



INTERNATIONAL CONFERENCE: TEXTILES, TECHNE AND POWER IN THE ANDES

Thursday, 15 to Saturday, 17 March 2012

The Senate Room (Senate House, First Floor) and Stevenson Lecture Theatre, British Museum, London UK

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This Conference arises from the AHRC-funded project 'Weaving communities of practice. Textiles, culture and identity in the Andes' (<http://www.comunidadestextiles.org/>), based at CILAVS in collaboration with the Department of Computer Science and Information Systems at Birkbeck and the Instituto de Lengua y Cultura Aymara (ILCA) in La Paz, Bolivia. It is supported by the Arts and Humanities Research Council (AHRC), with the collaboration of the Institute for the Study of the Americas, the British Museum, the History Workshop Journal, the Peruvian Embassy and Birkbeck School of Arts.



PROGRAMME

Thursday 15 March 2012

Senate Room, Senate House, University of London

Theme: Amerindian textiles, technology and material culture

9.00-9.30 **REGISTRATION**

9.30-10.00 **WELCOME AND INTRODUCTION**

Luciana Martins and Denise Y. Arnold (Iberian and Latin American Studies, Birkbeck, University of London, UK)

10.00-11.35 **PANEL 1: Textiles as documents**

Chair: Luciana Martins

10.00-10.25 Denise Y. Arnold (Iberian and Latin American Studies, Birkbeck, University of London, UK), 'Textiles, knotted khipus, and a semiosis in common: towards a woven language of documentation in the Andes'

10.25-10.50 Jeffrey Splitstoser (Pre-Columbian Society, Washington D.C.), 'Practice and meaning in spiral-wrapped batons and cords from Cerrillos, a Late Paracas Site in the Ica Valley, Peru'

10.50-11.15 Gary Urton (Department of Anthropology, Harvard University, USA), 'Middle Horizon khipus: Pre-Inka cord-keeping in the Central Andes'

11.15-11.35 Discussion

11.35-12.05 **COFFEE BREAK**

12.05-1.20 **PANEL 2: Textile and interrelated semiotic practices**

Chair: Penelope Dransart

12.05-12.30 Rebecca R. Stone (Art History, Emory University, USA), 'The khipu as textile: variation in fibers, forms, and functions in Emory's Carlos Museum examples'

12.30-12.55 Galen Brokaw (Romance Languages and Literatures, Univ. at Buffalo, SUNY, USA), 'Andean semiotics and the Quechua concept of quilca'

12.55-1.10 Discussion

1.10-2.30 **LUNCH BREAK**

2.30-4.05 **PANEL 3: Textile technologies and social consequences**

Chair: Denise Y. Arnold

2.30-2.55 Carrie J. Brezine (Anthropology, Harvard Univ., USA), 'Powers of thread: mathematics in Andean textile technology'

- 2.55-3.20 Penelope Dransart (Anthropology & Archaeology, Univ. of Wales, Trinity St. Davis, UK), 'Thoughts on productive knowledge in weaving with discontinuous warp and weft'
- 3.20-3.45 Ines Doujak and John Barker (Institute of Human Science in Vienna), 'Stitched Up: Andean textiles in an irrational world'
- 3.45-4.05 Discussion
- 4.05-4.35 COFFEE BREAK**
- 4.35-6.10 PANEL 4: Textiles technologies and social consequences**
Chair: Sara López
- 4.35-5.00 Jane Feltham (Independent scholar, UK), 'El mensaje que querían comunicar los Incas por medio de los textiles de Pachacamac durante el Horizonte Tardío'
- 5.00-5.25 Ann P. Rowe (Textile Museum Washington D.C.), 'Central Highland-Late Chancay textile interaction'
- 5.25-5.50 Anne Tiballi (Anthropology, California Institute for Peruvian Studies, USA), 'Weaving the body politic: the integration of technological practice and embodied social identity in the Late Prehistoric Andes'
- 5.50-6.10 Discussion
- 6.30-7.30 PLENARY LECTURE**
Chair: Denise Y. Arnold
- Ann H. Peters (Univ. of Pennsylvania Museum of Anthropology and Archaeology, USA), 'Paracas Necropolis: communities of textile production, exchange networks and social boundaries of the central Andes, 150 BC to AD 250'
- 8.15 pm CONFERENCE DINNER**

Friday 16 March 2012

Senate Room, Senate House, University of London

Theme: Textile complexity and social complexity

9.30- 10.35 **PANEL 5: Textiles and social identity**

Chair: Denise Y. Arnold

9.30-9.55 Cassandra Torrico (Independent scholar, USA) 'Technical competence in weaving as means of symbolic distinction among the Macha Indians of Northern Potosi, Bolivia'

9.55-10.20 Verónica Auza (ALBA Cultural-ASUR, Bolivia), 'Las tejedoras de los "Ponchos rojos": Un lenguaje femenino que teje la larga historia de la beligerancia aymara'

10.20-10.35 Discussion

10.35-11.05 **COFFEE BREAK**

11.05-12.10 **PANEL 6: Woven complexity and social complexity**

Chair: María Soledad Hoces

11.05-11.30 Eva Fischer (Institut für Sozialanthropologie der Universität Bern, Switzerland), 'Complejidad cultural e identidades complejas'

11.30-11.55 Juan de Dios Yapita (ILCA, La Paz, Bolivia), 'Pensando los desarrollos tecnológicos andinos en el textil desde las lenguas andinas'

11.55-12.10 Discussion

12.10-1.25 **LUNCH BREAK**

1.25-3.00 **PANEL 7: The textile productive chain: materiality and meaning**

Chair: Aicha Bachir Bacha

1.25-1.50 Claudia Rivera (UMSA e ILCA, La Paz, Bolivia), 'Artefactos de producción textil prehispánicos en el occidente de Bolivia: una visión diacrónica'

1.50-2.15 Andrés Romano (Instituto de Arqueología y Museo, Universidad Nacional de Tucumán, Argentina), 'Tejido en el tiempo: el uso de las fibras animales y la tradición textil... Antofagasta de la Sierra como caso de estudio'

2.15-2.40 Sara López Campeny (Archaeology, Universidad Nacional de Tucumán, Argentina), 'Los textiles como medio de expresión simbólica múltiple: tejiendo mensajes sobre poder y memoria... análisis de casos arqueológicos para el NO de Argentina'

