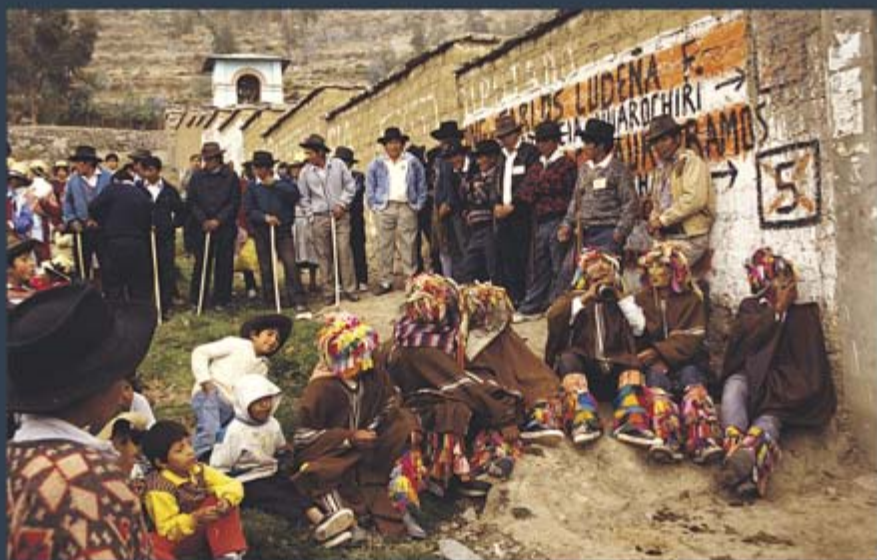




THE CORD KEEPERS

Khipus and Cultural Life in a Peruvian Village Frank Salomon



THE CORD KEEPERS

A book in the series
Latin America Otherwise: Languages, Empires, Nations
Series editors:
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THE CORD KEEPERS

Khipus and Cultural Life in a Peruvian Village

Frank Salomon

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TO JOHN V. MURRA
WHO TAUGHT:

“No digan ‘perdido.’ Digan ‘aún no encontrado.’”
“Don’t say ‘lost.’ Say ‘not yet found.’”

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ABOUT THE SERIES

Latin America Otherwise: Languages, Empires, Nations is a critical series. It aims to explore the emergence and consequences of concepts used to define “Latin America” while at the same time exploring the broad interplay of political, economic, and cultural practices that have shaped Latin American worlds. Latin America, at the crossroads of competing imperial designs and local responses, has been construed as a geocultural and geopolitical entity since the nineteenth century. This series provides a starting point to redefine Latin America as a configuration of political, linguistic, cultural, and economic intersections that demands a continuous reappraisal of the role of the Americas in history, and of the ongoing process of globalization and the relocation of people and cultures that have characterized Latin America’s experience. *Latin America Otherwise: Languages, Empires, Nations* is a forum that confronts established geocultural constructions, that rethinks area studies and disciplinary boundaries, that assesses convictions of the academy and of public policy, and that, correspondingly, demands that the practices through which we produce knowledge and understanding about and from Latin America be subject to rigorous and critical scrutiny.

The Incas were a great mystery—at least according to many Western pundits who could not understand how a complex, highly stratified empire, stretching from southern Colombia to northwest Argentina, with a road system larger than Rome’s and a political organization that incorporated millions—could have existed without a “true” or European-like system of writing and accounting. The Incas’ closest instrument was the *quipu*—a set of knotted cords that served, in ways we hardly understand, as the nerve system of an empire.

One frontier of Andean scholarship today is trying to making sense of the khipu, and Frank Salomon's exciting book is a pioneering contribution to the field. Salomon's curiosity was piqued when he noted that village leaders in Tupicocha, a community in the central Peruvian Andes, proudly wore khipus as a badge of civic authority. While these men couldn't decipher their khipus' meanings, they did offer Salomon their historical knowledge. The result of this exchange, along with an exploration into other khipu legacies, is an intriguing investigation into these knotted cords and their contexts of use over a period of four centuries. Significantly, Salomon, in the process, challenges us to reexamine our own assumptions about the relation between writing and "civilization" as well as about the nature of "writing" itself.

PREFACE

AT THE START, newcomers to Inka studies always ask, “Could they write?” Chalk in hand, I falter. The answers don’t sound reasonable: “Yes, but not in any way we can explain.” Or, “No, but they behaved like a literate society anyway.”

This puzzlement is as old as contact itself. Hardly had Spanish soldiers hit the beach of what is now northern Peru, when Hernando Pizarro himself (1920 [1533]:175) was startled to see “Indians” recording in knots what seemed like double-entry accounts for things the invaders had taken away. Yet the technique for keeping records on knotted cords, called *quipus*, is one aspect of America that Europe never really discovered. Later, when half a colonial century had gone by, Spaniards seemed almost resigned to just not “getting” the Andean way of recording. No early Spanish colonist is known to have made a concerted effort at learning it, even though experience had taught Spanish judges to respect the accuracy of Inka-style records.

“Could they write?” was also an interesting issue to Andean natives who grew up in the age of conquest. A lifetime after Pizarro saw his first *quipu*, an unknown Quechua-speaking native of central Peru wrote the only known book which preserves a pre-Christian religious system in an Andean language. It starts with these words:

If the ancestors of the people called Indians had known writing in former times,
Then the lives they lived would not have faded from view until now.

As the mighty past of the Spanish Vira Cochas is visible until now,
So too would theirs be.
But since things are as they are,
And since nothing has been written until now,
I set forth here the lives of the ancient forebears of the Huarochiri people,
Who all descend from one common forefather.

What faith they held,
How they live up until now,
Those things and more.
Village by village it will all be written down:

How they lived from their dawning age onward.
(Salomon and Urioste 1991:41–42, 157).

