

**UCLA**

**Cotsen Institute of Archaeology Press**

**Title**

Images in Action: The Southern Andean Iconographic Series

**Permalink**

<https://escholarship.org/uc/item/7gf348nt>

**ISBN**

978-1-938770-14-2

**Publication Date**

2018-09-01

**Data Availability**

The data associated with this publication are available at: <https://dig.ucla.edu/sais/>

Peer reviewed

# Images in Action

The Southern Andean  
Iconographic Series



Edited by  
William H. Isbell • Mauricio I. Uribe  
Anne Tiballi • Edward P. Zegarra

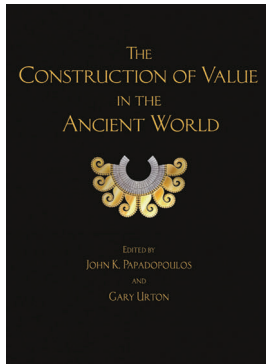
# Images in Action



**UCLA** COTSEN INSTITUTE OF ARCHAEOLOGY PRESS  
COTSEN ADVANCED SEMINAR SERIES

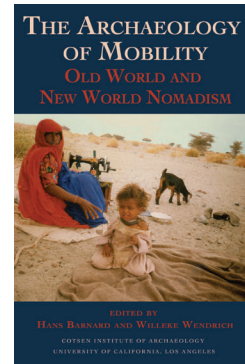
Books in this series present the published results of the Cotsen Advanced Seminars, cross-disciplinary conferences periodically sponsored by the Cotsen Institute of Archaeology

Volume 5



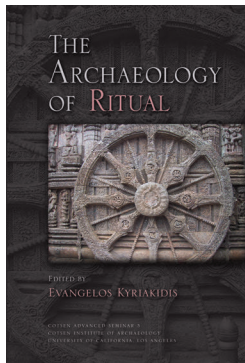
*The Construction of Value in the Ancient World*  
Edited by John K. Papadopoulos and Gary Urton

Volume 4



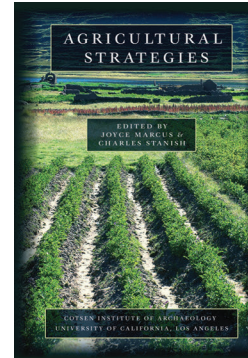
*The Archaeology of Mobility: Old World and New World Nomadism*  
Edited by Hans Barnard and Willeke Wendrich

Volume 3



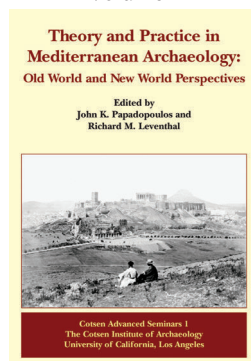
*The Archaeology of Ritual*  
Edited by Evangelos Kyriakidis

Volume 2



*Agricultural Strategies*  
Edited by Joyce Marcus and Charles Stanish

Volume 1



*Theory and Practice in Mediterranean Archaeology: Old World and New World Perspectives*  
Edited by John K. Papadopoulos and Richard M. Leventhal

# Images in Action

The Southern Andean  
Iconographic Series

Edited by  
William H. Isbell  
Mauricio I. Uribe  
Anne Tiballi  
Edward P. Zegarra

THE COTSEN INSTITUTE OF ARCHAEOLOGY PRESS is the publishing unit of the Cotsen Institute of Archaeology at UCLA, a premier research organization dedicated to the creation, dissemination, and conservation of archaeological knowledge and heritage. It is home to both the Interdepartmental Archaeology Graduate Program and the UCLA/Getty Master's Program in the Conservation of Archaeological and Ethnographic Materials. The Cotsen Institute provides a forum for innovative faculty research, graduate education, and public programs at UCLA in an effort to positively impact the academic, local and global communities. Established in 1973, the Cotsen Institute is at the forefront of archaeological research, education, conservation and publication, and is an active contributor to interdisciplinary research at UCLA.

THE COTSEN INSTITUTE OF ARCHAEOLOGY PRESS specializes in producing high-quality academic volumes in nine different series, including *Monumenta Archaeologica*, *Monographs*, *World Heritage and Monuments*, *Cotsen Advanced Seminars*, and *Ideas, Debates, and Perspectives*. Through a generous endowment by Lloyd E. Cotsen, longtime Institute volunteer and benefactor, the Press makes the fruits of archaeological research accessible to scholars, professionals, students, and the general public. Our archaeological publications receive critical acclaim in both academic communities and the public at large.

#### THE COTSEN INSTITUTE OF ARCHAEOLOGY AT UCLA

Willeke Wendrich, Director  
Aaron A. Burke, Editor-in-Chief  
Randi Danforth, Publications Director  
Deidre Whitmore, Digital Archaeology Lab Director

#### EDITORIAL BOARD

Willeke Wendrich	Africa (Ex officio member)
Li Min	East Asia
John K. Papadopoulos	Mediterranean Basin
Gregson Schachner	North America–Southwest
Stella Nair	South America–Andes
Richard G. Lesure	South America–Mesoamerica
Aaron A. Burke	West Asia–Near East
Randi Danforth	Ex officio member

Edited by Gillian Dickens  
Designed by Sally Boylan

#### Library of Congress Cataloging-in-Publication Data

Names: Isbell, William Harris, 1943- editor. | Uribe, Mauricio I., editor. | Tiballi, Anne, editor. | Zegarra, Edward P., editor.  
Title: Images in action : the Southern Andean iconographic series / edited by William H. Isbell, Mauricio I. Uribe, Anne Tiballi, and Edward P. Zegarra.  
Description: [Los Angeles, California] : UCLA Cotsen Institute of Archaeology Press, [2018] | Series: Cotsen advanced seminars ; 6 | "Images in Action is composed of revised papers presented at an international archaeological conference held at the Universidad de Chile Santiago on March 16-17, 2007."  
| Includes bibliographical references.  
Identifiers: LCCN 2018005734 | ISBN 9781938770142 (alk. paper)  
Subjects: LCSH: Andes Region--Civilization--Congresses. | Andes Region--Antiquities--Congresses.  
Classification: LCC F2212 .I49 2018 | DDC 980/.01--dc23  
LC record available at <https://lcn.loc.gov/2018005734>

Copyright ©2018 Regents of the University of California  
All rights reserved. Printed in the United States of America



Dedicated to the memory of Joerg Haeberli, an inspired thinker who earned the admiration and friendship of his Andean archaeology colleagues. Joerg revolutionized thinking about the ancient peoples of the Sihuas Valley, and greater Arequipa region. With exceptional devotion, he advocated for the overwhelming importance of textiles in understanding Andean social processes, while skillfully mediating the divide between archaeologists and art collectors. Joerg will be remembered for his spectacularly illustrated presentations and his keen insights about the past. He will also be greatly missed for his gentlemanly good nature, both as a friend and as an intellectual beacon.

READ ONLY / NO DOWNLOAD





## Contents

<b>Contributors</b>	ix
<b>Chapter 1:</b> Introduction: Social Interactions in the Southern Andes <i>William H. Isbell</i>	1
<b>PART 1: SAIS ORIGINS AND EARLY INFLUENCES</b>	
<b>Chapter 2:</b> Identification, Definition, and Continuities of the Yaya-Mama Religious Tradition in the Titicaca Basin <i>Sergio J. Chávez</i>	15
<b>Chapter 3:</b> Late Formative Period Ceramics from Pukara: Insights from Excavations on the Central Pampa <i>Elizabeth A. Klarich and Cecilia Chávez Justo</i>	51
<b>Chapter 4:</b> Stone Stelae of the Southern Basin: A Stylistic Chronology of Ancestral Personages <i>John Wayne Janusek and Arik Obnstad</i>	75
<b>Chapter 5:</b> Travels of a Rayed Head: Textile Movement and the Concepts of Center and Periphery in the Southern Andes <i>Ann H. Peters</i>	107
<b>Chapter 6:</b> Front-Face Deity Motifs and Themes in the Southern Andean Iconographic Series <i>Joerg Haerberli</i>	139
<b>PART 2: LATE SAIS AND THE TIWANAKU REALM</b>	
<b>Chapter 7:</b> The Tiwanaku Ceramic Offerings of the Island of Pariti, Lake Titicaca, Bolivia <i>Antti Korpisaari</i>	209
<b>Chapter 8:</b> The Tiwanaku Style in Cochabamba: How “Derived” Was It? <i>Karen Anderson</i>	239
<b>Chapter 9:</b> Gods and Goddesses in Diaspora: Gender, Patriarchy, and Resistance in Tiwanaku Ceramic Iconography <i>Paul S. Goldstein</i>	275
<b>Chapter 10:</b> Tiwanaku in the Tarapacá Region (Chile): Realities or Illusions in the Desert? <i>Carolina Agüero and Mauricio I. Uribe</i>	305

<b>Chapter 11:</b> Visionary Plants and SAIS Iconography in San Pedro de Atacama and Tiahuanaco <i>Constantino Manuel Torres</i>	333
<b>Chapter 12:</b> San Pedro de Atacama, Northern Chile: The Domestic Ceramics of the Late Formative and Middle Period <i>Emily M. Stovel and Michael A. Deibel</i>	373
<b>Chapter 13:</b> Exploring the SAIS throughout the Middle Horizon in San Pedro de Atacama, Chile <i>Christina Torres-Rouff and Mark Hubbe</i>	387
<b>Chapter 14:</b> Symbols, Offerings, and Metallic Goods from the Puna and Quebrada de Humahuaca, Northwestern Argentina <i>Myriam N. Tarragó</i>	399
 <b>PART 3: LATE SAIS AND THE WARI REALM</b>	
<b>Chapter 15:</b> Ayacucho and the Staff God Pantheon: Wari, Tiwanaku, and the Late SAIS Era <i>William H. Isbell</i>	423
<b>Chapter 16:</b> Art and Elite Political Machinations in the Middle Horizon Andes <i>Donna J. Nash</i>	479
<b>Chapter 17:</b> Wari Textiles, Vehicles of Ideology, and Power during the Andean Middle Horizon: Iconography of the Weavings from Huaca Malena, Asia Valley <i>Rommel Angeles Falcón</i>	501
<b>Chapter 18:</b> The Middle Horizon and Southern Andean Iconographic Series on the Central Coast of Peru <i>Peter Eeckhout</i>	529
<b>Chapter 19:</b> Interacting Polities on the North Coast of Peru: The Moche and Wari Dilemma <i>Hélène Bernier and Claude Chapdelaine</i>	571
 <b>PART 4: INTERPRETIVE PERSPECTIVES ON SAIS ART</b>	
<b>Chapter 20:</b> Mothers and Others: Female Images and Life Cycle Rituals in the Southern Andes <i>JoEllen Burkholder</i>	599
<b>Chapter 21:</b> Huari, Tiahuanaco, and SAIS: The Local and the Foreign in the Iconography of the Empire <i>Krzysztof Makowski</i>	631
<b>Chapter 22:</b> Snake, Fish, and Toad/Frog Iconography in the Ceramic Caches of Pariti, Bolivia <i>Martti Pärssinen</i>	659
<b>Chapter 23:</b> Founding Fathers of the Middle Horizon: Quests and Conquests for Andean Identity in the Wari Empire <i>Patricia J. Knobloch</i>	683
<b>Chapter 24:</b> From Structure to Cognition: The “Logic of Models” in the Pattern Systems of Middle Horizon Tapestry Tunics <i>Mary P. Frame</i>	721
<b>Chapter 25:</b> Circum-Puna Style in the Art of Pre-Hispanic Hallucinogenic Paraphernalia (Atacama and Northwestern Argentina) <i>Helena Horta Tricallotis</i>	757
<b>Chapter 26:</b> Conclusion: SAIS and the Study of Southern Andean Prehistory <i>William H. Isbell</i>	785



## Contributors

**William H. Isbell** is Distinguished Professor of Anthropology at the State University of New York at Binghamton, where he has taught since 1971. He has directed archaeological investigations at numerous locations in Peru and Bolivia, authoring and editing many books and academic papers on Andean prehistory. Dr. Isbell is an internationally recognized expert on the Middle Horizon (AD 600–1000), when the capital cities of Huari and Tiahuanaco dominated the Andean world.