2.40-3.00 Discussion

- 3.00-3.30** **COFFEE BREAK**
- 3.30-4.35** **PANEL 8: Woven networks**
Chair: Georges Lau
- 3.30-3.55 Bárbara Cases (Universidad de Tarapacá, Arica, Chile), ‘Persistencias y variaciones técnicas en las bolsas domésticas de Arica’
- 3.55-4.20 Alonso Barros (Anthropology, LSE, UK), ‘A common thread: the textiles of highland Bolivia and Chile in ethno-historical context’
- 4.20-4.35 Discussion
- 5.00-7.15** **ROUNDTABLE ON ANDEAN TEXTILES AND CONTEMPORARY ART**
Chair: Valerie Fraser
- Discussants:** Alethia Alonso (Iberian and Latin American Studies, Birkbeck, University of London, UK), ‘Calar el nudo o cómo dejarse absorber: posibilidades artísticas del quipu en el trabajo de Jorge Eielson’; Cecilia Vicuña (Artist, Chile); Susie Goulder (Warmi; Artist, Peru); Elvira Espejo (ILCA, Bolivia)
- 8.00** **OPENING OF SUSIE GOULDER (WARMI) EXHIBITION ‘TEXTILE SCULPTURES’ AT THE PERUVIAN EMBASSY**
- FOLLOWED BY A DRINKS RECEPTION**

Saturday 17 March

Senate Room, Senate House, University of London

Theme: Textiles, iconographic studies and weaving languages

- 9.15-10.50** **PANEL 9: Iconographic studies, textile techniques and structures**
Chair: M-J Jiménez
- 9.15-9.40 Gail Silverman (Independent scholar, Peru), 'The Inca motifs as recorders of worldview'
- 9.40-10.05 Victòria Solanilla Demestre (Art History, Universitat Autònoma de Barcelona, Spain), 'Tejiendo paisaje: textiles de la Costa Norte durante el Intermedio Tardío'
- 10.05-10.30 Miriam de Diego (Iberian and Latin American Studies, Birkbeck, University of London, UK), 'Hacia la relación entre iconografía y técnica textil'
- 10.30-10.50 Discussion
- 10.50-11.15** **COFFEE BREAK**
- 11.15-12.20** **PANEL 10: Technique, technology and image**
Chair: Victoria Solanilla
- 11.15-11.40 Sophie Desrosiers (Archaeology, EHESS, France), 'Common logics between pre-European and present indigenous textile knowledges in the Central-Southern Andes'
- 11.40-12.05 Elvira Espejo (ILCA, Bolivia) and Denise Y. Arnold (Iberian and Latin American Studies, Birkbeck, University of London, UK), 'Las técnicas textiles y las interacciones sociales: el caso del peinecillo'
- 12.05-12.20 Discussion
- 12.20-1.25** **LUNCH BREAK**
- 1.25-3.00** **PANEL 11: Weaving languages, patterns, and symmetries**
Chair: Sophie Desrosiers
- 1.25-1.50 George Lau (Sainsbury Research Unit for the Arts of Africa, Oceania and the Americas School of World Art Studies and Museology, University of East Anglia, Norwich): 'On textiles and alterity in the Recuay culture (AD 200-700), Ancash, Peru'
- 1.50-2.15 Aïcha Bachir Bacha (École des Hautes Études en Sciences Sociales, Paris Centre de Recherche sur l'Amérique Préhispanique), 'Contextos arqueológicos, imágenes y simbología de los textiles paracas de Animas Altas, Ica-Perú'
- 2.15-2.40 Mary Frame (Independent scholar, Canada), 'Conceptualizing space through structures, pathways, motions, and maps: plural models for symmetry patterns on ancient Andean textiles'
- 2.40-3.00 Discussion

3.00-3.45 **CONFERENCE SUMMING UP**
Chair: Luciana Martins

Roundtable with Denise Y. Arnold, Gordon Brotherston, Ann H. Peters and Elvira Espejo

5.00-6.00 **PLENARY LECTURE: STEVENSON LECTURE THEATRE, BRITISH MUSEUM**
Chair: Colin McEwan

R. T. Zuidema (Anthropology, University of Illinois, USA), 'Andean royal tunics and the Inca calendar'

6.00 **DRINKS RECEPTION: CLORE FOYER, BRITISH MUSEUM**

ABSTRACTS

'Calar el nudo o cómo dejarse absorber. Posibilidades artísticas del khipu en el trabajo de Jorge Eielson' ['To penetrate the knot or how to let oneself be absorbed. Artistic possibilities of khipu in the work of Jorge Eielson']

Alethia Alonso

Jorge Eduardo Eielson (Peru 1924- Italy 2006) is recognised by his reinterpretation of the khipu as a form of artistic expression, emphasising its Peruvian origins. I suspect, however, that his understanding of the khipu and Chavín art goes hand in hand with his eagerness to understand Buddhism and Taoism. The result is an amalgam of western and eastern influences, represented in his writings, installations and performance. The materiality of Eielson's knots reveals a complex practice that ends up involving the space, the audience and the author himself. In this paper I offer an idea of the knots and the renewal of the concepts of authorship and public that starts when the khipu, as Eielson understood it, absorbs space. I will also refer to Tao, given its relevance to comprehend the interaction between materiality and space. In order to make this tangible, I will focus on Eielson's performance and fragments of the novel entitled *El cuerpo de Giulia-no*, and on his installation *Proliferazione*.

'Textiles, knotted khipus, and a semiosis in common: towards a woven language of documentation in the Andes'

Denise Y. Arnold

This paper gives a reading of Andean textiles as documentary repositories concerning tributary relations in the past, and the traces that these relations have left in textile terminology and weaving practice today. It argues that textiles as documents record the activities of households, gendered persons and institutions in this web of tributary relations, as well as systematizing information on production, productive resources, and productive patterns. This kind of approach to information flow, analysis and documentation has been limited until now to studies of the knotted threads called khipu in Quechua or chinu in Aymara, although much evidence shows that Andean textiles served a parallel purpose. The paper argues that textiles have not been viewed in this light before because of several limitations in Andean studies, which are first reviewed. The paper proposes that one way of overcoming these limitations is to take up Frank Salomon's challenge to treat textiles and khipus together as part of a common semiosis in fibre. The principles at stake in this challenge are laid out and examined.

'Las tejedoras de los "Ponchos rojos": Un lenguaje femenino que teje la larga historia de la beligerancia aymara' ['The weavers of "ponchos rojos": a feminine language that weaves the long history of aymara militancy']

Verónica Auza

This paper investigates the social and historic memory of the Aymara movement through the beauty of the textiles produced by the red ponchos weavers from Omasuyos. I propose an understanding of the Aymara memory from the ethnic and aesthetic dimensions provided by the red ponchos, also called by some communities 'wayruru', which are woven in delicate and paired stripes in a contrasting chromatic alternating of red and black. The weavers of these ponchos know that the colour, texture and design that they employ represent the power and authority projected onto the masculine domain. It is this meaning, which comes from a feminine product, that provokes me to consider the corporeal symbolism of textiles as the axial source to approach in their deeper connections the symbolic, cultural and political structure of the contemporary Aymara movement in Bolivia.

'Los textiles Paracas descubiertos en Ánimas Altas. Contextos arqueológicos e iconografía' [Paracas textiles discovered in Ánimas Altas. Archaeological contexts and iconography]

Aïcha Bachir Bacha

Little is known about the archaeological contexts of the famous Paracas textiles, in particular of those from the Ica Valley. In the years 2009-11, during our recent excavations in Ánimas Altas – the most significant site of the Paracas society – remnants of textiles were found in two buildings, one civic-ceremonial and the other of funerary characteristic. This paper presents the textiles discovered in these buildings, with particular emphasis on the analysis of their contexts and iconography. The results provide new interpretations about Paracas symbolism and open the debate about the stylistic heterogeneity identified in different supports and objects registered in the same context.

