

"Secret Strings: The Sounds of Fibre and Ply"

By Sabine Hyland and William Hyland

In: *The Material Culture of Basketry*, edited by Stephanie Bunn and Victoria Mitchell,

London: Bloomsbury Press

A stuffy minivan, crammed with people and supplies, carries me and my husband far above from Lima's coastal mist into the sun-filled mountains 12,000 feet above sea level. Hours later, as the van climbs ever higher, raising clouds of dust on the dizzying hairpin turns, our hostess stops to point out to us curious shapes in the towering rock formations. We exit the van to examine the natural figures in the stone -- a condor, a turtle, even a fox whose tail is a red mineral streak on the cliff face. In the endless blue sky we spot a lone condor gliding on the air currents. Our hostess informs us that this is a good omen; the condor is a messenger for the mountain gods -- called *apus* -- and is carrying the news of our presence to the watching peaks.

Below us lies our destination -- the remote Andean village of Collata, population 300. A scattering of adobe houses with no running water, no sewage, and electricity for only a couple of homes, entering the village feels like stepping into another world. Our visit has been timed to coincide with the annual assembly of the village peasant community. We spend the next few hours making formal presentations to the indigenous officers, requesting permission to study two rare and precious objects that the community has guarded for centuries -- bunches of twisted and coloured cords known as *kipus*. After dinner, the man in charge of the community treasures, a middle aged herder named Huber Brañes, brings to our

house the colonial chest containing the *kipus* along with goat hide packets of original 17th and 18th century manuscripts -- the secret patrimony of the village. In the ensuing days, we would learn that these multicoloured *kipus* were narrative epistles created by local chiefs during a time of war in the 18th century. But that evening, exhausted yet elated, my husband Bill and I simply marvel at the shimmering colours of the delicate animal fibre cords -- crimson, gold, indigo, green, cream, pink, and shades of brown from fawn to chocolate.



Figure 1. Collata khipu cords. Photo by Sabine Hyland

The Inkas and other ancient Andean peoples had used *kipus* to record numerical accounts, as well as histories, biographies, and even letters sent from one regional administrator to another. In its heyday, there would have been 100,000s of khipus in the Inka Empire, conserved in both imperial and local archives. Most Inka khipus recorded numerical accounts; accounting khipus can be easily identified by the knots tied into the cords, which represent numbers, even if we don't know what those numbers mean. More elusive are the narrative khipus; discovering a narrative khipu that can be deciphered remains one of the holy grails of South American

anthropology. If we could find such an object, we might eventually be able to read how native South Americans viewed their history and rituals in their own words, opening a window to a new Andean world of literature, history, and the arts.

Today there are about 800 khipus in museums around the world, but no one knows anymore how to "read" them. Until recently, scholars believed that khipu use died out in the Andes soon after the Spanish conquest in 1532, lingering only in the simple cords made by herders to keep track of their flocks. Yet in the 1990s, anthropologists found that a few communities in the Central Andes continued to make and interpret khipus up until the early 20th century. Although the inhabitants of these villages are not still able to "read" the cords, this handful of recently created khipus holds out the promise of new insights into this mysterious communication system. Khipus preserved in their original village context are incredibly rare; each one provides new knowledge that one day may allow us to decipher these enigmatic texts.

Bill and I had been granted 48 hours to photograph and take notes on the two Collata khipus -- a daunting task, given their complexity. As we begin working the next morning, it becomes clear that these two khipus are unlike any that I have ever seen before. They possess a much greater range of colours and colour combinations than any accounting khipu I had studied previously. I ask Huber and his companion, who had been assigned to watch us, what types of animal fibres were present in the cords. Their answers reveal another surprising level of sophistication. The 487 pendant cords of the two khipus are made of fibres from 6 different Andean animals -- vicuña, deer, alpaca, llama, guanaco, and vizcacha (the latter a common rodent hunted for food). In many cases, the identification of the

fibre can be made only through touching the cords -- brown deer hair and brown vicuña wool, for example, may look the same but feel very different. My interlocutors insist that the difference in fibre is significant, and Huber even calls the khipus a "language of animals". They request that I handle the khipus with my bare hands, and teach me how to feel the fine distinctions between the various animal fibres. Curiously, there are no knots, suggesting that these might be two long-awaited examples of narrative khipus.

