

Archaeology Research Center

The Andean Khipu: Current Knowledge After a Century of Scholarship

Symposium Speakers, Talk Titles, Synopses, and Short Biographies



Carrie Brezine

Context of Khipu in Fiber Traditions and Its Dialogue with Andean Ethnomathematics

What is it like to think in a medium that is not textual? This talk considers khipu as part of an extensive history of textile mastery and experimentation. The embodiment of mathematical principles in Andean textiles forms one context for considering khipu, and prompts questions on the broader study of ethnomathematics.

Carrie Brezine is a lifelong fiber artist with an abiding interest in mathematics. Her graduate research in archaeology focused on cloth, technology, and identity in colonial Peru. Carrie's interests include the mathematical principles in textile structures, dress history, and the anthropology of data. Carrie lives in Ann Arbor, Michigan, and works in Institutional Research for the Rackham Graduate School at the University of Michigan.



Galen Brokaw

The Enigma of the Khipu

This talk will present a general introduction to the khipu and its history. It will also discuss the problems that this medium poses for decipherment and the way that it challenges us to think differently about the nature of communicative media.

Dr. Galen Brokaw is professor of Latin American Studies and Hispanic Studies at Montana State University. He specializes in indigenous American media and media theory. He is the author of *A History of the Khipu* (Cambridge UP, 2010).



Jon Clindaniel

Inka Khipus: Digital Pattern Recognition at Scale

Spanish chronicles, as well as contemporary khipu studies indicate that the Inka used khipus to record everything from accounting records to historical narratives. As such, Inka khipus were a widely conventionalized, symbolic system similar to that of writing systems in other cultures around the world. However, the Inka khipu system remains largely undeciphered. In this talk, I introduce the Inka khipu medium, as well as a summary of recent decipherment efforts. Specifically, I emphasize promising computational approaches to decipher Inka khipu signs using large digital datasets.

Dr. Jon Clindaniel is an Assistant Senior Instructional Professor in Computational Social Science at the University of Chicago. He is trained as a computational anthropologist and is focused on solving difficult archaeological problems using computational strategies. His current research is centered on deciphering symbols in the undeciphered Inka khipu sign system using large, open-source archaeological databases.



Sabine Hyland

Iconicity in Post-Inka Khipus

This presentation will describe some of the forms of iconicity that are fundamental to Inka khipus; it will then explore the diversity of iconic signs found in post-Inka khipus. The talk will conclude with a consideration of how 3D iconicity can differ from 2D iconicity.

Dr. Sabine Hyland is an anthropologist at the University of St Andrews in Scotland. For over twenty years she has collaborated with elders in remote Andean villages to discover, among other things, that khipus signified meaning partially through the tactile feel of different fibers and the twist of knots and thread. Her publications are, *The Chankas and the Priest: A Tale of Murder and Exile in Highland Peru* (Penn State UP, 2016), and *The Quito Manuscript: An Inca History Preserved by Fernando de Montesinos* (Yale, 2007). In 2015, the National Geographic Society selected her as a "National Geographic Explorer" in recognition of her contributions to South American anthropology.



Manny Medrano

Paper Khipus: Colonial-Era Transcriptions of Inka and Post-Inka Khipus

Following the Spanish conquest of the Inka Empire in 1532 AD, khipu-wielding Andeans read out their cords in various legal and administrative settings for colonial overseers, who had their contents transcribed. These "paper khipus" are the focus of the talk, which will survey ongoing efforts to study transcribed strings as sources for both Inka and post-Inka history.

Manny Medrano is a PhD student in Harvard University's History Department, where he studies Latin American science and culture in a global context. His 2021 book, *Quipus: Mil años de historia anudada en los Andes y su futuro digital*, surveys khipu research for non-specialist readers.



Frank Salomon

A Modern Village's Khipu Patrimony: Echos of Yauyo, Yunka, Ychsma, Inka

In the Quechua-language mythohistory of the Lurín Valley written c.1608, high-Andean herders known as *yauyos* are protagonists. Fighting down the Lurín Valley they master lower- and mid-valley *yunca* settlements, even to the outliers of Pachacámac, where their Inka allies would build religious hegemony. One could say it is a *yunca*-oriented book more than a *yauyo*-centric one; *yuncas* get 38 mentions, Inkas 33, and Yauyos 11. How does reading the story "upstream" relate to the fact that the lower Lurín is the valley richest in khipus, and its headwaters the area richest in patrimonial khipus? The ten Tupicocha khipus resemble incaic ones in some ways, but they share other traits with "anomalous" khipus associated by Urton and others with the Yunka culture known as Ychsma. They may bear traces of a now-remote fusion.

Dr. Frank Salomon, ethnographer and ethnohistorian of the Andes, is the author of *At the Mountains' Altar: Anthropology of Religion in an Andean Community* (Routledge, 2017) as well as other books including *The Huarochiri Manuscript, a Testament of Ancient and Colonial Andean Religion* (1991), *The Cord Keepers* (Duke UP, 2004), and a forthcoming book on the Quechua-language songs of Rapaz village. A past president of the American Society for Ethnohistory, he has held NSF, Guggenheim, SAR, and NSF fellowships. He received the 2018 Lifetime Achievement Award of the American Society for Ethnohistory.



Jeffrey C. Splitstoser

The First Khipus and Their Predecessors

The origins of khipu are enigmatic. This talk will present evidence that the first khipus, which appear during the Wari Empire (c. 600–1000 CE), likely developed out of much earlier information systems found in embroidered fabrics, wrapped sticks, and wrapped cords. It will also show how Wari khipus are similar to yet different from later Inka khipus.

Dr. Jeffrey Splitstoser has studied ancient Andean fabrics and cordage for over 20 years and specializes in both Wari khipus and early textile practices. He is an Assistant Professor of Anthropology at the George Washington University in Washington, D.C., and the Vice President of the BEARC. Splitstoser has studied all known Wari khipus, and, with Tom Dillehay, Jan Wouters, and Ana Claro, he discovered the earliest known use of indigo.