'A common thread: the textiles of highland Bolivia and Chile in ethno-historical context'

Alonso Barros

The ancient seafaring province of Atacama was part of the Collasuyo, befalling to the jurisdiction of the Audiencia de Charcas (Viceroyalty of Peru) during the greater part of the colonial period. The peoples who inhabit this hyper-arid region have long been caught up within shifting boundary relations and warfare around its famed mineral districts. To this day, Atacameño, Aymara and Quechua communities have been repeatedly classified and displaced in order to fit the changing geographical categories, which has led to a confusing historical picture. This paper explores how the spatio-temporal relations between textile communities might help to resolve the Atacama Desert's ethnographic puzzle and thus contribute to balance out the 'fabulously retroactive' or anachronistic effects of the historical cartographies of Bolivia, Chile and Peru. It argues that a common thread of textile knowledge practices and techniques might have been stitching the territorial ethnohistory of Bolivia's southern highlands together with Chile's adjoining basins of Tarapacá, Loa and Atacama. The conclusion reflects on how textile studies might undo nationalist methodological flaws in order to answer old questions on ethnic classification in the South Central Andes, and hence lead to re-think how distinct forms of graphic power might induce different historicities.

'Powers of thread: mathematics in Andean textile technology'

Carrie J. Brezine

What does it mean to be numerate in a civilization without writing? Textiles were the vehicle for the development and diffusion of numeracy in the pre-Columbian Andes. The English word 'numeracy' all too easily elides the vast variety of mathematical topics into those dealing only with numbers and quantification. In reality, mathematics includes many subjects such as topology, geometry, and symmetry which do not depend on numbers. The creation of textiles touches on many non-trivial problems in these and other fields. Given the sophistication of Andean textile constructions, it is untenable to claim that Andean civilizations had no practical understanding of mathematics beyond arithmetic. If one believes that many, perhaps most Andean people were familiar with the principles of textile construction, the level of numeracy may have been quite high. Yet arithmetic is only one part of a mathematical system, and is only one aspect of the complex data encoded in any one khipu. In the spirit of drawing together khipu studies and textile studies, I propose in this paper that we consider an expansion of the quotidian use of the term 'mathematics' to include non-arithmetic arenas, and explore the mathematics of all Andean textile techniques. In particular I discuss the dimensionality inherent in weaving, braiding, and other techniques and the possible conceptual differences between working with fibre and working with symbols on paper. Finally, I focus on a time in which the weaving technology of the Andes underwent a severe and sudden bifurcation: the decades following Spanish contact.

'Andean semiotics and the Quechua concept of Quilca'

Galen Brokaw

The Andean knotted, string device known as khipu is normally considered the primary medium or system of communication that made possible the extensive nature of the Inca state. Although the khipu was almost certainly the most versatile medium employed by the Inca at the time of the conquest, the Andes was a multimedia environment in which semiotic activity was distributed across a number of different media serving a variety of different functions. While the khipu has received the most attention, it is also common to identify an indigenous tradition of painting based on references in colonial chronicles and the appearance of Inca portraits, which presumably derive from that tradition. In this paper, I discuss colonial texts, archaeological objects, historical context, and the way Quechua terms were translated into Spanish in order to clarify the origin of the colonial tradition of Inca portraiture and the nature of the pre-Hispanic practice that was translated as 'painting.' I also offer a more rigorous basis for identifying the Quechua term 'quilca' as a broad concept that referred to a set of interrelated semiotic practices and their associated media in Andean societies, and I suggest that at least one of links between these media has to do with the use of color patterns.

'Persistencias y variaciones técnicas en las bolsas domésticas de Arica' ['Technical persistencies and variation in the domestic bags of Arica']

Bárbara Cases

'Hacia la relación entre iconografía y técnica textil' ['On the relation between textile iconography and technique']

Miriam de Diego

This paper focuses on the results of the AHRC-funded research project 'Weaving communities of practice' in respect to the relations established between textile iconography and technique. The analysis focuses on the warp-faced weave technique employed in textiles of the Tiwanaku culture, as well as those produced during periods related to the same region of influence until the present day. Particular attention is given to the analysis of Paracas and Nazca textiles, including the importance of colour, tones and patterns.

'Common logics between pre-European and present indigenous textile knowledges in the Central-Southern Andes'

Sophie Desrosiers

I will discuss how present textile knowledges from Bolivian highlands find echos in pre-European textiles unearthed on the Peruvian coast. Such comparisons attest the antiquity of both present textile logics and the abstract knowledges that support them. Moreover they bring elements which help understand the relations between the coast and the highlands in early times.

'Stitched Up: Andean Textiles in an irrational world'

Ines Doujak and John Barker

In the early part of the twentieth century, Andean textiles of the past were being acclaimed by German artists, curators and critics. At the same time, industrially produced mantas (Indigenous shawls), which imitated Andean patterns, were being exported from the same Germany back into Bolivia. Since the Spanish conquest edicts recurred which banned the wearing of Indigenous clothing with such patterns, in societies for whom its absence

meant that members of such communities perceived themselves to be naked. Such edicts were still being made in the twentieth century. They continue now in new forms as when in 2008 Aymara peasants protesting in Sucre, Bolivia – a stronghold of anti-Morales forces – were forced to march into the city without clothes. The Spanish conquistadors themselves, just as much as those German intellectuals, recognized the superiority of Indigenous textiles to anything produced in Europe, even though much of the best had been burned by the retreating Inca. However, by a series of typically colonial policies they repressed both the production and wearing of these higher quality textiles. In the more recent 'globalisation' of the textile and clothing industries, these perversities have been reproduced, as we will discuss in this paper. The rituals used in Andean societies in relation to natural and climatic forces seem irrational to modern Western thought: the lengths to which under-financed states will now go to reach trade deals with the more powerful are based on a far greater degree of wishful thinking.

'Thoughts on productive knowledge in weaving with discontinuous warp and weft'

Penelope Dransart

This paper is based on a study of grave goods from late pre-Hispanic tombs on the central coast of Peru. Its purpose is to consider techne as a mode of production and as a form of communicating an ideal for crafting yarn and garments. The discussion focuses on spinning tools and certain tunics woven from discontinuous warp and weft.

