authorities revalued and reopened the competition for eastern lands, which at the time of the Conquest had been at least partially abandoned. Old and new indigenous rivals appear, trying to confirm, expand, or acquire land rights. The conquerors themselves discovered that they preferred life in the valleys to that on the cold punas. While taking over the land "of the Inka," they also invaded some belonging to the neighboring communities, thus integrating their own productivity into communal circuits. Getting an adequate labor force became a matter of highest priority.

The first limitations placed on vertical control had already emerged in Inka times, but our perception of this is blurred by the events of the Conquest: We see it clearly only as a consequence of the reducciones. The lowland headmen asserted rights in the ethnic colonies sent from above, a claim that the puna dwellers accurately perceived as a challenge to their archipelago. The new claims also revealed the contradictions implicit in the evolution of the valleys: If these dispersed populations were aware of the need for interdigitation, even at this most local level, in order to dispose of varied and abundant agricultural resources, such aims will have required some overarching, nonethnic local organization based on the ties of proximity.

Meanwhile, the punas, characterized by large-scale polities, with carefully physically separated nuclear settlements, could not subsist without valley products; they therefore insisted on continued dominion over the lowland colonies. Can this double tension be conceptualized as the dilemma of horizontality versus verticality? Or, to use spatial terminology, is it to be solidarity through contiguity, the primacy of the vicinity, or will faraway subjection, the recognition of long-distance dependency, prevail? In other words, is it to be coresidence or descent?

These constraints point to an ambivalence faced by the valleys: They represented an immediate escape for the colonists and fugitives from the puna; they offered new working conditions and the opportunity for a new status. If some *mitimaes* resettled by the Inka got themselves recognized as yungas sometime in the late sixteenth century, others may have had to wait for another century before being fully incorporated into their new places of residence. Meanwhile, most of the *mitimaes* had abandoned their ayllus because they were overworked and had not received any reinforcements. They migrated even farther, becoming yanacona on haciendas or "strangers" elsewhere. Beyond the everlasting semantic confusions created by these changes, they represent a total break with their original ethnic ties.

To compensate for this loss, both highland and lowland populations tried to foster new exchanges between individuals by creating new ritual and marital alliances. But such substitutions did not make up for the heavy loss in organizational strategy: Once the collective mechanisms of ethnic integration were lost or reduced to simple (if direct) links between households, the archipelago was utterly impoverished.

The other alternative that now emerged at the disposal of the lords

of the puna consisted in buying haciendas or in taking over as individuals the lands of their valley colonies. Beyond the ambiguity implied in this propietary claim (is the colony taken over on one's group's behalf or just for one's own benefit?), this tactic worked well for some highlanders: As late as the mid-twentieth century, the Indians of Jesús de Machaca were still in control of some lowland acreage at Timusi, between Ambana and Combaya. They lost this only during the land reforms: The new laws of the 1950s prohibited multiple community property.

Another consequence: Over the long, colonial haul, the origin and rationale of puna holdings in the valleys were lost. At the end of the eighteenth century, the highlanders circulated an explanation of their holdings in the valleys among the "illustrated" bureaucrats. They now attribute these holdings to grants made in early colonial times in exchange for sending the mita to Potosí. They may have thought that such a made-up colonial myth would validate and protect their rights below. A wasted effort: The great flood of people and legislation in the republican nineteenth century wiped out any memory of onetime solidarity between Larecaja and their puna neighbors.

An active differentiation had once existed in the valleys, based on vertical descent from highland nuclei. Later these lowland dwellers suffered the pressures that tore families and individuals from their ethnic solidarity, thus creating a social mixup, prelude to undifferentiated, horizontal fusion with neighboring households into an atomized conglomerate that endured colonial pressures and servitude.

Why did this process of disaggregation, active in the Andes from the Conquest until our own days, have a precocious presence in the valleys? Can such anticipatory developments in Larecaja be explained in terms of the valley's isolation from both Lake Titicaca and the Amazonian frontier? Or was it the early concentration in the valleys of many Spaniards and their mixed offspring from La Paz? Or even some special kind of impotence of the local indigenous authorities?

In fact, all of these factors were present simultaneously, and we do not yet know how to evaluate the proportions of each disorganizing factor. We can point to one dimension: The valleys never enjoyed the alternate way of complying with tax requirements open to puna groups. The highlanders disposed of animal transport so that they could engage in interregional trade; they also had access to cash generated by urban or mining employment. The valley headmen, their authority challenged by heterogenous and mobile populations, found themselves without any remedies beyond the rental or even sale of communal lands. This was suicidal alienation, which ended in the transformation of their people into hacienda peons.

Once true safety valves against colonial pressures, the valleys of Larecaja had supplied all the illusions of a refuge: They had naturalized the immigrants, though closing upon them like a trap and depriving them of a complex history, whose motivations had once been in the hands of the highlanders.

Notes

Archivo General de Indias, Seville
Justicia 1064
Charcas 56
Archivo General de la Nación, Argentina
Sala XIII, 2–4
Sala XVII, 2–4
Archivo Histórico, La Paz
Protocolos 1564, no. 1
Various unclassified papers
Archivo Histórico Municipal, Cochabamba
Legajo 1570
Archivo Nacional de Bolivia, Sucre
Expedientes Coloniales 1595, nos. 187, 189
1611, no. 418
1617, no. 8
1686, no. 34
1687, no. 9
1749, no. 34
Cartas 810, 1135–6

1 On the Macha, see Platt, Chap. 13, this volume. The Quillaca still travel to the valleys of Sucre, where they find relatives who live there permanently (observation from fieldwork in settlements near Lake Poopó, with N. Wachtel and G. Rivière, 1976).
2 On altiplano communities, see the inquiries of J. Albó and the CIPCA team (1975).
3 Note the names of present-day communities in Larecaja called Pucarari, Huarina, and Viacha, or pastures such as Lupacaxi; also Hilave, in the province of Camacho. The place-names of fields or boundaries also evoke the highland homes of their occupants.
4 See Diez de San Miguel [1567] 1964 and the later commentaries of J. V. Murra, in Chap. 7 of his *Formaciones económicas y políticas del mundo andino* (Lima: 1975) and Franklin Pease, Chap. 2 of his *Del Tawantinsuyu a la historia del Perú* (Lima: 1978).
5 Murra, *Formaciones*, Chap. 3.
6 The word *mitima* (*mitimaes* in the Spanish plural) so frequently used in the Spanish documents comes from the Quechua *mitmaq*, which according to González Holguín's 1608 dictionary meant "advenedizo, avesindado en algun lugar."
7 "Visita del obispo de La Paz, Su Excelencia don Antonio del Castro y Castillo en 1655," in V. M. Maúrtua, ed., *Juicio de límites entre el Perú y Bolivia* (Barcelona: 1906), vol. 11, p. 227.
8 On the ecology of these internal basins, see the discussion of Ayacucho by A. Nelken-Terner and R. S. MacNeish, in *Annales ESC*, no. 5 (Paris: 1975).
9 "Peticion de los principales yungas de Hilabaya," Sorata, September 19, 1618, in Archivo Nacional de Bolivia, Sucre (hereinafter *ANB*), series of *Expedientes Coloniales* (hereinafter *EC*) 1749, no. 34, f. 67.

