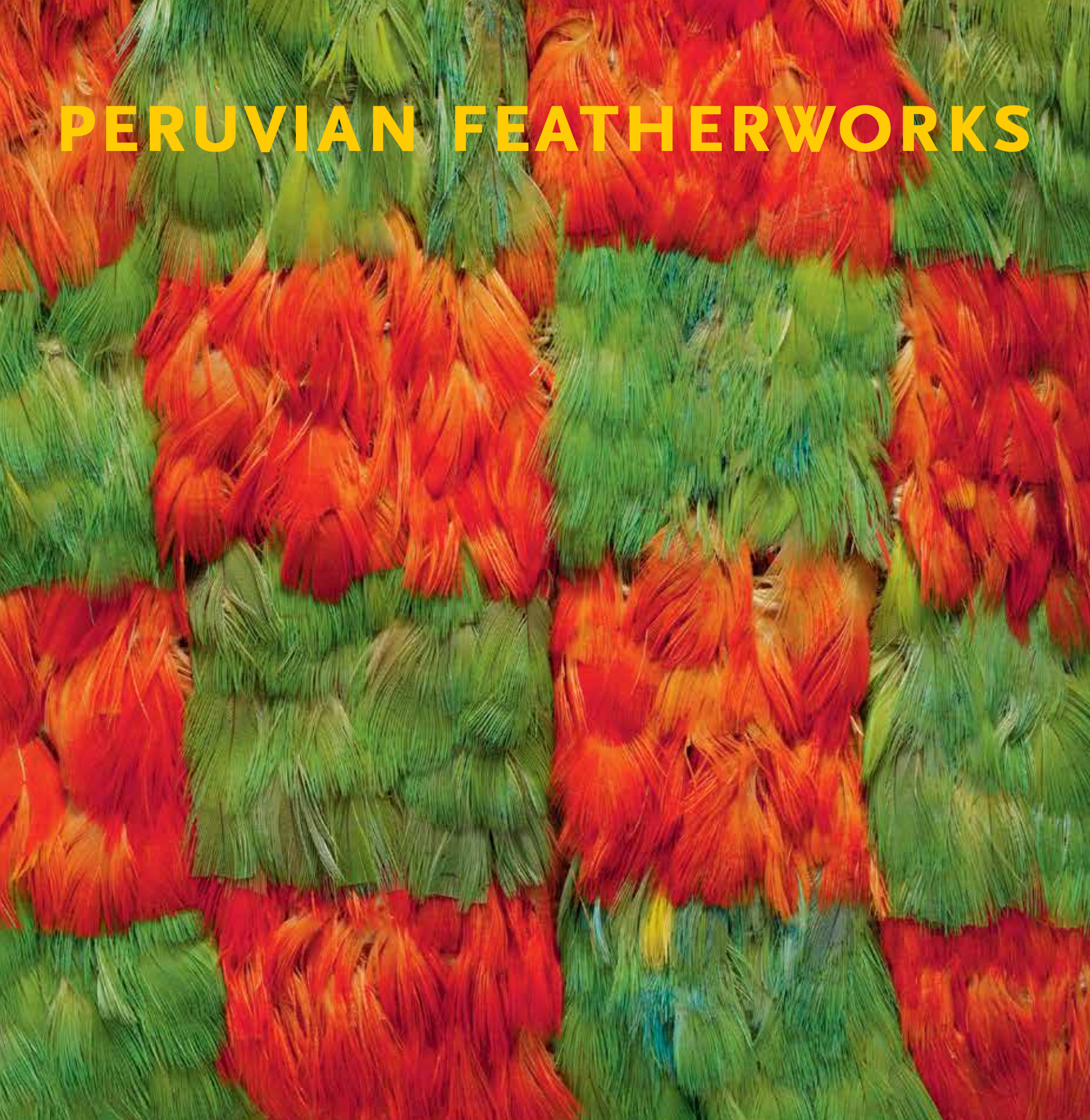


# PERUVIAN FEATHERWORKS







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**ART OF THE PRECOLUMBIAN ERA**

**HEIDI KING**

with essays by

**Mercedes Delgado, Mary Frame, Christine Giuntini, Johan Reinhard,  
Ann Pollard Rowe, and Santiago Uceda**



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# Director's Foreword

Ancient Peruvian artists demonstrated remarkable imagination and ingenuity in the creation of textiles, and the work of these extraordinary craftsmen remains among the most accomplished in the field. The appeal of these creations to the modern viewer lies both in their color and sophisticated design and in the technical diversity of their structures. Embellishing the cloth with feather mosaic was part of this tradition, which spanned a period of more than three thousand years. While numerous exhibitions and publications have celebrated the textile arts of ancient Peru, featherworks are seldom shown and have been little studied by scholars.

The idea for this book grew out of the exhibition “Radiance from the Rain Forest: Featherwork in Ancient Peru,” held in 2008 at The Metropolitan Museum of Art, the first ever to be devoted to this topic. In researching the works of art, it became evident to the curator of the exhibition, Heidi King, that featherworks are as rare in collections as is information about them. For the present publication, she explored the archaeological literature for discoveries of featherworks in their original contexts, which date from roughly the second millennium BCE to the time of the Spanish Conquest in the early sixteenth century. Her findings are summarized in the first essay. Additional essays by archaeologists and textile specialists discuss specific documented finds from different periods of Peruvian prehistory. For the plate section the search was extended to feather pieces in museum collections in Peru, the United States, Europe, and Canada, with a focus on university and ethnographic institutions with holdings collected by German travelers around the turn of the twentieth century. The search proved highly rewarding, producing a number of visually engaging and iconographically interesting pieces that had never before been published. Considering that they are between five hundred and twelve hundred years old, many of them are quite well preserved; others have lost many or most of their feathers.

The essays and the many color illustrations of previously unpublished works shed new light on this little-known art and rectify some of the misperceptions found in the literature, although many questions remain unanswered and require further research. We are pleased to publish this book, which provides not only documented research of interest to the specialist but, for the general reader, a window on to a world largely unknown and lost to history.

**Thomas P. Campbell**

Director

The Metropolitan Museum of Art



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I express my gratitude to my coauthors Mercedes Delgado, Mary Frame, Christine Giuntini, Johan Reinhard, Ann Pollard Rowe, and Santiago Uceda for so eloquently sharing their knowledge and expertise.

This project began with a conversation with Julie Jones, Andra E. Pearson Curator in Charge of the Metropolitan Museum's Department of the Arts of Africa, Oceania, and the Americas, about writing a book on ancient Peruvian featherworks. I had gathered substantial information on the subject during my research for the exhibition "Radiance from the Rain Forest: Featherwork in Ancient Peru," held at the Metropolitan in 2008, and felt there was a need for a publication. Julie's enthusiastic response led to the submission of a proposal to the Museum's then Director, Philippe de Montebello, and his successor, Thomas P. Campbell. The Director suggested that I broaden my research to include additional American museum collections and museum collections in Peru and Europe in order to present a more comprehensive discussion. I am most grateful to them all, particularly Tom Campbell, who authorized the project in spite of financially challenging times.

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But no one has listened more willingly and more patiently to me talking about feathers while I was preparing first the exhibition and subsequently this publication than my husband, Timothy. He was a wonderful listener, and though a nonexpert in ancient Peruvian textile arts, he provided invaluable comments and advice. To him I offer my special, heartfelt thanks.

I dedicate this book to the anonymous feather artists of ancient Peru.