**Anne Tiballi** is Director of Academic Engagement at the University of Pennsylvania Museum of Archaeology and Anthropology. She received her PhD in Andean archaeology from Binghamton University, where she studied under Dr. William Isbell, and conducted her dissertation research at the Penn Museum on the Cemetery of the Sacrificed Women at Pachacamac.

**Mauricio I. Uribe** is an Associate Professor at the Universidad de Chile where he has worked since 1998. He received his licenciatura in Anthropology and M.A. in Archaeology from the same institution. He has also undertaken coursework for his doctoral degree at the Universidad de Buenos Aires, Argentina. He has conducted several research projects in the Norte Grande region of Chile in the Atacama Desert, studying Andean pre-Hispanic cultures.

**Edward P. Zegarra** received his PhD in Anthropology from Binghamton University in 2018. His dissertation research focuses on strategic collaboration and sustainable archaeological site development at the site of Huari in Ayacucho, Peru.

**Carolina Agüero**

Universidad Católica del Norte, Chile

**Karen Anderson**

University of California, Santa Barbara, USA

**Rommel Angeles Falcón**

Museo de Sitio de Pachacamac, Peru

**Hélène Bernier**

Heritage College, Canada

**JoEllen Burkholder**

University of Wisconsin at Whitewater, USA

**Claude Chapdelaine**

Université de Montréal, Canada

**Sergio J. Chávez**

Central Michigan University, USA

**Cecilia Chávez Justo**

Collasuyo Archaeological Research Institute (CARI),  
Puno, Peru

**Michael A. Deibel**

Earlham College, USA

**Peter Eeckhout**

Université libre de Bruxelles,  
Belgium

**Mary P. Frame**

Independent Scholar, USA

**Paul S. Goldstein**

University of California, San Diego, USA

†**Joerg Haeberli**

Independent Scholar

**Helena Horta Tricallotis**

Universidad Católica del Norte, Chile

**Mark Hubbe**

Ohio State University, USA

**William H. Isbell**

State University of New York at Binghamton, USA

**John W. Janusek**

Vanderbilt University, USA

**Elizabeth A. Klarich**

Smith College, USA

**Patricia J. Knobloch**

Institute of Andean Studies, USA

**Antti Korpisaari**

University of Helsinki, Finland

**Krzysztof Makowski**

Pontificia Universidad Católica del Peru, Peru

**Donna J. Nash**

University of North Carolina at Greensboro, USA

**Arik Ohnstad**

Vanderbilt University, USA

**Martti Pärssinen**

University of Helsinki, Finland

**Ann H. Peters**

University of Pennsylvania Museum of Archaeology  
and Anthropology, USA

**Emily M. Stovel**

Office of Economic Development, Sandoval County,  
New Mexico, USA

**Myriam N. Tarragó**

Universidad de Buenos Aires, Argentina

**Constantino Manuel Torres**

Florida International University, USA

**Christina Torres-Rouff**

University of California, Merced, USA

**Mauricio I. Uribe**

Universidad de Chile, Chile



## Chapter 14

# Symbols, Offerings, and Metallic Goods from the Puna and Quebrada de Humahuaca, Northwestern Argentina

Myriam N. Tarragó

This chapter addresses precious objects from the Puna and Quebrada de Humahuaca of northwestern Argentina, examining collections of metallic objects to determine their technological and iconographic characteristics, as well as associations with other goods. At the same time, comparisons are made with similar materials from Chile and Bolivia to propose interpretations of their symbolic, religious, and political implications.

During the second half of the first millennium AD, southern Andean peoples experienced political developments resulting in differing degrees of organization and preeminence among the regional ethnic communities. As part of this process, representations of anthropomorphic deities and related themes were widely circulated. In the highlands of northwestern Argentina, one area experienced the development of an innovative and autochthonous style known as “La Aguada.” Its art appears in many media, as well as richly varied regional manifestations, with its center of development in what are today the modern provinces of Catamarca and La Rioja. More or less simultaneously, but farther north, in the highlands of Salta and Jujuy, different conditions prevailed, with art demonstrating much greater influences from Tiwanaku, of the Lake Titicaca Basin, as well as territories under its dominion—the southern altiplano of Bolivia and the Atacama oases of Chile.

Among the goods of great symbolic value that circulated though this northern region were cups of the *ke-ro*

form. Many were manufactured of precious metal—gold or silver—as well as other media such as wood, stone, or pottery. Eventually ending up in offering caches or as grave furniture accompanying bodies of important dignitaries, in life these cups must have participated in a variety of ceremonies that involved consuming an alcoholic beverage and/or hallucinogenic substance from the eastern lowlands where “cebil” (*Anadenanthera* sp.) is abundant. Also appearing in prestigious and ceremonial offering contexts are sets of gold objects that adorned the clothing and headdresses of the entombed deceased.

Attempting to clarify the biography of these objects opens a series of perspectives regarding the production of signification in the relationship between society and objects of diverse uses. Circulation of goods in important contexts of social interactions progressively loaded the objects with meanings, potentially resignifying them such that they were transformed into active media producing and reproducing social hierarchy in a reciprocal process of value creation. Pursuing the “micro-history” of objects—their forms and uses—enables researchers to gain some insight into the mobile people who promoted these developments. Of course, it is important to consider the entire trajectory of the objects, from production through consumption, including circulation, exchange, distribution as gifts, and other acts fulfilling recognized duties (Gosden and Marshall 1999; Kopytoff 1991).

A great number of objects that circulated among Andean peoples were made of gold and silver, or a combination of these metals, often with copper, forming special alloys. Gold and silver had special ritual and political significance throughout the pre-Hispanic past, and this tradition continued prominently into Inca times. Indeed, Inca cosmology considered gold to be the sweat of the sun and silver to be the tears of the moon (Lechtman 1991). The transfer and distribution of sumptuous ceremonial objects during the Middle Period, or central Andean Middle Horizon, contributed greatly to the symbolic capital gained by the Tiwanaku polity as it transformed into an urban ceremonial center with pan-regional power (Janusek 2005).

Societies that developed or appropriated symbolic power from La Aguada-style iconography, regardless of the degree of their autonomy, also availed themselves of cosmological ideas originating and developing in the Lake Titicaca Basin (A. R. González 2004). But they were not the only societies in northwestern Argentina to participate in the great movement recently named the Southern Andean Iconographic Series (SAIS). Less known but no less important processes took place that are critical for understanding cultural complexity in the region. This chapter presents a study of these issues by analyzing a set of metallic objects consisting of collections from past excavations at sites in the Puna de Jujuy and Quebrada de Humahuaca that have been neglected in the published literature. Technological and iconographic characteristics are examined, as well as associations with other goods and their places in regional chronologies. At the same time, comparisons are made with related collections from Chile and Bolivia, making important inferences about the symbolic, religious and political implications of the objects.

### The Quebrada de Humahuaca and Puna de Jujuy

Societies of the Quebrada de Humahuaca and adjacent Puna de Jujuy have been immersed, throughout their history, in multiple relations with communities of diverse environmental sectors, including the western desert, the humid eastern valleys, and, from their position along the Tropic of Capricorn, with societies of the altiplano as well as its eastern frontier (Albeck 1994; Tarragó 1994a). Because of this critical location, the Quebrada de Humahuaca and adjacent Puna de Jujuy seem to have played a pivotal role in cultural process within the southern Andes (Figure 14.1). Frontier areas are ideal places for investigating processes of cultural

expansion since interferences of foreign sociopolitical forces frequently produce profound and diverse changes in local societies (Berenguer 1998; Tarragó 2006). Recent archaeological work in the Quebrada de Humahuaca has largely ignored the metal artifacts considered here, despite their importance for discussions of local cultural processes associated with influences from more complex state formations, especially Tiwanaku, during the centuries prior to the great cultural apogee of the Late Period, which included kingdoms based on social inequality in the southern Andes.

The important archaeological zone of Río Doncellas, or Agua Caliente de Rachaite, is located in the southeast of the department of Cochinocha, in the least arid portion of the Puna de Jujuy (Boman 1908; Vignati 1938). Within a space delimited by 22°45' to 23° latitude south and 66° to 66°20' longitude west are a series of sites that include a residential settlement covering 2.5 ha with ample agricultural areas surrounding it. Two cliffs or outcrops of volcanic dacitic tufa that bound the region on the north and south contain hundreds of tombs in sealed caves and special sepulchers of the type referred to as “grave-houses” (cf. Rydén 1947:404). A total of 96 such graves have been located at the foot of the southern outcrop, while some 800 sealed caves are reported for both cliffs (Ottonello 1973:30–33). Excavations conducted by Eduardo Casanova between 1941 and 1943 produced the “Colección Doncellas” that includes more than 3,000 objects currently located in the Museo Etnográfico de Buenos Aires and the Museo de Tilcara, Jujuy (Casanova 1943, 1944).

A valuable analysis of the spatial distribution of constructions and artifacts was completed during the 1970s (Ottonello 1973), and slightly later archaeologists undertook excavations in the residential settlement and its surroundings (Alfaro 1983, 1988; Alfaro and Suetta 1976). However, the discoveries have convinced prehistorians to assign Doncellas exclusively to the Late Intermediate Period and Late Period (AD 1000–1550). Of course, it is obvious that much of the material recovered, including the most visible structures, does belong to that important time span. However, they should not overlook a set of data that indicates the presence of several diachronic components: (a) architectural variants consisting of a stepped structure of quarried stone beside an open space on a prominence that dominates the entire site (Alfaro 1988:Figura 19), (b) presence of cylindrical as well as ashlar-shaped monolithic stones of volcanic tufa in wall construction contexts that surely represent reuse, (c) trichrome vessels with white dots (Alfaro 1988:92–93)





Figure 14.1. Map of the South-Central Andes showing locations of the Quebrada de Humahuaca, Puna de Jujuy, and archaeological sites discussed in the text.

associated with an Isla/Alfarcito component (Nielsen 2007:236), (d) a cache from the site of Peña Atajadera containing two effigy vessels of gold in Tiwanaku style, and (e) significant stylistic diversity in rock art painted on the cliffs, outcrops, and the stone walls of “grave-houses.” These images range from post-Hispanic riders on horseback, to rows of rigid little llamas in Inca style,

to curvilinear llamas with long necks, to an immense feline in red ochre, and even include mask-like images, as well as anthropomorphs with elaborate headdresses or plumes (cf. Alfaro 1978, 1988:109–126). These data emphasize the urgency of the most recent re-study of the collections, using modern methods of analysis as well as atomic mass spectrometer (AMS) radiocarbon dating.