This anonymous writer himself knew about *quipus* and mentioned them twice (Salomon and Urioste 1991:112, 211, 142, 242). But if *quipus* were among his sources, he kept that fact to himself. After all, he was writing at a time—circa 1608—when “extirpators of idolatry” were under orders to burn *quipus*. As it happens, villagers of his own home today hold a set of *quipus* which offer a tantalizing clue to the unknown system. That set is the subject of this book.

To the set’s owners, too, “Could they write?” is still an interesting problem. Troubled with their relationship to a sacred but no longer intelligible legacy, which they see as crucial to their cultural self-image, they were kind enough to let me delve into it.

But why is “Could they write?” such a compelling question? What’s so important about this question anyway? What do we mean when we ask? Is there a better way to ask? These doubts, too, were among the reasons for undertaking the book.

For several years I was devoted to studying the anonymous Huarochirano’s words (Salomon and Urioste 1991). At first, in John V. Murra’s Cornell classroom in the 1970s, the names of the Huarochiri *ayllus* (corporate descent groups) such as Sat Pasca or Caca Sica had sounded to my novice ear as fabulous as the names of Gilgamesh and Utnapishtim the Faraway. Much later, in 1989, I began traveling around Huarochiri to learn the ecological, political, and land-tenure facts mythicized by stories of the ancient divinities (*huacas*). It turned out that the ancient *ayllus* were still very much in business, carrying on the ancient and heroic task of wringing an agropastoral living from the semiarid heights. Satafasca, Cacasica, and Allauca were names on soccer jerseys.

As it happens, my acquaintance with the cord records of Tupicocha village (1994) coincided with the beginnings of a period of renewed interest in Inka *quipus*. I hope the results will add something—much less than a decipherment, but more than a speculation—to the perennially baffling task of recapturing a code seemingly different from all other “lost scripts.”

I also hope that it will in some measure repay the generosity of the many who supported this study.

The institutions that supported research were the Instituto de Estudios Peruanos in Lima, the John Simon Guggenheim Memorial Foundation, the National Science Foundation under grant 144-FW88, the School of American Research under its National Endowment for the Humanities Resident Fellowship, the University of Wisconsin Graduate School Research Committee, and the Wenner-Gren Foundation for Anthropological Research. Their support is deeply appreciated.

Just as crucial were institutions in Huarochirí: the *parcialidades* (sectors) of Tupicocha, which own the *quipocamayos*, the Comunidad Campesina of San Andrés de Tupicocha, and the Municipality. The parcialidad of Segunda Satafasca and the Peasant Community are thanked with special warmth for granting me honorary membership.

Several museums kindly helped me view pre-Hispanic khipus: the American Museum of Natural History in New York, the Musée de l'Homme in Paris, the Museo Nacional de Antropología y Arqueología in Lima, and the Ethnologisches Museum of the Preussischer Kulturbesitz in Berlin. The staff of the Archivo Nacional de Historia in Lima, and especially Director of Lima's Archivo Arzobispal, Laura Gutiérrez Arbulú, together with her cataloger Melecio Tineo Morón, were of great help. Father Thomas Huckemann of the Prelatura de Cañete, Yauyos, and Huarochirí helped with the problem of lost parish archives. Susan Lee Bruce of Harvard's Peabody Museum is thanked for her clarifications about the Tello-Hrdlička holdings.

Gary Urton, the anthropologist who has done the most to advance khipu studies in recent years, has proven a clear-sighted and generous colleague at every turn and an able convener of the community of khipu enthusiasts, which includes William Conklin, Regina Harrison, Tristan Platt, and many others. There is a special connection among ethnographers who share a terrain, and among these Hilda Araujo, then of Peru's Universidad Nacional Agraria de la Molina, stands out. To see her at work in the field is to know the gold standard of ethnography. I am glad I had a chance to learn from Marcia Ascher and Robert Ascher, who created the modern foundations of khipu study and whose courses I foolishly missed in Ithaca. The scholars who helped me along with dialogue, critique, hospitality, or a practical leg up are innumerable. I would like to thank especially Tom Abercrombie, Francisco Boluarte together with Teresa Guillén de B., Duccio Bonavia, Tom Cummins, John Earls, Marie Gaida, Patricia Hilts, Kitty Julien, Daniel Levine, Carmen Beatriz Loza, Pat Lyon, Carol Mackey, Bruce Mannheim, Regis Miller, Patricia Oliart, Juan Ossio, Elena Phipps, Jeffrey Quilter, Joanne Rappaport, Maria Rostworowski, Vera Roussakis, the late John Rowe, Gerald Taylor, Luis Eduardo Vergara Lipinsky, Nathan Wachtel, and Tom Zuidema. It was a pleasure and an honor to work with Karen Spalding, who helped make Huarochirí a canonical

name among Latin Americanist historians. (What Karen and I did together forms two sections of chapter 5: “A Late-Colonial Episode of Rebellion, Ethnicity, and Media Pluralism” and “The Implications of a Campaign of Corded Letters.”) Many turns back in the winding road, this all began with George Urioste’s Cornell seminar on the Huarochirí Quechua manuscript.

At the University of Wisconsin, Madison, wonderful students helped with various parts of the project: Melania Alvarez-Adem, Mark Goodale, Jason K. McIntire, and Steve Wernke, who helped create the project Web site (<http://www.anthropology.wisc.edu/chaysimire/index.htm>). Department Administrator Maggie Brandenburg kept work on track with her almost magical knack for problem solving. David McJunkin provided radiocarbon expertise, Richard Bisbing of McCrone Associates Laboratory provided fiber expertise, and Onno and Marika Brouwer did the cartography. Kildo Choi and Robert Bryson drew the diagrams.