10 On the chaupi, see Platt, Chap. 13, this volume; for the Aymara equivalent, see Bouysse-Cassagne, Chap. 12, this volume.
11 Mining in Larecaja is not discussed in this chapter; it showed similarities with the relations of production in Carabaya (discussed by Berthelot Chap. 6, this volume).
12 R. Lizárraga, *Descripción breve de toda la tierra del Peru, Tucuman, Rio de la Plata* ([1609]; BAE, Madrid, 1968, pp. 68 and 72; Santa Cruz Pachacuti, "Antiguedades deste Reyno del Perú," in *Cronicas peruanas de interés indígena* ([1613]; Madrid: 1968).
13 "Yunca: es tierra muy caliente," in Bertonio [1612] 1956, p. 296.
14 "Nombramiento de don Pedro Carlos Yanarico cacique-gobernador de los yndios yungas de la provincia de Larecaja," 1594–6, in ANB/EC 1687, no. 9, ff. 2–4.
15 About the so-called chunchos of the eastern lowlands (between Cusco and Cochabamba), see the documents published by Maúrtua, *Juicio*, vol. 6. In 1609 the chunchos crossed over into the valleys and attacked Hilabaya (ANB, *Cartas*, no. 1135–6). I have initiated a study of chuncho pressures in "El piemonte amázónico de los Andes meridionales: Estado de la cuestión y problemas relativos a su ocupación en los siglos XVI y XVII," in the special issue devoted to the eastern Andes in *Boletín*, Institut Français de Etudes Andines, (Lima: 1981), vol. 10, nos. 3–4.
16 Carlos Ponce Sanginés, "Reflexiones sobre la ciudad precolombina de Iskanwaya," La Paz *Diario*, June 12, 1977, p. 4. By the same author, "La cerámica de Mollo," in *Arqueología Boliviana* (La Paz: 1957), pp. 35–117.
17 These are the coca leaf groves on the river terraces of the Larecaja River (called today the Yauro-Llica). They belonged to the local yunga group, the Palla. "En los Andes que llaman Palla-yunga donde hay ciertas suertes de coca que benefician ciertos repartimientos que los mismos que los tienen dicen que estan enfermos que odinariamente, de diez indios que lo van a beneficiar no vuelven seis." Juan Matienzo, *Gobierno del Perú* ([1567]; Paris/Lima: 1967), p. 171.
18 The count of Nieva, viceroy of Peru, confirmed in 1563 the order issued by his predecessor that all coca-leaf fields and the irrigation canals watering them be destroyed (Archivo General de Indias, Seville [hereafter *AGI*], *Justicia* 1064, f. 10).
19 The yungas of Camata, Larecaja, and Zongo complained frequently about chunchu depredations in the sixteenth and seventeenth centuries.
20 See the bridges over the Copani, linking Ambana and Chuma, as well as the "Inca" bridge below Iskanwaya, uniting Aukapata and Quiabaya (described in "Visita del obispo," p. 228).
21 One should not forget that the valleys of Larecaja appear to be internal enclaves of the semicircle formed by the cordillera.
22 The metaphor of islands was used by Murra in *Formaciones*, and that of bubbles by Platt, to indicate the unstable nature of the islands, which arise and disappear according to pressures and fields of forces between natives and strangers.
23 The first litigation over lands in Hilabaya awarded 130 *fanegas* of maize, in one plot, to the "indios lupacas, yungas huarinas y achacaches, . . . since we found them in possession." On October 21, 1595, ANB/EC 1749, no. 34, f. 71v.
24 "De tiempo imemorial a esta parte las comunidades de nuestros pueblos

estan y estamos poseiendo tierras en esta provincia [de Larecaja]." Petition by the lords of Omasuyo, 1647, unclassified documents in the Archivo Histórico de La Paz. "Porque la provincia de Omasuyos que es toda de puna y la de Lari Caxa que es de valles estan contiguas y entre los yndios que de la provincia de Omasuyos se pasaron a Lari Caxa . . . " (the lord of Hilabaya, September 20, 1746, in ANB/EC 1749, no. 34, f. 38v).

25 The lords of Achacachi (Omasuyos) remembered in 1595 that in 1560 there had been litigation over the fields at Guacangache and Tintilaya "aviendo traba de pleito sobre ellas con don Pedro Yanarico cacique que fue deste valle de Larecaja" (ANB/EC 1617, no. 8, f. 40v).

26 On the pre-Inkaic division of the altiplano into two moieties (*urco* and *uma*), see the work of Bouysse-Cassagne, Chap. 12, this volume. If the Pacajes and Lupacas were resettled in Larecaja by the Inka or by the Spaniards, such a late colonization would confirm a preexisting dual division: Presumably, in earlier times, the western polities (the urco sector) were sending their outliers to the Pacific coast, whereas the eastern ones (uma) would go to the Amazonian slopes. See my article "Lupacas dans les vallées orientales de Charcas," in *Mélanges de la Casa de Velásquez* (Madrid: 1981).

27 "Y despues [de la caida del Inka] tuvieron guerra los yndios Canches y Canas que son del termino del Cuzco con los yndios deste pueblo de Guancane, Moho, Carabuco y Pacajes y Quiruas ques termino de los Charcas.," was the testimony of don Pedro Condori, lord of Moho and *gobernador* of the Omasuyos side fifty years earlier. Huancané, December 6, 1583, ANB/EC 1611, no. 418 (a source suggested by N. Wachtel).

28 The guarantee that one could circulate freely among one's discontinuous territories without enjoying state protection raises again the whole issue of lordship and war in the Andes.

29 Statements by the lords of Paria, on November 22, 1556. *Archivo Histórico Municipal de Cochabamba*, Legajo 1570 (published by the University of Cochabamba in 1977, as *Repartimiento de tierras por el inga Huayna Capaj*, p. 19).

30 "Por mandato de Tupa Yupanqui y Guayna Capac yngas decimo y onzimo destos reynos mandaron a Are Capaquiqui que por ellos governava desde Ambana asta Usico adelante de Coyocoyo (in Carabaya)"; statement of cacique-*gobernador* of Charazani, ANB/EC, 1605, no. 2, f. 54.

31 Licenciado Vaca de Castro granted the "provincia de Ambana" in encomienda: see AGI, *Justicia* 415.

32 "E que tienen noticia de otras minas de oro que el inga dio a los yungas de Larecaxa que se dicen Hiana, hacia Pallayunga," answers by the lords of Omasuyos in Carabuco, in 1573. See *Relaciones geográficas de Indias*, (Madrid: 1965), vol. 2, p. 69. These are the mines at Yani, above Sorata, at some 4,000 meters.

33 "El pueblo de Achacache que en estos tiempos es el asiento de los corregidores y capital de la provincia de Omasuyo fue en la creación de esta ciudad (La Paz) perteneciente a la provincia de Laricaxa por extenderse esta a toda o a la mayor parte de la provincia de Omasuyo, su confinante," an anonymous paper, not yet classified in the Archivo Histórico de La Paz (hereinafter AHLP).

34 When Inka Pachakuti died, there was a rebellion of "las provincias de los Puquinas y de los Collas desde Vilcanota y Chacamarca with all the Umasuyos . . . with all the Taracos.," Pachacuti, "Antiguedades," p. 303. See also Murra, Chap. 4, this volume.

35 Census reports on the *mitmaq* installed on the left bank of the Llica (near Iskanwaya) enumerate them as descendants of rebels in the Collao.
36 A similar argument is advanced by Carl Troll. See his "Los fundamentos geográficos de las civilizaciones andinas y del imperio inca," the Spanish translation (of the German original) published in *Revista de la Universidad de Arequipa* 9 (1935).
37 Garci Diez, *Visita de Chucuito*, 1567, p. 114; *Tasa de la visita general de Toledo* ([1575]; Lima: 1975), p. 67.
38 "Y en la provincia del Collao el pueblo de Pucarani e otro que se dice Quipa y esta trece leguas adelante de Ayaguiri," which are towns belonging to the Caracara lords, granted to Pizarro in 1544: See AGI, *Charcas* 56.
39 Murra, "El 'control vertical' . . . ," (1972) p. 467, n. 5.
40 The Inka installed *mitmaq* from Charcas and Yampara at Ambana and Combaya, distinguishing between the two capitals whence they came. They did the same with the Collas in Combaya, the Canches in Italaque, and the Canas at Ambana. The northerners from Chachapoyas were sent to Charazani, and those from Chinchaysuyo to Sorata. See land litigation papers, unclassified, AHLP, and "Visita de La Palata" 1683–4, Archivo General de la Nación (hereafter *AGN*), Buenos Aires.
41 We are here thinking of colonization in archaic Greece: Greek colonies remained independent of their metropolis, even if they adopted the Greek language and Greek ritual practices.
42 See John Hyslop, "El area lupaca bajo el dominio incaico, un reconocimiento arqueológico," *Histórica* vol. 3, no. 1 (Lima: 1979): 57–9, 76.
43 Larecaja is full of fortified sites located on mountaintops and considered pre-Inkaic (see Warca Warca, above MocoMoco, for example). There is a triple stratification in the valley of Ambana: the Marka Marka site, at 4,000 meters (with Mollo and Inka pottery; Merque-Ambana ("the old one," at 3,800 meters and above the contemporary town at 3,500 meters); and at 3,700 meters the ruins of "two neighborhoods" divided by a wall, which may be the place where the Inka built their *reduccion*.
44 Testimony of don Francisco Cacassaca (in La Palata, December 22, 1587), in ANB/EC 1687, no. 34, f. 2v.
45 Hilabaya, June 3, 1591, ibid. f. 3v. Each *mitimae* ayllu was named after the original ethnic group it came from in the puna.
46 Thus, in Hilabaya, ayllu Cchejje, which in Aymara means "interwoven," includes households of yunga, *mitimaes* from Huarina, and *yanacona* of the headmen (see sources in no. 68, below).
47 Murra, "El 'control vertical,' " pp. 441–3, about colonies on the western slopes.
48 Hilabaya, September 27, 1746, ANB/EC 1749, no. 34, f. 84v (emphasis mine).
49 "Ansi los Carangas se quedaron sin las tierras y mitimaes en la costa y lo mismo los de Chucuito y todos los demas los quales fueron repartidos a la ciudad de Arequipa. . . . " Inquiry about the lands of Cochabamba [1540], see n. 38 (this source consulted thanks to N. Wachtel).
50 One should distinguish a first period, which ended in 1548 when La Paz was founded and when the first silver bars were shipped from Potosí to Lima via Arequipa: This first stage did not seriously affect Andean social structure. It was during the next two decades that a major effort was made to reorganize indigenous society (conversion, tribute, administration).