'Las técnicas textiles y las interacciones sociales: el caso del peinecillo' ['Textile techniques and social interactions: the case of the peinecillo']

Elvira Espejo and Denise Y. Arnold

The peinecillo, known by this name because of the form of its design in coloured lines or draftboard of intercalated colours, is known in Spanish also as 'líneas ajedrez' and in English as 'ladder'. In some cases the peinecillo constitutes a whole strip of drawings; in other cases, it corresponds to just a segment of such strip. In any case, the peinecillo is ubiquitous in Andean textiles, showing certain continuities from archaeological examples to the present. In some contexts, these characteristics give it the role of a textile structure, in the sense of organising the warp layers; in other contexts, it provides it with the features of a textile technique and, in another cases, of a textile motif with a variety of iconographic meanings. In all these modes of use, the peinecillo has played in the past – and still does today – an important role in the relation between textile technology and the social domain. Above all, we argue here that the peinecillo is key in the codification and documentation of a whole series of products and their transactions between the ecological zones in the Andes.

'El mensaje que querían comunicar los Incas por medio de los textiles de Pachacamac durante el Horizonte Tardío' ['The message that the Incas wanted to convey through the Pachacamac textiles of the Late Horizon']

Jane Feltham

'Complejidad cultural e identidades complejas' ['Cultural complexity and complex identities']

Eva Fischer

Both the use and production of Andean textiles participate in the process of constructing identities, including those personal, social, of group, folklore and local. For Andean weavers, weaving is in a direct relation to the formation of their social and personal personalities. There are excellent weavers who are artists; others not so skilled but equally good and enthusiastic. It seems that all the weavers enjoy the embodied aspect of this kind of

work as well as the intellectual challenge articulated by the employment of highly sophisticated techniques and the creation of new designs. But in addition to expressing the self-confidence of its producers, textiles also relate the collective memory that could be preserved through lengthy centuries of cultural clandestinity that Andean groups had to endure with almost never-failing patience. These are exactly the contexts that are currently under transformation and redefinition. This paper seeks to establish a discourse about Andean textiles in the intersection of tradition and modernity, of the personal and the social. Understanding these contexts also mean to understand at least one part of the intentions and background of Andean weavers, which simultaneously participate in the formation of culture defined as a social act.

'Conceptualizing space through structures, pathways, motions, and maps: plural models for symmetry patterns on ancient Andean textiles'

Mary Frame

I have written numerous articles on the relation of fibre structures to images and patterns on ancient Andean textiles, but I have also explored other models that coincide systematically with finite and infinite symmetry patterns. While fibre structures appear to be important models for some patterns in some styles, my investigation indicates that textile technology was not a singular model for the generation of symmetry patterns. Fibre structure is probably the most accessible model for symmetry patterns because there are depictive examples of structures in varying degrees of abstraction, in addition to systematic correlates between structures and patterns in some styles or sub-styles. The images and patterns that resemble fabric structures suggest that fibre technology was a powerful aid in conceptualizing interlocking and interconnected space.

'On textiles and alterity in the Recuay culture (AD 200-700), Ancash, Peru'

George Lau

This paper proceeds with a query: to what extent are ancient Andean textiles less about identity than they are about alterity, basically a kind of making for and about the other? By way of a response, I focus on a small group of textiles pertaining to the Recuay culture, of the first millennium AD in Peru's north central highlands. I first detail the main examples and their distinctive technical and iconographic relationships with other media: in design structure, motifs and meaning. The techniques and expressions of textiles were part of a cross-media impulse to enhance planar surfaces on and about chiefly bodies. As fancy gifts and as funerary wrappings, these are almost always associated with burial practices and veneration of ancestors. Recuay potters also produced elaborate ceramic representations of handsomely attired people, adding another layer to the alterity process of mimesis. Making textiles for others implies a predictable imagination, indeed an *idée fixe*, of the other – in this case, noble ancestors enshrined for posterity.

'Los textiles como medio de expresión simbólica múltiple: tejiendo mensajes sobre poder y memoria... análisis de casos arqueológicos para el NO de Argentina' [Textiles as medium of multiple symbolic expression: weaving messages about power and memory... analysis of archaeological case studies in the Northwest of Argentina]

Sara López Campeny

This paper explores the communicative role of textiles by focusing on archaeological case studies from the Northwest of Argentina. A series of differential characteristics was identified in the samples studied as follows: a) structural or superstructural character; b) grade of visibility; c) the spatial or geographical scale of the register; d) the temporal continuity of disruption of their existence and e) the performance of their role in different moments of the 'social life' of the garments. This persistence is interpreted here as a form of commemorative

memory which, while tracing connections with the past and ancestry, depends on the continuity of the practices in order to maintain their generational transmission.

'Paracas Necropolis: communities of textile production, exchange networks and social boundaries of the central Andes, 150 BC to AD 250'

Ann H. Peters

Our study of artifact assemblages in and around Paracas Necropolis mortuary bundles unwrapped and recorded in the 20th century provides an opportunity to study a large, diverse and relatively well documented assemblage of gravelots produced as part of rites honoring deceased and ancestral personages some 2000 years ago. Here I propose models of production processes for different types and groups of textiles, and style groups that may reflect communities enacted in their production. The diversity of these style groups calls for a model of possible corporate groups, social networks and exchange relationships involved in gathering 10, 20, 60 or over 100 elaborately constructed textiles added to conical mortuary bundles overlooking the Bay of Paracas.

'Artefactos de producción textil prehispánicos en el occidente de Bolivia: una visión diacrónica' ['Artefacts of textile production in western Bolivia: a diachronic vision']

Claudia Rivera

This paper presents a diachronic analysis of pre-Hispanic instruments for textile production. Considering the textile productive chain, the artefacts were grouped accordingly: acquisition of raw materials, spinning, weaving and final product. These artefacts were analysed by period and compared, showing temporal changes and continuities which provide clues to textiles practices in different moments and their association with broader socio-economic transformations.

'Tejido en el tiempo: el uso de las fibras animales y la tradición textil... Antofagasta de la Sierra como caso de estudio' ['Woven in time: the use of animal fibres and the textile tradition... the case of Antofagasta de la Sierra']

Andrés Romano

Andean textiles provide a considerable amount of information that brings us closer to: the techniques employed; decorative patterns; iconography; and ritual, economic, political and social aspects, among others. In addition, some authors claim that these materialities constitute an Andean form of writing (Arnold and Yapita 2000; Arnold et al., 2007). Despite this, most of the existing research focuses on the cloth and/or the final product, without taking into account the previous stages of acquisition, selection and processing of its raw materials. These preceding procedures are nevertheless of great relevance for the understanding of textiles from a holistic viewpoint. These are related to the tending the flock for the acquisition of different colours of fleece and the search for fibres with specific properties (length to width ratio, strength, and extensibility, among others). Furthermore, they are fundamental to enable understading of a series of technical gestures related to the use of fibres and their place in the woven garment, as a form of 'textile cartography'. Following this approach, this paper proposes the analysis of textiles before the textile, based on the microscopic study of animal fibres (including human hair) and their resistance.