**Heidi King**

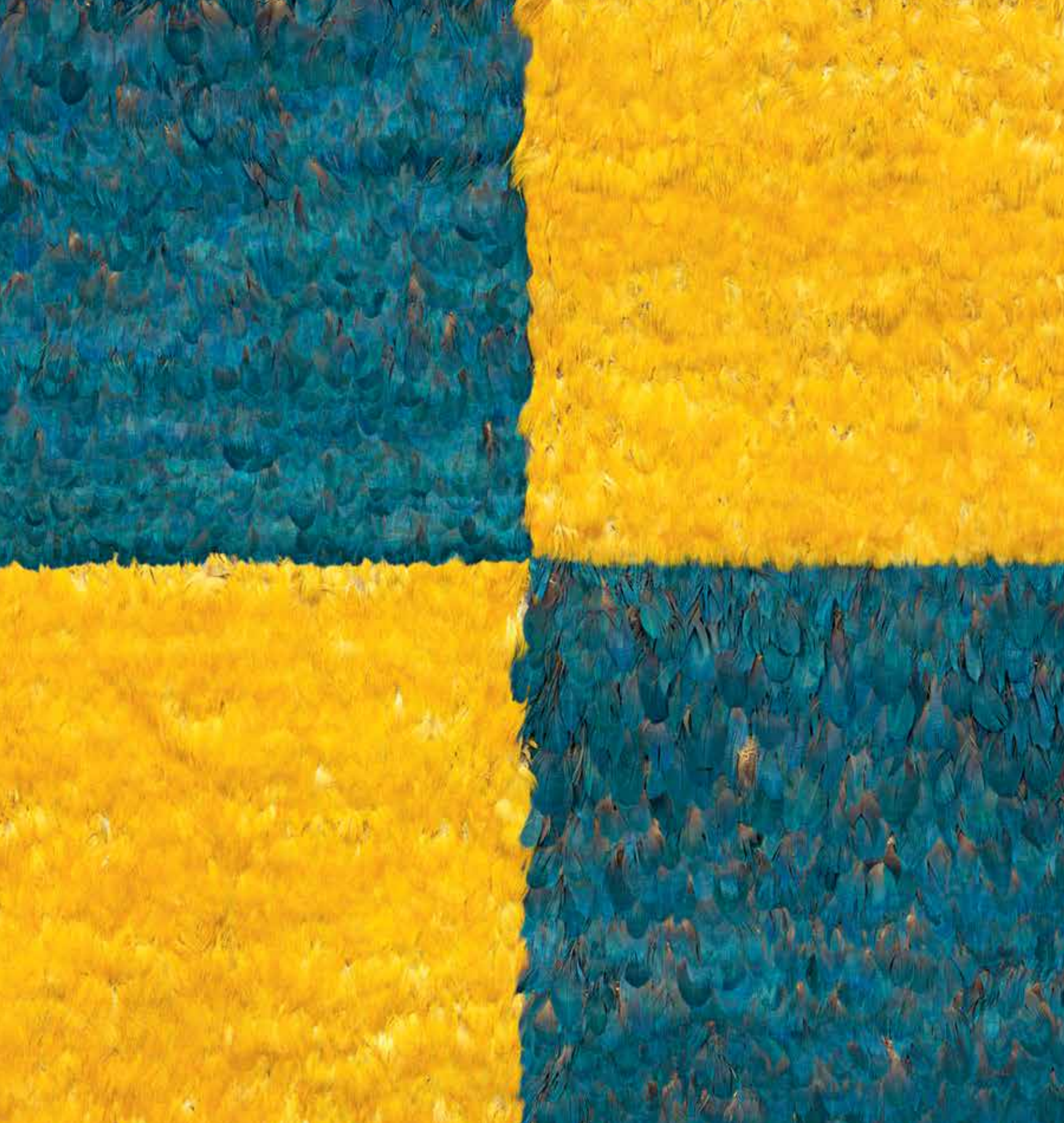




## Peruvian Featherworks







# Introduction

## HEIDI KING

Of universal appeal and unique beauty, feathers have been used for thousands of years by peoples in all parts of the world to adorn themselves and to animate their environment. With their wide range of rich natural colors, elegant shapes, and luminous textures, feathers offer great aesthetic appeal, and artists have developed many ways of using them on clothing, headgear, and a variety of ornaments.

Among indigenous peoples past and present, feathers and objects decorated with them have been imbued with meaning and value. In some societies, because of their remarkable colors and rarity, feathers signify wealth and high social standing. In traditional Hawaiian culture, for example, *kāhili*, tall plumes mounted on long slender sticks, symbolized royalty, and feather-covered cloaks and helmets were the most valued possessions of aristocratic Hawaiian chiefs. Similar attributes of wealth and status pertain to the feather capes used by the Maori people of New Zealand, which to the present remain symbols of ethnic pride, sometimes offered to important visitors.

Feathers in traditional societies also signify spiritual energy and supernatural force. For many native peoples in the Americas birds, because of their ability to fly, have access to the spirit world. Their plumes, worn on ceremonial costumes and decorating ritual paraphernalia, are thought to empower ritual specialists with the capacity to bring forth good harvests, cure illness, foretell the future, and assure the well-being of the community. The feathers of certain species are considered particularly potent. Foremost among these are the feathers of the eagle, a bird universally admired for its size, dignity, and prowess. Among many native North American peoples the eagle represented both secular and sacred power, and being clothed in eagle-feather regalia signified that the wearer had strength and courage, and wisdom acquired through spiritual guidance.

In present-day Peru the use of feathers by indigenous peoples, especially those living east of the Andes, is widespread in social and ceremonial contexts. Explorers and ethnographers have for centuries investigated the physical, social, and cultural environments of the makers

of these works to better understand why certain feathers were chosen in the fabrication and ornamentation of festive attire and objects for ritual use.<sup>1</sup> Knowledge of the feather arts among coastal and highland peoples in ancient times, on the other hand, is limited. What has become known through archaeological investigations is that peoples living along the dry desert coast of the Pacific and in the Andean highlands used feathers as early as the late third millennium BCE. The earliest archaeological evidence of feather use consists of individual or loosely tied feathers placed in pits together with other meaningful objects such as shells and bones. These assemblages were most likely dedicatory or supplicatory offerings. Eventually the use of feathers in Peru would become part of a highly sophisticated textile tradition, one in which artists would “paint” with feathers, creating figurative and abstract designs on elite apparel and luxury accessories. This tradition spanned several thousand years, extending to the arrival of the Spaniards in the early sixteenth century.

The textile arts of ancient Peru have been much admired and collected, their techniques and dyes extensively studied and published. The feather arts, by contrast, have been little investigated. Information in the archaeological literature is scarce and dispersed, and there are few scholarly publications on the subject.<sup>2</sup> The lack of a greater understanding of the feather arts can be explained by both cultural patterns and historical events. Primary among these is the absence of written records by the makers of the works about their culture, beliefs, and customs and the destruction of archaeological sites. In addition, the ethnohistorical literature about the ancient peoples of Peru, for the most part written by Spaniards after the Conquest in 1532, focuses on the Inca of the sixteenth century. These accounts make only marginal mention of Inca feather arts—albeit in laudatory terms—and provide little information on the meaning of feathered objects in social and religious contexts. Many questions about ancient Peruvian feather arts have no answers. How, for example, were feathers chosen? Were the feathers of certain birds associated with spiritual and protective powers, as they are among many living Amazonian peoples? What role did these birds play in the ancient peoples’ mythology? Did the colors of the feathers have the same meaning for the ancients as they have for today’s indigenous groups? Was featherworking carried out predominantly by men, and was the use of feathered garments and objects a male prerogative, as it is in many indigenous communities today?

Compared to textiles without feathers, archaeological featherworks from Peru are rare in both public and private collections. The vast majority were not excavated by trained archaeologists, so that their provenance, original burial context, and association with other objects are not known, making their cultural attribution and dating problematic. While modern scientific dating methods such as Carbon-14 can provide an approximate time frame during which an object with no documented provenance was made, associating it





with a specific people is often not possible since most archaeological investigations in Peru have concentrated on the main known centers and peoples, and many regional groups that undoubtedly also used feathers have yet to be identified.

The first essay in this publication summarizes what is currently known about ancient Peruvian feather arts based on the archaeological record, considerations of iconography, and basic technical characteristics of featherworks in museum collections in Peru, Europe, and the United States. A complete listing of the institutions whose collections were consulted appears at the end of this publication. Focusing on the most significant discoveries by archaeologists, the essay also briefly reviews the evidence of featherworking, both for textiles and for objects in other media, in most of the currently known major Andean traditions: Paracas, ca. 600–100 BCE; Nasca, ca. 100 BCE–700 CE; Moche, ca. 100–800; Wari, ca. 600–1000; Sicán, Chancay, Chimú, ca. 1000–1470; and Inca, 1430–1534.

While a thorough analysis of structural and compositional features of the feather pieces discussed and illustrated here would be helpful for more specific dating and cultural attributions, such an analysis would have exceeded the scope of this project. For feathered textiles, only generally accepted diagnostic features of weaving structures—balanced weave often with paired warps typical of North and Central Coast weaving, and warp-predominant cloth associated with southern coastal and highland traditions—are taken into consideration.