51 "Relacion de los indios que ai en la provincia de Chuquiabo que fueron del marques," in Rafael Loredo, *Bocetos para la nueva historia del Perú: Los repartos* (Lima, 1958), p. 205.

52 His arrival was announced for the end of June, 1573 (RGI), and the visit was confirmed by the mitimaes of Larecaja, who remembered it twenty years later ("El vissorey don Francisco de Toledo que lo vio por vista de ojos," ANB/EC 1595, no. 187, f. 124v).

53 A detailed list can be found in the protocol of the inspection of the duke of La Palata, AGN, Sala XIII, 2–4, ff. 200–300. On the effectiveness of this measure, see no. 46 above.

54 For the process of reducción building, see A. Málaga Medina, "Las reducciones en el Perú, 1532–1600," *Historia y Cultura* 8 (Lima: 1974): 141–72. For a detailed analysis of what happened in Ambana, see vol. 10, nos. 3–4, of *Bulletin*, Instituto Francés de Estudios Andinos (Lima: 1981).

55 These are the *mitas de septima parte*, assigning those whose turn it was to work on the local haciendas.

56 The cacique-gobernador, or Hilabaya, reproached the headmen of the various ayllus for wanting to grab "sobras de tierras para que los servicios personales los cumplan por ellos yndios que quieren agregar para este efecto sin atender aquellos [que] por sus personas estan obligados a hacerlo y algunos que tenga agregados . . . acuden a las mitas y servicios del corregidor y de sus tenientes, al cura que nos dotrina, el tambo y lo principal a la iglesia donde nunca faltan obras." Don F. Cacassaca stated this at Hilabaya, on September 25, 1660, in AHLP, unclassified papers. The estimate determined with care what *sínodo* was paid by each group of *mitimaes* to benefit the priest of the reduccion.

57 About this access to valley lands, see the corpus of work by Tristan Platt.

58 Sorata, November 20, 1594, in ANB/EC 1595, no. 189. ff. 134v/135r (see title of this litigation, below, no. 75).

59 Visita . . . de Toledo, p. 80, where he mentions the ten *mitimaes uchucamayos*, who were supposed to gather hot peppers in the torrid valleys on behalf of the ten ayllus of Macha (see Platt, Chap. 13, this volume).

60 About the analogies and the permeability of the status of mitimaes and that of yanacona, see observations of Murra, in *Formaciones*, pp. 230–3.

61 *Visita de Chucuito*, p. 107. The centenarian, Vilcacutipa, was the lord of Ilave.

62 "En el pueblo de Sorata a la puente del rrio a 21 dias del mes de noviembre a las dies del dia . . . el capitan Antonio Lasso de la Vega juez de la dha comision echo los yndios contenydos en este padron del repartimeinto de Laja de la parcialida de Urinsaya casique della don Garcia Asixi el qual se hallo presente al despacho de los dhos yndios los quales salieron con sus comidas y mugeres." (ANB/EC 1595, no. 189, f. 13v).

63 The Uru of the Anansaya moiety:

> Aillo Cache – Hernando Casa casado con Ynes Sucama y tiene 4 hijos y lleva 4 carneros cargados de maiz y papas.
> Pedro Halanoca con Ysabel Choncaia sin hijos y lleva 2 carneros cargados de su comyda.
> Aillo Conse – Pedro Taquincha y Ysabel Choncaia con 3 hijos y lleva 4 carneros cargados de papa maiz y su ropa.
> Diego Churque e Ysabel Qutima con dos hijos lleva 4 carneros cargados de amiz y su hato.

Y Francisco Halanoca casado con Ysabel Yanama con dos hijos lleva un carnero levalo cargado de maiz y la demas hato y cocavi – todos los quales dichos yndios huros. [Ibid, f. 50).

64 *Visita... de Toledo*, p. 68.

65 "Es casi hordnario tomarles [Yndios] fuera de sus pueblos el tiempo de sembrar, y en tal caso quedasen a donde se hallan, mayormente tan gente de su tierra que estan puestos por mytimaes casi en todas las provincias y acostumbran pagarles algo de lo que cogen por el terrazgo y despues se vuelven e aun algunos se quedan, y dende alli acuden a sus caciques con la tasa... a estos forasteros llamanlos *llactarunas* que quiere decir ombre de nuestra tierra e acaese hacerse una visita a un pueblo destos e asentarlos en ella por naturales syn entender las que ellos tienen entre si." Polo de Ondegardo, "Relacion de los fundamentos...," in *Colección de libros y documentos referentes a la historia del Perú* ([1571]; Lima: 1916), ser. 1, vol. 3, pp. 157–8.

66 Polo, ibid,, p. 136; "Relacion de la provincia de Pacajes," 1586, and "Relacion del corregimiento de La Paz," 1586, both in RGI, pp. 334–48. See also *Visita de Chucuito*, pp. 29, 33, 39.

67 "Diez yndios de tierra esteril pueden dar mas plata que treints de otra fertil.," Polo, "Relaccion de los fundamentos," p. 70.

68 "Preguntados que fue la causa de tasarlos a comidas y no a oro como antes dicen la solian dar, dijeron que porque la procuraron asi sus encomenderos porque valia mucho entonces la comida en Potosi..." Information provided by the lords of Omasuyos, *Relaciones geográficas de Indias*, vol. 2, p. 70.

69 "Yo el dicho don Pedro de Figueredo me toca la dha compania las tierras que tengo en Larecaxa llamadas sant Pedro en las quales los Yndios de Achacache que son de la encomienda del dho don Diego de Çarate an de sembrar cinco fanegadas de sembradura de maiz y arada." (La Paz, July 31, 1564, in Archivo Histórico de La Paz, *Protocolos* 1564, no. 1). Such "contratos de campañia" are numerous in the sixteenth century, the consequence of labor shortage.

70 One Spaniard, who tried to obtain the lands of Tacabaya (unsuccessfully, since the people of Quiabaya protested), explained the matter: "Las dhas tierras los caciques las quieren para repartirlas entre yndios de la puna fugitibos y ausentes de sus pueblos y reducciones que por no acudir a los servicios dellos ni a los de las minas y engenyos de Potosi se hacen cimarrones en estos valles." Juan de Bargas, testifying in Sorata on December 15, 1595, among the unclassified papers of AHLP.

71 "Relacion de los corregimientos y otros oficiales que se proveen en los reynos e provincias del Peru, en el distrito e gobernacion del vissorey dellos," 1583, in Maúrtua, *Juicio*, vol. 1, pp. 184–5.

72 *Visita... de Toledo*, p. 69.

73 "Don Hernando Chuquihuanca y don Santos Callisaya caciques de los pueblos de Carabuco y Huarina por si y en nombre de los de Achacachi, Pucarani, Laja, Huaqui contra el corregidor de Larecaja," October–December 1594, ANB/EC 1595, no. 189, f. 1.

74 *Doc. cit.*, ibid., ff. 1, 4, 7v, and 8.

75 Sorata, on November 11, 1594, ibid., ff. 134v, 135r.

76 Christobal Hidalgo, *residente*, testifying, ibid., f. 139r, (Madrid: 1973), and Diego de Molinedo, residente, ibid., f. 142r.

77 N. Sánchez-Albornoz, *La población de América latina*, pp. 83–4.

78 "Los caciques han venido a sacar los indios cimarrones que ay en los valles," said the corregidor of Larecaja in Sorata, on November 22, 1594, in *doc cit.*, f. 127r. Note that in Table 16.4 the two groups describe themselves differently: The *mitimaes* claim to be yungas, whereas the llactarunas say they are *mitimaes*.

79 Decision by the *oidor* Juan Dias de Lupidana, who belonged to the Consejo de Su Magestad, Potosí, November 11, 1594 (ibid., f. 5v).

80 "Don Juan Poma Catari . . . pretende sacar [de los valles] y llebar a la provincia de Chucuyto cantidad de yndios que en los dichos valles estan poblados visitados y tasados . . . los quales estan ya naturaliçados en aquel temple y los mas dellos nacidos y criados alli por ser hijos de los primeros que alli se poblaron." (draft of a letter from the Audiencia of Charcas to the viceroy, ANB, *Cartas* no. 810, June 16, 1603, f. lv).

81 Taking refuge with the "savages" of the Amazonian piedmont was, during the entire colonial period, a final option for those attempting to escape the colonial system. Many sources (see Maúrtua, *Juicio*, vol. 6) describe this form of indigenous "resistance" on the eastern frontier (see also n. 15, above).