Results include new dates, technological comparisons, and corrected chronological schemes that admit a great deal more time depth. Five traditional radiocarbon dates and three AMS dates span from as early as 4400 and 3400 BP until as recent as the Late Period. At the extreme top of the chronological chart are post-Hispanic materials, including horses with riders, a child accompanied by a cross of sticks, and a knife and needle of iron (Ottonello 1973); five chain links and a knife blade of iron from a room (Alfaro 1981–1982); and a silver coin minted in Potosí in 1677 that came from the burial of an adult from one of the caves (Vignati 1938:83–84).<sup>1</sup>

However, we want to focus on Tiwanaku items. During the 1974 field season, Diana Rolandi discovered exceptional artifacts in the mortuary area on the right bank of the Arroyo Antiguo (a place known as “Peña Atajadera,” according to Alfaro 1988:49). While surveying, she observed a fragment of an ordinary vessel. Upon excavation, it became apparent that the fragment belonged to a utilitarian *olla*, blackish in color, 20.7 cm tall, that was covered by a bowl and the base of another similar vessel. Inside the *olla* were two effigy vessels of a gold-silver alloy, one upright that contained a necklace. The other vessel was inverted over the first; beside it was a bracelet of a copper alloy and three bangles with holes for suspension, of copper-silver alloy. The beads of the necklace total 394, of different size and thickness.

Although there are no radiocarbon dates for the span between AD 600 and 1000, the two gold effigy vessels of Tiwanaku affiliation indicate that, along with the ceramic evidence and the form of the stepped structure, part of the settlement must belong to the Middle Period or transitional moments at the beginning of the Late Intermediate.

The Quebrada de La Cueva is a subsidiary canyon of the Quebrada de Humahuaca that flows north to south, joining the larger valley near the modern city of Iturbe. Archaeological explorations in the region by Casanova in 1930 revealed valuable information about three locations and their surrounding areas of influence. The most important is Pueblo Viejo de La Cueva at 22°35' latitude south and 65°18' longitude west (see Figure 14.1). The residential nucleus of rectangular buildings was constructed of split stone masonry with quarried jambs over many doorways. This sophisticated architecture for the time and region relates to the Doncellas remains.

The building excavated by Casanova stands out among others for its greater dimensions and higher quality construction, as well as the archaeological contents discovered. In addition to *manos* for grinding and obsidian

tools, five diagnostic cups of the Isla style were associated spatially with a pair of large ovoid jugs of the kind called *virque* (Editor's note: a large Inca jug into which liquids—especially *chicha*—were poured from drinking cups when elites drank toasts to the dead or to supernatural beings). The jugs were located in the two western corners of the room. Both these vessel shapes, storage jars and drinking cups, are obviously associated with the ceremonial preparation and ritual consumption of *chicha*—corn beer. Also discovered were cooking vessels and personal adornments of gold (Casanova 1933:297–299).

Excavations at the site by Susana Basílico in 1983 produced complementary materials. The new ceramics are consistent with pottery found by Casanova, of the Isla Tricolor and Bicolor styles, but also including cups of similar shape that were colored gray or brown, as well as utilitarian culinary pottery. She also excavated 29 coarse sandstone beads that are typical personal adornments of the era (Basílico 1987, 1992). One radiocarbon date spans the eighth and ninth centuries AD (LP-142: 1180 ± 50 BP uncalibrated).

Within the Isla ceramic style, a distinctively inflected cup shape seems to have had a special role. This shape is oval in cross section and hyperboloid in profile, like an hourglass, with convex lip, flat base, and vertical strap handle riveted to the body, usually above and below the vessel's constricted waist. Variations include bodies more like the section of a cone, or an oval, with a waist at the level of the handle, and even specimens with a cylindrical body and everted rim (Figure 14.2a–e). These cups approximate regional variants of the *kero* that belong to the southern Andean tradition of the Middle Period and especially the hourglass form defined by Goldstein (1985:103, Figure 13d) for Moquegua. The external surface is slipped red-purple, with vertical polishing marks, over which designs were painted with black and white lines or black alone. The design is characterized by play between two fields, the lower on the vessel body and the upper on its neck, above the handle. The division is marked by black lines or a flange or raised band at the waist, dividing the profile in two. Typical designs in the lower register include a row of triangles opposing another row, all filled with parallel black lines, black triangles, hatching, or a panel formed by a set of parallel lines that break into right angles to form triangular shapes with a step figure in the center (Figure 14.2c,d). This last design is the one most allied to Tiwanaku, a relationship suggested long ago by Debenedetti (1912). In the upper register, the same design may be repeated or replaced by triangles filled with white dots. On the inner edge of the

rim, the common design is the simple or double zigzag line. In reflection, it seems significant to note that in the development in Moquegua and Humahuaca, in zones at the opposite ends of the Tiwanaku interaction sphere, regional ceramic styles share formal attributes as well as certain design elements. This recalls what occurred later, during the Late Period, with local Inca styles.

The temporal position of the Isla-style cups was established by cross-dating with materials named “Clase 27” from mortuary contexts excavated in San Pedro de Atacama, Chile (Tarragó 1977:Figure 4, 1989:423–424). The tomb of Quito 5, ME-2241 containing a single individual had an Isla Tricolor cup as its singular ceramic object but in association with objects of wood that include a lovely Tiwanaku *keero* with two bands or flanges (Figure 14.3), making it very similar in proportions to the gold *keero* from Larrache (see below). The upper band is engraved with an interlocking fret design, composed of

“L”-shaped elements, that appears in many Tiwanaku sculptures (Torres 2001:446, Figure 15). Perhaps the radiocarbon dates from the Muyuna S2 (LP-1467: 1230 ± 50 BP) and Tilcara 22 (LP-346: 1190 ± 90 BP uncalibrated) sites, which include an Isla-style component (Nielsen 2007:238; Rivolta and Albeck 1992), apply to these cups from other locations.

The archaeological site of Volcán sprawls across the elongated top of a cinder cone tangential to the Rio Grande de Jujuy. Its location is only 2,000 m above sea level, occupying the lower part of the Quebrada de Humahuaca where humid winds from the east bring more frequent rains, sufficient to support pasture, and tropical forest trees such as the cebil (*Anadenanthera* sp.) (Gatto 1946). The site covers some 7 ha, including a dense habitation zone that, at its maximum, reached as many as 600 stone-walled rooms. An axial raised causeway runs east to west across the site, dividing the site into two halves.



**Figure 14.2.** Vessels in the Isla style. (a) La Isla A, tomb 18, ME 2647; (b) Tricolor with white dots, Pueblo Viejo de La Cueva, ME 31-297; (c) ME 73-874, without provenience; (d) Tchecar Sur-695; (e) Tricolor with white dots, Quito 6 2569-2573, San Pedro de Atacama.





Figure 14.3. *Kero* of wood carved in Tiwanaku style, Quitor 5, Tomb 2241, San Pedro de Atacama.

Explorations by Casanova and Gatto in 1935 revealed a marvelous discovery, a gold *kero*. Furthermore, the room named *yacimiento* ME-10 produced more important materials. Of rectangular form, 6.3 m long, the room had an opening in the southeast corner, bordered by two vertical stone slabs. This doorway opened onto a lateral street that joined the principal causeway. Next to the western wall of the room, the archaeologists found two painted jars and between them a grind stone with the skull and bones of a llama and a utilitarian jar. At the foot of the grindstone, as though fallen, lay the golden cup (ME No. 35-224).<sup>2</sup>

At the northern extreme of the habitation zone, other grinding stones, both *manos* and *metates*, were found (Gatto 1946:Figure 11; Tarragó 2006:361). Although it may be that these contexts are later in time, the techno-morphological characteristics of the gold cup identify it with Tiwanaku metallurgy. Of course, it is wise to remember that the place has a long occupation, with radiocarbon dates ranging from an early episode 1,900 years ago up until the Inca takeover in the fifteenth century (Garay de Fumagalli 1998).

The island of Tilcara is located on the left margin of the Rio Grande, 7 km north of the Pucará de Tilcara. Salvador Debenedetti excavated there during the 1908 campaign of the Museo Etnográfico de Buenos Aires, in three cemetery areas: El Morro, Necropolis A, and Necropolis B. In

the first two, he was able to distinguish individual tombs and excavated 11 and 21 burials, respectively (Debenedetti 1910). The El Morro cemetery is located in an elevated area separate from residential space, and although the Necropolis A graves contained few artifacts, El Morro burials included an impressive quantity of high-quality goods, especially objects of metal as well as other luxuries with each individual. One burial in particular stands out from all the others, ME-11, containing an inhumation accompanied by 142 items. By order of wealth, the next most impressive burials were Nos. 3, 6, and 4 (Tarragó 1994b). Much later, E. Casanova (1937) excavated additional mortuary contexts in the area, and most recently, Clara Rivolta (2000:19–20) has drawn plans, excavated rooms in Alto de la Isla, and sunken test probes into the El Morro and Necropolis cemeteries. No radiocarbon dates are available for the contexts discussed here, but the ceramic component with cups of the Isla style along with Early Yavi pottery, as well as the style of the metal objects accompanying the burials, suggest a tentative placement during the eleventh and twelfth centuries AD.

### Symbols, Offerings, and Golden Cups

For many years, archaeologists have studied monuments as inert objects abandoned in the past, treating them as though their existence was almost independent of social life. Alternatively, if they are treated within a holistic configuration analyzing intrinsic contextual dimensions, and following their long-term trajectories, dynamism is achieved that permits significant interpretive levels (Miller 1987:110–112). Among the most important questions to ask is about the relationship between the signifier and the signified—that is, the form of representation and that which is represented (for underlying ideas, cf. Foucault 1990:11–17). Signs can be natural or arbitrary—established by humans in accord with convention. They may appear within the concept that is expressed or not, but in all cases, signs establish the link that permits communication of meaning through language and image, object referred to, or the matrices of signification involved. The relationship can only be established at a general level of understanding given that the signifier and signified are not connected except in that the two have been represented and that the one stands for the other (Foucault 1998:73). In this sense, symbols, representations perceived by the senses from a virtual reality that exists only as socially accepted convention, constitute a class of testimonies especially interesting for the study of material culture. These objects, through

their materiality, reveal a series of significations for the social group to which they belong that can, with the passage of time, transform into signs denotive of social status and rank. Their spatial distributions and associations preserved in the archaeological record possess grand potential for providing information about patterns of sociopolitical and economic activity. Among the symbols discovered—landscapes, public monuments, ceremonial contexts, icons, and portable objects—the final group was especially effective for long-distance communication among elites (DeMarrais et al. 1996).

Anthropological and ethnohistorical literature are replete with accounts from many societies of objects that function as insignias and emblems that confirm the rights of particular leaders within the paradigms of a local cosmivision that sustains the institutions of that society (Martínez 1986). A very special role seems to have been fulfilled by *kero* drinking cups, from the era of Tiwanaku through Inca times (Cummins 2007). Whether in polychrome ceramics, carved wood, or precious metal, *keros* circulated as objects of great symbolic value, materially admired for their designs, shine, and color, among many cultures and social spaces throughout the southern Andes. Intimately associated with feasting and consumption of alcoholic beverages, *keros* had great salience in relation to special persons located at the heart of societies negotiating various degrees of social complexity. Guamán Poma de Ayala (1980:262–263, 268–269), speaking of Collasuyo, affirmed that the Collas engaged in ritual drinking from *keros* in front of the *chullpa*, a vault or tower-shaped tomb into which the dead were

placed. They also poured libations with these cups at the interment of the Inca emperor. Teresa Gisbert (1999:22) has found a pair, or four, wooden *keros* imbedded in the walls of the *chullpas* of Rio Lauca, in the Carangas region. Ramos Gavilán (1976:26), chronicler of Copacabana on Lake Titicaca, contributed to the topic when he commented that the cups from which the children to be sacrificed had drunk were buried with them. Indeed, in some tombs, numerous of these cups are found—called *queros* when they are of wood and *aquillas* when of silver. The presence of pairs of cups in many offering contexts, such as the effigy vessels of Contituque, Atacama (Llagostera 2004:152), and Doncellas, Puna de Jujuy, surely express to some a denotative aspect or the promotion of alliances (Sagárnaga 2008).