'Central Highlands-Central Coast Textile Interaction in the Late Horizon'

Ann P. Rowe

During the period of the Inca Empire, many highland textiles, not only Inca ones, but also from other highland styles, were taken for one reason or another to the coast where they were preserved in the coastal desert

cemeteries. The paper focuses on one style of tunic found on the central coast that has obvious highland technical features and appears also to have influenced local coastal style tunics. The style can be identified as Late Horizon in date partly because a few of the local pieces use Inca designs. The paper examines a range of examples from both the highland and coastal styles in order to trace their interactions. A preliminary review of the evidence suggests that a surprising number of late tunics from the central coast show influence of this highland style to varying degrees. The available documentation suggests that the area of influence was Chancay and its vicinity so the tunics therefore also help to begin to define the Chancay style of the Late Horizon. It is harder to identify the highland source, since archaeological textile documentation is lacking because of poor preservation conditions in the highlands. The paper assumes that technical and design features of textiles were markers of ethnic and local identities as they are today in the Andes, and that this information, drawn from analysis of archaeological fabrics, can be used to reconstruct ethnic affiliation and interaction in a manner that goes beyond other available types of evidence, such as historical records.

'The Inca motifs as recorders of worldview'

Gail Silverman

Drawing upon my ethnographic work concerning the Cuzco textile tradition in relation to the Inca tocapu motifs, descriptions and drawings by the chroniclers, and architectural remains found in Inca archaeological sites, I describe how Barthel's 24 tocapu types refer to four specific themes: 1) Agriculture; 2) Time; 3) The presence of the Inca state; and 4) Inca sacred sites and rituals. First, referring to the theme of agricultural technology, we note tocapus which represent furrows, irrigation canals, stone lined terraces situated on the sides of mountains, and black and white corn seeds. Second, time concerns the use of architectural structures built by the Incas to measure the solstices both in Cusco and in the provinces, the butterfly which functions as a biological clock for plants, in addition to the rising and setting December solstice but only the setting June solstice. Third, the theme of sacred sites and rituals includes the Inca's throne, the male and female sacrificial llamas, sacred sites of origin in all four regions, ancestors perceived as seeds found inside burial structures, and the Temple of Wiraqocha. Finally, the presence of the Inca state includes Inca provincial sites, the chosen women, and the dual, three and four part division of the Inca Empire. An analysis of each of these tocapu units argues for a representational interpretation of the tocapus instead of perceiving them as merely decorative.

'Tejiendo paisaje: textiles de la Costa Norte durante el Intermedio Tardío' [Weaving landscape: textiles of the North Coast during the Late Intermediate']

Victòria Solanilla Demestre

Through the continuous study of pre-Hispanic Andean textiles, especially from public and private collections in Cataluña (Spain), I was able to identify a great number of them with decorative motifs of animals, plants, and people. From Chimú textiles, to the Lambayeque, up to those of Chancay, a broad panorama of such examples opens up. According to the iconography of each culture, there are particular renderings of vegetables, insects, mammals, including the human figure. In this paper I present a general study of these elements, grouping them in the iconographic themes above mentioned. In this way, we are able to get closer to the landscape of this Andean zone in the past, before the arrival of the Conquistadores, with their domineering way of seeing. In the process, I will also consider the landscape depiction by the principal Cronistas in order to compare them with what we identified in the textiles.

'The khipu as textile: variation in fibres, forms, and functions in Emory's Carlos Museum examples'

Rebecca R. Stone

Non-specialists in the textile arts may regard the Inka knotted khipu as falling outside the fibre traditions of the Andes, seeing them basically as an important if aberrant type of world writing (e.g., Brokaw 2010). This leads to an incomplete consideration of the levels of information encoded in this powerful mode of expression in thread. For example, despite the best of intentions and due to the large size of the corpus, to date the spin-ply of all the component cords have not been recorded in the main corpus of Inka khipu (<http://khipukamayuq.fas.harvard.edu>). We know from numerous previous Andean textiles studies that spin-ply direction may correlate to regions and thus represents a key insight into the spatial variation of Inka recording (e.g., Wallace 1979).

'Weaving the body politic: the integration of technological practice and embodied social identity in the Late Prehistoric Andes'

Anne Tiballi

The emerging field of cyborg anthropology admonishes researchers to move away from entrenched models of humans as tool users to examining the ontological relationship between humans and technology as relational, doubly agentive, and mutually constituting. This theoretical lens can be successfully applied to archaeological contexts, and may be particularly fruitful in examinations of the complex associations between textile production and gender, ethnicity, and personhood among specialized producers under the Inka. This paper investigates the ways that the processes of textile production, and the technological objects associated with it, constitute bodily practices that shaped Andean spinners and weavers even as they shaped the emerging cloth.

'Technical Competence in Weaving as Means of Symbolic Distinction among the Macha Indians of Northern Potosi, Bolivia'

Cassandra Torrico

The presentation focuses on the value attributed by the Macha Indians to the acquisition of technical competence in weaving among women and excellence in craftsmanship as a motor of innovation and change and means of social distinction between women and links this process to the constitution of personal, social, and cultural identities.

'"Power" and "Place" in Khipu Structure and Practice'

Gary Urton

This paper examines construction procedures in the production of khipus, as well as at administrative practices in Inka administration, that center around the concepts of 'power' and 'place.' These concepts are central to the organization of information and sign units in cord keeping for administrative purposes as well as potentially having had a key role in semiosis in narrative khipus.

'Pensando los desarrollos tecnológicos andinos en el textil desde las lenguas andinas' ['Considering Andean technological developments in textiles from Andean languages']

Juan de Dios Yapita

In Europe, the relation among the 'social', the 'technological' and the 'technique' has been reconsidered from the origin of reflections about these notions in Ancient Greece. In this way, original meanings of key terms such 'tekne' have been recovered, in comparison with changes in their meanings in the last centuries. The situation is

distinct in the Andes. An equivalent term to 'tekne' does not exist in the languages Aymara y Quechua; the technological and technical domains are much more disseminated in distinct levels of society. In this context, Heather Lechtman's idea that the technological developments in the Andes have been directed not to the material development, but rather to the exploitation of natural and human resources of the region and the integration of diverse populations and ecologies in common productive efforts is useful. This paper explores the evidence of the technological domain in terms of Andean languages that articulate and integrate these domains in common.

'Andean royal tunics and the Inca calendar'

R. T. Zuidema

The intensive study of Andean textiles allows us now to bring to the fore also a number of female shawls and male tunics that register in precise and regular ways a variety of calendars of different kinds of yearly cycles, including daily, 'weekly', 'monthly' and longer periods, and that refer to some of their ritual uses. Thus we can study critically also the almanac that registered the ritual organization of the polity of Cuzco, capital of the Inca empire, and that had been copied from a khipu in early colonial times. This organization – and probably organizations like it – was referred to by the elaborate and complex decoration of a tunic, worn by Inca kings during their crowning ceremonies, known as Tarco Hualca. I will present an Inca example of such a royal tunic and come to suggest a similar purpose in the case of five tunics of Huari-Tiahuanaco times.