82 Such competition was one of the motivations of colonial exploitation until well into the nineteenth century: See N. Sánchez-Albornoz, *Indios y tributos en el alto Perú* (Lima: 1978).

83 Huarina, October 23, 1594, ANB/EC 1595, no. 189, f. 4v.

84 The original Canche lords of the settlers in Usadca attempted fruitlessly to gain access to them in 1620. The Colla of Combaya classified themselves into two ayllus, which corresponded to the two "capitals" of their homeland: Paucarcolla and Hatuncolla. No mention is made of the original home of the ayllu, Yanarini, now in Quiabaya. "Repartimientos de los yungas de Larecaja encomendados en el señor marqués de Oropesa," Sorata, September 23, 1620, AGN *Sala* XIII, 17-2-4, 95 folios. The *Retasa* of 1683–4, part of the census of La Palata, is also to be located under that call number.

85 For details on the *composición de tierras*, see T. Saignes, "El fondo colonial de la prefectura de La Paz," in *Boletín*, Archivo de La Paz, vol. 1, no. 2 (La Paz: 1976): 1–5.

86 "Memoria" of the headmen of Combaya, 1657. AHLP, unclassified documents.

87 ANB/EC 1749, no. 34, f. 86v.

88 On the role of the haciendas, see the article by Pablo Macera, "Feudalismo colonial americano: el caso de las haciendas peruanas," in *Acta Historica* 35 (Szamabol Szeged, Hungary: 1971), republished in author's *Trabajos de Historia* (Lima: 1977), vol. 3, pp. 139–227.

89 AHLP, unclassified documents, 1647.

90 Sorata, on October 25, 1647, testimony of Joseph Tello de Meneses. AHLP, unclassified documents, f. 1.

91 Don Juan Condori, "cacique principal y governador" of Pucarani, in Sorata, May 16, 1658. Ibid.

92 Statement of don Juan de Segura Davalos de Ayala, judge-inspector, at Ancoraimes, July 2, 1660. Ibid.

93 Census of the province of Larecaja, repartimiento de Sorata, on July 11, 1684. AGN in Buenos Aires, *doc. cit.*, *Sala* XVII, 2–4, cuaderno 6.

94 The ruling family of Acora, the Catacora, who became the owners of the haciendas Soque (ANB / *Minas* 730, f. 76v, 1620), Moyobaya (ANB/EC

1677, no. 5), Corga in Quiabaya, Porobaya and Cutisacapampa in Combaya (see "Visitas de tierras," 1658 and 1746, among the unclassified papers, AHLP). The Guarachi family of Machaca owned the lands of Corani in Sorata and of Sococoni in Ambana (see Silvia Rivera, "El mallku y la sociedad colonial en el siglo XVIII," in *Avances* 1 (La Paz: 1978): 7–27, and J. V. Murra, "Aymara Lords and their European Agents in Potosí," in *Nova Americana* 1 (Torino: 1978): 231–44.

95 I have developed this point further elsewhere, insisting on the demographic evolution of this region and utilizing the data from the inspection census of the duke of La Palata. See T. Saignes, "Valles y punas en el debate colonial: la pugna sobre los pobladores de Larecaja," in *Histórica*, vol. 3, no. 2 (Lima: 1979), pp. 141–64.

17
The Andean community today

Antoinette Molinié-Fioravanti

The foregoing studies have shown how the colonial period led to the gradual erosion of the Andean ethnic groups. This long process of fragmentation culminates in the basic social units being reduced to a "community." This, at any rate, is the term used in the anthropological literature to define the present-day village societies. It refers to a wide range of different contexts, but the disadvantage is that by isolating the reality of the Andes from its historical context, it fails to do it justice.

This reductionist category is administrative in origin: In the 1570s, Viceroy Toledo had ordered the Indians to be regrouped in villages or *reducciones* and had allocated collective fields (*tierras del común*) to them. This reorganization of their social and economic life was largely modeled on the *comunidades* of Castille, Estremadura, and the Kingdom of Leon, some of which are still functioning. The terms *común* and *comunero* were very quickly assimilated into the Indian lexicon, the former becoming a synonym of *ayllu*, in the Andes the latter of "Indian."[1] After independence and Simón Bolívar, the *comunidades* were dissolved by decree, allegedly so as to eliminate discrimination against the Indians; their fields could thereby fall pray to the *latifundia*. It was only after 1920 that the Peruvian constitution came to revive a colonial policy of defending the collective fields, providing the *comunidades indígenas* with a juridical status.[2] It was also in the 1920s that the intellectuals of the Andean countries, with the burgeoning of the *indigenista* movement, took over the notion of "community." It was further reinforced by J. C. Mariátegui and by the ideology informing his vision of the Peruvian rural world, since he claimed to perceive the "survival of the community and of the elements of practical socialism in agriculture and in native life."[3] The concept of "community" was finally given scientific validity in the Anglo-American sociology of the 1950s, which produced a whole series of Andean monographs, often designed to promote economic "development" and the integration of "marginal" peoples.[4]

In 1959, the communidades indígenas of Peru became the object of a "national plan for the integration of the aboriginal population" launched by the ministry of labor and native affairs.[5] Finally, with the military government that came to power in 1968, they became *comunidades campesinas*, a modification that combined the colonial tradition

of protecting the communal fields with the liberal political stance favoring the emancipation of the Indians, so that they might become peasants and thus be "raised" to the status of citizens. But this willingness to integrate the Indians into the new structures emerging from agrarian reform also betrayed considerable lack of awareness of the specificity of Andean societies.

From the 1960s on, the growth of anthropological studies undertaken now by local researchers and the better understanding that was gained of the pre-Hispanic Andean societies enabled this specificity to be better understood.[6] Thus, in 1968, F. Fuenzalida offered an interesting inventory and critique of the notion of the "Andean community."[7] He showed how complex the process of development had been and how complex the present situation still was, thus steering clear of the somewhat schematic although useful generalizations that had hitherto been available to us.[8]

Nowadays, in Peru, the term *community* brings to mind a group of families related by kinship, without ostensible social stratification, working a common territory that generally comprises some private plots of land in permanent cultivation along with some collective holdings that must be cultivated in rotation. In the light of the studies that have used this notion, it is the job of anthropologists to undertake a systematic critique of it. What drawbacks does it reveal?

To begin with, it denies the ethnicity of Andean societies. Admittedly, few peasants nowadays live the culture of the aboriginal ethnic group,[9] and it would hardly be appropriate to compare the contemporary rural milieu with the situation before the European invasion. But it is also true that the term *community* is applied to social structures so diverse that all sense of their specific features is lost. More precisely, it gives no account of the originality and complexity of a social organization that may well comprise some two thousand or three thousand hearths. What is most striking about this form of social organization is the fragmentation of its territory among various tiers, with these latter being worked by colonies, themselves under the supervision of a political nucleus located on one of these tiers.[10] Moreover, the term *community* implies a coherent social structure without internal fragmentation. Actually, in the Andes, a social group often consists of a heterogeneous set of kin (*ayllu*), or residential (*saya*, *barrio*) or religious (*cofradias*) units. Besides, the members of such a unit are not as undifferentiated economically and socially as the term would seem to suggest. The "community" usually segments into groups of varying degrees of wealth or status, which for convenience are called 'social classes." The term *community* has, finally, the serious drawback of grouping together a range of different realities without taking their history into account. Knowing the past enables us to identify three types of community in contemporary Andean society, each of which I shall here illustrate from my own research.

I have already drawn attention to those societies that are still ethnic

groups.[11] San Juan Uchucuanicu, in the valley of Chancay (Peru), may be taken as representative of this category; it was treated as such by the indigenistas and in the contemporary ideologies that they inspired. But the reader will discover just how fragile this balance is. Some Andean societies, such as Ambana in the Larecaja valley (Bolivia), are still organized as reducciones. More or less directly, they function as a continuation of social, territorial, and residential units set up at the beginning of the colonial period. But Ambana is also divided into social groups that have arisen recently. I shall therefore give a survey of the notion of community in temporal and spatial terms.[12]

Finally, I want to consider societies that have increasingly been divided by the market economy, although to varying degrees, at varying speeds, and in various ways. Yucay, in the Sacred Valley of Cusco, is an example of a society whose breakdown has been accelerated by contemporary agricultural policies. Its rituals, however, recall its former status as a reduccion, and the archives testify to the existence of these colonial units. The community thus dissolves into various social groups that challenge it.

It should be obvious that these three types of community are only reference models and that no particular social structure could readily be classified into any one of the three. The concrete instances find themselves at interstitial levels, and any given society may always be described as belonging, to varying degrees, to more than one of these categories. My three examples, though putting in question the underlying homogeneity of the notion of community, are meant in the last analysis to recall a range of different moments in the development of the Andean world.