This book grew under the glittering aspens of Santa Fe at the School of American Research (SAR), where Doug Schwartz, Nancy Owen-Lewis, and an able staff helped it along. Thanks especially to Sally Wagner, for donating a dream house, which is the kind of house writers need. Thanks to my homey Ana Celia Zentella for showing what kind of human being an anthropologist ought to be. For good times and good thoughts, I thank my other SAR “classmates,” especially Dave Edwards. Edith Salomon L. Rosenblatt and Wilhelm Rosenblatt, of Albuquerque, helped distill a drop of the ancient scholarly stuff from other times and places.

In Peru, the people who sustained this job are beyond counting. Among the residents of Huarochirí (provincial capital), Abelardo Santisteban Tello provided insight into the regional inheritance. In Tupicocha, I owe special thanks to Celso Alberco and his family, including the colony which his sister Maritza founded in Elmhurst, Queens, New York—right around the corner from where my then-immigrant mother, Mathilde Loewen, went to high school half a century before. León Modesto Rojas Alberco and his family taught me a world of village history. Margareto Romero generously opened Mújica’s archive. Don Alberto Vilcayauri and his daughter Elba Vilcayauri were faithful guides and helpers to me, as they are to all “Tutecos.” I am especially grateful to young Nery Javier and to his family. Alejandro Martínez Chuquizana and Tueda A. Villaruel, schoolteachers and friends of local culture, helped find some vital links to the tradition. With Wilfredo Urquiza of Tuna, Roberto Sacramento of Concha, and Martín Camilo of Tupicocha, all philosophically minded men, I passed hours of discussion on the mountain path or in the patio. Mayor Roy A. Vilcayauri provided help including work space in the Municipal Hall. Aurelio Ramos, who brought the computer age to Tupicocha, provided cartographic assistance. The people consulted on specialized cultural matters are mentioned by their real names in the chapters, and to each of them I am grateful. The staffs of the NGO Instituto de Desarrollo y Medio Ambiente and of the public health post, as well as the storekeeper Lidia Ramos, helped keep life cheerful during the murky months of fog.

I would like to thank the Guevara-Gil family, Oscar and María Benavides, the Bronstein family, and the Flint-Baer family, all of Lima, for their many acts of kindness toward Laurel Mark, my kids, and me. The Mayer family, especially the late Lisbeth Mayer, and the family of Liduvina Vásquez became dear to us in those years for more than scholarly reasons. I thank my kids, Mollie and Abe, for their patience and awakening sympathy with Peru. As for the joy that carries one through the days, nobody really knows where it comes from, but I think mine comes from Mercedes Niño-Murcia.

THE CORD KEEPERS



FIGURE 1 Villagers looking at quipocamayo on author's work table. From personal collection of author.

THE UNREAD LEGACY:

AN INTRODUCTION TO TUPICOCHA'S KHIPU

PROBLEM, AND ANTHROPOLOGY'S

IN 1994, a fluke of ethnographic luck brought me face to face with the officers of Tupicocha village, Peru, as they draped themselves in skeins of knotted cords which constitute the most sacred of their community's many traditional regalia. Villagers call these *quipocamayos*, a cognate of the ancient Quechua word for a khipu master, *khipukamayuq*. The core Quechua sense of *khipu* is 'knot.' They also call the cords *equipos*, or *caytus* (the latter deriving from a Quechua term meaning "wool thread, spool of wool, ball of wool, piece of cloth, string, cord, etc." according to Jorge Lira (1982 [1941]:127).

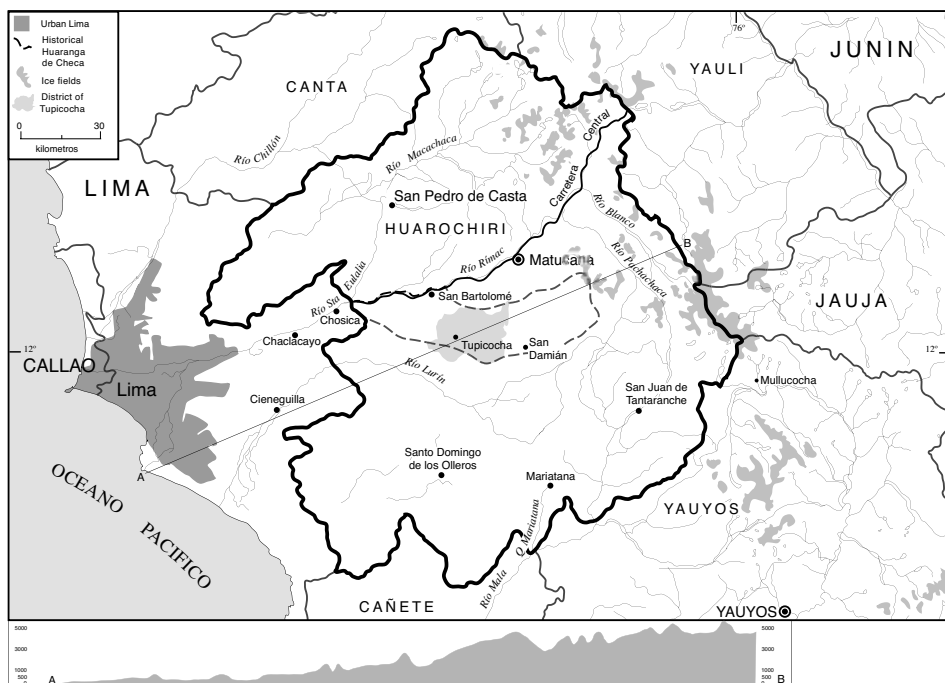
Khipus are usually associated with Inka archaeology. Although "ethnographic" khipus for herding or confessing are known, historians treat the political role of khipus as a chapter that closed early in the colonial era. Tupicocha's cords represented an unsuspected continuity and, with it, an unexpected chance to see how this pristine graphic tradition functioned in political context. That lucky encounter provides an entry into a central problem of Andean studies: the management of complex information in a state-level society lacking "writing" as usually understood.