As I questioned elderly men in Collata about the khipus, they revealed to me that the khipus were "letters" -- "cartas" -- written by local leaders during their battles on behalf of the Inkas in the 18th century. Until a few years ago, the khipus' existence was a fiercely guarded secret amongst the senior men, who passed on the secrets of the colonial archive to younger men when they reached maturity. Their disclosures confirm a recent finding by scholars that khipu "letters" played a major role in a 1750 rebellion in the Collata region. The text of one of these 18th century khipu missives survives, written out in Spanish by a local colonial official, even as the original khipu has disappeared. It recalls how the intended recipient had double-crossed his fellow rebels -- a straight-forward story, but a narrative nonetheless. If the Collata khipus encoded narratives, as the evidence suggests, why did local people use khipus instead of alphabetic literacy, which they knew as well?

Surely one reason for retaining khipu literacy in remote corners of the Andes was the desire for a form of writing that was opaque to colonial tax collectors and other authorities. The Collata khipus, for example, were created as part of a native rebellion in 1783 centred in the two villages of Collata and nearby Casta. Felipe Velasco Tupa Inka Yupanki, a charismatic merchant from Lima who peddled religious

paintings in the mountains, declared the revolt against Spanish rule in the name of his brother the Inka Emperor who, he claimed, lived in splendour deep amid the eastern rain forests. Testimony from captured rebels specifies that Tupa Inka Yupanki demanded warriors to lay siege to the capital of Lima, with the goal of placing his brother -- or more likely himself -- on the throne of Peru. In January, 1783, he spent two weeks in Collata, stirring revolutionary fervor, and appointing the Mayor of Collata as his "Captain of the People". Dressed in a lilac coloured silk frock coat, with lilac frills at his neck, black velvet breeches, white leather boots with steel buckles and a white tri-cornered hat, Tupa Inka Yupanki must have cut a striking figure as he accepted the homage of the Collata farmers and herders. His attack on Lima had scarcely begun when a confederate betrayed him by reporting the conspiracy to the regional Corregidor. A small band of Spanish troops captured Tupa Inka Yupanki and his associates, and, despite a fierce ambush by rebels from Collata and Casta, successfully carried him to prison in Lima. There he was tortured, tried and executed. Reading through the trial notes, it's clear that the most damning evidence against him were letters detailing the conspiracy, written on paper in Spanish and found among his possessions. Likewise his main lieutenants carried alphabetic letters that discussed their efforts to raise troops, and that railed against Spanish crimes in the Andes; these Spanish letters provided unassailable proof of guilt. Spanish authorities never found comparable written letters against the rebel leaders in Collata, despite plentiful witness testimony implicating them in the rebellion. The Collata leadership completely escaped prosecution, all the while guarding their war khipus in their cherished archive. We don't know how long the tradition of narrative khipus lasted after the 1783 revolt, but do know that Andeans

carried on making accounting and ritual khipus to shield their records from the prying eyes of outsiders.

How did the Collata khipus encode messages through colours and animal fibres, with no characters or letters? Out of the 487 pendants in the two khipus, there are a total of 95 unique pendants, or symbols, in terms of colour, animal fibre, and ply direction (that is, whether they are twisted like the middle stroke of an "S" or a "Z"). This falls within the normal range of symbols (80 to 800) for writing systems that are logosyllabic; in other words, of systems whose signs represent either entire words or single syllables. According to village authorities, one of the khipus (Khipu A) was composed by the primary lineage, ALLUKA. Given that the manuscript letters preserved in the village archive ended with the signatures of the authors, I wondered whether we can match the final cords of this khipu with the lineage name:

Khipu A ending sequence

Dark brown wanaku (S) = **A**

White/dark brown, llama/wanaku (wrapped) (Z) = **LLU**

Blue llama (S) = **KA**

Ankas was the Huarochiri Quechua term for "blue"; the phonetic value "ka", the first syllable beginning with a consonant, might possibly relate to the colour's name.

Do the proposed equivalences between the final cords of Khipu A and the syllables of ALLUKA allow us to decipher the ending cords of Khipu B?

Khipu B ending sequence:

Dark brown wanaku (S) = **A**

Blue llama (S) = **KA**

Golden brown vicuña (S) = **?**

The Quechua term for the golden-brown hue of the third cord is *Paru*, likened to ripening corn. This creates the word A-KA-PAR(U) or YAKAPAR, the name of one of Casta's only two lineages, conforming to the pattern of a lineage name at a khipu's terminal end. This accords with the history of the villages as the twin centres of the 1783 Huarochiri revolt, and with Collata's oral history about the khipus. This proposed decipherment suggests that at least some narrative khipu pendants possess standard syllabic values.