The three ayllus concentrated at San Juan Uchucuanicu were part of the kingdom of Ata Huallas, whose ethnic integrity was maintained until the seventeenth century.[13] There is no trace of them today, and San Juan consists of a comunidad clinging to a slope of the valley of the Chancay at an altitude of 2,900 meters. Its forty-five families supervise the various tiers of cultivation to which they apparently have similar access.

The whole estate is the collective property of the comunidad, and those who emigrate have to pay a fee in order to keep their plots. Its members graze their flocks at 3,000 to 3,700 meters and cultivate in rotation any two of the seven zones devoted to the growing of tubers, of which they share the usufruct. The irrigated tier of the slope (1,800 to 3,000 meters) comprises different zones of specialized agriculture (maize, alfalfa, fruit), and each family owns plots in each of these zones. Finally, at the bottom of the valley is a large orchard that is watered by the Chancay and is the property of the whole comunidad.

The sharing out of the water, or *turno*, is similarly egalitarian and follows a complex and intricate system. The water of the communal reservoir, which comes from the main spring, is shared out equally among five comuneros every nine, ten, or thirteen days (depending upon

the quantity available); the water from the three additional springs in various parts of the district is likewise shared out to two persons every twenty-six days. The plots of land within each cultivable area are so placed in relation to the springs that there is only negligable inequality in their access to water. The scattering of these plots (there seem to be about a thousand of about 0.5 acre each for forty-five families) serves to guarantee two fundamental economic principles, namely, that each family may have access to each cultivated tier and to each spring. Moreover, it enables the comuneros to exchange or to combine their periods of access to the water, which is vital in softening the rigidities of the system of distribution.

The organization of agricultural activities is based upon reciprocal labor prestations, and the stability of this system does much to impede the development of wage labor. Irrigation and stock raising are the work of women, the former requiring the collaboration of at least three women. This is achieved by means of a system similar to the traditional *ayni*, here called *huaypo*: "I will help you on such and such a day to water your plot, if you will help me when it is my water turn." As for stock raising, it can be extremely arduous, since the pastures are distant from the hamlet and the animals difficult to corral. The women form little groups (*vaquerías*), thereby sharing out the work required by the entire flock. The women who make up a *huaypo* or a vaquería are bound by relations of real or ritual kinship.[14] Relations of production thus involve stable mutual aid units of related women. Moreover, we have seen that the comuneros willingly exchanged their periods of access to water: "If you let me take your turn on such and such a day in such and such a zone, I will give you my turn on that other day in another zone." These exchanges are preferred among kinfolk. The equal distribution of the means of production, and the range of the prestations based upon kin relations, allow a genuine planning of labor at each of the various tiers (and even between tiers).

This social homogeneity has its political corollary in the general assembly that brings together all the comuneros, that is, all the married men, who make all the decisions. The comunidad is administered by a *junta* made up of holders of seven offices that the general assembly distributes among its members according to an obligatory system of increasing responsibilities: Each comunero has to assume each office in turn, from the most lowly one to the presidency. The latter consists in supervising the smooth running of the meetings in which each person expresses his opinion and votes by raising his hand. A treasurer manages the funds, which derive mostly from the renting out of the communal fields in the valley, from fines for nonparticipation in the collective labor teams or in the general assemblies and, finally, from the fees paid by migrants so as not to lose their plots.

This, one might suppose, is the very model of a "community." Indeed, but a thorough analysis of San Juan would reveal the seeds of future inequalities and of social stratification, which outline, as in filigree, the

lines of its subsequent development. I have shown how the fallow system on the upper fields and the water distribution system below control access to two essential collective goods (land and water) that are scrupulously shared out. However, these goods can also serve the purposes of private accumulation. This is still a very limited phenomenon, but if we study the mechanisms involved we have good reason to believe that they are open to further development.

Every comunero may graze his animals on the collective pastures at a trifling yearly rental per head of cattle, to be paid into the communal treasury. Today the number of animals per family varies from one to thirty-nine. Inequality in the size of flocks is, admittedly, an old Andean tradition. But stock raising constitutes one of the main sources of cash revenue, and different degrees of access to money, even if it is not yet of great significance, may in time give rise to serious social divisions of a quite different kind from those that invariably existed in the traditional social structure.

I have shown that it was the comunidad that supervised the division of water from the communal reservoir and from the three springs. There also exists a system of taking turns, called *reparto*, that governs the distribution of water from the four supplementary basins. In contrast with the turno, it eludes the control of the community, enabling the water from the collective reservoir to be diverted into private plots. Indeed, only families whose names are on a list of unknown origin may take advantage of the water from the reparto, which is distributed not in an egalitarian manner, as the turno was, but in ration to the size of the user's plot. The water whose distribution is thus regulated derives largely from the communal reservoir. This system therefore allows some comuneros the private and unrestricted use of a collective good, just as the organization of stock raising permits an unequal exploitation of pastures.

If one is concerned with social differentiation, one should also look into the organization of labor. We have seen how reciprocal prestations forestall the inequalities to which wage earning might give rise, and how, along with the sharing of access to water, they are a crucial element in guaranteeing the efficacy of labor. Such prestations and such sharing are based on kinship ties. It is the number of kin one has that determines the number of different tactics one can employ and the quality of the organization of tasks and their productivity. Kinship relations thus constitute a genuine capital and a source of accumulation. Like the shared access to water or the rotation of pasture land, they may be defined as a constraint, in the sense that, to become a comunero, one must found a family and give and acquire kin ties. But, just like the constraints, kinship relations may give rise to accumulation. Wealth in kinfolk, which is so significant in traditional Andean society, may assume, like inequality in access to herds, a very different meaning within the framework of a developing market economy of the sort that is now emerging in San Juan. In fact, it gives rise to differentiations that may cause the

economic system to develop toward a threshold beyond which the function of this wealth changes and may even become its opposite. For, whereas in the traditional economy kin ties constitute the basis of relation of production, whose accumulation may give rise to inequalities, so, in a market economy, reciprocal labor prestations hold back the development of wage labor, the advance of the market, and social differentiation. In San Juan's present social structure, kinship seems to play both of these mutually contradictory roles at once. For, in relation to the traditional structure, they constitute a capital and are the source of inequality, but in relation to the emergent structure they hold back the spread of wage labor.

I have now described the internal and structural factors involved in accumulation and development. But these days, the main factor is external and conjunctural: The market at Lima is very close and, in the last fifteen years, the irrigated lands were planted to peaches. Today, the sheer number of privately owned orchards serves to indicate how rich this area might be, and all the more so given that the comuneros have not profited as much as they might have done, in monetary terms, from this form of cultivation. Certain villages close to San Juan, such as San Agustin Huayopampa, that have been committed to fruit growing far more intensely and over a much longer period, demonstrate quite clearly how the extension of this form of cultivation may actually further social differentiation.[15]

We are now in a better position to understand the care with which the comuneros order the distribution of land and water, endure the burden of community constraints, and preserve a strictly democratic running of their communal production by means of their general assembly. By means of the comunidad, of which little – after the division of the land into properties that are in practice private – can remain, the comuneros ward off the emergence of inequalities that would prove divisive. The strength of this communitarian ideology accounts for the somewhat baffling usage to which the comuneros put the money collected by their treasurer. Instead of purchasing a truck, which would have freed them from their dependence on the closest town (to which they have to transport their fruit if it is to get to Lima), they bought three years ago a sophisticated system of microphones, so that the whole village might listen to music. For the truck would have worked to the advantage of the peach growers and so would have given rise to economic differentiation.

San Juan therefore constitutes a residential group of families with apparently equal incomes whose kinship relations are crucial to the cultivation of a shared territory. Since its tribal identity has gone, its colonial differences have been leveled out, and its economic differentiation is little marked by the market: It accords quite well with the model of community that social-nativist ideology has inherited. Does it represent a general rule, or is it an exception? I shall inquire into the limits of this model by means of other ones.

Ambana is one of those societies that, in spite of subsequent social upheavals, is still organized as if it were a colonial reduccion. A study of its social organization and territory should enable us to reexamine, and to question, the very notion of community.

Ambana Valley lies on the Amazonian slope of the central Andes, to the east of Lake Titicaca, in Bolivia. It fuses with other valleys so as to form the Copani Valley. There is a succession of cultivated tiers. Llama and alpaca flocks graze on the damp puna (4,000 to 4,500 meters above sea level); some fields feature the occasional cultivation of tubers. The higher slopes of the valley have permanent and unirrigated fields of barley, wheat, and beans (3,000 to 3,700 meters), and the lower ones have fields of maize and vegetables that tend to be irrigated (2,900 to 3,400 meters).