BIOGRAPHICAL NOTES

Alethia Alfonso is a Ph.D. candidate in the Department of Iberian and Latin American Studies at Birkbeck, University of London. She graduated as a Licentiate in Latin American Literature (Universidad Iberoamericana, Mexico City). She has worked as an assistant in the Media Lab of the Department of History of Art (Birkbeck College) and as an independent editor. Her research interests are literature and visual arts that defy traditional limits of authorship, readership and mediation, as well as the influence of Eastern thought in contemporary art; both are remarkably exemplified in Eielson's work.

Denise Y. Arnold, an Anglo-Bolivian anthropologist, holds postgraduate degrees in Architecture, and in Environmental Studies, and a doctorate in Anthropology from University College London (1988). She has been Leverhulme Research Fellow and ERSC Senior Research Fellow. She is Research Professor at Birkbeck, University of London, working on the AHRC-funded project 'Weaving communities of practice', and Director of the Instituto de Lengua y Cultura Aymara, in Bolivia. Her co-publications on Andean textiles include *Hilos suelos: Los Andes desde el textil* (2007), and *Ciencia de las mujeres* (2010).

Verónica Auza Aramayo is based in La Paz, Bolivia. Trained as a sociologist with a MSc in Philosophy and Political Sciences, she specialises in political and cultural processes in which subaltern and resistance conditions are debated and realised. Currently, she is critically engaged with the concepts of subjectivity, power, body and femininity that are present in the artistic languages and visual memories of Andean textiles.

Aïcha Bachir Bacha holds a PhD in Archaeology and is Tenured Investigator in the Centre de Recherche sur l'Amérique Préhispanique (CeRAP) at L'École des Hautes Études en Sciences Sociales (EHESS) in Paris. Head of the Archaeological Programme Animas Altas, Ica-Perú, supported by the French Ministry of Foreign and European Affairs (MAEE), she specialises in the Paracas and Nazca societies.

John Barker read English Literature at Clare College, Cambridge. He is a fiction writer and researcher who published extensively on political economy, labour process, and the structure, uses and misuses of metaphor for the journals *Science as Culture*, *Capital and Class*, *Mute* and *Variant*. He participated as an artist in The Potosi Principle exhibition, and works on the Loom Shuttles / Warpaths as researcher and co-writer.

Alonso Barros obtained his law degree from the Pontificia Universidad Católica (Santiago, Chile) and received his PhD from the University of Cambridge (Department of Social Anthropology). His work focuses on the anthropology of law and human rights in Mesoamerica and Latin America. His publications combine the ethnography of peoples and archival regimes with 'longue durée' historical and legal data that enable to assess conflicting historicities (time and memory politics). His work engages current anthropological debates on indigenous peoples' human rights, geopolitics, intellectual property and traditional knowledge, land and water rights, media and commodity fetishism, racialization, ethnobotany, archaeology, corporate social responsibility, media activism and communal ontologies.

Galen Brokaw is Associate Professor in the Department of Languages and Literatures at the University at Buffalo, the State University of New York. He specialises in colonial Latin American studies; historiography; Nahuatl language and culture; Indigenous writing; Indigenismo; and the Andean khipu. He is currently undertaking research on the interaction between indigenous media (Andean khipu, Mesoamerican codex) and alphabetic script in the colonial period.

Gordon Brotherston is Honorary Professor in Latin American Studies at the University of Manchester and Emeritus Professor in the Department of LiFTS, University of Essex. His research interests include the cumulative history of Native and later American literature; the Mexican codices and the intellectual interface between the Old and New Worlds; poetry and narrative in Latin America; and translation. He has published a number of studies of Mexican iconography and native American literature, including *Book of the Fourth World: Reading the*

Native Americas through their Literature (1992), and *Painted Books from Mexico: Codices in the United Kingdom Collections and the World they Represent* (1995).

Bárbara Cases Contreras is an Archaeologist (Universidad de Chile) with an MA in Anthropology from the Universidad Católica del Norte-Universidad de Tarapacá, where she is currently a PhD candidate. In the course of her professional life, she has specialized in the study of archaeological textiles from the Norte Grande of Chile, which led to numerous publications and conference papers, informing her teaching at undergraduate and postgraduate levels. She has also worked as curator of national and international exhibitions of Chilean prehistoric artefacts.

Miriam de Diego is an art historian (Universidad Autónoma de Barcelona). Her research focusses on the Precolombian world. Currently a PhD candidate at the Universidad Autónoma de Barcelona on Tiwanak iconography, she is also Research Assistant in the AHRC-funded project 'Weaving communities of practice' at Birkbeck, University of London.

Sophie Desrosiers received her PhD in Anthropology from the École des Hautes Études en Sciences Sociales (EHESS) in Paris, in 1987. A Senior Lecturer at the EHESS, she teaches the seminars 'Textiles and Society' and 'Objects as source of information: textiles, leather and others'. She has published extensively on textile techniques and is a co-editor of *Tessuti precolombiani* (1992).

Ines Doujak is a visual artist based in Vienna, currently working as project leader on Loom Shuttles / Warpaths, a two-year artistic research project on Andean textiles and their connection to the world, sponsored by the FWF Austrian Science Fund. She has staged large-scale trans-disciplinary projects addressing topics such as racism, feminism, neocolonialism, and globalization. In her work, she uses different media such as photographs, sculpture, performance, text, and installations. Her exhibitions include *The Potosi Principle*, Museo Nacional Centro de Arte Reina Sofia, Madrid, Haus der Kulturen der Welt, Berlin, Museo Nacional de Arte, La Paz (2010); *documenta 12*, Kassel (2007); and *Father Ass, Secession*, Vienna (2002).

Penelope Dransart is Reader in Anthropology and Archaeology at the University of Wales Trinity St David. Since the 1980s she has conducted fieldwork in the Andes including San Pedro de Atacama, but especially in Isluga, in the north of Chile. Her research interests encompass pastoralism and herding, as well as thematic and symbolic aspects in the study of textiles, dress, fibres and colours. These interests also include medieval textiles. She is author of *Earth, Water, Fleece and Fabric: an Ethnography and Archaeology of Andean Camelid Herding* (2002), *Textiles from the Andes* (2011, with Helen Wolfe) and is co-author of *Perth High Street Archaeological Excavation 1975-1977 Fascicule 4: Leather and Textiles* (in press).

Elvira Espejo, a weaver, painter, poet, singer, and storyteller, speaks Aymara and Quechua. She published her first book of tales in 1994. She studied in the Academia Nacional de Bellas Artes, in La Paz, and held her first exhibition of paintings in 2002. Her first volume of poetry received the International Poetry Prize in Venezuela in the Fourth World Festival of Poetry in 2007. In 2010 she was invited as principal artist to the exhibition 'Principio Potosí' in the Museo Reina Sofia, Madrid, which passed to Berlin and La Paz in 2011. Her co-publications include *Hilos sueltos: Los Andes desde el textil* (2007) and *Ciencia de las mujeres* (2010). She is currently the textile expert in the AHRC-funded project 'Weaving communities of practice'.