The *kero* cup was valued as an object and an icon in the imagery of Tiwanaku and for that reason was widely distributed throughout many regions. In stone sculpture, the “symbol *kero*” appears on the Gate of the Sun and on the personage with staffs on the Stone Receptacle for Offerings No. 1 from the Semi-subterranean Temple (Figure 14.4). On the Bennett and Ponce monoliths, the primary figure holds a *kero* in the left hand and a snuff tablet for snorting hallucinogenic powder in the right. Many metonymic versions of these complex figures circulated throughout the southern Andes, especially small and portable objects that participated in rituals where alcoholic beverages were consumed. This seems to have been a major feature of Tiwanaku expansionism in many parts of its vast sphere of influence (Berenguer 1998:27–34).

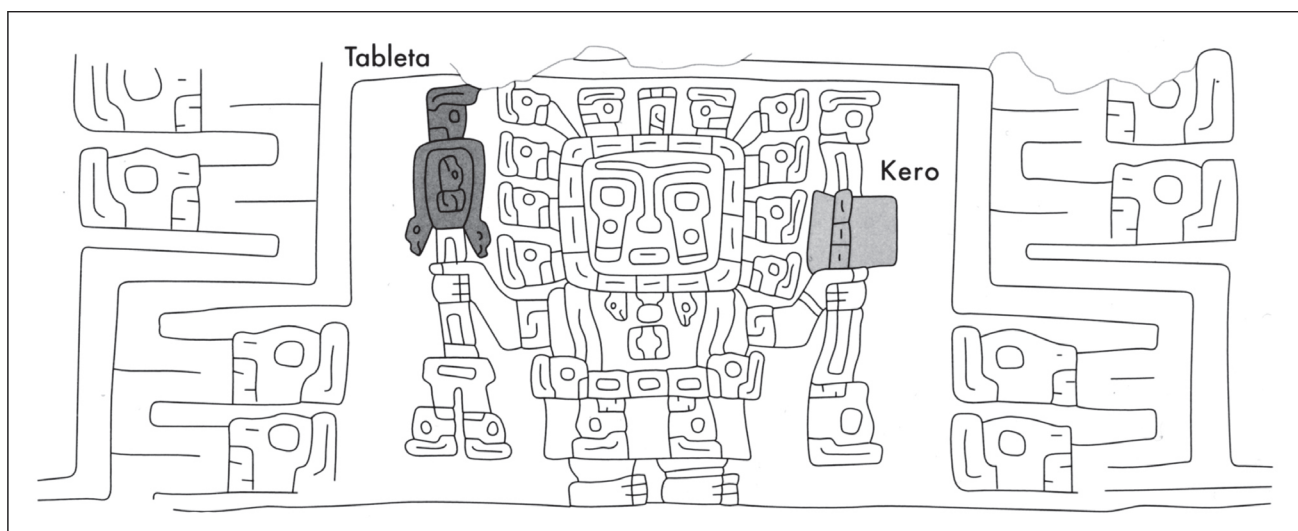


Figure 14.4. The *kero* symbol held by a Personage with staffs carved on the Stone Receptacle from Offerings No. 1 found in the Semi-subterranean Temple at Tiwanaku.

The pair of gold-silver alloy effigy cups from Doncellas is almost the same height (102 mm for Vessel 1 and 105 mm for Vessel 2). Each was manufactured by hammering, trimming, and embossing a single sheet of metal, and they weigh 56.8 g and 89.3 g, respectively (Figure 14.5a,b). A qualitative spectrographic analysis indicates that silver was the primary element, with gold accounting for only about 10 percent of the metal (Rolandi de Perrot 1974:158).<sup>3</sup>

The relief image of the human head wearing a cap, with a hairdo that hangs in a nested “Y” shape on the back, stands out clearly. The face is framed by a trapezoid with the chin constituting its base. The eyebrows join the trapezoidal nose, while the eyes are rhomboidal or diamond shaped, with a slight central protuberance representing the pupil. The mouth is an elongated rectangle, and at each end the cheekbones were saliently embossed. On the sides are hints of ear adornments. The

better preserved of the *keros* is Vessel 2 (Figure 14.5b) that has a throat-like constriction between the representation of the head and the lower part of the vessel. Vessel 1, on the other hand, has a wrinkly appearance with a puckered scowl at the base of the nose. Careful inspection of the vessel surfaces reveals many dents in the basal portions, and some embossed designs have been almost worn away, apparently from so much handling before the cups were buried. This is especially apparent in the upper edge of the cups where the caps of the effigies were represented. This evidence of prolonged use of the cups before they were concealed in their final resting place speaks to a dense biography for the iconic objects. In view of their style, these objects were related to Tiwanaku since discovery (Alfaro 1988:49, Figure 16; Rolandi de Perrot 1974:159), an assignation that has been reaffirmed recently by A. R. González and Baldini (1992:11, Lámina 11).



Figure 14.5. Effigy vessels of gold from Doncellas: (a) *kero* I and (b) *kero* II with constricted waist. INAPL 2613.



Surely relating to the Doncellas discovery, another extraordinary find of gold-silver alloy objects comes from Pueblo Viejo de la Cueva, probably from funerary contexts. This collection belonging to Dr. Alfredo Linares includes an effigy cup 108 mm tall that averages about 0.64 mm thick and weighs 69.58 g (Figure 14.6). This *kero* has been modeled and embossed to form a human face, with somewhat quadrangular eyes and convex pupils, as well as arched eyebrows that turn sharply down to join the eagle-like nose that has very prominent nostrils. The rectangular mouth with parted lips suggests a man of mature age, an impression that is accentuated by bags under the eyes and worry lines on the cheeks and chin. The upper front of the vessel has been pushed in, between the mouth and nose. The material is basically gold with a complement of silver, nine parts to one, respectively.<sup>4</sup>

The upper rim of the cup is markedly convex, reminding one of the classic Puneño hat (see illustrations of this hat style by Guamán Poma de Ayala [1980:148, 268]) that characterizes Tiwanaku effigy vessels. Perhaps it once had a decorative design, invisible today from long use before being deposited in its final context. A bundle-shaped object can be seen on the back of the head, projecting from under the cap, with a band hanging from it that is decorated with parallel lines—perhaps representing hair. Below the neck and ears are modeled shoulders and arms that meet in front of the body. Three deep grooves at the end of each arm suggest fingered hands. Significantly, this posture with the hands together over the midriff resembles many Tiwanaku monoliths, especially those of small size, such as a miniature figure in

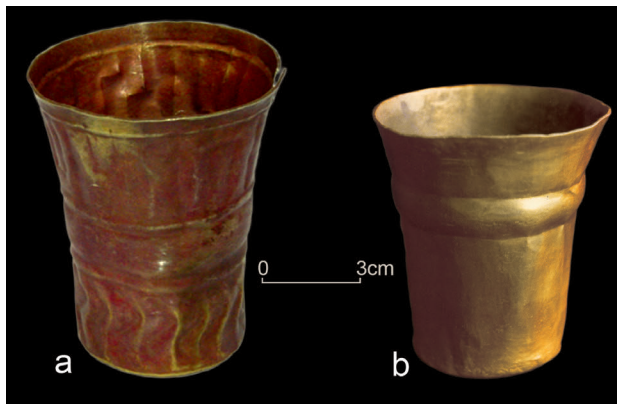
the Metropolitan Museum of Art in New York (Young-Sánchez 2004:Figure 2.14).

The Linares collection includes another *kero* of the same provenience decorated with wavy lines embossed on an upper and a lower zone, separated by a horizontal band that creates a waist. The style and manufacture clearly relate to Tiwanaku. This cup measures 106 mm tall, is 0.68 mm thick, and weighs 89.57 g. It appears to have been covered with red pigment that is still visible in some places, probably cinnabar (Figure 14.7a). Another *kero* that probably belonged to the same group is only 85 mm tall and weighs 71.27 g. It is plain, with expanded waistband (Figure 14.6b), and shows some similarities to the *kero* from Larrache, San Pedro de Atacama (Llagostera 2004:152; Tarragó 2006:Figure 13), as well as the gold cup from Pariti (Bennett 1936:Figure 30k).<sup>5</sup> A. R. González and Baldini (1992:Lamina 11-4) published another *kero* from this same locality, with a central register decorated with embossed volutes and stepped hooks of the same cultural affiliation.

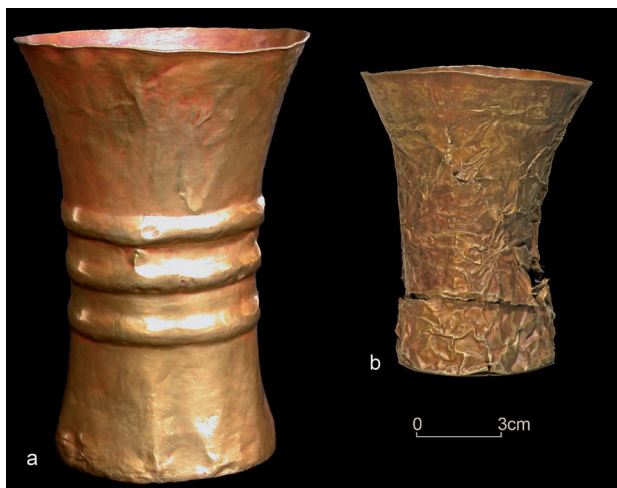
A gold cup from Volcán has a hyperboloid shape that approaches the classic *kero* form with regard to the relationship of base to rim—mouth diameter 115 mm, base diameter 88.5 mm—as well as for the three convex bands it has on its constricted midportion (Figure 14.8a). This is one of the three styles of *kero* illustrated by Janusek (2001:Figure 2). It measures 161 mm tall and weighs 152 g. It also seems to have been covered with red pigment similar to cinnabar that is especially visible on the interior and exterior of the lip. According to a preliminary analysis by the Museo de Ciencias Naturales B. Rivadavia (Gatto 1946:63), it appears that the surface is



Figure 14.6. Effigy vessel of gold from Pueblo Viejo de La Cueva: front, profile, and three-quarters views. A. Linares collection.



**Figure 14.7.** *Keros* in Tiwanaku style from Pueblo Viejo de La Cueva. (a) embossed vessel with red paint; (b) plain vessel with constricted throat. A. Linares collection.



**Figure 14.8.** *Keros* of gold from the Quebrada de Humahuaca. (a) Volcán, with two constricted throats, ME 2276; (b) Hornillos, with deformation and breakage ME -90407.

high-quality gold, including some silver. Comparing this cup with the *kero* of Larrache, San Pedro de Atacama, one can see similarities in production technology (Tarragó 2006:Figure 13), for example, a zone of weakness in the union of the body with the base as a result of enlarging the gold sheet that, in the Volcán specimen, resulted in a break. Similarly, in both vessels, there are many small dents from prolonged use before their final deposit in an offering.