The 1976 census reports that the market town of Ambana had 134 hearths,and 423 inhabitants. The people describe themselves as *vecinos*, *obreros*, or as *campesinos*. *Vecinos* are former hacendados[16] whose present importance is the result of their holding administrative posts that link the market town to La Paz. These are bourgeois in the strict sense, having political and, to a certain extent, economic control of the valley. They live in the central square of the village, whereas some members of their families live in La Paz. The obreros are small to middling landed proprietors, some of whom are as rich as the vecinos. But, unlike these latter, they work the land. They wish, however, to be free of this task to pursue secondary activities such as commerce, artisanal work, or wage labor in the lowlands. Finally, the campesinos are small proprietors and represent the lowest, and often most despised, social category.

Local territorial divisions complement native social categories. Ambana Pueblo is the most important place in the cantón, and the most urbanized village, having its own square and its own shops. The administrative authorities and the police are to be found there, and a truck connects it to La Paz twice a week. Hamlets from an hour to a day's walk away are scattered throughout the valley, and the comunidad takes the almost classic Andean form of an undifferentiated grouping of nuclear families working, on the one hand, privately owned (*sayaña*) plots under permanent and irrigated cultivation and, on the other hand, collective fields cultivated in rotation (*aynoka*). Finally, the *exhacienda* contains the former *colonos*[17] of one or several large estates that were supposed to have been expropriated by the Bolivian agrarian reform of the 1950s. In fact, since this has been only partly enforced, the greater part of the fields are today sharecropped by the former *colonos*, an illegal situation that persists only because of the power relation subsisting between the vecinos and the peasants. This range of activities is therefore very complex and quite blurred, for it involves small landowners who have benefited from agrarian reform or have bought a plot from the hacendados; de jure sharecroppers with plots that the law has awarded them; and de facto sharecroppers with plots that have, as a rule, been expropriated but that the owner's position of strength in the region

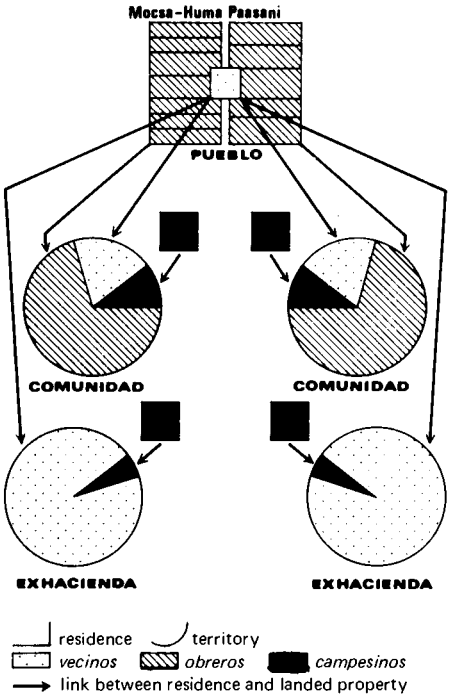


Figure 17.1. Social structure and territories in Ambana Valley.

allows him to keep. The vecinos have taken advantage of the confusions and imprecisions in land tenure produced by the agrarian reform.

I shall now set aside social and territorial classifications so as to consider the access that the various groups have to the different kinds of land (see Fig. 17.1).

The campesinos live either in a comunidad or in an exhacienda (a very small number of them live in the market town itself). In the former case, they own private land under permanent cultivation and plots lying fallow, which are part of collective estates; in the latter case, they cultivate, as sharecroppers, plots belonging de jure or de facto to an *exhacendado*.

The vecinos, as we have seen, live in the central square of the pueblo; they own an estate in an exhacienda, which they usually reach on horseback, and some plots in the territory of a comunidad.

As for the obreros who live in the pueblo, their access to land is structured in terms of a fundamentally dual system. The market town of Ambana is divided into two residential and ritual moieties – Mocsa Huma, below, and Paasani above, which are materially represented in the spatial organization of the village. They are delimited by the central square (which is neutral with respect to the dual structure, and since it

is the place of residence of the vecinos), whose four corners serve as the boundary posts of the bipartition, with Ccollana and Chuani at Mocsa Huma, and Kilima and Punama at Paasani. An obrero's family's place in a moiety is determined first by virilocal residence but also by the ownership of plots in the territory of a comunidad corresponding to his residential moiety. The obreros, therefore, have their land in one of the comunidades, which are more or less distant depending on the moiety to which the people belong in the market town of Ambana. The bipartite division of the village is thus expanded to reach through the whole territory.

It is common in the Andes for divisions to assume a nesting structure of this sort. In Ambana, this phenomenon is particularly apparent in rituals. At the great festivals, all of those living in the valley replicate the dual division of the market town. The campesinos dance into the village square from the corner[18] that is appropriate to their comunidad or to their exhacienda.[19] These latter used to have, until a few years ago, clearly defined locations at one of the four corners of the central square. Throughout the rituals each group of peasants feasted in front of the house of a vecino whose responsibility it was to feed and house them.

Can we speak of Ambana's territory? It would seem not to exist as such, for the market town does not include its own lands. Its vecinos have their estates in the territory of the exhaciendas and its obreros in that of the comunidad that corresponds to their residential moiety. Both thus encroach on the lands that the campesinos cultivate and that are close to where they live (see Fig. 17.1). The market town itself is divided into moieties that are inserted into the valley's huge dual system, and the kitchen gardens belonging to its inhabitants actually encroach on the fields of the comunidades belonging to each of the two moieties. Ambana's territory is therefore to be found in the surrounding comunidades and exhaciendas, where the holdings of the vecinos and obreros of Ambana are considered a flagrant intrusion.

Is Ambana, then, just a residential group without its own territory? The fragmentation of its constituent units would seem to make this unlikely. We know that ownership of plots in a comunidad corresponding to one of the moieties of the market town constituted one of the criteria by which one might claim to belong to it. Since inheritance of these plots is transmitted as much through men as through women, the coherence of the system requires that the moiety be endogamous – which is what my survey at Ambana effectively suggests: 55 percent of family heads have chosen a spouse from their own moiety, and 51 percent of their parents had observed the same prescription. When you consider how far rules of alliance in Andean societies have broken down, these rates of endogamy are very high. Moreover, each of the two moieties is divided in turn into neighborhoods. Thus, the upper moiety, Paasani, comprises five neighborhoods and twenty-one families; the lower one, Mocsa Huma, comprises seven neighborhoods and sixty-eight families.

The ideal form of alliance involves endogamy within the quarter as well as within the moiety: 27 percent of the family heads in the census took a spouse from their own quarter, and 36 percent of their parents had done the same. The inhabitants of the market town are quite explicit about this. I found this to be true of both the comunidad and the exhacienda – to such an extent, indeed, that each neighborhood in Ambana – and, at a higher level, each moeity – function like a comunidad, both with respect to alliance and with respect to access to land.

Ambana is, therefore, simply a residential group constituted by an assemblage of endogamous social units. Its "community," and even its territory, can be identified in terms of the huge dual organization covering the whole valley, and above all in terms of its history, particularly of the organization of the reducciones by Toledo during the 1570s.

Although Andean dualism derives from the pre-Columbian epoch, the reducciones of Toledo are responsible for the present-day forms of human settlement in the valley.[20] The reduccion of Ambana includes naturales and *mitmaq*, in a dozen ayllus, divided into two moieties. Their respective territories lie in tiers of altitudes of from 2,000 to 4,000 meters; their *estancias* allow them to control several different ecological tiers. These ayllus preserve their traditional habitat, and in the reduccion of Ambana each is allocated quarters in which to dwell when there are festivals and when taxes are due. The present-day names of the four corners of the square bring this form of organization to mind: Ccollana was the most important ayllu of the upper part (Anansaya), and Chuani was one of its estancias, whereas Punama was the most important ayllu of the lower half (Urinsaya), and Quilima was one of its estancias. Even today Ambana is an artificial enclave concerned with the exercise of power and with administration, which is why its territory must be sought elsewhere. Thus, the obreros' fields lie within the territory of the comunidades and are continuations of the resettled ayllus, whereas those of the vecinos lie within the territory of the exhaciendas, which would seem to have been created hurriedly by the colonizers, probably on lands that originally belonged to the Inka state.