Eva Fischer is a Lecturer in the Institute of Social Anthropology at the University of Berne and Researcher at the Museo Nacional de Etnografía y Folklore in La Paz, Bolivia. Her research interests include young people as social actors; socialization processes; forms of exclusion and inclusion; local groups and translocality; anthropological theory; and textiles and identity. She is the author of *Urdiendo el tejido social. So* (2008).

Mary Frame is an independent scholar whose research encompasses both ancient and ethnographic textiles of the Andes. While the structures and techniques of fabrics provided the focus for her early studies, her interests soon branched out to include fabric structure imagery, symmetrical patterns and other systematic aspects of ancient textile styles. Her writings include treatments of the systems in the Chuquibamba, Paracas Necropolis, Wari and Ychsma styles, as well as a number of articles on tukapu, the geometric designs on high-status Inka textiles. She lives in Vancouver, Canada and is a Research Associate of the Institute of Andean Studies, Berkeley.

Valerie Fraser teaches art history at the University of Essex. She has published widely on aspects of the art and architecture of Latin America and is Director of the Essex Collection of Art from Latin America (ESCALA). Her publications include *The Architecture of Conquest: Building in the Viceroyalty of Peru, 1535-1635* (1990) and *Building the New World: Studies in the Modern Architecture of Latin America, 1930-1960* (2000). She is currently directing an AHRC-funded research project entitled 'Meeting Margins: Art in Latin America and Europe, 1950-1978' in collaboration with colleagues at Essex and the University of the Arts London, which is investigating transnational exchanges between artists from Europe and Latin America, and within Latin America in the post-war decades.

Susie Goulder lives and works in London, and also in Paris and Peru. She grew up in Cuzco but has been principally based in Europe since 1977. After gaining a BA in Latin American Cultural Studies at King's College, University of London, she started in 1990 to make her first chuwas, handmade earthenware pots. She studied ceramics at Edith Sachs College in Lima, and later in London, and undertook postgraduate study at Birkbeck, University of London. Since 1996 her work has formed part of the permanent collection at the University of Essex Collection of Latin American Art. Her pot-sculptures have been exhibited in Paris, London, and Norwich, UK.

María Jesús Jiménez, an independent researcher, collaborates regularly with the Museo de América in Madrid. Her research has focused on the study and classification of the styles of pre-Hispanic textiles of the Central Andes, specializing in the area of textiles in archaeological projects (Dos Cabezas, Farfán, Cabur, among others) as well as international public and private collections. She has published extensively on the subject, including *Weaving for the Afterlife - Peruvian Textiles* (Maiman Collection, 2 vols), co-edited with Alfredo Rosenzweig and Cristóbal Makowski (2006), and *Tradición de tradiciones: tejidos prehispánicos y virreinales de la Andes: la colección del Museo de América* (2009).

George F. Lau is Senior Lecturer at the Sainsbury Research Unit for the Arts of Africa, Oceania and the Americas (University of East Anglia). He specialises in the archaeology of South America, especially the Peruvian Andes. His fieldwork investigates pre-Hispanic communities of the Recuay tradition, in Peru's north highlands. His publications, including *Ancient Community and Economy at Chinchawas* (2011) and *Andean Expressions: Archaeology and Art of the Recuay Culture* (2010), highlight the ways that local social life and material culture are enmeshed with regional processes of social complexity, such as exchange, identity, warfare, art production and funerary ritual.

Sara M. L. López Campeny is an archaeologist (Universidad Nacional de Tucumán, UNT, 2001) with a PhD in Natural Sciences, specialised in Archaeology (Universidad Nacional de La Plata, UNLP, Argentina, 2009). Currently teaching Archaeology at UNT, she is a Postdoctoral Fellow at the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET). Her research focusses on the construction of the social landscape by the agropastoral communities that occupied the Puna Meridional Argentina (Antofagasta de la Sierra) during the first millennium CE and on the analysis of the practices, materialities and social meanings associated with the pre-Hispanic production of textiles.

Luciana Martins, Director of the Centre for Iberian and Latin American Visual Studies at Birkbeck, University of London since 2007, is the Principal Investigator in the AHRC-funded research project 'Weaving Communities of Practice'. A Senior Lecturer in Luso-Brazilian Studies at Birkbeck, she originally trained in architecture and urban planning, specialising in visual and material culture, cultural history and the history and philosophy of geography, with particular emphasis on visuality and travel. Her publications include *O Rio de Janeiro dos Viajantes: O Olhar Britânico* (2001) and the co-edited volume *Tropical Visions in an Age of Empire* (2005). She is currently writing a book-length project, *Documentary Film and Photography in the Making of Modern Brazil*.

Colin McEwan is Head of the Americas section and Curator for Latin American collections at The British Museum. He has excavated and travelled extensively in Latin America and published on Andean and Amazonian archaeology and iconography. His publications include *Ancient Mexico in the British Museum* (1994), *Patagonia: Natural History, Prehistory and Ethnography at the Uttermost End of the Earth* (1997), *Pre-Columbian Gold: Technology, Style and Iconography* (2000), *Unknown Amazon* (2001) and *Turquoise Mosaics from Mexico* (2006). Colin was the curator for the British Museum's 2009 major exhibition: 'Moctezuma: Aztec Ruler'.

Ann Hudson Peters began study of Paracas Necropolis embroidered imagery as part of a history of non-western, textile-based art, and went on to study and practice ethnographic and archaeological research methods. Her dissertation (1997) documents contemporary archaeologically excavated contexts to ground a social analysis of the Paracas Necropolis cemetery (2100-1750BP). She has explored mediums and messages of textile-based imagery (1991, 2000, and in press) and the structure and significance of headdress elements (2004, 2006) in approximately contemporary production traditions throughout the south-central Andes. Since 2004 Peters has been documenting Paracas Necropolis burial assemblages in collaboration with Peruvian and international colleagues.

Claudia Rivera Casanovas holds an MA and a PhD in Archaeology from the University of Pittsburgh. She teaches Anthropology and Archaeology at the Universidad Mayor de San Andrés in La Paz. Her areas of research include: complex societies; pre-Hispanic societies from Southern Bolivia; regional interaction; agrarian systems and use of environmental resources; pre-Hispanic textiles. In Bolivia, she has worked in the Titicaca Lake basin and the inter-Andean valleys of Cochabamba and Chuquisaca, investigating the trajectories of social development and the processes of social complexification in these different regions. A team member of the AHRC-project 'Weaving communities of practice', her research focuses on the textile productive chain.

Ann Pollard Rowe spent most of her career as Curator of Western Hemisphere Textiles at The Textile Museum in Washington, DC, and is now a Research Associate there. She has curated many exhibitions, of which those with catalogues include *Warp-Patterned Weaves of the Andes* (1977), *A Century of Change in Guatemalan Textiles* (1980), *Costumes and Featherwork of the Lords of Chimor* (1984), and *Hidden Threads of Peru: Q'ero Textiles* (2002, with John Cohen). She has also co-authored and edited three books on Ecuador, *Costume and Identity in Highland Ecuador* (1998), for an exhibition in 1999, *Weaving and Dyeing in Highland Ecuador* (2007), and *Costume and History in Highland Ecuador* (2011). These publications, with her numerous articles, focus especially on the stylistic development and the techniques and structures of both archaeological and ethnographic textiles of Latin America.