In the next five essays important documented finds of featherworks dating from different periods are discussed by archaeologists and experts in the Peruvian textile arts. Textile specialist Ann Rowe writes about a group of some of the earliest surviving feathered textiles and objects from the cemeteries at Ocucaje in the Ica Valley on the South Coast. Although this group of objects was not excavated by archaeologists, their provenance is generally accepted. Textile specialist Mary Frame discusses the feathered dresses excavated in 1998 at Cahuachi in the Nasca Valley by the Italian archaeologist Giuseppe Orefici. Peruvian archaeologist Mercedes Delgado describes her rare discovery in 2002 at Cerrillos, in the Ica Valley, of the burial of a woman shaman wrapped in a large, brilliantly colored feathered shroud. Santiago Ucedo, Peruvian archaeologist, and Heidi King present the discovery between 2001 and 2005 of a number of exceptionally well preserved complete sets of small feathered male garments made by the Chimú and buried at the site of Moche on the North Coast. And archaeologist Johan Reinhard discusses the miniature feather pieces he and a group of Argentinean archaeologists excavated in 1999 at early-sixteenth-century child burials made by the Inca on Mount Llullaillaco in Argentina. Finally, a discussion of featherworking techniques and conservation is presented by Christine Giuntini, textile conservator at the Metropolitan Museum.

The plate section features nearly seventy examples of the feather arts. The selection process was guided by the intention to present objects that were collected in the late nineteenth and early twentieth centuries by archaeologists and collectors in Peru, that have been published infrequently and only in black-and-white or are unpublished, and that have not received excessive restoration work in modern times. The objects are organized by category: garments, headdresses, personal ornaments and accessories, and ritual objects. Most of them are now housed in museum collections in Peru, Europe, and the United States; a few are in American private collections. Among other object types known to have been covered or embellished with feathers that are not included in this publication are false heads for mummy bundles, wood statuary, containers, musical instruments, and clubs and slings.

Despite our current insufficient understanding of the several-thousand-year-old tradition of featherworking in Precolumbian Peru, the viewer today will appreciate the works presented here for their rich, luxurious surfaces in vibrant colors and for the diversity of their designs, ranging from the figural to the nonrepresentational, the latter often having a strikingly contemporary aesthetic. The anonymous artists who made the works possessed extraordinary manual dexterity and a highly sophisticated sense of color and design. One can imagine their creations as worn by a ruler appearing in front of his subjects — seated on a litter covered with lustrous feather mosaic and wearing a brilliantly colored feather tabard, large ear ornaments, and a gold crown topped with resplendent feathers all gleaming in the bright sun of Peru's desert coast. What a dazzling sight it must have been.





Sigismundus  
V. S. P. S. P.



Matthias L. S. P.

# Feather Arts in Ancient Peru

HEIDI KING

Sixteenth-century European conquistadors and explorers of the Americas wrote with admiration of the exotic objects they saw on their travels, among them artifacts, clothing, weapons, and ornaments often made of or embellished with rare and precious feathers of birds. They were equally impressed by the fine craftsmanship and beauty of these objects, many of which they took back to Europe, where they were housed in the *Kunstkammer* of European royalty. Sadly, only few of these objects have survived or can be seen in museum collections today, most likely as a result of environmental damage and a lack of proper care.

One of the first known depictions of the peoples encountered by the Europeans in the newfound lands of the Americas, a woodcut made between 1505 and 1507 in Augsburg, Germany, shows them wearing feathered crowns, skirts, and capes, apparel that quickly came to identify the American Indian in the European mind and would continue to define their stereotypical image for centuries to come.<sup>1</sup> Most sixteenth-century European manuscript and book illustrations of indigenous peoples of the American continents derive from early travel reports rather than from direct visual contact. Many are based on fantasy and often combine ornaments and attire from groups in different geographic areas, with the addition of even European elements. A series of eight watercolors depicting a *Fastnacht*, or carnival, that took place in 1599 at the court of Frederick I, duke of Württemberg, in Stuttgart shows participants in the “Parade of Queen America” (fig. 1a–c).<sup>2</sup> Several of the figures wear feather costumes and carry feathered accessories that bear similarities to items documented to have been used by indigenous individuals of high status. The long cape covered with red and green feathers worn by the figure holding the parrot (fig. 1a) recalls the magnificent ceremonial feather cloaks that Europeans saw among the Tupinambá people of Brazil,<sup>3</sup> while the open-sided yellow knee-length garment (fig. 1b) was inspired by the feather tabards reportedly worn by Inca noblemen in Cuzco, Peru (see pls. 1–26). “Queen America” (fig. 1c) is shown with long blonde hair wearing a Renaissance gown and seated on a litter under a baldachin carried by four litter bearers dressed in feathered body suits, a garment type not

Figure 1a. Detail from a drawing in *Der Aufzug der “Königin Amerika,” 1599* (KK 205). See following pages.





Figure 1b, c. *Der Aufzug der "Königin Amerika,"* 1599. Two of eight drawings, watercolor, pigment, and gold on paper, max. 12 × 22<sup>1</sup>/<sub>8</sub> in. (30.5 × 56.3 cm). Stiftung Weimarer Klassik und Kunstsammlungen, Schlossmuseum, Graphische Sammlung (KK 206, 207)

known to have been worn by any indigenous peoples in the Americas. She is accompanied by individuals carrying tall circular feathered fans and feathered war shields customary among the Aztecs of Mexico during the late fifteenth and early sixteenth centuries.

### BIRDS AND FEATHERS

Birds are wondrous creatures, and their behavior and characteristics have inspired the imagination of peoples in all parts of the world for millennia. Depictions of birds are particularly abundant in the art of the ancient Peruvians. Undoubtedly birds played an important role in their mythology and folktales, although knowledge of bird symbolism in Peruvian cultures remains limited at present.<sup>4</sup>

Surviving featherworks and the accounts written by the Spanish chroniclers suggest that feathers were used primarily to embellish tabards (open-sided tunics), personal ornaments, headgear, and accessories for elite men to wear and display on festive occasions. Like precious metals, shells, and colored stones, feathers, especially those from colorful birds, were highly valued. Indeed, feathers may have been considered the ultimate luxury material



in ancient times. Feathers were chosen primarily for their radiant colors, striking iridescence, and silken texture. The gentle curve of feathers, when sewn to the foundation fabric, provided volume and a soft, plush texture that woven fabrics do not have. The skill and ingenuity of Peruvian textile artists and their ability to create with mineral and vegetal dyes a wide range of colors with subtle gradations in tone are well known. However, the glossy, brilliantly hued colors of feathers of tropical rainforest birds—the rich yellow and deep blue of the macaw, for example, or the bright turquoise and soft chartreuse of the paradise tanager—could not be achieved with dyes.

The featherworks still in existence show that for their creations the ancients preferred the brightly colored feathers of the rainforest birds that inhabited the eastern slopes of the Andes and the vast Amazon Basin. The more muted feathers of coastal and highland birds, such as seabirds, hummingbirds, condors, owls, and eagles, were seldom used, although these birds too—like parrots, macaws, and raptors—are frequent motifs in ceramics, in metalwork, and in the textiles arts.<sup>5</sup> Examination of feathered pieces in museum collections indicates that the feathers of less than 2 percent of all bird families and species in the Amazon





Figure 2. **Procession of figures playing panpipes and carrying parrots. Nasca, 1st–4th century.** Ceramic, pigment, length 5¾ in. (14.5 cm), width 4¼ in. (10.8 cm). Museo Nacional de Arqueología, Antropología e Historia del Perú, Lima (C-55308)



region were used.<sup>6</sup> The most common were macaws — blue-and-yellow, scarlet, and red-and-green — and parrots, as well as Muscovy ducks, curassows, flamingos, and egrets. Smaller birds included various types of cotingas, honeycreepers, and tanagers, especially the spectacular paradise tanager, with feathers of five different colors.<sup>7</sup>

The dazzling feathers used in the manufacture of luxurious cloths, sumptuous head-dresses, and precious personal ornaments had to be carried west from the rainforest over the Andes to workshops in the highlands and on the Pacific Coast, where the finished products are believed to have been made, although no archaeological evidence of feather workshops in the highlands or on the coast has been reported to date. The Spanish chroniclers reported that during the reign of the Inca in the early sixteenth century large quantities of plucked feathers, as well as birds both dead and alive, were received from the eastern provinces as tribute by the mighty Inca rulers. In 1615 Felipe Guaman Poma de Ayala noted that young boys hunted birds with slings; they kept the flesh for food and the feathers for use in the production of fine cloth.<sup>8</sup> Sancho de la Hoz describes a warehouse in the vicinity of Cuzco that contained more than one hundred thousand dried birds whose feathers were used for clothing.<sup>9</sup> Parrots, macaws, and Muscovy ducks, all easily tamed, are also thought to have been domesticated, an assumption supported by finds of parrot and macaw bones as well as mummified macaws and parrots in burials and offerings on the coast.<sup>10</sup> A rare Nasca scene depicts a procession of finely dressed elites accompanied by dogs and playing panpipes; three carry large

parrots on their shoulders (fig. 2). On the basis of pigment remains on the birds, they have been identified by the Peruvian ornithologist Enrique Angulo as depicting the blue-and-yellow macaw, the scarlet macaw, and the Amazona parrot. It has been suggested that the group may be on their way to Cahuachi or some other Nasca ceremonial center, taking the brilliantly colored birds to sacrifice.<sup>11</sup>

### FEATHERS ON CLOTH AND OBJECTS IN OTHER MATERIALS

Featherworking in ancient Peru was a highly specialized craft, one that required great manual dexterity and patience in addition to artistic sensitivity. Although the chroniclers do not describe featherwork production in detail, they write that feathered cloth was the “most esteemed and valued” cloth among the Inca,<sup>12</sup> and that commoners or even local leaders of high rank were prohibited from wearing feathers unless they had received them, for their services, from the Inca king himself.<sup>13</sup> Feathered cloth is mentioned in conjunction with the manufacture of *cumbi*, the finely woven cloth produced during Inca times and made by the most accomplished weavers in the land for the kings and high-ranking nobility, suggesting that it was made in *cumbi* workshops.