Tupicocha provides no Rosetta stone. But it does open an ethnographic and ethnohistorical window on how the cord system articulated political life as organized by corporate kinship groups. It also provides some clues about specific details of the code. In following them up, I will suggest how an "ethnography of writing" — Keith Basso's term (1974) — must be extended to put systems grossly different from alphabetic "writing" onto an even heuristic footing with more familiar ones.

A Glimpse of Equipos and a Glance at Semiological Pluralism

In 1994 I was seeking early-colonial indigenous writing related to a 1608 Quechua text. I sought it where the source originated: around the mountain village of San Damián near the center of Huarochirí Province in Peru's Department of Lima (see map 1; Salomon 1995, 1998a, 2002b). San Damián de los Checa is a name with ethnohistorical charisma.¹ It was here, in what the Inkas called the “Thousand of Checa” (Huaranga de Checa in Hispano-Quechua),² that an anonymous native scribe around 1608 wrote the only known book recording the lore of the pre- or non-Christian deities in an Andean language (Salomon and Urioste 1991; Taylor 1997). The unknown compiler wrote in Quechua, the political language of the Inka state and later the “general language” of early Spanish rule. He used the alphabet and many scribal conventions.

In San Damián Milton Rojas, a schoolteacher who grew up in a Huarochirí peasant home, kept a tiny part-time store. I liked to kill a twilight half hour there because he had made a cheerful little museum of it. He painted the walls glossy green, and decorated them with a changing array of oddments gathered from magazines and NGO brochures. Teacher's college had given him some interest in research such as mine, and I appreciated his detailed local knowledge.



MAP 1 Map of Huarochirí Province, Departamento de Lima, Peru.

One evening, Milton said, “You know, Salomón, you should visit my home village, Tupicocha. I think you’d be interested in the equipos.”

Equipo means a team, usually a soccer team. I said, “Well, I like soccer too, but I guess I can watch it at the field right here.”

Milton half-smiled and said, “No, I really think you’d be interested in *my* village’s equipos.”

As the bus to San Damián snakes along the precipice it stops at Tupicocha, so I had seen it many times. Tupicocha was a smaller, poorer village than San Damián. The passengers who got off there seemed always to be talking about poverty and water worries: scanty rain, half-full reservoirs, withering or late crops, or disputes over land and irrigation. Every time we stopped there, I thought, “I’m glad I don’t live here.” I knew that the mythic path of one the most important heroes of the Huarochirí book passed through Tupicocha, but I had not given the place ethnographic priority. Yet eventually, needled by the feeling that Milton was setting me a half-satirical test by hinting at something important, I finally went there.

I arrived one morning just as the Tupicochans were making their daily vertical exodus, some up to the pastures and potato plots, others down to the orchards and cactus-fruit patches. My heart sank as distant couples with burros disappeared over the ridge. The tips of their steel tools glinted and were gone. But luck was on my side: I met a kinsman of Milton’s, Sebastián Alberco. He was running an errand in connection with his duties as secretary of the Peasant Community, so he’d be in town for an hour or so. That gave him time to listen to my question, “Why are Tupicocha’s equipos important?”

Sebastián shared the streak of dry wit for which his family is known. He guessed at Milton’s sly way of educating me. “Ah, the equipos. Sure, stick around, I’ll show you something.”

While running the errand, he said, “We’ll stop at my cousin’s store. Our equipo is there, our *equipocamayo*.” Suddenly I realized important information had arrived, in the humble form of a pun or folk etymology. *Equipo* had nothing to do with soccer. *Equipocamayo* would be the monolingually Spanish-speaking village’s way of pronouncing the Inka word for a master of the knot-cord art, *kipukamayuk*. But could this rather ordinary-looking village retain a legacy that the classic places of Andean ethnography had lost?

Walking briskly, Sebastián explained that Tupicocha consists of ten parcialidades (sectors), informally known by the ancient term *ayllus*, and that all but the newest of them were symbolized in political ritual by quipocamayos. Now the rest of that punning folk-etymology fell into place: each *ayllu* really is a “team,” not in the sports sense (though *ayllus* do in fact sponsor soccer teams) but in the sense of furnishing one team in the complex array of crews who, in friendly rivalry, do the village’s basic infrastructural work.

When we got to Sebastián’s cousin’s store, the owner had not quite finished locking up to head for the fields. Sebastián rapped on the shutters and shouted

“Cousin! There’s a foreigner who needs to talk to you!” Feet scuffed on a creaky stair, and the door opened. In the store it was deep twilight, the shutters open just a crack to discourage disruptive last-minute buyers. The brass of a balance scale showed through the murk with a Rembrandtesque burnished gleam. Sebastián’s cousin pulled a plastic bag from a locked chest and upended it on the counter. Out flopped a multicolored tangle of heavy yarn. A few wine-red and yellow ornaments glowed amid a mound of tawny, dark, and mottled cordage.

Sebastián lifted the skein, demonstrating the first steps in handling a quipocamayó: one picks up the extremes of the main cord, shakes the pendants down to a hanging position, and calls on a peer to “comb” the tangled pendants out by separating them with the fingers. As the cords began to hang parallel, it became clear that this was nothing like the eccentric “ethnographic” khipus documented elsewhere. It was a khipu right in the mainstream of the canonical Inka design tradition. In fact it looked a lot like some of the grander museum specimens, except that, as my fingers soon told me, it was made of wool and not cotton.

Sebastián then demonstrated how one displays the object to the village in its annual ceremonial array. He held the main cord diagonally from his left shoulder to his right hip, while his friend caught the long “tail” up behind and tied it over his shoulder blade so that the whole object formed a “sash of office” — the metaphor he used in explaining this motion. We stepped out into the brightening morning and took a photo.