Other signs represent entire words or ideas; for example, the brush of bright red deer hair at the beginning of one of the khipus indicates that the khipu is about warfare. This discovery marks the first time that any khipu has been found to be logosyllabic. The Collata khipus are an entirely new form of logosyllabic writing, one that communicates sounds through three dimensional animal fibre cords that must be felt as well as seen. However, these phonetic khipus raise a host of questions. Were these logosyllabic khipus, which date to the 18th century, a relatively localised phenomena influenced by contact with alphabetic writing, or do they have far-reaching roots into the pre-Columbian Andean past? Do the other types of khipus that were used in the Central Andes until the 20th century, such as those for accounting and for funerals, share semiotic features with the phonetic khipus? What are the epistemological implications of a three-dimensional writing system, in which

the sense of touch plays as important a role as sight, and how does this expand our understanding of what 'writing' is?

Although these khipus were hidden in the past, away from the prying eyes of outsiders, village authorities in Collata and the other Central Andean communities where I have done fieldwork are now eager for recognition of their valuable cultural heritage. With my assistance, the Collata village council has created a packet of information about their khipus for use in the village school. As one community official wrote to me, "it is imperative that our children know the value of their cultural heritage here in Collata so that they will not abandon their village when they grow up". On 24 June 2017, which is the official feast day of the village, the village council and the President of the Collata Peasant Association formally inducted a Spanish translation of my *Current Anthropology* report on their khipus into their treasured archive.

The extraordinary khipu texts of the Central Andes, including the logosyllabic animal fibre cords, are a proud testament to the intellectual achievements of Native American peoples.

Suggested Readings:

Arnold, Denise. 2014. Textiles, knotted khipus, and a semiosis in common. In:

Textiles, Technical Practice and Power in the Andes. Denise Arnold and

Penelope Dransart, Eds. London: Archetype Publications.

Boone, Elizabeth. 2011. The cultural category of scripts, signs, and pictographies. In

Their Way of Writing. Elizabeth Boone and Gary Urton, Eds. Pp. 379-390.

Washington DC: Dumbarton Oaks.

- Brokaw, Galen. 2010. *History of the Khipu*. Cambridge: Cambridge University Press.
- Brown Vega, M. 2016. Ritual practices and wrapped objects. *Journal of Material Culture* 21(2): 267-272.
- Cereceda, Verónica. 1986. The Semiology of Andean Textiles. In: *Anthropological History of Andean Polities*. J.V. Murra, N. Wachtel and J. Revel, Eds. Pp. 149-173. Cambridge: Cambridge University Press.
- Conklin, William. 2002. A Khipu Information String Theory, In: *Narrative Threads*. J. Quilter and G. Urton, Eds. Pp. 53- 86, Austin: University of Texas Press.
- Curatola Petrocchi, Marco, and José de la Puente Luna, Eds. 2013. *El quipu colonial*. Lima: PUCP.
- Dransart, Penelope. 2014. Thoughts on productive knowledge in Andean weaving with discontinuous warp and weft. In: *Textiles, Technical Practice and Power in the Andes*. Denise Arnold and Penelope Dransart, Eds. London: Archetype Publications.
- Femenías, Blenda. 1987. *Andean Aesthetics*. Madison, WI: Elvehjem Museum of Art.
- Franquemont, Christine. 1986. Chinchero Pallays. In: *The Junius B. Bird Conference on Andean Textiles*. Ann Pollard ed. Washington DC: The Textile Museum.
- Garcés, Fernando and Marco Bustamente Rocha. 2014. *Lutrina Timpu*. Cochabamba, Bolivia: Universidad de San Simón.
- Garcés, Fernando and Walter Sánchez. 2015. *Textualidades*. Cochabamba, Bolivia: Universidad de San Simón.
- Garcés, Fernando and Walter Sánchez. 2016. Inscripciones y escrituras andinas. *Boletín del Museo Chileno de Arte Precolombino*, 21(1), 115-128.