Different techniques were used to cover the surfaces of both cloth and objects made of other materials with dense mosaics of colorful feathers. Textiles such as tabards and hangings were covered by sewing strings of feathers—the feathers had been knotted into the strings in a separate process—to the fabric in overlapping horizontal rows, starting from the bottom. The long tail and wing feathers were probably used as part of elaborate headgear. And for smaller objects, such as leather crowns and headbands or ear ornaments of light wood (probably balsa wood), the tiny pretrimmed feathers—often those of the paradise tanager—were attached with an organic adhesive (see Giuntini, pages 89–100).<sup>14</sup>

Featherworks are rare in collections of ancient Peruvian textiles, most likely because they were so highly valued that they were not made in large numbers. It is also probable that many did not survive over time given their fragility and susceptibility to environmental damage. Another possibility is that those who came upon featherwork remains, which are often in poor condition, did not find them attractive or important enough either to keep or to record.

From colonial times South America has had a history of unauthorized digging in pre-Conquest archaeological sites. Most feather pieces in collections both within and beyond Peru come from such undocumented excavations, primarily from the dry desert coast of south Peru, where conditions are optimal for the preservation of organic materials over thousands of years. Featherworks have seldom been discovered in controlled archaeological excavations. Even finds of feathered fragments are scarce and rarely reported, although a

few scientific discoveries have been made on the South and Central Coasts and, in recent years, even on the North Coast, where less favorable climatic conditions for preservation prevail.

## THE ARCHAEOLOGICAL EVIDENCE

### EARLY DISCOVERIES (3RD – 2ND MILLENNIUM BCE)

From this early period feathers are found very sparingly. The earliest evidence of the use of feathers in Peru is archaeologically documented in ritual contexts, in caches where there are no traces of human remains, at a number of coastal sites dating to as early as the late third millennium BCE. Either loose or tied together, they are commonly part of offering assemblages that may contain shells, cotton cloth fragments, and unbaked clay figurines, as at Aspero in the Supe Valley, about 70 miles (113 km) north of Lima.<sup>15</sup> One cache also held a fragment of featherwork formed from about twelve parallel rows of red and yellow feathers.<sup>16</sup> At El Paraíso, on the northern outskirts of Lima, loose feathers and bird down were buried in the floor of a room; the remains of at least two types of birds—perhaps doves, seabirds, or parrots—suggest that the room may have been an aviary.<sup>17</sup> In excavations at the site of La Galgada, in the north highlands, archaeologists recovered red and green parrot feathers beneath the floors of ritual chambers.<sup>18</sup> They also found orange and white feather down, the latter commonly associated with shamanic rituals among many present-day indigenous peoples in the Americas.<sup>19</sup>

In the late third and second millennia BCE feathers also come from elite burials, where they have survived on accessories. In the small village of Ancón on the Central Coast, a man was buried wearing necklaces and armlets. Across his forehead was a string of colored feathers. He also had a fan of red, yellow, and green feathers, and a wood bowl filled with feathers was beneath his head.<sup>20</sup> At Caral, the largest of several urban centers in the Supe Valley, about 15 miles (24 km) inland from the coast, among the tomb offerings of higher-status individuals were yellow feathers placed in a knotted cotton bag, a headband decorated with feathers,<sup>21</sup> and a feathered necklace.<sup>22</sup> Some of the earliest known examples of feather strings attached to mostly looped or knotted fabric—woven cloth had not yet been developed—were excavated at the site of Asia, about 44 miles (70 km) south of Lima.<sup>23</sup> The use of feather string would eventually become the preferred technique of attachment to cloth.

### PARACAS CULTURE (CA. 6TH – 1ST CENTURY BCE)

Among the earliest well-preserved feathered textiles and objects are offerings and costume elements of the Paracas culture, which flourished in the Pisco and Ica Valleys on Peru's desert South Coast during most of the first millennium BCE. The culture is best known from the

quantities of polychrome ceramics and exquisite textiles decorated with complex imagery recovered from burials at cemeteries in the Ica Valley and on the Paracas peninsula. Between 1927 and 1928 the Peruvian archaeologists Julio Tello (1880–1947) and Toríbio Mejía Xesspe (1896–1983) excavated well over four hundred mummy bundles from the Necropolis of Wari Kayan on the Paracas peninsula. The two men worked closely together throughout their careers and are responsible for shaping modern Peruvian archaeology and the institutions through which it was carried out. A native Quechua Indian, Tello studied medicine in Lima and anthropology at Harvard University and was instrumental in the creation of Peru's National Museum of Archaeology and Anthropology in the early part of the twentieth century. The recovery of the Paracas mummy bundles is arguably one of the most important archaeological discoveries in South America.

Many of the bundles were wrapped in multiple layers of spectacular textiles embroidered with composite supernatural beings combining human and animal characteristics, often masked and wearing elaborate costumes and accessories. Less than 25 percent of the bundles have been unwrapped.<sup>24</sup> Feather accessories were found in many of them, mostly fans (fig. 3), plumes, small shoulder panels, staffs, and headdress ornaments.<sup>25</sup> Some bundles also included loose feathers in the wrappings, and a few of the highest-status bundles had sets

Figure 3. **Feather fan from bundle 217, Necropolis of Wari Kayan, Paracas peninsula, 1st century BCE–1st century CE.** Reeds, possibly condor feathers, 16 $\frac{7}{8}$  × 21 $\frac{1}{8}$  in. (43 × 53.5 cm). Museo Nacional de Arqueología, Antropología e Historia del Perú, Lima (RT-01893)





Figure 4. **Funerary garment from bundle 451, Necropolis of Wari Kayan or Cerro Colorado, Paracas peninsula, 1st century BCE–1st century CE.** Feathers on camelid hair, skin, length 70<sup>7</sup>/<sub>8</sub> in. (180 cm), width 26<sup>3</sup>/<sub>4</sub> in. (68 cm). Museo Nacional de Arqueología, Antropología e Historia del Perú, Lima (RT-25826)



of miniature garment offerings to which rows of small yellow feather strings had been applied. Feather fans are often held by elaborately costumed figures embroidered on Paracas textiles (see fig. 33 on page 52) and may refer to social status or ritual activity. Ranging in size from more than twenty inches (51 cm) in width—the fan shown in figure 3 is one of the largest examples known—to miniatures barely two inches across, they usually feature the longer tail and wing feathers of local raptors such as hawks, falcons, and possibly condors.<sup>26</sup> It is noteworthy that the smaller feathers on Paracas staffs, panels, miniature garments, and headbands are predominantly the yellow chest feathers of the blue-and-yellow macaw, suggesting that the color yellow may have had special meaning for the ancients; perhaps it was symbolic of the sun. Color symbolism in ancient Peruvian cultures is, however, poorly understood at present.