The survival of this complex put the matter of Huarochirí’s lettered past into a different and more exciting light. The ayllus that owned the cords had, for the most part, the same names as the ones that made up the confederacy which the Inka regime called the “thousand” of Checa. And these were also the same ayllus which figured as protagonists of Huarochirí 400-year-old Quechua book of gods and heroes (Salomon and Urioste 1991:1–38). Could it be that the cords held content related to that legacy?

The chapters of this book describe how that day’s initial and simplistic guesswork gave way to more informed hypotheses. Their overall concerns are the following:

1. At the level of theory, the goal is to adapt the “ethnography of writing” to a code which philological grammatology locates outside the domain of “writing proper.” Writing proper is taken by many grammatologists to mean any “secondary” code which uses visual signs to represent a “primary” code consisting of audible speech signs. But we know many societies have produced inscriptive codes which do not work this way. And while there is no reason khipus *could* not stand for speech segments, we have no evidentially firm case that proves khipus *did* work in this way. We do know that they worked in other ways, and these other ways are worthy of ethnography. Putting khipus into a more omnidirectional model of inscription would contribute to interpreting a large and poorly understood portion of humanity’s “technology of intellect.”

2. From a historical perspective, the supposed death of political *quipus* is usually seen as an instance of alphabetic writing's triumph over "proto" or "partial" inscriptive systems. In the old Viceroyalty of Peru this is usually dated to the early colonial era and is attributed either to the alphabet's greater intrinsic capacity, or to the brute force with which it was wielded. Ethnohistoric inquiry into the Tupicochan context proves, on the contrary, that both systems coexisted for almost four centuries. This gives reason to think that the radical differences between them may have made them complementary rather than rival media from the local viewpoint.

3. On the plane of ethnographic synchrony—an "ethnographic recent past" devised for heuristic purposes, without imputation of real-world timelessness—I am concerned with reconstructing some macroscale features of the data-registry and documentary system in which *quipocamayos* worked at the end of their full-function life. The actual years to which this reconstruction applies correspond to about 1883–1919.

4. I will argue that *quipus*' double capability for simulating and documenting social action worked as the hinge of articulation between kinship organization and political organization. While we do not know whether ancient *quipus* worked the same way overall, the reconstruction offered here is compatible with the structure of many ancient specimens. The final chapters argue that Tupicochan practice demonstrates a root relationship between inscription and Andean social complexity.

The remainder of this introduction discusses why Huarochirí Province is a crucial locus for Andean studies. It then lays down contexts of *quipu* study, sketches the *quipu* research frontier, previews the argument, and summarizes research methods.

Huarochirí, Classical and Marginal

The phrase "canonical culture" is sometimes heard in anthropology about peoples whose ethnographic literature has durably influenced theoretical ideas or images of peoples.³ Among Andean cultures, only the Inka empire would be recognized as "canonical" across the discipline—canonical because it is one of the clearest examples of "pristine" or "precapitalist states" and of divine kingship. But ideas of what makes "Inka culture" distinctive and important (in theories of state formation, political economy, ideology, etc.) are, on source-critical inspection, composites of scholarly experience from several regional polities and cultures. Among these, "Huarochirí" has rather a classical sound to Andeanists—so much so that one disadvantage of working there is to face a jaded attitude from sophisticated Peruvians, who have already heard plenty about it.

Indeed Huarochirí stands second only to the sacred Inka capital Cuzco, with its outliers around Lake Titicaca, as the place where Spain's, Peru's, and later the world's notion of what is "Andean" was constructed. This has everything to do

with the fact that it lies astride what was until the twentieth century the main route from the Viceroyalty's City of the Kings—Lima—to the Inka capital Cuzco. It was along this route that in 1570, at the future provincial capital of Santa María Jesús de Huarochirí, Peru's first Jesuits set up an experimental prototype for their famous schools to teach the sons of native lords literacy, music, and Catholic doctrine (Mateos 1994:223–24; Wood 1986:66). One of the staff at that mission was the brilliant half-Inka novice Blas Valera. Later in life, Valera may have invented a way to emulate European “writing proper” and put Christian sacred discourse on cords (Hyland 2002:162–64). We do not know what young Blas had in mind circa 1570, but it may be that the notion he developed of a *kipu* art capable of carrying exalted meaning was influenced by Huarochirí experience as well as by his famous studies among the heirs of the pre-Hispanic god-king. Perhaps his presence in Huarochirí influenced the literate but simultaneously *kipu*-using semiotic pluralism which characterized the area through subsequent centuries.

The most famous thing about Huarochirí is the colonial book mentioned in the opening of this chapter—the only known South American text that bears comparison with Mesoamerica's native-language monuments such as the Maya *Popol Vuh*, namely the untitled, anonymous Huarochirí manuscript sometimes known by its initial phrase *Runa yn[di]o ñiscap*. Written in colonial Quechua and dated by Antonio Acosta Rodríguez to 1608, it alone of all known writings tells the myths of the pre-Christian deities and heroes in an Andean language, and it explains the duties of their priests (including the knotting of *kipus*). The immediate genesis of this anonymous treasure lies somewhere in an ugly colonial brouhaha. At the turn of the seventeenth century, Huarochirí was in the pastoral care of a brilliant clergyman, who, like Blas Valera, had enjoyed a Quechua-Spanish bilingual upbringing in the shadow of the Inka palaces, but who unlike Valera had a purely contemptuous attitude toward non-Christian worship. This man, Father Francisco de Avila, seems to have commissioned an unknown native ally to compile the text from oral testimonies. Faced with a lawsuit by his disgusted parishioners (Acosta Rodríguez 1987), Avila used the text to sleuth out incriminating particulars about Andean cults and stoke up the series of persecutions called “extirpation of idolatries” (Duviols 1972; Griffiths 1996; Mills 1997). Consequently, during the century and more when “extirpation” lashed the archbishopric, Huarochirí was one of the two most punished provinces. The resultant trial records (Duviols 1986; García Cabrera 1994) have enriched reconstructions of Andean religion (Doyle 1988; Gilmer 1952; Huertas Vallejos 1981). Huarochirí's great regional deity, embodied in the snowcap Paria Caca, was among those the indigenous chronicler Felipe Guaman Poma de Ayala (1980 [1615]:240) chose as a pictorial archetype of multiethnic “major idols.”