Gail Silverman received her PhD from the Université de Paris, Sciences Humaines, Sorbonne. Former Professor of Anthropology at the Universidad de Cusco and at the Pontificia Universidad Católica in Peru, she has dedicated her career to almost thirty years of fieldwork concerning the Cuzco area textile tradition and its relation to the Inca tocapu motifs. Her research has been funded by Fulbright Hays (1979), Ministry of French National Education (1985), Concytec, Lima, Peru (1989-1991), French Embassy Peru Contra-Valor (1997-1998), Finnish Embassy (2000), among others. Her numerous publications include *El Lexico Grafico del Cusco* (1991), *Tejido Andino: Un Libro de Sabiduria* (2008), *A Woven Book of Knowledge, Textile Iconography of Cusco Peru*

(2012), *Los Signos del Imperio: La Escritura Inca*, (2012) and *Reading Inka Writing: The Dumbarton Oaks Royal Inca Tunic* (forthcoming).

Victòria Solanilla Demestre received her PhD in Ancient History and Archaeology from the Universidad de Barcelona (1976). Teaching at the Universitat Autònoma de Barcelona (UAB) since 1974, she became Chair of Ancient and Pre-Columbian Art in the Department of Art in 1985 and is currently Vice-Dean of Academic Management in the Faculty of Philosophy and Letters. She has been Associated Professor in the Département d'Art et Archéologie (Section Amérique Précolombienne) at the Université Libre de Bruxelles (1985-1990) and undertook research on public and private collections of pre-Columbian art in Cataluña and Cracovia, Polonia. She has organized the Jornadas Internacionales sobre Textiles Precolombinos en Barcelona (1999, 2001, 2004, 2007 y 2010) and edited their Proceedings.

Jeffrey Splitstoser is a textile specialist. Currently studying ancient South American materials from the north coast of Peru at the Mercyhurst University, he has previously worked for the Huaca Prieta Archaeological Project directed by Tom Dillehay and Duccio Bonavia, an endeavor that allowed him to study the oldest cotton textiles ever excavated. He has also served as the textile specialist for the Cerrillos Archaeological Project from 2000–2003, and worked as a consultant for Andean textiles at the National Museum of the American Indian.

Rebecca Rollins Stone, Masse-Martin Distinguished Professor of the Humanities, Professor in the Art History Department, and Faculty Curator of Art of the Ancient Americas at the Michael C. Carlos Museum of Emory University, received her PhD from Yale University in 1987. Under the name Rebecca Stone-Miller, she published *To Weave for the Sun: Andean Textiles in the Museum of Fine Arts, Boston* (1994), *Art of the Andes from Chavín to Inca* (1996, 2002), and *Seeing with New Eyes: Highlights of the Michael C. Carlos Museum Collection of Art of the Ancient Americas* (2002). Under the name Rebecca Stone, she has published *The Jaguar Within: Shamanic Trance in Ancient Central and South American Art* (2011) and the 3rd edition of *Art of the Andes* (forthcoming, 2012). Her primary research interests are the fiber arts, shamanism, museology, and Andean and Costa Rican art. She curates a collection of over 2,500 objects from Mesoamerica, Central and South America.

Anne Tiballi recently completed her PhD in Anthropology at Binghamton University, and conducted her dissertation research on the archaeological materials from the Cemetery of the Sacrificed Women, Pachacamac, Peru, at the University of Pennsylvania Museum of Archaeology and Anthropology. Anne remains a part of the Penn community as a Consulting Scholar, and also serves as the Director of Textile Studies for the California Institute for Peruvian Studies. Her primary research interests include craft production, phenomenology and body theory, and the development of new analytical methods in textile research.

Cassandra Torrico is an independent scholar.

Gary Urton is Dumbarton Oaks Professor of Pre-Columbian Studies in the Department of Anthropology, Harvard University. His research focuses on Pre-Columbian and early colonial intellectual history in the Andes drawing on materials and methods in archaeology, ethnohistory, and ethnology. He is the author of numerous articles and books on Andean/Quechua cultures and Inka civilization, including *At the Crossroads of the Earth and the Sky* (1981), *The History of a Myth* (1990), *The Social Life of Numbers* (1997), *Inca Myths* (1999), *Signs of the Inka Khipu* (2003) and *The Khipus of Laguna de los Cóndores* (2008). He is the Founder/Director of the Khipu Database Project at Harvard (<http://khipukamayuk.fas.harvard.edu/>).

Cecilia Vicuña is a Chilean poet, artist and filmmaker. The author of twenty poetry books published in Europe, Latin America and the US, she performs and exhibits her work widely. A precursor of conceptual art and the improvisatory oral performance, her work deals with the interactions between language, earth and textiles. Her most recent books are *Saborami* (2011) and *Chanccani Quipu* (2011). She also co-edited the *Oxford Book of Latin American Poetry* (2009). Since 1980 she divides her time between Chile and New York (<http://www.ceciliavicuna.org>, www.konkon.cl).

Juan de Dios Yapita, a Bolivian linguist and Aymara speaker, has taught in Bolivia, Chile, Peru, the USA, England and Scotland. He worked as a consultant in Aymara linguistics for UNESCO, and forms a part of their Follow-up Committee for the Universal Declaration of Linguistic Rights. He has been awarded various grants for his work (Leverhulme Trust, King's College Research Strategy Fund). He is Linguistics Director of the Instituto de Lengua y Cultura Aymara in Bolivia, and Visiting Professor at Birkbeck, University of London, working on the AHRC-funded project 'Weaving communities of practice'. His publications include *Aymara: Compendio* (1988, with Hardman and Vásquez), *Curso de Aymara Paceño* (1991), *Aymara: Método Fácil 1* (1994), *La dinámica aymara* (2008), and the Internet site *Ciberaymara*.

R. T. Zuidema is Professor Emeritus of Anthropology in the Center for Advanced Study at the University of Illinois at Urbana-Champaign. Originally trained in Indonesian studies at the University of Leiden, his Doctoral thesis was devoted to the social and ritual organization of Cuzco during the Inca period. His book *The Ceque System of Cuzco* (1964) was translated into Italian (1971) and into Spanish (1995) with a new evaluation of the problem. His lectures on Inca civilization, delivered in 1984 at the Collège de France, Paris, led to his book *La Civilization Inca au Cuzco* (1986) and were also published in both Spanish (1990) and English (1990). His recent publications are all related to Andean concepts of time. He has been curator of the South American, North American and Siberian collections at the Museum of Anthropology in Leiden, the Netherlands and Professor at the Universidad de Huamanga en Ayacucho, Peru.