The American art historian Anne Paul, specializing in ancient Peruvian textiles, in her examination of several Paracas mummy bundles, observed that in bundles 310 and 378,

feathers “seem to have been a crucial component of the bundle, suggesting that feather objects were essential elements of the ritual paraphernalia of a Paracas leader in life or death or both.”<sup>27</sup> It would seem, however, that feathers were in fact used quite sparingly by the peoples of Paracas, and primarily as color accents or possibly as avian references. As such they have been found at the end of long densely embroidered headbands,<sup>28</sup> on ceremonial slings, tied to the paws of fox-skin headdresses,<sup>29</sup> and on the tips of staffs. One of only two full-size Paracas mantles with feathers was found on bundle 451 (fig. 4). Thought to have been owned by an important individual, the indigo fabric has sewn along the edges strings of small yellow and orange feathers and in the center a large oval, also comprising rows of yellow and orange feather strings.<sup>30</sup>

Feather mosaics that cover the entire surface of a textile or an object are rare on necropolis bundles,<sup>31</sup> but do occur in the burials of the Ocucaje cemeteries in the adjacent Ica Valley, which date from roughly the same period (see fig. 30 on page 49).<sup>32</sup> A small wig ornament not from a documented excavation (fig. 5) represents a rare example of late Paracas–early Nasca polychrome feather mosaic. Its entire surface front and back is covered with tiny blue, yellow, turquoise, and brown feathers that depict a face. Similar ornaments, not covered with feathers but with faces made with colored threads in a knotting technique, were found attached like tassels to the braids of a wig on a Paracas mummy bundle.<sup>33</sup>

Figure 5. **Wig ornament. Late Paracas–early Nasca, 2nd century BCE–2nd century CE.** Feathers on hide, spondylus shell, cotton,  $3\frac{3}{8} \times 3\frac{3}{8}$  in. (8.5 × 8.7 cm). Museum für Völkerkunde Hamburg (52.57.320)



Front



Back

#### NASCA CULTURE (CA. 1ST CENTURY BCE – 7TH CENTURY CE)

Many feathered textiles of undocumented provenance are attributed to the Nasca (ca. 1st century BCE–7th century CE) and to the Wari peoples (ca. 7th–10th century) on the basis of their alleged provenance from the South Coast. These attributions are, however, unconfirmed, and many have been proven incorrect. According to Helaine Silverman, an archaeologist who has worked in the area for many years, feathered textiles “are exceedingly rare in Nasca culture though known.” She goes on to say that, in the literature, “there is a persistent confusion of the geographical provenience with cultural identification.”<sup>34</sup>

The Nasca culture partially overlapped the Paracas in the southern coastal valleys and was centered farther south in the Nasca Valley. Understandably, the art styles of the two cultures are linked, especially in subject matter depicting supernatural composite beings, animals, and bodiless human heads on polychrome ceramics and elaborate textiles, the reflection of a shared mythology and belief system. A number of archaeologists excavated in the Nasca region beginning in the early years of the twentieth century, among them Max Uhle (1901), Alfred Kroeber (1926), and William Strong (1952), recovering vast quantities of ceramics, textiles, and artifacts in other materials. The feather items they encountered are few. They include feather-decorated textile fragments, feathers attached to vegetal fiber forming tassels, strings of feathers, and loose feather offerings.<sup>35</sup> In the mid-1960s the German archaeologist Hans Dietrich Disselhoff (1899–1975) excavated an early Nasca cemetery (1st–3rd century) near Huacapuy, in the Camaná River region on the far South Coast. Among the many textile finds were several narrow headbands wrapped around the skulls of the deceased, each about six to seven feet (ca. 2 m) long by 1½ inches (4 cm) wide and densely covered with small colorful feathers.<sup>36</sup> Similar headbands not from controlled excavations are in museum collections (fig. 6). They are often very long and composed of several sections. Explorations in the 1990s at Los Molinos and La Muña in the Palpa Valley produced evidence of featherworking, but few feather finds.<sup>37</sup>

The most substantial discovery of Nasca feathered cloth in its original context was made in 1998 by the Italian archaeologist Giuseppe Orefici at the Nasca site of Cahuachi, a monumental ceremonial center in the Nasca Valley covering some 61 acres at its core. Founded probably in the third or second century BCE, the site served as a burial ground and pilgrimage center; offerings were deposited there until about the seventh century.<sup>38</sup> One of the offerings Orefici uncovered was a large deposit of mostly women’s dresses and shawls. The cache included a number of sizable, nearly complete feathered garments in addition to painted and embroidered clothing (see Frame, pages 55–61).

A second, very unusual discovery of a late Nasca feathered cloth dating from the eighth century occurred in 2002 at the site of Cerrillos in the Ica Valley. A team of archaeologists

Figure 6. **Detail of a headband. Far South Coast, 4th–7th century.** Feathers on cotton, 216 × 17⁄8 in. (5.48 m × 4.8 cm). Collected before 1931. Former José A. Gayoso Collection, Lima. Courtesy, National Museum of the American Indian, Smithsonian Institution, Washington DC (178910)



excavating a temple structure of the early first millennium BCE came upon an untouched burial that is believed to be that of a woman shaman whose body had been laid to rest many centuries after the ancient site had been abandoned. The body was wrapped in a large textile covered with red, blue, and yellow macaw feathers (see Delgado, pages 63–67).

Despite the dearth of scientifically excavated feather pieces in museum collections, a few objects can be attributed to the Nasca culture based on their distinctive iconography and style. The motifs on these works are also found on Nasca ceramics and on woven and embroidered textiles. A fragment of a panel of unknown function with a border of trophy heads (fig. 7) may have been part of a longer cloth similar to the feathered textile in the Museo Nacional de Arqueología, Antropología e Historia del Perú, Lima.<sup>39</sup> A panel with a sideways floating mythological figure in the British Museum (fig. 8) has a counterpart in the Linden-Museum Stuttgart. The figure's enormous head with wide mouth and big eyes is shown frontally with





Figure 7. **Fragment with trophy heads.** Nasca, 4th–7th century. Feathers on cotton, 31 1/8 × 24 3/4 in. (79 × 63 cm). Museo Nacional de Arqueología, Antropología e Historia del Perú, Lima (RT-01799)



a pointed cap; above and below the body are two serpents and small animal forms; between the hands is a quadruped, possibly a llama. The two objects in figure 9, of unknown function, were originally joined (the unfeathered section of the spatula-shaped element was stitched to the underside of the boxlike piece). Both parts are decorated with profile heads of animals, possibly monkeys. Like the characteristically Nasca motifs, the outlining in black is also diagnostic of Nasca art.

#### MOCHE CULTURE (CA. 2ND–8TH CENTURY)

Surviving featherworks made by the Moche peoples of the Peruvian North Coast, contemporaries of the Nasca, are even rarer than those from the South Coast, most likely because of poorer preservation conditions, although a few finds have been reported in the archaeological literature. The Moche were dominant on the North Coast between the valleys of Piura and Nepeña for about seven hundred years, building cities—some with populations estimated in the tens of thousands—with elaborately decorated ceremonial architecture. Ruled by powerful leaders, the many states or kingdoms spanning several coastal valleys, though independent of one another, were linked by cultural ties. These peoples also shared a belief



Figure 8. **Panel with mythological figures. Nasca, 5th–7th century.** Feathers on cotton, 16½ × 22 in. (42 × 56 cm). British Museum, London (AM 1931, 07-12.1) (after Monti 1964, p. 1318)

Figure 9. **Objects with animal heads. Nasca, 5th–7th century.** Feathers on cotton-wrapped reeds, diam. 3¼ in. (8.3 cm), depth 1 in. (2.6 cm), length 5½ in. (13 cm), width 1⅝ in. (4 cm). Collected before 1941 by Samuel K. Lothrop at Chaviña, Acarí Valley. Courtesy of the Peabody Museum of Archaeology and Ethnology at Harvard University, Cambridge, Mass. (42-12-30/3342)





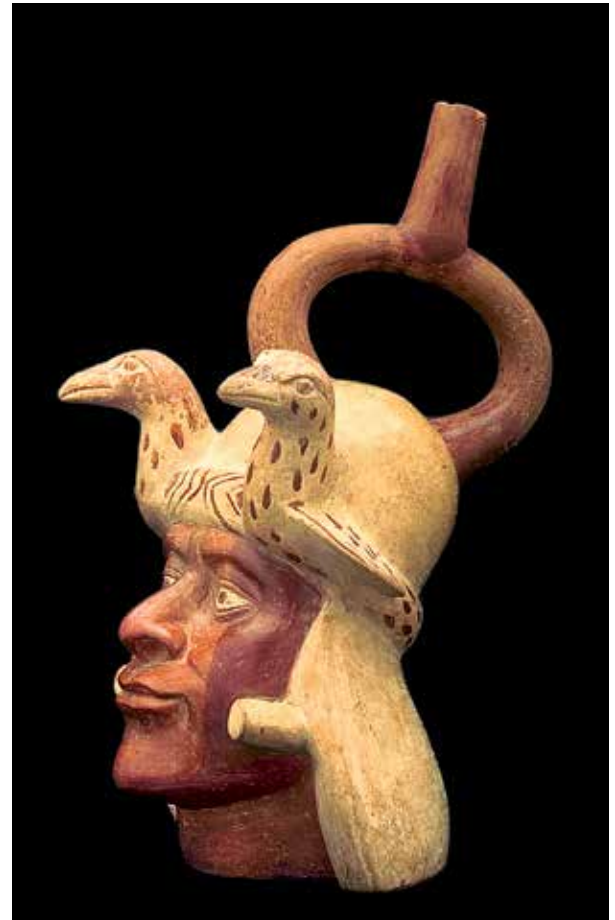
system comprising a pantheon of gods that combined human and animal features, particularly those of felines and birds. One of the most complex Moche rituals, known as the Sacrifice Ceremony, involved the sacrifice of humans. The participants were resplendently clothed and are depicted on ceramics, in metalwork, and on the façades of important pyramids (see figs. 46 and 47 on pages 71, 72).