Huarochirí studies (alongside those of Cajatambo, its counterpart to the north of Lima) have influenced dominant modern images of Andean culture far out of

proportion to the province's size. It was here, early in the twentieth century, that the pioneer archaeologist Julio C. Tello and the Harvard physical anthropologist Aleš Hrdlička pioneered scientific mummy-hunting (1914). Tello's assistant Toribio Mejía Xesspe, a Quechua speaker from childhood, wrote a still-unpublished pioneer translation of the Huarochirí Quechua Manuscript and tirelessly roved the Huarochirí heights for his 1947 regional monograph. In the 1950s, a group from the country's flagship university under the leadership of José Matos Mar wrote a series of influential ethnographies which did much to place the country's "indigenous communities" into the paradigm of modernization theory (1958). Partly in response to the cultural thinness and overbearing modernism of such studies, Peru's Quechua-Spanish literary genius José María Arguedas translated the Huarochirí textual legacy so as to give Spanish-speaking Peruvians a more indigenous-based understanding of pre-Christian "gods and men" (Arguedas and Duviols 1966). By 1980 Huarochirí as conceived by Avila had so clearly become a locus classicus that when Ortiz Rescaniere set out to introduce "oral tradition" research as a resource for structuralist modeling of Peruvian archetypes, he could give his book a Spanish title meaning "Huarochirí Four Hundred Years After," without even having to say after what.

In the final quarter of the twentieth century, researchers countering the "modernization" paradigm with Marxian alternatives pioneered the argument that "Indian-ness" is a contextual attribute of social inequalities. Among these, Karen Spalding's 1974 *De indio a campesino* and her 1984 *Huarochirí: An Andean Society under Inca and Spanish Rule* provided an influential regional case study. Huarochirí was not at first a paramount theater for the "vertical archipelago model" which John V. Murra fashioned (portraying Andean political territories as assemblies of discontinuous "islands" stacked in different resource niches at different altitudes; 1975a). But as the geographic shape of ancient society emerges, we now see vertical organization as the substrate of that same organization which the Quechua stories explain in mythic terms (Feltham 1984). Among structuralist-influenced models of Andean society, María Rostworowski's pioneering interpretation of the Quechua mythology as the ideological self-image of a society formed by fusion between invasive highlander ayllus and locally rooted lowland peoples (1978a, 1978b) has stood alongside Pierre Duviols's 1973 *huari-llacuaz* analysis of the same fusion as a perennially fruitful insight into the "emic" side of vertical diversity.⁴

Because it is the nearest contact zone between the capital city and the "deep" Peru to which national ideology often appeals, Huarochirí has become influential in urban and schooled Peruvians' understanding of rural ways of life. Social science departments in Lima universities routinely dispatch students there for training fieldwork: in some towns on any festival day, one is likely to meet an academic outsider. A set of university term papers about Huarochirí became, for

example, the special journal issue *Debates en Antropología* 5, 1980. Huarochirí figures disproportionately in social-scientific attempts to characterize modern peasantry (Echeandía Valladares 1981; Llanos and Osterling 1982).

Although foreigners seeking the “Andean” usually wing straight to Cuzco, Limeños of modest means enjoy weekend excursions to Huarochirí tourist zones such as San Pedro de Casta or the heights of Marcahuasi. School groups, families, and young couples toil up precipice roads by bus to seek vistas, both literal and conceptual, above Lima’s smog. Bemused peasants see clubs of mountain bikers caked in the dust of archaeological byways pounding the locked doors of part-time rural stores in desperate search of soft drinks. Not infrequently, Huarochirí’s stunning landscapes and “typical” central-highland ways of life (Olivas Weston 1983) appear in newspaper supplements (Noriega 1997; Ochoa Berreteaga 2000, 2001). During 2001, “adventure tourism” packagers put an ad for travel through Huarochirí “in the footsteps of the extirpators” onto the Internet.

At the turn of the twenty-first century, Tupicocha has caught the eye of journalists. This ordinary-seeming village is beginning to acquire a special mystique because its civic ritual appears emblematic of homegrown, responsible, democratic grassroots governance—a value for which Peruvians became hungry as they watched the Alberto Fujimori regime dissolve in a nauseating vortex of high-level scandal. *La República*, an opposition daily, greeted New Year 2001 with a color-photo spread (Ochoa and Herrera 2001) in which “the [Tupicochan civic meeting] Huayrona, basis of Andean democracy” figured as a pageant of rock-steady integrity. In 2002, Oxfam America and the Ford Foundation projected the same image toward a worldwide public through their multimedia synthesis “Indigenous Peoples of Latin America” (Smith 2002).

Limeños also notice many Huarochiranos among the in-migrating vendors and workers who recently swelled the city’s numbers, especially while Shining Path warfare deepened the 1980s economic recession. One might expect the children of this province to disappear into the colossal maelstrom of Lima demography; 28.7 percent of the country’s citizens by 1996 lived in Lima,⁵ while as of 2000 the 59,238 Huarochiranos made up only about two-tenths of 1 percent of their country. But people from there are disproportionately visible because they fill roles that link urban and rural publics: market-stall vendors, operators of tent-restaurants in working-class neighborhoods, entrepreneurs in regional transport, and truck-farm wholesalers. Radio Inka, a pop station specializing in “chicha music” for a Huarochirí-born audience, blares in taxis and commercial galleries.⁶

Huarochirí is sometimes emblematic of what elite Limeños see as the racial masquerade of not-really-white immigrants. In his famous satirical novel *Un mundo para Julius*, Alfredo Bryce Echenique deflates an upper-crust Lima beauty’s cosmopolitan pretensions by giving her hairdresser a resoundingly Huarochirano surname, Pier Paolo Cajahuaringa (1984:279). Despite suffering such racially

tinged snobbism, Huarochirí villagers regard themselves as progressive campesinos (peasants) of Peruvian nationality, not as members of an indigenous “race.”