At the Pucará de Hornillos site, a coarse jar was discovered that contained remains of an infant. An equally coarse pitcher was also found within that contained a piece of metal twisted and folded several times, along with a necklace of malachite beads (Casanova 1942:256, Lamina 7a). After conservation, it was revealed that the piece of metal was a *kero* (Figure 14.8b) with a small base (56 mm) and wider mouth that measured 104 mm tall

and weighed 53.3 g. Inclusion of this cup in the burial of a child constitutes an emphatic epilogue relating the biography of the *kero* associated with libations of great social and ceremonial importance, which only after prolonged use by many owners was employed to seal the short life of an infant.<sup>6</sup>

The impressive effigy vessels of gold from Doncellas and Pueblo Viejo de La Cueva, although of Tiwanaku tradition, may not have come from the lakeshore city but perhaps from regions under its influence. These effigy vessels as well as *aquillas* with constricted waist represent clear examples of circulation throughout the southern Andes of ceremonially valuable goods in the sense of “all those forms of action and symbolic representation that relate to the social, economic, ecological, political and even religious” (Berenguer et al. 2000:765, translation W. H. Isbell).

### Sound and Color in Ceremonial Paraphernalia

Metals and especially gold, by virtue of their incorruptible nature, were used in the pre-Hispanic Andes as a medium to express cultural values and religious ideology of the highest symbolic worth. The unfolding of prestige and power constitutes the social scene within which Andean metallurgy was developed. Furthermore, it seems that the symbolism underlying the colors of gold and silver played a key part in the way these new values were expressed. Ancient smiths were obliged to produce a host of sumptuous objects for the elite that for the most part fulfilled ideological ends. What was desired was the reaction provoked by visually experiencing the objects, their sound and movement, and the color of the pieces. These impacts could only be appreciated in their ceremonial and ritual contexts, whether achieved within life-affirming events or celebrations of death. To create noise and movement, a large number of small sheets of metal were fastened together mechanically, producing flexible and mobile objects capable of making sounds and reflecting sunlight in accord with the gyrations of the individual carrying the object—often attached to a ceremonial costume. Given the great interest in the color of the metal, artisans were encouraged to become masters of alloying techniques (Carcedo de Mufarech and Vetter 1999). Other well-known specialties include mosaic encrustations in necklaces using malachite, lapis lazuli, and turquoise.

It is significant that among the collections discussed above, gold and silver objects were discovered that served as adornments, directly for the body, or for costume. It

is no accident that in the secret sanctum of Doncellas, together with the effigy cups, they found pectoral disks, a bracelet, and a long necklace of malachite beads. Three long silver ornaments have diameters between 68 and 81.5 mm. Circular in form with a hole in the center, they have a slightly concave profile that suggests the function of reflecting light from the front of a cap—perhaps like the “Arica fez” that was popular in the Late Period. Alternatively, they may have been used as bangles to hang on the chest of individuals wearing them. Three gold plaques of similar size and shape were encountered in Tiwanaku contexts at Larrache, San Pedro de Atacama (Llagostera 2004:151).

A bracelet from Doncellas is open and oval in shape, measuring 92.5 mm long but only 1 mm thick. It is composed primarily of copper. Additional adornments include a necklace of 394 malachite beads, probably originally strung on a wool string, of which some traces remain and whose clasp was made of rectangular wooden beads with three lateral holes on each side (Rolandi de Perrot 1974:158).

Grave No. 11 at Morro de La Isla was located in the middle of the cemetery, where it was clearly distinguished by its permanence and visibility. It contained bones of a single person who was accompanied by an extraordinary trousseau that included many offerings. It is the richest tomb on La Isla, with 143 items, making it one of the wealthiest burials ever found in northwestern Argentina (Debenedetti 1910:37–38). Intended as servingware, 71 red bowls were placed in the grave, of which approximately 50 preserved interior designs of black lines forming mostly triangles cross-linked into designs with two, three, or four sections. A total of 12 gray-colored bowls were found or with the interior polished black. Among the closed ceramic forms were six small jars decorated with cross-hatch or other simple design. Five mugs intended for beverages were recovered along with one trichrome cup of a style originating in the Chicha-Yavi area (Debenedetti 1910:Figure 160). A total of 96 ceramic vessels were recorded from this burial.

Some of these ceramic objects must have contained the large quantity of burned maize that is mentioned in the field notes, along with other food and drink that may have been placed in the jars. Traces of botanical impressions, on the interior walls of closed vessels, as well as heavy wear of the interior decorations of the bowls, document long use of these vessels. This demonstrates that this collection of ceramics had a significant use history before the pieces were offered as mortuary furnishings in the grave of a deceased individual.

A tool kit for specialized metallurgical work includes copper minerals of several types, two small stone polishers with a good deal of use-wear as well as red impregnations, scoria from founding, and two pieces of deer antler with wear showing their use for retouch. The presence of copper minerals in the artist's kit is suggestive. It might establish relations between metallurgy, a miraculous technical process that transformed stone into metal through the actions of fire, with powerful symbolic implications (L. R. González 2007). Furthermore, it is reasonable to suppose that power and prestige were intimately associated with the control and knowledge of technical skills in these ancient societies.

As regards ideology and rituals in propitiation of the natural world, a solid figure of a terracotta female llama was found, 110 mm long and 40 mm high, which Debenedetti (1910:245, Figures 184–185) considered a beautiful *illa*. On its ventral side are two pairs of mammary glands as large as the stumpy legs of the animal. Also excavated was a fragment of a similar llama figurine and the osseous remains of a large parrot or macaw, probably of the genus *Ara* or *Anodorhynchus*.<sup>7</sup> There were also remains of another parrot of smaller size. As is well known, the impressive plumage of these birds, ranging from red, yellow, and turquoise, was long favored throughout the Andes for decorating headdresses and clothing. Such garments were probably included in the grave, but nothing has survived because of poor conditions for archaeological preservation.

The deceased individual buried in the tomb must have worn rich attire adorned with gold sheets hanging from or sewn to the garments. A total of 25 of these plaques were recovered, along with four small bronze bells. A large diadem measures 660 mm long and weighs 14.3 g. It must have been tied around a headdress (Figure 14.9). The band is of a consistent thickness, .14 mm, with smooth surface and no cracks from bending or stretching. There are slightly undulating marks visible that appear to have been caused as the metal was elongated. From the center of the band outward toward the edges, one can see marks running oblique to the long axis, revealing the technique used as the band was elongated by the smith, to give it curvature. The two ends narrow to terminate in triangular point, each with an orifice for tying.

The diadem or headband was accompanied by two lovely llama figures cut from sheet gold that may have been part of the headdress or decoration on the front of the deceased's *uncu* or shirt (Figure 14.10). The pair is almost identical, 39 mm tall (feet to head), with bodies





Figure 14.9. Diadem of gold, El Morro, Tomb 11, La Isla, ME 2989.



Figure 14.10. Llamas figures cut from sheets of gold: El Morro, Tomb 11, La Isla, ME 3000 and 3001.

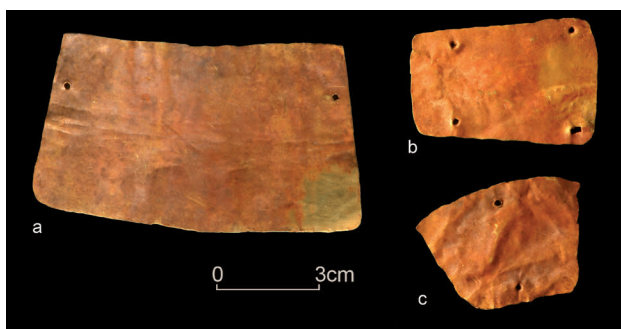


Figure 14.11. Pectoral adornos of gold, El Morro, Tomb 11, La Isla: (a) ME 2990; (b) ME 2991; (c) ME 2992.

31 mm long and .20 to .24 mm thick. Each piece weighs 2 g, but one of the two, ME-3001, retains traces of the llama's outline along which it was cut, probably with a bronze chisel. The edge of this cut was not evened up by polishing. A curious feature is the tail that was deliberately bent forward over the back at the tip. This may mark a specific posture of the female animal in heat. This same condition is represented in a figurine from Tabladitas, as well as some of the figures of Manuel Elordi, province of Jujuy, published by Ventura (1984–1985:Figures B–C). An orifice for hanging was placed where the neck and back join. Analysis of object ME-3000 revealed 78.89 percent gold, 19.34 percent silver, .051 percent copper, and 1.24 percent iron.<sup>8</sup>

Specimen ME-2990 is a trapezoidal sheet with a base 96 mm wide and .17 to .20 mm thick that weighs 8.6 g. The surface is well smoothed. Traces of a flat tool used to spread the metal can be detected along the edges, and a longitudinal line is also visible in the central area. The other trapezoidal plaque, ME-2991, is 55 mm long and weighs 3.7 g. It is composed of 77.19 percent gold, 21.45 percent silver, 0.43 percent copper, and .91 percent iron. Sheet ME-2992 is irregular in shape, 36 mm long and mostly of gold—82.99 percent. Silver accounts for only 15.66 percent, and there are traces of copper and iron as well (Figure 14.11a–c). Other objects of gold from the same collection include ME-2697, as well as additional fragments of plaques entered under the same catalog number, ME-2614. They are like other pieces, elongated rectangular sheets with perforations for sewing, but of copper. Six little bells of gold-silver alloy could have been sewed to clothing or placed like jingle bells attached to woolen strings hung on the extremities like wristbands of leggings. They were trimmed into circular or quadrangular sheets and then folded. Shaped somewhat like a pyramid with four folds, at the truncated peak, a hole was punched from the inside to facilitate suspension. The size and thickness (.20 mm) of the sheets are consistent, varying only slightly, which may suggest that these objects were manufactured according to a plan that anticipated the final form. The degree of the folds and height of the peaks differ somewhat, with ME-2996 the largest and best made, measuring 36 mm in diameter and 1.7 g in weight. ME-2994 measures 35 mm wide and weighs 1.6 g. Analysis of ME-2998, weighing 1.4 g, reveals the content to include 82.96 percent gold and 17.03 percent silver (Figure 14.12a,b). Four pyramidal bells of bronze are made from circular sheets 85 mm in diameter that were folded four times using percussion and compression. They were pierced at the center for suspension (L. R. González and Cabanillas 2005). Considering their use, Debenedetti (1910:226–227) suspected that they were personal adornments, perhaps part of dance belts worn in ceremonial performances similar to practices by Chaqueñas tribes at the beginning of the twentieth century. In modern ceremonial costume, the ancient bronze bells have been replaced with rattles made of deer hooves, seeds of special plants, or metal sheets cut from tin cans and rolled up.

The deceased individual must have been buried with a pendent ornament composed of five stone disks, or beads, probably of volcanic tuff, that are distinct for their large size and slight weight. Of irregular shape, their diameter varies between 40 and 27 mm. Resembling

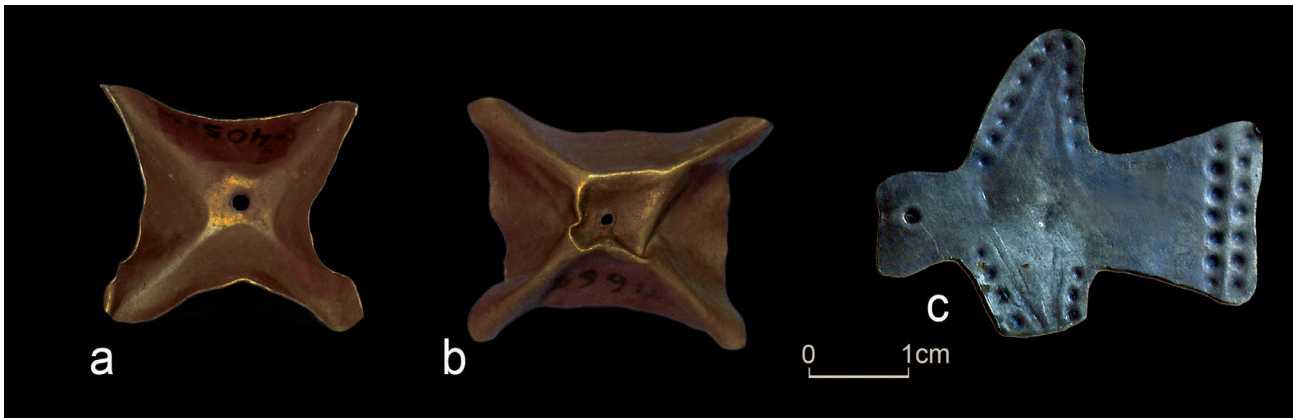


Figure 14.12. Jingle bells and bird effigy of gold: (a) El Morro, Tomb 11, La Isla, ME 2996; (b) ME 2994; (c) Pueblo Viejo de La Cueva, ME 31-326.

those recuperated from Pueblo Viejo de La Cueva, they are common in sites from the Puna and Atacama, constituting a class of adornment diagnostic of a transitional era during the development of the Late Intermediate Period. The offerings also include two highly polished bone tubes, one 55 mm long and the other measuring only 11 mm, that were surely associated with the imbibing of hallucinogens.