Moche society was highly stratified, and some of the richest burials excavated in Peru are those of the Moche rulers. Impressive quantities of grave goods—ceramics; ornaments of shell, gold, silver, and semiprecious stone; and textiles decorated with supernatural beings—also show evidence of featherworking. At the site of Huaca de la Cruz in the Virú Valley, a head ring of a type often seen on Moche portrait vessels was excavated from a burial in 1946 (figs. 10, 11).<sup>40</sup> Two yellow feather plumes mounted on copper handles and a green parrot feather fan, both probably headdress ornaments as seen on painted Moche ceramics, were also found at the site.<sup>41</sup> And headdress ornaments made of bone pins with



Figure 10. **Head ring with bird heads (one partially destroyed), wings, and tail. Moche, 4th–8th century.** Feathers on cotton, fiber, length 11<sup>3</sup>/<sub>8</sub> in. (29 cm), width 8<sup>5</sup>/<sub>8</sub> in. (22 cm). Museo Nacional de Arqueología, Antropología e Historia del Perú, Lima (after Strong 1952, pl. XXVD)

Figure 11. **Portrait jar of an individual wearing a head ring with two bird heads similar to the one shown above. Moche, 5th–7th century.** Ceramic, paint, height 9<sup>1</sup>/<sub>2</sub> in. (24 cm). Private collection



attached feathers were reported from Moche burials at the site of Pacatnamú in the Jequetepeque Valley.<sup>42</sup>

In the late 1980s and 1990s similar but much larger feathered headdress ornaments were documented in the fabulously rich elite tombs excavated at Sipán in the Lambayeque Valley.<sup>43</sup> The grandest tomb, arguably the most lavish ever excavated by archaeologists in Peru, is that of the Lord of Sipán. Six individuals (and a dog) accompanied him in death, and more than eleven hundred ceramic vessels—probably once containing foodstuffs—were placed in niches in the burial chamber. Personal ornaments included exquisitely worked ear spools, necklaces, and nose and belt ornaments, all made of gold, silver, copper, semiprecious stone, and shell. There were also several copper shafts, the longest 20½ inches (52 cm) in length, to which feathers had been fastened to create fan-shaped plumes that may have been inserted into headdresses or held as staffs. Although badly decomposed, the feathers were identified as the wing feathers of the Chilean flamingo, which inhabits the lakes and lagoons in the Andean highlands and the marshlands along the coast. No evidence of feathered cloth was found among the many textile remains recovered from this tomb.<sup>44</sup>

It is clear that the Moche used feathers, but apparently only on select, high-status ritual objects and garments. One such object was excavated in 1998 on Platform I at the Huaca de la Luna (Pyramid of the Moon), at the site of Moche near the modern town of Trujillo (fig. 12). The object, found in a reed basket near a tomb, is in the shape of a pendant feline effigy often seen on the backs of Moche warrior figures (fig. 13).<sup>45</sup> The long ties that hang down at the sides served to secure the garment to the wearer. Remains of small yellow and dark brown feather strings are visible among the gold plaques and dangles on the body and near the paws; on the creature's face are tiny purple, red, and turquoise feathers, probably those of the paradise tanager. A similar but more deteriorated object—it has a human head, hands, and feet—also with small purple and orange feathers on the body was excavated at the monumental adobe pyramid Huaca Cao Viejo (2nd–7th century), an important Moche religious center in the Chicama Valley.<sup>46</sup> The ornament was part of the furnishings of the main companion tomb, next to the tomb of the Señora de Cao, which, in its contents, rivals that of the royal burials at Sipán. Clearly of the highest social rank, the Señora was buried with fine ceramics, magnificent textiles, and elaborate headdresses, necklaces, nose ornaments, and even weapons in gold, silver, shell, and semiprecious stone. In the same companion tomb was a well-preserved feather object (fig. 14) of unknown function; it may have been part of a headdress.<sup>47</sup>

Also noteworthy is the rare discovery by archaeologists in 2010 at the Moche site of Pañamarca in the Nepeña Valley of a round ceremonial shield that has feathers on its front. Although only few of the feathers remain, it would appear that they were arranged in a circular pattern.<sup>48</sup>





Figure 12. **Ritual garment. Moche, 4th century.** Cotton, skin, gold, copper, hide, resin, feathers, shell,  $26\frac{3}{8} \times 12\frac{1}{4}$  in. ( $67 \times 31$  cm.). Huaca de la Luna, Platform I. Museo Huacas de Moche, Trujillo (PHLL-56-INC-03). Photo: Steve Bourget

Figure 13. **Stirrup-spout vessel of a kneeling warrior with feline effigy on back. Moche, 1st–3rd century.** Ceramic, pigment, height  $8\frac{1}{2}$  in. (21.6 cm). Courtesy of the Cleveland Museum of Art, Andrew R. and Martha Holden Jennings Fund (1989.90)



Figure 14. **Feather object. Moche, 4th–5th century.** Reeds, cotton, feathers, height  $10\frac{3}{8}$  in. (27 cm). Museo de Sitio Cao, Chocope, La Libertad



Evidence of feather-covered textiles is very limited within the substantial quantities of Moche textiles, mostly fragments, that archaeologists have found at Moche sites in burials, caches, and infill of public or ceremonial architecture.<sup>49</sup> The German art historian and archaeologist Heinrich Ubbelohde-Doering (1889–1972), who excavated on Peru's North and South Coasts and was later director of the Staatliches Museum für Völkerkunde München, where much of his excavated material is housed, provides one rare description of a Moche feathered cloth in his report on the 1938 excavations at the cemetery at Pacatnamú. He writes that in the cane coffin, “the deceased lay underneath dusty textiles in a blue feather mantle whose remains surrounded him like wilted flower petals.”<sup>50</sup> At Dos Cabezas metal platelets that decorated a crown and a shirt were found with “traces of feathers in their surface corrosion,” suggesting that they had been sewn to a feathered textile.<sup>51</sup>

#### WARI CULTURE (CA. 7TH–10TH CENTURY)

As mentioned earlier, many feathered textiles without documented provenance are attributed in publications to the Wari peoples. But in fact only a few justify the Wari attribution on the basis of formal or iconographic characteristics or scientific dates (see, for example, pls. 3, 19, and 27).

In the seventh century the Wari started evolving into an expansive state from their capital city, also called Wari, in the Peruvian central highland valley of Ayacucho. Wari's increasing influence coincided with the rise of the city of Tiwanaku, near Lake Titicaca in Bolivia, causing a shift of political and economic power from the coastal areas to the south and south-central highlands. The nature of the relationship between the two centers is still being explored, but it would seem that the Wari peoples adopted aspects of Tiwanaku religion, among them a staff-bearing frontal deity (pl. 3) frequently seen in their art. Wari-style objects—ceramic vessels, textiles, and works in wood, shell, and semiprecious stone—are distinguished by a high degree of technical excellence and have been found in many sites on the North and Central Coasts, and especially on the South Coast and in the south highlands. Feather finds in Wari contexts are reported from several sites, but only in small numbers. At the vast Necropolis of Ancón north of Lima, for example, more than a dozen archaeologists have excavated over three thousand tombs since 1870, when a team of German archaeologists first investigated the site.<sup>52</sup> The most common feather objects found and published in the 1880s are plumes or tassels of various sizes and colors that were part of headdresses or head ornaments placed on the false heads of mummy bundles.<sup>53</sup> The Necropolis of Ancón was in use over many centuries. Several of the recovered feather pieces, including feathered textiles and ornaments collected by the German businessman Wilhelm Gretzer and now in the Ethnologisches Museum, Berlin, date from later periods.<sup>54</sup>