Khipu Contexts

A khipu (or *chinu* in Aymara) is an Andean information storage device made of cord. The concept is not uniquely Andean, and indeed devices fitting this minimal definition are attested in many cultures. Herodotus mentions one in use during the Persian wars. Other cases come from peoples as far afield as the New Mexico Pueblos, the Ryukyu Islands, and Hawaii (Day 1967:2–3, 7–11, 13). In the Hebrew Bible, Numbers 15:37–38 prescribes knotted “fringes” (*tsitsit*) as a vector of memory (Gandz 1931). Diffusionists have suggested that this far-flung distribution reflects an ancient dispersion of an eminently portable medium (Birket-Smith 1966–67). There is no archaeological trail, though, and one could just as well posit independent inventions.

Only in the Andes were cord records central to the cultures they served, or abundantly produced. Khipu chronology is obscure because few if any specimens have been radiocarbon-dated. William Conklin (1982) has documented a highly developed khipu art from Middle Horizon times, about 600–1000 CE, that is, a half millennium prior to Inka expansion; one of its striking features, the lashing of bright-colored thread in bands around pendants (Radicati di Primeglio 1990b) also appears in an otherwise Inka-looking specimen (Pereyra Sánchez 1997), suggesting a continuous deep-rooted design evolution. As of 2004, pre-Inka khipu-related objects are appearing in even earlier contexts (Splitstoser et al. 2003).

Regarding Inka times (c. 1400–1532), Spanish chroniclers, including a few with close access to royal khipu masters, say that cords served virtually all the data needs one would expect an imperial state to have. The attested uses include censuses; calendars; inventories of all sorts including weapons, foodstuffs, and clothing; tribute records; royal chronicles and chansons de geste; records of sacred places or beings and their sacrifices; successions and perhaps genealogies; postal messages; criminal trials; routes and stations; herd records; and game-keeping records. Responsible summaries of the complex and rewarding primary literature, which bristles with source-critical hazards, appear in Carmen Arellano (1999), Carol Mackey (1970:8–22, 209), Carlos Sempat Assadourian (2002), and Gary Urton (in press).

Pre-Hispanic (“archaeological”) khipus are not rare. By 1988 Robert and Marcia Ascher (1978, 1988) had analyzed 215 museum khipus. As of 2001, specimens attested or published by scholars totaled 575,⁷ or if one includes fragments, about 1,000 (Arellano 1999:231, 233). But they form a difficult research base because nearly all of them come from looting (mostly on the central and southern desert coast), which robs them of context.

A khipu is termed “colonial” if it was produced and used between 1532 and

1824. Many colonial khipus are mentioned or transcribed on paper—and some are important to this book—but no single museum specimen has been identified as definitely colonial. A relatively undamaged burial complex with khipus discovered at Laguna de los Cóndores (Von Hagen and Guillén 2000) may span the pre-Hispanic–colonial transition and seems to yield an early-colonial tribute register on cords (Urton 2001).

A khipu is termed “patrimonial” if it has been held as a historic legacy in its owner community but is not a productive medium at the time of documentation. Leaving out hybrid cases (Rivero y Ustáriz 1857, 2:84; Robles Mendoza 1990 [1982]; Tello and Miranda 1923), the only clear case besides those reported later in this book is one reported by Arturo Ruiz Estrada 1990. It too comes from the Lima highlands. Patrimonial khipus apparently date from the Republican or modern eras, as discussed below. All the known cases have much in common with Inka-era designs.

Khipus will be called “ethnographic” if they were studied in a context of productive use or were explained by people who retained productive competence. A few ethnographic khipus—those which herders made to keep track of flocks—have been interpreted, the best cases being Mackey’s (1970:121–75, 267–99). Many deviate in basic design from Inka-era specimens. Other ethnographic cases were reported by Bandelier (1910:89), Adolph Bastian using Uhle’s data (1895), Teresa Gisbert and José de Mesa (1966:497–506, plates 11–14), Olaf Holm (1968), Mackey (1990), Oscar Núñez del Prado (1990 [1950]:165–82), Rita Gertrud Prochaska (1983:103–5), Mariano Eduardo Rivero and Johann Jakob Tschudi ([1846] 1963:384–86), Froilán Soto Flores (1990 [1950–51]:183–190, Max Uhle (1990 [1897]:127–34), and Martha Villavicencio Ubillús et al. (1983:32–36). With the exception of Holm’s Ecuadorian specimens and certain ones from La Libertad, Peru, reported by Mackey, modern khipus come from montane southern Peru through central Bolivia, and especially from the Cuzco area. Some authors do not give numbers of specimens seen, but the stated cases total under fifty.

The relevance of patrimonial and ethnographic khipus to pre-Hispanic ones is an open and difficult question. This book argues that for khipus of specifically political import, the patrimonial chain is continuous enough to shed light on archaeology.