As they did in the seventeenth century, the vecinos today stand for administration and power. But who are the obreros who go to make up a large part of the population of Ambana? There is good reason to suppose that they quite simply drifted in from the comunidades in which they continue to hold property and that the social group that they represent emerged from a general process of upward mobility on the part of peasants throughout the whole of the last century. The fact that the obreros were called *cholos*, a term that is widely used in the Andes, would seem to bear out this supposition. With the imposition of the reducciones in the sixteenth century, spatial categories were also restructured and in this form can still be observed in the present settlement of the valley, whereas social categories underwent redefinition throughout the nineteenth century. As if in a reducing mirror, the obreros living at Ambana have reproduced at the village level, and in the form of

neighborhoods and moieties, the valley's traditional social divisions and the endogamy that is characteristic of them.[21]

It is thus only by scaling down our mode of analysis with respect to that of San Juan that we have been able to identify a "community" in the market town of Ambana. This scaling down is both synchronic and diachronic: The territory of the town is scattered throughout the comunidades and the exhaciendas of the valley, and it may be identified only when related to the colonial reduccion; its social categories can be defined only in terms of relations of production that link them to areas outside the boundaries of the town, and in terms of a history that goes back only to the beginning of the last century. Ambana is thus an instance of an Andean society that overtly is organized in terms of reducciones, but whose more recent development broke it down into social strata. This last trend is best illustrated by the case of Yucay, discussion of which will shed additional light on the notion of community.

The Sacred Valley of Yucay lies 50 kilometers north of Cusco and follows the Urubamba River. It extends, at an altitude of 2,900 meters, between the snow-capped peaks of the eastern cordillera and the Maras- Chinchero plateau.

The colonial subdivisions into reducciones have not affected the territory of Yucay. Its magnificent Inka terraces surround the village, but although they are not a marked feature of the village's spatial organization, they are still taken into account. Yucay is at present divided into two moieties, as it was in the sixteenth century – Hananparte (the upper) and Urinparte (the lower). Some villagers died and others were wounded in the ritual battles in which they engaged some years ago. They still confront each other regularly through their soccer teams, and it is recommended that one marry a member of one's own moiety. It is apparent to all that the lower moiety is the more prestigious one, for there stand the palaces of Sayri Tupac and of Manco II and the residences of the hacendados.

At the beginning of the century, the village was divided into ayllus, each of which occupied quarters distributed among the two moieties and having their own political authorities. The sections that today allocate the collective labor teams for each quarter, which are headed by "captains," remind everyone of his or her former ayllu. The last vestiges of these latter are the crosses raised on the mountain slopes all around Yucay, which are brought down solemnly each year and carried in procession to the church, where their doubles are, and where each is celebrated in a separate ritual. Those owing loyalty to the same cross tend to live in the same neighborhood. The lingering identifying feature of the ayllus, before their disappearance at the end of the last century, derived from the fact that their members all occupied a specific neighborhood in the village.

A particular detail of the rituals would seem to confirm my hypothesis that there is a homology between the present-day crosses and the now

extinct ayllu. Some years ago, the cross belonging to the hamlet of Chichubamba was brought down to Yucay at the time of the festivals and elaborately welcomed by all the other crosses before the palace of Sayri Tupac. Why was it not welcomed in this manner at Urubamba, the nearest village and the capital of the province to which Chichubamba belongs? The parish archives inform us that Chichubamba had been an ayllu of the reduccion of Yucay in the seventeenth century[22] and that its cross ought therefore to have been honored at Yucay.

The peasants no longer explicitly identify a given cross with a particular ayllu or quarter; they do, however, differentiate between the upper and lower ones. Organization in terms of moieties is in some respects the final expression of the division into ayllu; parish registers testify to the progressive disappearance of the latter, until the nineteenth century, during which only Ayllu Hananparte and Ayllu Urinparte were registered. Like the archives of the last century, the division of the crosses into two moieties simply expresses this dualism.

The ayllu are disappearing; the divisions into quarters are fading; the moieties are no longer represented except in the village's spatial organization and in a number of rituals. What takes the place of these social units? What does the term *community* now mean to those who live in the valley?

Yucay has been recognized as a comunidad indígena since 1920. Its territory includes the mountain slopes but also the fertile fields on the terraces next to the prosperous haciendas that take up practically one-half of the irrigated territory.[23] Both the inhabitants of Yucay, at the bottom of the valley, and those who live in the hamlet of San Juan, on the slope, are members of the comunidad and have in principle the same rights. But in fact these two populations have very different statuses. Whereas the former share ownership of the irrigated fields at the bottom of the valley, the second have rights of usufruct only in the inferior plots on the slope of the mountain. Moreover, relations between the peasants who live in the upper and lower parts are extremely hierarchized, and the mestizos of Yucay despise the "Indians" of San Juan.

But one cannot really talk of equality in discussing the families at the bottom of the valley either, for 3.5 percent of them hold more than one-fifth of the comunidad's cultivated land, whereas almost half of them own less than one-tenth of this land. Moreover, although 2.3 percent of the peasants have 17.5 percent of the livestock, more than one-half of them have no animals at all. The poorest peasants are often forced to hire themselves out to work in the fields of the richest ones, and mutual labor prestations (*ayni*) have gradually been replaced by wage labor. This inequality has two basic sources: the enrichment of certain peasants, thanks to the mule trade with the subtropical coffee-producing valleys of La Convención and Lares, and the sale in the town of produce (fruit) grown on the rich fields below.

Admittedly there was no lack of inequalities in the traditional system, and the notarial archives often tell of the seventeenth- and eighteenth-

century *curacas*' accumulation of fields. But the market gives a new impetus to fast-spreading economic and social distinctions that are dividing the peasantry into social categories enjoying ever more disparate styles of life and levels of wealth. It produces a profound change in the meaning of the comunidad and in the status of the comunero, and even goes so far as to empty these institutions of all content. The administration of a district thus replaces the communal assembly, the *personero's* role becomes a purely token one, and everyone recoils from being a comunero because the term has something "Indian" about it. Besides, what is one to make of a comunidad whose territory is divided into separate private properties?

But the market economy does more than just create social divisions that undermine the "community"; it also creates new structures that curiously enough are inspired by the communitarian ideology while at the same time they mark the end of the traditional comunidad. This is how present-day agarian policy introduces cooperatives.

The most recent of the Peruvian land reforms was meant to set up production cooperatives on some of the larger confiscated estates, with the former colonos becoming wage workers of the cooperatives'. These new groupings may well have brought about considerable improvement in the lives of the peasants, but in many cases they amount to reducciones in the literal sense. Thus, this law prevents one from owning land in more than one place. This new ruling effectively limits the abuses of those hacendados who try to spread out their estates so as not to exceed the authorized number of hectares; but it runs quite counter to the peasant economic system, in which diversity in cultivation and in risk taking, through the ownership of plots in ecologically varied tiers, is the basic rule.[24] In that sense one can claim that the law is anti-Andean. Most of those responsible for an agrarian policy of this sort were quite ignorant of the Andean economic system.

In the case of Yucay, an examination of the working of one of the agricultural production cooperatives established in 1975 will show clearly how these "communities" fragment the previous ones. The agricultural production cooperative of San Juan Bautista today includes the fields from several haciendas. One of these used to consist of a single estate at the bottom of the valley, but in order to achieve complementarity in natural resources and in produce, its owner was betting on his ties to the plateau of Maras-Chinchero. In return for labor prestations in the valley, some comuneros living on the plateau received tuber plots that were high up, close to where they lived, and maize fields down below in the valley. Today they are summoned to choose between their two sorts of plots, in order to become a part either of the cooperative in the valley or of the comunidad on the plateau, which now has been turned into a "production cooperative." The peasants refuse this alternative and continue to work their fields on both tiers. But they come up against two other groups of peasants: on the plateau, the members of the Yanacona comunidad who have claimed the tuber plots as their own for

centuries; in the valley, local peasants now organized in cooperatives, who make the situation still more complex by claiming that the fields on the plateau are an integral part of the exhacienda in the valley, and therefore of their cooperative. The resulting serious conflicts paralyze cooperative and comunidad alike. The peasants cannot understand why they should have to choose between plots that admittedly are situated in different regions but that they perceive as fundamentally a part of the same estate. No one has hit upon the idea of creating "archipelago cooperatives" made up of "islands" located on the various tiers.[25] That is why the peasants who cultivated fields both in the valley and on the plateau are now to be "reduced" – confined within new structures that took no account of this mobility. Although there have been cases in which the Andean system of production was able, thanks to its ideal of self-sufficiency,[26] to resist three centuries of colonial policies, there would seem to be little chance of its prevailing over the rigid structures of the new reducciones.

What are we to think about the "community" of Yucay? Based, until the beginning of the century, on its organization as an ayllu, it stood at the opposite pole when confronting the hacendados in the social structure of the valley. Today it is still perceptible in the rituals; in the collective labor teams organized along the lines of the former ayllus; in the now vestigial ritual battles that occur when the soccer teams of the two moieties confront each other; in the simulated redistribution that occurs when status feasts are held; and in the pretense of political control on the occasion of the general assemblies of the comunidad, which bring together a dozen or so of the 435 comuneros' families. The legal recognition of the comunidad of Yucay in 1920, a crucial epoch for social differentiation, sanctioned the decline of the "community." Since then, the peasants of the Sacred Valley have mimed their sense of "community" through their crosses and their moieties. How could they pursue their dream, drafted as they are into the reducciones of modern times?