Feather plumes were also recovered in the late 1990s from Huaca Malena, an ancient site and important cemetery during the Wari period near the town of Asia, about 44 miles (70 km) south of Lima (fig. 15). Several were found still inserted into the interior fold of basketry headdresses (fig. 16). Archaeologists excavated and recovered from disturbed burials about four thousand textiles, many of them colorful and of very fine quality, though only a few feathered. One high-status mummy bundle was wrapped in five tunics, some of them decorated; the outermost sixth layer was a tabard originally with bright blue, yellow, and red feather mosaic. The feathers have nearly all disappeared, but the foundation cloth and strings that once held the feathers are in good condition, allowing for the reconstruction of the geometric design, which consists of five circles on a solid blue field.<sup>55</sup>

Feathered textiles in their original context have recently been reported from the Wari site of La Real, in the middle Majes Valley on the far South Coast.<sup>56</sup> Archaeologists encountered about ninety mummy bundles wrapped in textiles—some plain, some with typical Wari iconography—which had been placed in a mortuary chamber between the years 650

Figure 15. **Feather plume. Wari, 7th–10th century.** Vegetal fiber, feathers, height 11 $\frac{7}{8}$  in. (30 cm). Museo de Sitio Huaca Malena

Figure 16. **Folded basketry headband with inserted plume, height 8 $\frac{5}{8}$  in. (22 cm).** Museo de Sitio Huaca Malena





and 800 with offerings including polychrome ceramics, foodstuffs, coca, and snuff tablets. Feathered cloth, representing only a small portion of the total textile finds at the site, was found near the bundles and is thought to have been part of the wrappings. The feathered cloth remains, though occasionally sizable, are fragmentary, making it difficult to determine whether they were part of tabards, mantles, or hangings. As in the case of the Huaca Malena tabard, the feathers have nearly all disappeared, probably as a result of insect damage. The strings into which the feathers had been tied, however, are still in place, in many cases making possible the reconstruction of the designs. Among the recognizable motifs on one of the larger fragments found at La Real are two standing frontal figures with upraised arms similar to those seen in plate 5, executed in the same color palette.<sup>57</sup>

Figure 17a, b. **Two of the reportedly six to eight faceneck jars that held the feather panels. Wari, 7th–8th century.** Ceramic, height 43¼ in. (110 cm); 32⅞ in. (83.5 cm). Reportedly from Corral Redondo, Churunga Valley. Museo Nacional de Arqueología, Antropología e Historia del Perú, Lima (WF-142/C-54799; WF-143/C-64874)

The most spectacular and largest find of Wari feathered textiles occurred in 1943, also on the far South Coast near the village of La Victoria in the Churunga Valley, not far from its juncture with the Ocoña River. The excavation of the textiles was carried out by local residents,





Figure 18a, b. **Two panels. Wari, 7th–9th century.**  
Reportedly from Corral Redondo, Churunga Valley

a. Carbon-14 date 660–870 (95% probability).  
Feathers on cotton, camelid fiber,  $27\frac{1}{4} \times 84$  in.  
(69.2  $\times$  213.4 cm). The Metropolitan Museum  
of Art, The Michael C. Rockefeller Memorial  
Collection, Bequest of Nelson A. Rockefeller,  
1979 (1979.206.475)

b. Feathers on cotton, camelid fiber,  $27\frac{1}{4} \times 83\frac{1}{8}$  in.  
(69.2  $\times$  211.1 cm). The Metropolitan Museum of Art,  
The Michael C. Rockefeller Memorial Collection,  
Bequest of Nelson A. Rockefeller, 1979 (1979.206.470)

but the circumstances and alleged context in which they were found were reported in a number of articles in the Peruvian press and in university publications in Arequipa.<sup>58</sup> According to these accounts local people had excavated six to eight ceramic jars (fig. 17a, b), each three to four feet tall (approximately 1 m or more), in an enclosure known as Corral Redondo.<sup>59</sup> Each of the jars is said to have contained twelve large rolled-up feather panels for a total of ninety-six (fig. 18a, b). Having for centuries been protected in the jars from salts and insects, many of the panels were in remarkable condition. They average 84 inches wide by 29 inches high (213 × 74 cm) and are made of finely woven cotton cloth completely covered with the small iridescent blue and yellow body feathers of the macaw in an arresting design of large rectangles. A few of the panels have blue and red feathers or are covered entirely in yellow feathers. Radiocarbon dating of several of the panels confirms that they date from the Wari period. Although the Peruvian accounts of the find vary in detail—some say seven jars and only forty panels were unearthed—they state that the site was a burial ground and that mummies were also found there, which the locals burned immediately. Thus it is not known whether the monumental jars and magnificent feather panels were part of an elite tomb, or whether they represent precious gifts offered to the supernatural forces in ritual ceremonies that may have involved human sacrifice.<sup>60</sup> Although the panels are called “mantles” in the Peruvian reports, their format and size make it unlikely that they were garments. Their function in ancient times is not known. Perhaps they served to decorate the walls of important buildings on special occasions.

Featherworks that can be dated reliably and attributed to peoples of the first millennium—the Nasca, the Moche, and the Wari—are small in number. Surviving examples from these cultures include elite attire—tabards, headgear, ritual objects, and ornaments such as plumes—burial cloths, large panels, and objects of unknown use.

#### SICÁN, CHIMÚ, AND CHANCAY CULTURES (CA. 10TH–15TH CENTURY)

It would appear that after the tenth century featherworking increased dramatically, particularly on the North Coast, where powerful Chimú kings became the dominant force in the latter half of the period. During this time feathers also became an important design motif and are seen on many high-status woven and painted garments and also in metalwork, especially gold. Many surviving feather tabards and magnificent headdresses, pectorals, ear ornaments, and even parts of litters bearing exquisite feather mosaic date from this period.<sup>61</sup> They are usually attributed to the Chimú, although it is known that other coastal cultures, such as the Sicán, the Ichma (also spelled Ichsma), and the Chancay on the North and Central Coasts and the Ica/Chincha on the South Coast, also produced featherworks.<sup>62</sup> The reason for the increased interest in and use of feathers is not clear. Perhaps there was greater

demand by the ruling elite, requiring the opening of more active trade with the tropical lowlands to make exotic feathers more readily available, or by this time featherworking techniques had been perfected and mastered by more artisans.

In the early part of the twentieth century several archaeologists, among them the previously mentioned German archaeologist and linguist Max Uhle (1856–1944), carried out systematic excavations on Peru's Central Coast. Uhle began archaeological work in South America in 1892 and worked in Argentina, Bolivia, Chile, and Ecuador. In Peru he first worked for the University of Pennsylvania, and from 1899 to 1905 for the University of California. He assembled collections of artifacts, field notes, and maps in many parts of Peru, which resulted in a chronological sequence of cultures. One of the important sites that Uhle investigated was Pachacámac, a leading religious center a few miles south of Lima on the Pacific Coast, where for more than a thousand years up to the time of the Inca, high-status individuals of various cultures were laid to rest with rich offerings. Uhle excavated hundreds of these burials. Among the Chimú feather pieces he recovered were tabards—mostly fragmentary—headdresses, crowns, ear ornaments, plumes, and various types of ornaments covered with feather mosaic. These featherworks, together with those he excavated at nearby La Centinela, are today preserved at the University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia, and at the Ethnologisches Museum, Berlin; most are unpublished.<sup>63</sup> One burial included the remains of an individual on whose chest lay a flattened tripartite crown (figs. 19, 20; see also pl. 32).

In addition to the professional German and Peruvian archaeologists who worked at Pachacámac and other nearby coastal sites, a number of German amateur archaeologists and collectors who lived in Peru in the late nineteenth century acquired archaeological feather pieces from these sites that had been found by locals. Noteworthy among these early collectors are Wilhelm Gretzer (1847–1926), a textile merchant, and Eduard Gaffron (1861–1931), an ophthalmologist. Gretzer lived in Peru from 1872 to 1903 and amassed a vast collection of archaeological artifacts, exotic animals, and plants. Among the feather pieces from Pachacámac are five feathered tabards now housed in the Ethnologisches Museum, Berlin (fig. 21 and pl. 16). Gretzer also acquired a rare mortuary bundle of a puma—reportedly from Pachacámac—wrapped in a cloth covered with red, blue, yellow, and black feathers. Small bunches of yellow feathers were attached to the puma's head, paws, and tail. The puma wore one gold and one silver cuff on his forelegs and necklaces of red and white shells and black seeds.<sup>64</sup> Gaffron, who was in Peru from 1892 to 1912, formed a sizable collection mostly of ceramics and textiles, among them some featherworks. While Gretzer often recorded the alleged origin of the pieces he acquired, Gaffron rarely did, but, based on the iconography, they too date from the late Chimú and possibly the Inca periods (see pls. 12–14, 20).