Goods of high symbolic and ceremonial value such as these metal objects are unique at Morro de La Isla. The investment in energy was very high, as was the degree of specialization in the metallurgical craft responsible for the emblematic art. Symbols associated with fertility of llamas along with the offering of the *guacamayo* suggest a person of special meaning who was clearly distinguished during the burial process (Tarragó 1994b). Considering mortuary landscape, El Morro was a place of interment for a particular social segment of high standing, considering the elaboration and abundance of mortuary goods and offerings. Speaking of Burial 11, Debenedetti commented as follows:

This was the most important of the tombs explored at “El Morro,” both in the number of items discovered as well as their quality and variety . . . it contained a single cadaver placed in a manner with such extraordinary goods that an analogical relationship can be inferred between this tomb and medieval chroniclers’ descriptions of burials of Inca nobles, or their representatives [Debenedetti 1910:37, translation W. H. Isbell].

Excavation of the building at Pueblo Viejo de La Cueva by Casanova yielded spectacular personal

adornments of gold, among them four bracelets, two rings, and a bird-shaped plaque. This latter pendant, ME 31-326, is shaped like a bird with wings spread, and is 35 mm long, is .20 to .24 mm thick, and weighs 1.4 g. Analysis indicates that the greater portion is silver (51.94 percent) while gold constitutes slightly less (48.05 percent). Alloying or some other technical process produced an iridescent effect with silver or gold appearance varying with how the object is moved in the light. The spread wings, which give the effigy its triangular shape, are outlined by a row of embossed dots and a pair of lines while the tail ends in a double row of similar dots. A suspension hole pierces the head (Figure 14.12c). According to A. R. González, the Early Intermediate Period was distinguished by oval and figure-eight-shaped plaques, as well as figures of birds with spread wings, cut from thin gold sheet, such as the bird pendant just described (A. R. González and Baldini 1992:9).

Wrist band ME 31-323 is 48 mm in diameter and 5.9 g in weight. It belongs to the open type and has borders raised upward slightly. The width is 11 mm but reduces toward the ends. Analysis in CONEA determined that it contains 78.60 percent gold and 21.15 percent silver. A ring, ME-31-324, consisting of an open-ended rolled ribbon 20 mm in diameter, contains 57.65 percent gold and 42.34 percent silver (Figure 14.13a,b).

Complementing the information about ceremonial adornments presented in this chapter is a collection of objects from Linares del Pueblo Viejo de La Cueva. Included are three gold bracelets, containing only about 10 percent silver, that are more or less identical to the one described above. Given their diminutive size, they seem to have been intended for small children.



**Figure 14.13.** Bracelet and ring of gold from Pueblo Viejo de La Cueva: (a) ME 31-323; (b) ME 31-324.

Another object of personal adornment is a pectoral in the shape of a “U” that is 54 mm long, with two suspension holes at the extremes of its half-moon shape. This is a bimetallic object, basically of silver, but with a band of sheet gold attached to the middle of the front side. Half-moon-shaped ornaments with downward projections may be smooth, with embossed dots, or anthropomorphic faces on the tips. An example discovered by Krapovickas (1955:Lamina III) in Tebenquiche is in the Museo Etnográfico, and another is in the collection of B. Vázquez de Santa María, from the Valle del Cajón. Several similar specimens from Lípez belong to the Museum of the American Indian (Washington, D.C.). All are associated with early contexts or Middle Period remains (A. R. González 1979:147; A. R. González and Baldini 1992:Lamina IV).

Another piece of gold sheet has been cut into the form of a bicephalic llama. Two heads project from its body, one at each end as though a reflection of itself. The form of the heads—the ears and especially the open maw with canine teeth—presents something of a feline aspect. Embossed dots outline the mouths, eyes, and two collars formed or a double row of punctations. The effigies measure 64 mm tall and a maximum of 90 mm long, and they average .2 mm thick. Point perforations appear in each snout and the upper part of the back (Ventura 1984–1985:196–197). The composition resembles that of other objects containing nine parts gold and one part silver.<sup>9</sup> Furthermore, similar images appear in the rock art of Ancasti and Catamarca, while observers may also be reminded of the “Señor de los Camélidos” theme—an anthropomorphic figure who rises above bicephalic camelids—in “La Isla”-style petroglyphs from northern Chile. According to Berenguer (1999:29–31), this latter style postdates the Tiara style of northern Chile and developed during the first millennium AD.

In the search for similar objects and styles, it is significant that a semi-lunar object similar to those described above appears on headdresses of the Colla Indians, as drawn by Guamán Poma de Ayala (1980:148, 268). Furthermore, the “Tesoro de San Sebastián” from Cochabamba, Bolivia, includes a pair of trapezoidal pectorals quite similar to one from the Linares collection, as well as two circular gold disks with embossed volutes and a central perforation, in more or less the same style. Another pair of pectorals from the same San Sebastián mortuary collection, with cut-out birds pendant from both long sides, belongs to the same style as object ME-31-236 (illustrated in Figure 14.12c) (Berenguer 2000:72–73).

In the Quebrada de Humahuaca, a number of gold mortuary masks have been found. Two of them were excavated with other offerings in two separate burials at Puerta de Juella de Maidana; another probably came from the lower portion of the settlement on La Isla, a fourth from Tilcara, and a fifth from Huacalera. Encrusted with a red pigment, the last belongs to the André collection.<sup>10</sup> Significantly, the first three masks were discovered in association with ceramic cups of the Isla Polychrome style (A. R. González 1973).

In the André collection, there are also bells and sheets of gold similar to those described for La Isla. Another object is similar to one of the various gold feather-like diadems found in the priests’ house at San Pedro de Atacama (Llagostera 2004:151), while three other feathers or head decorations are made from a sheet of gold 15 to 18 mm wide and 100 mm long, with a fastening hole at the bottom. At the opposite end, the object expands into a sort of circular disk that terminates in belled edges. Another sheet metal object, ME-4375, terminates in a half-moon shape that resembles a piece from Pueblo Viejo de la Cueva. All these data show what an impressive number of gold objects have been found associated with pre-Hispanic costumes and mortuary offerings from the province of Jujuy.

Exceptional excavation contexts containing spectacular luxury goods, sometimes in significant numbers, confirm the existence of high-ranking actors with access to long-distance traffic. Corporeal adornment with profusion of gold and silver jewelry confirms the presence of ceremonial costumes in which socially prestigious lords or leaders participated in festivities that included the consumption of alcoholic beverages, and music as diverse rites was surely carried out. Emergence of regional styles such as Isla and Alfarcito, which are characterized by luxury goods that circulated throughout the “Circumpuneño” area—located at the latitude of the



Tropic of Capricorn—is consistent with the emergence of new social groups that sought to legitimize their local preeminence within a greater process of increasing socio-political complexity.

### Circulation of Goods, Emblems, and Symbolic Power

One of the most highly valued properties of metal in the Andean world was color (Lechtman 1991), which is based on its role in communication and promotion of symbolic power. Color was related to an aesthetic of brilliance throughout the Americas. The world was imbued by a spirit of shininess, derived from the generative capacity of light in connection with cosmological power, within which the transformative spheres combined aspects of symbolism, ritual, and technological activity (Saunders 2003).

In Inca times, ceremonies and rituals involved grand scenarios and actuations that employed a series of iconic objects, including pairs of fancy drinking cups for ceremonial toasts and ratification of alliances (Sagárnaga 2008). The production and consumption of special drinks seems to have been critical to and from the beginning, associated with these actuations, ceremonies, and sacrificial events. Transition to the afterlife re-created and put in motion these symbolic processes.

Exceptional effigy cups curated and jealously guarded for generations constitute a paradigmatic case of value afforded such goods within a social space that conferred specific meaning on them. The *aquilla* from Volcán represents an iconic object securely stowed within a great jar that safely protected its integrity—given that it survived into our times in perfect condition. In this example as well as that of Doncellas, the iconic object is the *kero*-shaped cup that was surely associated with festive consumption of fermented beverages made of corn and other cereals. The effigy cup from the Linares collection could have come from a similar archaeological context, or perhaps it accompanied an important person in his or her transition to the afterlife—as an offering of an emblem. In the other two cases analyzed, metallic vessels were replaced by ceramic cups, of the Isla style in the example from Pueblo Viejo de la Cueva and in the case of tomb No. 11 from Morro, by an imported vessel of the early Chicha-Yavi style that was highly prized in long-distance exchange.

Metal goods associated with ceremonial attire, such as patens, diadems, bracelets, and other jewelry, were material symbols associated with religious and social domains of the Tiwanaku political sphere that continued

in use into Inca times. These objects, based on their properties of color, shine, and sound, were attributed great significance as social markers for the afterlife. The cemetery of Morro de La Isla, with its exceptional offerings from Tomb 11, implies that places of death were spatial metaphors inscribed into built environments of the past (Rivolta 2000). Such spaces were designed to constitute differences in power within the social universe, with a goal of establishing norms that accepted distinctions marked as relevant (Isbell 2004). Objectification of the social being of the venerated dead encouraged the production and reproduction of dialectical relations of cohesion within the diversity of groups characterized by face-to-face relationships (Miller 1987).

The ubiquity of diagnostic ceramics in archaeological sites of the “Periodo Medio” favors analyses of stylistic variation within the southern Andean iconographic tradition, making it possible to discuss spheres of interaction between Wari and Tiwanaku (Cook 2004; Isbell and Knobloch 2006; Isbell and Silverman 2006). Simultaneously, advances have been achieved in studies of textile arts as well as carved wood, thanks to the outstanding preservation of archaeological contexts from the Atacama Desert, as well as dry rock shelters (Oakland 1986; Torres 2001, among others). Conversely, artifacts of metal are less studied, perhaps because they are so scarce in the archaeological record. Nonetheless, it is essential to include them in our discussion of cultural interactions since they document inadequately understood processes that characterized the SAIS. The formal attributes observed in the *aquillas* of embossed gold (Figures 14.7 and 14.8) as well as effigy cups (Figures 14.5 and 14.6) show that the principal relationship is with the stonework of Tiwanaku and especially the anthropomorphic statues—or monoliths (Berenguer 1998, 2000). Features of the cup from the Linares collection are especially interesting. The form of the headdress or hat and the profile of the face resemble the heads of the monoliths, particularly one drawn by Alcides D’Orbigny in 1839. Furthermore, the position of the shoulders and arms is like that of several miniature monoliths from the altiplano of Bolivia. In terms of the big picture, it seems likely that they constitute a metonymic version of the principal icon of southern Andean iconography, the Staff God, with many variations in different media that appear in Arica, Atacama, and in northwestern Argentina. In the latter region, the most salient image occurs on oval plaques of bronze that depict a deity, usually with arms spread but empty hands, who often has attributes of a Sacrificer (A. R. González 1992).