- Hyland, Sabine. 2017. Writing with Twisted Cords: The Inscriptive Capacity of Andean Khipu Texts" *Current Anthropology*, 58(3), 412-419.
- Hyland, Sabine. 2014. Ply, markedness and redundancy. *American Anthropologist*, **116**:3, 643-8.
- Hyland, Sabine. 2016. How khipus indicated labour contributions in an Andean village. *Journal of Material Culture* 21(4), 490-509.
- Hyland, Sabine, Gene A. Ware, and Madison Clark. 2014. Knot direction in a khipu/alphabetic text from the Central Andes. *Latin American Antiquity*, **25**:2, 189-197.
- Justeson, John S. 1976. Universals of language and universals of writing. In *Linguistic Studies Offered to Joseph Greenberg*. A. Juillard, ed. Pp. 57-94. Saratoga, CA: Anima Libri.
- Lau, George. 2014. On Textiles and Alterity in the Recuay Culture (AD 200 - 700), Ancash, Peru. In: *Textiles, Technical Practice and Power in the Andes*. Denise Arnold and Penelope Dransart, Eds. London: Archetype Publications.
- Loza, Carmen Beatriz. 1999. Quipus and Quipolas at the Museum für Völkerkunde, Berlin. *Baessler-Archiv, Neue Folge*, Band XLVII, 39-75.
- Mackey, Carol. 2002. The continuing khipu tradition. In *Narrative Threads*. Jeffrey Quilter and Gary Urton, eds. Pp. 321-347. Austin: University of Texas Press.
- Molina, Tirso de (Gabriel Téllez). 1973-4. *Historia general de la Orden de la Nuestra Señora de las Mercedes*. Manuel Penedo Rey, ed. 2 vols. Madrid: Provincia de la Merced.
- Murúa, Martín de. 1987. *Historia general del Perú*. Manuel Ballesteros, ed. Madrid: Historia 16.

- Pärssinen, Martti. 1992. *Tawantinsuyu: The Inca State and Its Political Organization*. Helsinki: SHS.
- Pimentel H., Nelson. 2005. *Amarrando colores: La producción del sentido en khipus aymaras*. La Paz: CEPA, Latinas Editores.
- Platt, Tristan. 2015. Un Archivo campesino como "Acontecimiento de Terreno": Los nuevos papeles del Curaca de Macha. *Americania (Seville)*. no.2, 158-185.
- Radicati di Primeglio, Carlos. 2006. *Estudios sobre los quipus*. Lima: Universidad Nacional de San Marcos.
- Rappaport, Joanne and Tom Cummins. 2011. *Beyond the Lettered City*. Durham, NC: Duke University Press.
- Sala i Vila, Núria. 1995. La rebelión de Huarochirí de 1783. In *Entre la retórica y la insurgencia*. Charles Walker, ed. Pp. 273-308. Cuzco, Peru: CBC.
- Salomon, Frank. 2001. How an Andean "writing without words" works. *Current Anthropology*, 42:1, 1-27.
- Salomon, Frank. 2004. *The Cord Keepers*. Durham, NC: Duke University Press.
- Salomon, Frank, and Mercedes Niño-Murcia. 2011. *The Lettered Mountain*. Durham, NC: Duke University Press.
- Salomon, Frank and George L. Urioste. 1991. *The Huarochiri Manuscript*. Austin: University of Texas Press.
- Salomon, Frank, Carrie J. Brezine, Reymundo Chapa, and Victor Falcón Huayta. 2011. Khipu from Colony to Republic. In *Their Way of Writing*. Elizabeth Boone and Gary Urton, eds. Pp. 353-378. Washington DC: Dumbarton Oaks.
- Silverman, Gail P. 2008. *A Woven Book of Knowledge*. Salt Lake City, UT: University of Utah Press.

- Spalding, Karen. 1984. *Huaro-chiri*. Stanford CA: Stanford University Press.
- Splitstoser, Jeffrey. 2014. Practice and meaning in spiral-wrapped batons and cords from Cerrillos. In: *Textiles, Technical Practice and Power in the Andes*. Denise Arnold and Penelope Dransart, Eds. Pp. 46-82. London: Archetype Publications.
- Szeminski, Jan. 1987. Why Kill the Spaniard? In: *Resistance, Rebellion, and Consciousness in the Andean Peasant World*. Steve Stern, Ed. pp. 166-192. Madison: University of Wisconsin Press.
- Tello, Julio C. and Próspero Miranda. 1923. Wallallo: Ceremonias gentílicas. *Inca*, **1**, 475-549.
- Uhle, Max. 1897. A Modern Kipu from Cutusuma, Bolivia. *Bulletin of the Free Museum of Science and Art*, 1(2): 51-63.
- Urton, Gary. 2003. *Signs of the Inka Khipu*. Austin: University of Texas Press.
- Urton, Gary. 2005. Khipu Archives. *Latin American Antiquity*, **16**:2, 147-167.
- Urton, Gary and Carrie Brezine. 2011. Khipu Typologies. In *Their Way of Writing*. Elizabeth Boone and Gary Urton, eds. Washington DC: Dumbarton Oaks.