What insight has this brief survey of three Andean societies given us about the notion of community? The model may hold good in local terms, but overall it is reductive, for there are some Andean societies that it cannot properly account for, and above all it neglects their historical development.

Those out to favor the notion of community have taken San Juan as their yardstick, but as we have seen, the money economy has given rise to greater and greater degrees of social differentiation, which, in turn, undermine San Juan's coherence and structural solidity. In spite of all their differences, San Juan will probably resemble Yucay in a few years. The "community" at Ambana exists at a quite different spatial and temporal level. Its social and territorial categories may be understood only in terms of a series of local comunidades and with reference to the colonial reducciones. Because Ambana enjoys a pattern of human settlement that is four centuries old, and because it has been relatively untouched by the market economy, its disintegration is altogether less

apparent than at Yucay. In the Sacred Valley, the new categories brought about by recent economic divisions have not been reconciled, as the obrero in Ambana has been, with the previous forms of organization: They are constituted as classes in relation to a market that transcends the level of the mere community, and above all they go to make up new reductiones. Some complacent observers have already seen fit to discern in these cooperatives the "survival of the community and of the elements of practical socialism."[27] An autopsy would perhaps be more appropriate.

The three categories of community that I have advanced may be compared with each other only insofar as they constitute the variants of one and the same system – namely, one that represents a blend of traditional and market economies. We have seen how the peasants of Yucay are involved in national agricultural policy, in that the maize that they produce on the more temperate tiers and the coffee that they grow in the subtropical valleys are marketed by cooperatives or exporters. In Larecaja, the wheat grown according to a system of access to land four centuries old was already supplying the urban center of La Paz and the mines in colonial times. As for the egalitarianism of the comuneros of San Juan, it is possible only because the migrants driven out of the community through a process of economic differentiation directly linked to the market no longer return. Whereas at Ambana and Yucay the seasonal nature of the emigration brings out the economic and social differences within the "community," at San Juan the "equality" of the comuneros is guaranteed by definitive emigration to nearby Lima.

It is clear, moreover, that we can throw light on the meaning of this model only through a study of the development of the Andean societies from tribes to "communities," from the ayllus of the kingdom of Ata Huallas to the peach sellers of San Juan, from the multi-ethnic islands of Ambana to the endogamous moieties of a village without a territory, from the ayllus reduced to neighborhoods at Yucay to the cooperatives that export maize to Japan. In Ambana, whose huge valley has been broken down into colonial categories, San Juan, which has both been sufficiently reduced and not excessively dismantled to provide a semblance of a community, and Yucay, whose communitarian pantomime would seem to be aimed at warding off the anomie that threatens it, we have considered three examples that, although contemporaneous, give some idea of the nature of this development.

Notes

1 J. M. Arguedas, *Las comunidades de España y del Perú* (Lima: 1968, Universidad Nacional Mayor de San Marcos).
2 *Estatutos de comunidades del Perú* (Lima: Dirección General de Asuntos Indígenas, 1961).
3 J. C. Mariátegui, *Siete ensayos de interpretación de la realidad peruana* (Santiago: Ed. Universitaria S.A., 1955).

4 See, e.g., the studies of the Vicos hacienda, of which I will only mention a few: O. Alers, "Population and Development in a Peruvian Community," *Journal of Inter-American Studies* vol. 7, no. 4 (Coral Gables, Fl.: 1965): 423–48; J. Fried, "Social Organisation and Personal Security in a Peruvian Hacienda Indian Community," *American Anthropologist* vol. 64, no. 4 (1962): 771–80; W. Mangin, "Organización social en Vicos," *Etnología y arqueología* 1 (1960): 24–37; A. Holmberg, H. Dobyns, M. Vásquez, "Methods for the Analysis of Cultural Change," *Anthropological Quarterly* vol. 34, no. 2 (1962): 37–46.

5 Ministerio de Trabajo y Asuntos Indígenas, *Plan nacional de integración de la población aborigen* (Lima: January 1962–June 1965).

6 It is worthwhile drawing the reader's attention to the important part played here by the Istituto de Estudios Peruanos of Lima, directed by J. Matos Mar, and also to the work done at Huánuco by a team led by J. V. Murra. Cf. *Visita de la Provincia de Leon de Huánuco en 1562*, by Ortiz de Zúñiga, *visitador* (Huánuco: 1967, 1972), 2 vols.

7 F. Fuenzalida, "La matriz colonial de la comunidad de indígenas peruana: una hipótesis de trabajo," *Revista del Museo Nacional* 35 (Lima: 1967–8): 92–123.

8 M. Gutelman, A. Métraux, "Les communautés rurales au Pérou," *Etudes rurales* 10 (Paris: 1963); H. Dobyns, *The Social Matrix of Peruvian Indigenous Communities* (Ithaca: Cornell University, 1964).

9 The reader should, however, consult Tristan Platt's studies of the Macha and those of Nathan Wachtel on the Chipaya; ethnic differentiation would seem to be more alive in Bolivia than in Peru.

10 J. V. Murra, *Formaciones económicas y politicas del mundo andino* (Lima: Instituto de Estudios Peruanos, 1975).

11 For examples of this category, the reader should refer to Platt, Chap. 13, and Wachtel, Chap. 15, this volume.

12 The *Institut Français d'études Andines* is at present conducting interdisciplinary inquiries into San Juan and Ambana, and the data presented here were gathered in the field by the author.

13 H. Locker, J. Piel, "San Juan Uchucuanicu: revolution historique," *Bulletin de l'Institut Français d'Études Andines*, vol. 4, nos. 1–2 (1975): 1 and 7. For general reference the reader should consult the whole of this issue of the bulletin, which is devoted to studies conducted in this area.

14 Relations of ritual kinship are based on *compadrazgo* and *juramento* ties, the first of which is well understood. Juramento kinship is formed by an ad hoc ritual that is binding not only on the two individuals involved but also on their families. Thus, my brother's sister by juramento also becomes my sister by juramento; my mother's son by juramento becomes my brother by juramento. The two sorts of kinship are thus very much interwoven.

15 F. Fuenzalilda, J. L. Villaran, J. Golte, et al., *Estructuras tradicionales y economía de mercado: la comunidad de Indígenas de Huayopampa* (Lima: Istituto de Estudios Peruanos, 1968).

16 *Hacendado*: owner of a *hacienda*, i.e., of a big estate.

17 *Colono*: His work on a large estate was repaid by allowing him the usufruct of a plot of land.

18 *Esquina*, a corner, represents a very significant notion in Andean thought.

19 Might this not indicate quadripartition?

20 T. Saignes, *L'accès à la terre dans les vallées d'Ambana*, cyclostyled (1977). See also Saignes's contribution to the present volume (Chap. 16).

21 This trajectory is best illustrated by taking the example of a particular family. Three obrero brothers live in the town of Ambana, two of them in a quarter appropriate to the upper moiety, the other in the village square. Their father has stayed in their comunidad of origin, which belongs to the upper moiety. Thus we have in some sense a representation of the three stages in the development of the obrero group: the comunidad in which the father lives, the quarter of the town in which the two brothers are installed, and finally the village square in which the third brother lives, testifying to the manner in which some obreros are tending to become vecinos.

22 Yucay parish archives, containing registers of baptisms, marriages, and deaths.

23 For a more exhaustive analysis of the social structure, and in particular of the relations between hacendados and peasants, see A. Fioravanti-Molinié, "Tendances actuelles de la communauté rurale Peruvienne," *Sociologie du travail* 2 (1974): 174–90.

24 J. V. Murra, "El control vertical de un máximo de pisos ecológicos en la economía de las sociedades andinas," in *Formaciones economicas y politicas del mundo andino* pp. 59–115.

25 In this respect I would draw the reader's attention to the perseverance with which members of the José Zuñiga cooperative in the Sacred Valley have demanded the right to buy an estate in the lowlands of Ccosñipata and to the blank incomprehension with which their requests were met. Today they have at last succeeded in acquiring an "island" upon which to raise stock and grow fruit.

26 A. Fioravanti-Molinié, "Contribution à l'étude des sociétés étagées des Andes," *Etudes rurales* 57 (1975): 35–59; C. Fonseca Martel, "La economía 'vertical' y la economía de mercado en las comunidades alteñas del Perú," in *Visita de la Provincia de León de Huánuco en 1562* 317–37; O. Harris, *Kinship and the Vertical Economy of the Laymi* ayllu, *Norte de Potosí* (*XLII Congrès international des américanistes*, Paris, Sept. 1976); S.T. Webster, "An Indigenous Quechua Community in Exploitation of Multiple Ecological Zones," *Revista del Museo Nacional* 37 (Lima: 1971): 174–83.

27 Mariátegui, *Siete ensayos*.

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