As regards the temporal placement of the metal objects analyzed from Jujuy, cross-correlating local relative chronologies with radiometric dating currently available for the Tiwanaku center, as well as the Pariti Island discoveries, implies a span between AD 600 and 1150 (Kolata 2003; Korpisaari and Pärssinen 2005). Furthermore, the complexity of the SAIS embodies multiregional and trans-cultural interactions involving cultures of the altiplano as well as the Transverse Valleys of eastern Bolivia, the Norte Grande of Chile, and northwestern Argentina. This was a dynamic tradition that implicated ideology as much as iconography that was part of the universal symbolic competence of Andean peoples (Isbell and Silverman 2006). In many and diverse reinterpretations and hybridizations, the people of northwestern Argentina participated, but not as a uniform block. Rather, participation involved diverse areas integrating and reintegrating assorted cultural spheres. Certainly, the two most salient of these traditions are the iconography and style known as La Aguada, from the central part of the semiarid valleys, while the other is from the distant Quebrada and Puna de Jujuy, bordering the Atacama and Lipez regions. In contrast with Staff God and Sacrificer iconography in La Aguada, with its heavy symbolic load, societies of Tropic of Capricorn latitudes appear to have followed other paths of symbolic expression, emphasizing greater abstraction in the expression of ideology, as implied by such elaboration and variation in ceramics. Nonetheless, shiny metallic artifacts, wooden tablets for the consumption of hallucinogenic powders, and use of *kero*-shaped cups of gold or pottery—as well as bloody human sacrifices documented by trophy heads throughout the Jujuy region—demonstrate that local societies participated in the beliefs and practices characteristic of the religious ideology of the time.

Throughout this period of time, social inequality and political power were on the increase, but not in a homogeneous manner. Processes were uneven and often involved the combined effects of contact among diverse social groups, for example, participating in pan-regional ceremonies, pilgrimages, and festivities that encouraged the display symbols of ethnicity. A panorama of interdigitated peoples distributed across the vast Puna de Atacama, as well as its immediately surrounding lands, is perhaps a good beginning for understanding the complex social history implied by the biography of sumptuous and ceremonial objects—best represented by shiny metal artifacts discussed in this chapter (Martínez 1998). As the culmination of the social and historical processes that promoted political complexity in late pre-Hispanic times, we can point to the proliferation of fortified settlements as well as

warfare among hierarchical political formations that characterized the extent of the valleys, Puna basins, and the entire altiplano from the twelfth or thirteenth century on.

### Acknowledgments

Thanks go to Dra. Diana Rolandi de Perrot for providing access to the gold cups of Doncellas, Dr. A. Linares for supplying photographs of his collection, Dr. Luis R. González for sharing his research methods as well as commentaries, Gimena Ávalos for sharing the inventory of the La Isla collection, Carlos Belotti López de Medina for osteological analyses of avian remains, Marcelo Lamamí and Catriel Greco Mainero for their work with the images, Clarisa Otero for information about collections at the Instituto de Tilcara, and of course the diligent collaboration of Silvia Manuale and staff in charge of archaeology storage at the Museo Etnográfico de Buenos Aires. Special thanks to Dr. William H. Isbell for the English translation.

### Notes

- 1 Dates for Doncellas materials: CSIC-576: 640 ± 50 BP, CSCIC-577: 360 ± 50 BP, CSIC-578: 740 ± 50 BP, CSIC-579: 640 ± 50 BP, and CSIC-595: 310 ± 50 BP (Alfaro 1988:152–153). BETA-93787: 720 ± 70 BP, AA-65130: 4811 ± 39 BP (Pérez de Micou 1996, 2009). AMS date: 3400 ± 40 BP, from Sitio 14 “Cueva del Hechicero” (Hugo Jacobaccio, personal communication, 2009).
- 2 Code ME: Museo Etnográfico Juan B. Ambrosetti, Universidad de Buenos Aires.
- 3 The “Colección Doncellas” is No. 2613, at the Instituto Nacional de Antropología y Pensamiento Latinoamericano (INAPL), Buenos Aires. Significantly, both *keros* present a golden color on the exterior and interior surfaces, which seems inconsistent with their compositions.
- 4 Report of the Dirección de Minería to Dr. Alfredo Linares. San Salvador de Jujuy, 1983.
- 5 Registered in the Registro Nacional de Colecciones de la República Argentina, Ley 25743, are No. 66.7286503.094 (effigy cup), No. 66.7286503.093 (*kero* with wavy lines), and No. 66.7286503.091 (plain *kero*).
- 6 An effigy vessel of trunco-conical form and an anthropomorphic face in relief on the front was illustrated by Lafón (1964); M. E. Albeck and B. Varga reported a gold vessel from Santa Victoria Oeste to the XIV Congreso of Arqueología Chilena, Copiapó, 1997.
- 7 Analysis of the bones labeled ME-2615 reveals that they belong to a large macaw, or guacamayo, in the size range of the species in the genus *Anodorhynchus*, or the even larger species of the genus *Ara* (e.g., *Ara chloroptera*) (Belotti López de Medina, report, March 2008).

- 8 These chemical compositions were determined for ME-3000, 2998, 2992, 2697, and 2991 from La Isla and Nos. 31-323, 31-325, and 31-326, from Pueblo Viejo de La Cueva, using energy-dispersive X-ray spectroscopy (EDS) with an instrument (EDAX-DX4) attached to an electron scanning microscope, in the laboratories of the Centro Atómico Constituyentes (Comisión Nacional de Energía Atómica). Each of the values reported is an average from five measurements made on clean surfaces in May 2008.
- 9 Registered in the Registro Nacional de Colecciones de la República Argentina, Ley 25743, are No. 66.7286503.089, the half-moon shaped object, and No. 66.7286503.090, the bicephalic llama.
- 10 The André collection is curated at the Instituto Interdisciplinario Tilcara that is administered by the Facultad de Filosofía y Letras, Universidad de Buenos Aires.

## References

- Albeck, María Ester (editor)  
1994 *Taller "De Costa a Selva." Producción e Intercambio entre los pueblos agroalfareros de los Andes Centro Sur.* Instituto Interdisciplinario Tilcara, Facultad de Filosofía y Letras, UBA, Tilcara.
- Alfaro, Lidia C.  
1978 Arte rupestre en la cuenca del río Doncellas (Provincia de Jujuy, República Argentina). *Relaciones de la Sociedad Argentina de Antropología* 12:123-146.  
1981-1982 Materiales arqueológicos posthispanicos en la cuenca del río Doncellas, Provincia de Jujuy. *Relaciones de la Sociedad Argentina de Antropología* 14(2):81-83.  
1983 Investigación arqueológica en la cuenca del Río Doncellas (provincia de Jujuy). Integración de la puna jujeña a los centros cálticos andinos. *Relaciones de la Sociedad Argentina de Antropología* 15:25-47.  
1988 *Excavación de la cuenca del río Doncellas. Reconstrucción de una cultura olvidada en la Puna Jujeña.* Departamento de Antropología y Folklore, San Salvador de Jujuy.
- Alfaro, Lidia C., and Juan Manuel Suetta  
1976 Excavaciones en la cuenca del río Doncellas. *Antiquitas, Boletín de la Asociación de Amigos del Instituto de Arqueología* 22-23:1-32.
- Basílico, Susana  
1987 Pueblo Viejo de la Cueva: sitio arqueológico en el Departamento de Humahuaca, Provincia de Jujuy. Recuperación de información contextual y cronología. Tesis de Licenciatura inédita, Facultad de Filosofía y Letras, Universidad Católica Argentina, Buenos Aires.  
1992 Pueblo Viejo de la Cueva (Dpto. De Humahuaca, Jujuy). Resultados de las excavaciones en un sector del asentamiento. *Cuadernos* 3:108-127.
- Bennett, Wendell C.  
1936 *Excavations in Bolivia.* Anthropological Papers, Vol. 25, Pt. 1. American Museum of Natural History, New York.
- Berenguer, José  
1998 La iconografía del poder en Tiwanaku y su rol en la integración de zonas de frontera. *Boletín del Museo Chileno de Arte Precolombino* 7:19-37.  
1999 El evanescente lenguaje del arte rupestre en los Andes Atacameños. In *Arte Rupestre en los Andes de Capricornio*, edited by José Berenguer and Francisco Gallardo, pp. 9-56. Museo Chileno de Arte Precolombino, Santiago.  
2000 *Tiwanaku. Señores del lago sagrado.* Museo Chileno de Arte Precolombino, Santiago.
- Berenguer, J., Tom Dillehay, and Ana M. Barón  
2000 Introducción al simposio de ceremonialismo en los Andes del Sur. *Actas XIV Congreso Nacional de Arqueología Chilena*, t. 1, Contribución Arqueológica 5:765-767.
- Boman, Eric  
1908 *Antiquités de la Région Andine de la République Argentine et du Désert d'Atacama.* I. Imprimerie Nationale, Paris.
- Carcedo de Mufarech, Paloma, and Luisa Vetter  
1999 Usos de minerales y metales a través de las crónicas. In *Los Incas. Arte y símbolos*, edited by F. Pease, C. Morris, J. I. Santillana, R. Matos, P. Carcedo de Mufarech, L. Vetter, C. Arellano, V. Roussakis, and L. Salazar, pp. 167-213. Banco de Crédito del Perú, Lima.
- Casanova, Eduardo  
1933 Tres ruinas indígenas en la quebrada de La Cueva. *Anales del Museo Nacional de Historia Natural B. Rivadavia* 37:255-320.  
1937 Contribución al estudio de la arqueología de La Isla. *Relaciones de la Sociedad Argentina de Antropología* 1:65-70.  
1942 El pucará de Hornillos. *Anales del Instituto de Etnografía Americana* 3:249-265.  
1943 Comunicación acerca del yacimiento de Doncellas. *Boletín de la Sociedad Argentina de Antropología.* Resúmenes de actividades 5-6:80-81.  
1944 Una estólida de la Puna Jujeña. *Relaciones de la Sociedad Argentina de Antropología* 4:115-132.
- Cook, Anita G.  
2004 Wari Art and Society. In *Andean Archaeology*, edited by H. Silverman, pp. 146-166. Blackwell, Malden, Massachusetts.
- Cummins, Tom  
2007 Queros, Aquillas, Uncus, and Chulpas: The Composition of Inka Artistic Expression and Power. In *Variations in the Expression of Inka Power*, edited by R. L. Burger, C. Morris, and Ramiro Matos, pp. 267-312. *Dumbarton Oaks*, Washington, D.C.