Several good books on the khipu art are widely available. Marcia Ascher and Robert Ascher’s *Code of the Quipu* (1981, republished 1997) presents a lively and accessible study of the mathematical makeup of cord records. Its complement is a microfiche compendium, the *Code of the Quipu Databook* and *Databook II*, of cord-by-cord descriptions documenting and mathematically analyzing 230 museum and privately owned specimens (1978, 1988). The most up-to-date compendium, Jeffrey Quilter’s and Urton’s *Narrative Threads* (2002), is rich on khipus in colonial context, and it contains findings by William Conklin that are seminal to Urton’s *Signs of the Inka Khipu* (2003). *Quipu y yupana* (edited by Mackey, Pereyra

et al. 1990) contains an equally important but earlier harvest of research, connecting the key findings of the 1920s with the current resurgence of khipu studies. The richest illustrations as well as strong documentation are in Carmen Arellano's "Quipu y tocapu: Sistemas de comunicación inca" (1999), which demonstrates (as do the Tupicochan specimens) that some khipus were made as craft treasures.

Khipu Research Frontiers

The next few paragraphs sketch the state of khipu research, especially for readers with interests in inscription, literacy, and decipherment formed outside the Andean area. It emphasizes the reasons why Andean scholars suspect the khipu problem of being uniquely difficult. As Quilter (2002:201–2) observes, we do not even know to what degree it is a single problem. Millennially old as it seems to be, and developed as it was among peoples who spoke a multitude of languages, the art of putting information on string may actually be a branching tree of inventions. In that case, studying the khipu as a single code would be as feckless as trying to study marks-on-paper as one code. Typological research to settle this doubt is only now beginning. We are also still in the dark about the diachronic dimension, since nobody has worked on khipu dating, much less developed an archaeologically grounded model of cord graphogenesis and evolution which might stand alongside impressive Old World research on origins of writing. And as already noted, it is still uncertain whether the idea of inscription as a secondary code for speech provides appropriate axioms for khipu decipherment. So at the start all bets are open. But that is not to say there are no existing landmark studies.

THE AGENDA OF KHIPU AND NUMBER

The first interpretative task broached in modern times was khipus' arithmetical structure. Leland Locke (1923, 1928) was able to establish base-10 positional notation as the numerical content of many knots. The plan is similar to Indo-Arabic numeracy except that zero is represented by an empty place rather than a sign. Ascher and Ascher explain the basic "Lockean" conventions as in figures 2–4.

Figure 4 could, for example, represent a small segment of an Inka census, encoding a village from which households have been sent to do *mitmaq*, or remote 'transplant' duty. Each pendant could stand for an ayllu, with its respective subsidiary signaling the number of its absent households, and the topcord with its subsidiary the whole population with a subsidiary expressing the number of absentees. The Aschers advanced past Locke by showing in principle that beyond this role, khipu numbers can function as "label numbers" (i.e., like a social security number, they register identity rather than quantity). They have documented mathematical regularities—many complex, some partial, and all enigmatic—in over 200 specimens. Mathematical analysis continues to be productive, dealing, for example, with the question of whether specimens express angles (Pereyra Sánchez 1996).

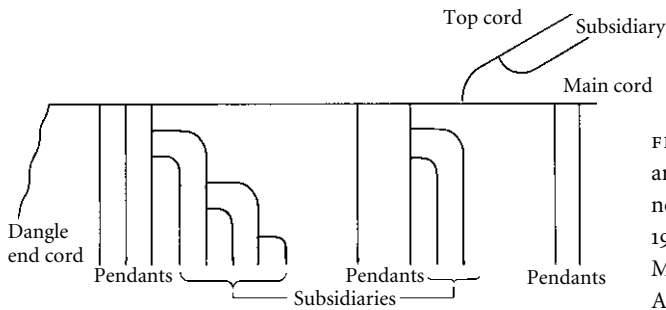


FIGURE 2 Basic khipu architecture and terminology (Ascher and Ascher 1997:17). By permission of Marcia Ascher and Robert Ascher.

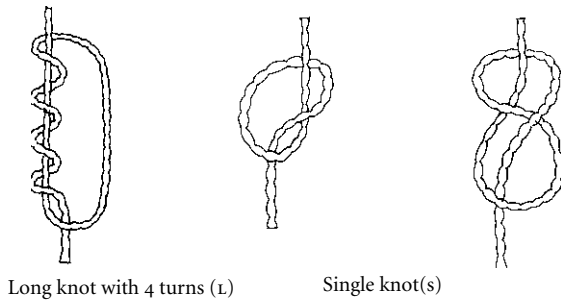


FIGURE 3 Common Inka-style data knots. Left, Inka long (L) knot of value four, used in units place; center, single (s) knot; right, figure-eight (E) knot (Ascher and Ascher 1997:29). By permission of Marcia Ascher and Robert Ascher.

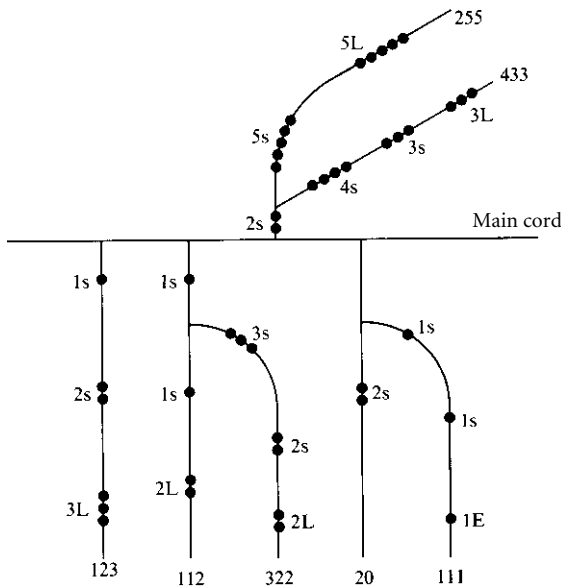


FIGURE 4 Khipu data deployed in "Lockean" Inka style. Note the regularized positioning of knots by their decimal "places." The topcord sums the values of pendants, and the topcord's subsidiary those of the pendants' subsidiaries. (Ascher and Ascher 1997:31). By permission of Marcia Ascher and Robert Ascher.