- Debenedetti, Salvador  
1910 *Exploración arqueológica en los cementerios prehistóricos de la Isla de Tilcara (Quebrada de Humahuaca, Provincia de Jujuy) Campaña de 1908*. Publicaciones de la Sección Arqueológica 6. Universidad de Buenos Aires, Buenos Aires.
- 1912 *Influencias de la cultura de Tiabuanaco en la región del noroeste argentino. Nota preliminar*. Publicaciones de la Sección Antropológica 2. Universidad de Buenos Aires, Buenos Aires.
- DeMarrais, Elizabeth, Luis J. Castillo, and Timothy Earle  
1996 Ideology, Materialization, and Power Strategies. *Current Anthropology* 37:15–86.
- Foucault, Michel  
1990 *La arqueología del saber*. 14th ed. Siglo Veintiuno, México.
- 1998 *Las palabras y las cosas*. 16th ed. Siglo Veintiuno, México.
- Garay de Fumagalli  
1998 El pucará de Volcán, historia ocupacional y patrón de instalación. In *Los desarrollos locales y sus territorios*, edited by María B. Cremonte, pp. 131–153. Universidad Nacional de Jujuy, San Salvador de Jujuy.
- Gatto, Santiago  
1946 Exploraciones arqueológicas en el Pucará de Volcán. *Revista del Museo de La Plata* 4, Antropología 18:1–84.
- Gisbert, Teresa  
1999 *El paraíso de los pájaros parlantes. La imagen del otro en la cultura andina*. Universidad Nuestra Señora de La Paz, Plural Editores, La Paz.
- Goldstein, Paul  
1985 Tiwanaku Ceramics of the Moquegua Valley, Perú. Master's thesis, Department of Anthropology, University of Chicago, Illinois.
- González, Alberto R.  
1973 Máscaras metálicas del NO. Argentino. In *Estudios dedicados al Profesor Dr. Luis Pericot*, pp. 411–441. Instituto de Arqueología y Prehistoria, Universidad de Barcelona, Barcelona.
- 1979 Pre-Columbian Metallurgy of Northwest Argentina: Historical Development and Cultural Process. In *Dumbarton Oaks Conference on Pre-Columbian Metallurgy of South America*, edited by E. Benson, pp. 133–202. Dumbarton Oaks, Washington, D.C.
- 1992 *Las placas metálicas de los Andes del Sur. Contribución al estudio de las religiones precolombinas*. AVA-Materialien 46, Mainz.
- 2004 La arqueología del Noroeste argentino y las culturas formativas de la cuenca del Títicaca. *Relaciones de la Sociedad Argentina de Antropología* 29:7–38.
- González, Alberto R., and Marta Baldini  
1992 La Aguada y el proceso cultural del NOA. Origen y relaciones con el Área Andina. *Boletín del Museo Regional de Atacama* 4:6–24.
- González, Luis R.  
2007 Tradición tecnológica y tradición expresiva en la metalurgia prehispánica del Noroeste Argentino. *Boletín del Museo Chileno de Arte Precolombino* 12(2):33–48.
- González, Luis R., and Edgardo Cabanillas  
2005 Las campanillas piramidales del Noroeste Argentino. *Pacarina* 4:25–34.
- Gosden, Chris, and Yvonne Marshall  
1999 The Cultural Biography of Objects. *World Archaeology* 31(2):169–178.
- Guamán Poma de Ayala, F.  
1980 *Nueva coronica y buen gobierno*, 1615. Siglo XXI, México DF.
- Hernández Llosas, Isabel  
1983–1985 Las calabazas prehispánicas de la Puna centro-oriental (Jujuy, Argentina). Análisis de sus representaciones. *Anales de Arqueología y Etnología* 38–40:77–159.
- Isbell, William H.  
2004 Mortuary Preferences: A Wari Culture Case Study from Middle Horizon Perú. *Latin American Antiquity* 15(1):3–32.
- Isbell, William H., and Patricia K. Knobloch  
2006 Missing Links, Imaginary Links: Staff God Imagery. In *Andean Archaeology III. North and South* edited by W. H. Isbell and H. Silverman, pp. 307–351. Springer, New York.
- Isbell, William H., and Helaine Silverman  
2006 Rethinking the Central Andean Co-Tradition. In *Andean Archaeology III. North and South*, edited by W. H. Isbell and H. Silverman, pp. 497–518. Springer, New York.
- Janusek, John W.  
2001 Diversidad residencial y el surgimiento de la complejidad en Tiwanaku. *Boletín de Arqueología PUCP* 5:251–294.
- 2005 Patios hundidos, encuentros rituales y el auge de Tiwanaku como centro religioso panregional. *Boletín de Arqueología PUCP* 9:161–184.
- Kolata, Alan L. (editor)  
2003 *Tiwanaku and Its Hinterland. Archaeology and Paleocology of an Andean Civilization: 2. Urban and Rural Archaeology*. Smithsonian Institution, Washington, D.C.
- Kopytoff, Igor  
1991 La biografía cultural de las cosas: la mercantilización como proceso. In *La vida social de las cosas. Perspectiva cultural de las mercancías*, edited by Arjun Appadurai, pp. 89–122. Grijalbo, México DF.



- Korpisaari, Antti, and Martti Pärssinen (editors)  
2005 *Pariti: isla, misterio y poder. El tesoro cerámico de la cultura Tiwanaku*. La Paz.
- Krapovickas, Pedro  
1955 *El yacimiento de Tebenquiche (Puna de Atacama)*. Publicaciones del Instituto de Arqueología 3. Facultad de Filosofía y Letras, Buenos Aires.
- Lafón, Ciro R.  
1964 De arte antiguo humahuaca. In *Homenaje a Fernando Márquez-Miranda. Arqueólogo e Historiador de América*, edited by Juan Comas, pp. 221–241. Editorial Universidad, Madrid.
- Lechtman, Heather  
1991 La metalurgia precolombina: tecnología y valores. In *Los orfebres olvidados de América*, pp. 9–18. Museo Chileno de Arte Precolombino, Santiago de Chile.
- Llagostera M., Agustín  
2004 *Los antiguos habitantes del Salar de Atacama. Prehistoria Atacameña*. Pehuén Editores, Santiago.
- Martínez, José Luis  
1986 El “personaje sentado” en los keru: hacia una identificación de los Kuraka andinos.” *Boletín del Museo Chileno de Arte Precolombino* 1:101–124.  
1998 *Los pueblos del chañar y el algarrobo. Los atacamas en el siglo XVII*. Centro de Investigaciones Diego Barros Arana, Santiago.
- Miller, Daniel  
1987 *Material Culture and Mass Consumption*. Blackwell, Oxford.
- Nielsen, Axel  
2007 El periodo de desarrollos regionales en la Quebrada de Humahuaca: aspectos cronológicos. In *Sociedades Precolombinas Surandinas*, edited by V. Williams, B. Ventura, A. Callegari, and H. Yacobaccio, pp. 235–250. Artes Gráficas Buschi S.A., Buenos Aires.
- Oakland, Amy S.  
1986 Tiahuanaco Tapestry Tunics and Mantles from San Pedro de Atacama, Chile. In *The Junius B. Bird Conference on Andean Textiles*, edited by Ann P. Rowe, pp. 101–121. The Textile Museum, Washington, D.C.
- Ottonello, María M.  
1973 Instalación, economía y cambio cultural en el sitio tardío de Agua Caliente de Rachaite. *Publicaciones de la Dirección de Antropología e Historia* 1:24–68.
- Pérez de Micou, Cecilia B.  
1996 Los artefactos sobre materias primas vegetales de la Colección Doncellas, Museo Etnográfico (Buenos Aires) y Museo del Pucará (Tilcara). Tesis doctoral inédita, Facultad de Filosofía y Letras, UBA, Buenos Aires.
- 2009 Indicios arcaicos en la Colección Doncellas, Jujuy (República Argentina). El “Yacimiento 26” a la luz de un fechado radiocarbónico (4811 ± 39 AP). *Boletín del Instituto Francés de Estudios Andinos* 38(1):75–85.
- Ramos Gavilán, A.  
1976 *Historia del célebre santuario de Nuestra Señora de Copacabana, 1621*. Academia Boliviana de la Historia, La Paz.
- Rivolta, Clara  
2000 *90 años de investigaciones en la Quebrada de Humahuaca: un estudio reflexivo*. Monográfica 5, Instituto Interdisciplinario Tilcara. Facultad de Filosofía y Letras, Tilcara.
- Rivolta, Clara, and María Ester Albeck  
1992 Los asentamientos tempranos en la localidad de Tilcara: SJujTil22, Provincia de Jujuy. *Cuadernos* 3:86–93.
- Rolandi de Perrot, Diana  
1974 Un hallazgo de objetos metálicos en el área del río Doncellas (Provincia de Jujuy). *Relaciones de la Sociedad Argentina de Antropología* 8:153–166.  
1979 Los tejidos del río Doncellas, provincia de Jujuy. In *Actas Jornadas de Arqueología del Noroeste Argentino, Antiquitas*, pp. 22–73. Universidad del Salvador, Buenos Aires.
- Rydén, Stig  
1947 *Archaeological Researches in the Highlands of Bolivia*. Elanders Boktryckeri Aktiebolag, Goteborg.
- Sagárnaga, Jédu  
2008 Alianza y ritualidad en Tiwanaku. Las vasijas pares de Pariti. *Chachapuma, Revista de Arqueología Boliviana* 4:5–25.
- Saunders, Nicholas J.  
2003 “Catching the Light”: Technologies of Power and Enchantment in Pre-Columbian Goldworking. In *Gold and Power in Ancient Costa Rica, Panama, and Colombia*, edited by Jeffrey Quilter and John W. Hoopes, pp. 15–47. *Dumbarton Oaks*, Washington, D.C.
- Scattolin, María Cristina  
2006 De las comunidades aldeanas a los curacazgos en el Noroeste Argentino. *Boletín de Arqueología PUCP* 10:357–398.
- Tarragó, Myriam N.  
1977 Relaciones prehispánicas entre San Pedro de Atacama (Norte de Chile) y regiones aledañas: la Quebrada de Humahuaca. *Estudios Atacameños* 5:50–63.  
1989 Contribución al conocimiento arqueológico de las poblaciones de los oasis de San Pedro de Atacama en relación con otros pueblos puneños, en especial, el sector septentrional del Valle Calchaquí. Tesis doctoral inédita, Facultad de Humanidades y Artes, Universidad Nacional de Rosario, Argentina.

- 1994a Intercambio entre Atacama y el borde de la Puna. In *Taller de Arqueología De Costa a Selva*, edited by María E. Albeck, pp. 199–214. Instituto Interdisciplinario Tilcara, Tilcara.
- 1994b Jerarquía social y prácticas mortuorias. *Actas y Memorias XI Congreso Nacional de Arqueología Argentina*, 1a. Parte. *Revista del Museo de Historia Natural* 13(1/4):170–174.
- 2006 Espacios surandinos y la circulación de bienes en época de Tiwanaku. In *Esfemas de interacción prehistóricas y fronteras nacionales modernas: los Andes sur centrales*, edited by Heather Lechtman, pp. 331–376. Instituto de Estudios Peruanos, Lima.
- Torres, Constantino L.
- 2001 Iconografía tiwanaku en la parafernalia inhalatoria de los Andes centro-sur. *Boletín de Arqueología PUCP* 5:427–454.
- Uribe, Mauricio, and Carolina Agüero
- 2003 Aproximaciones a la puna de Atacama y la problemática Yavi. In *Actas 36° Congreso Nacional de Arqueología Chilena*, pp. 283–292. Tomé, Chile.
- Ventura, Beatriz N.
- 1984–1985 Representaciones de camélidos y textiles en sitios arqueológicos tardíos de las Selvas Occidentales. *Relaciones de la Sociedad Argentina de Antropología* 16:191–2002.
- Vignati, Milcíades A.
- 1938 “Novísima Veterum.” Hallazgos en la Puna Jujeña. *Revista del Museo de La Plata* 1:53–61.
- Young-Sánchez, Margaret
- 2004 *Tiwanaku: Ancestors of the Inca*. Denver Art Museum, Colorado.