Figure 19. **Crown with frontal figures. Sicán (Lambayeque), 10th–11th century.** Feathers on cotton, reeds, copper, height of crown  $6\frac{1}{8}$  in. (15.5 cm), width  $9\frac{1}{2}$  in. (24.2 cm); height of panels  $4\frac{3}{8}$  in. (11 cm), width  $8\frac{1}{4}$  in. (21 cm). Excavated in Gravefield I, Pachacámac, 1896. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia (28549, 28550, 28551)

Figure 20. **Reconstruction drawing of the tripartite crown above right.** Drawing: Daniel Kershaw



Excavations at Pachacámac by Peruvian and foreign archaeologists continue at present, although published feather finds are rare. One project, led by the Belgian archaeologist Peter Eeckhout, yielded a remarkable leather headband comparable to the one shown in plate 30. It features five registers with cutout repeat frontal figures wearing large crescent headdresses, a well-known motif in the art produced on the North and Central Coasts between the tenth and the fifteenth century. The entire diadem, attributed to the Ichma people who lived on the Central Coast between the Lurín and Rímac Rivers, is covered with a fine mosaic of tiny paradise tanager feathers of turquoise, purple, red, yellow, and char- treuse.<sup>65</sup> Other feathered items found during the excavations include a feather fan, the

remains of a tabard presumably left in a looted tomb, and a miniature mantle with two green feathers that was part of an offering of miniature male garments.<sup>66</sup>

The largest discovery by archaeologists of Chimú feathered textiles was made between 2001 and 2005 at the site of Moche during excavations on the Huaca de la Luna, a gigantic pyramid complex built by the Moche peoples between the second and the eighth century. The Chimú people, who rose to power in the region several hundred years later, considered the pyramids at Moche sacred sites, and there they performed rituals and ceremonies and buried offerings to the gods and ancestors. Among the hundreds of offerings excavated during the last twenty years in various parts of the Huaca de la Luna were about fifteen sets of small Chimú male garments covered with exquisite feather mosaic in brilliant colors (see Uceda and King, pages 69–77).<sup>67</sup>

Many undocumented featherworks can be attributed to Chimú artists on the basis of their distinctive imagery and the weaving technique of the foundation fabric. Pieces with a presumed provenance of the South Coast, into which the Chimú never expanded, nonetheless

Figure 21. **Tabard half. Chancay or Ichma, 13th–15th century.** Feathers on cotton,  $31\frac{1}{8} \times 21\frac{1}{4}$  in. (79 × 54 cm). Collected by Wilhelm Gretzer at Pachacámac before 1903. Staatliche Museen zu Berlin, Preussischer Kulturbesitz, Ethnologisches Museum (va 660300)



were probably made by Chimú artists and date from the thirteenth to the early sixteenth century. One striking tabard that features a frontal figure wearing a crescent headdress (pl. 1) was recovered from a burial in the Nasca Valley. The feather strings on the tabard are sewn on to the plain-weave foundation cloth of finely spun cotton with paired warps, considered the most common diagnostic feature of Chimú weaving.<sup>68</sup> It is unclear whether this piece was made in the north, or perhaps on the Central Coast, and reached the south by way of elite luxury exchange, or whether it was made locally by Chimú artists who had been relocated to the south by the Inca after they conquered the Chimú kingdom in the 1470s.

#### FEATHERWORK OF THE INCA (1430–1534)

By about 1500 the Inca had consolidated their vast empire, which stretched for more than 2,500 miles (4,000 km) along the Pacific Ocean from central Chile to south Colombia. The heart of the empire was Cuzco. Home exclusively to the Inca nobility and their extensive entourages, it was a city of great wealth and splendor that much impressed the Spanish conquistadors with its magnificent stonework and ceremonial pageantry. The empire was a loose confederation of ethnic groups linked to Cuzco through conquests, alliances, and kinship ties. Quechua was the prestigious language of the administration—provincial, regional, and state—and the Inca solar cult, the worship of the sun, the state religion. In the arts a homogeneous, conventionalized imperial Inca style was developed in the Cuzco area. It is characterized by simple forms, balanced proportions, and geometric designs executed under strict supervision and with superb craftsmanship by the artisans who had been recruited from all parts of the empire to work in the service of the Inca state.

For lack of both scientifically excavated pieces and detailed descriptions by the early chroniclers, we know even less about Inca featherwork than we do about featherwork from earlier peoples. When the Spaniards first saw the brilliantly colored feather garments worn by the nobility in Cuzco, they were astounded by their exotic beauty. “The gloss, splendor and sheen of this feather cloth was of such exceptional beauty that it must be seen to be appreciated,” wrote Bernabé Cobo, a Spanish Jesuit who went to Peru in the first half of the seventeenth century.<sup>69</sup> A keen observer of all aspects of indigenous life, Cobo wrote what is still considered the most complete description of Inca culture. He goes on to say that for solemn festivals as well as for celebrations, Inca noblemen wore bright feathered garments, which were their richest and most valued apparel. Most of their finery and ornaments “were made of feathers which came in a variety of attractive colors. Above the forehead they put a large diadem of feathers standing up high in the form of a crown or garland; it was called *pilcocata*. Hanging from the *llauro* [headband] they had several flowers and other finely made feather decorations.”<sup>70</sup> They wore another string of the same feathers around the neck like a Vandyke

collar.<sup>71</sup> Other chroniclers reported that on the occasion of a royal wedding the streets of Cuzco were “paved” with colored and feathered cloth,<sup>72</sup> and that the roofs of the imperial city were covered with beautiful textiles “woven with brilliant feathers of tropical birds.”<sup>73</sup> The Inca king and his *coya*, or favorite wife, were carried in a litter decorated not only with gold and silver but also with feathers, and umbrellas covered with feathers offered protection from the sun.<sup>74</sup>

In his descriptions of the religious ceremonies held in Cuzco, Cobo notes that for one festival, “the statue of the Sun was seated in the center of the square on a small bench which was completely covered with mantles made of fine, colorful feather cloth.” For other festivals idols were “dressed richly and adorned with many feathers,” and offerings were made to shrines and idols that included gold and silver vessels and figures, fine cloth, large quantities of seashells of all kinds, and colored feathers.<sup>75</sup>

Feather cloth also seems to have been associated with soldiers and war during Inca times. Salcamayhua, an indigenous man who had learned to write in Spanish, reports in the early seventeenth century that when the Inca ruler Yawar Waqaq was preparing for battle, he ordered not only armor but feather garments as well.<sup>76</sup>

What did the Inca feather cloth the Spaniards saw in Cuzco actually look like? Cobo—the only chronicler to provide a description—states in two short sentences that “they used only very small, fine feathers. These they fastened on the cloth with a fine, wool thread, laying them to one side, and making with them the same patterns and figures found in their handsome *cumbis*.”<sup>77</sup>

Imperial Inca artistic conventions are well known, especially from the many tapestry textiles embellished with *tocapu* (small squares or rectangles filled with geometric designs)

Figure 22. **Tabard fragment with stepped diamond design. Inca, late 15th–early 16th century.** Feathers on cotton, 11 $\frac{7}{8}$  × 14 $\frac{1}{8}$  in. (30 × 36 cm). Museo de Arqueología y Antropología de la Universidad de San Marcos, Lima (3001-5543). Photo: Daniel Giannoni





Figure 23. **Tabard fragment. Inca, late 15th–early 16th century.** Feathers on cotton,  $37 \times 31\frac{7}{8}$  in. ( $94 \times 81$  cm). Collected by Alfred Kroeber in 1925 from a cemetery mound at Infantas, Chillon Valley, greater Lima area. The Field Museum, Chicago (1925.1588.168633)



that have survived.<sup>78</sup> There are, however, only a handful of extant feathered textile fragments that reflect both the imperial Inca aesthetic and the superior craftsmanship seen on Cuzco-style Inca textiles. One such example is a tabard fragment worked in particularly fine feather mosaic (fig. 22). It was discovered in 1982 during construction work at the site of Armatambo, now part of Lima, together with a few Inca ceramic vessels and other Inca-period textile fragments.<sup>79</sup> The design comprises adjoining stepped diamonds with nestled diamonds in different colors, the central one quartered. The same motif is seen on several Inca *uncus* (tunics) made of *cumbi* cloth, where it forms the waistband.<sup>80</sup> A second fragment—it has lost most of its feathers—shows a checkerboard design created with the small body feathers of the blue-and-yellow macaw sewn to plain-weave cotton cloth (fig. 23). It brings to mind the black-and-white checkerboard *uncus* with stepped V-shaped yokes in red in fine *cumbi* cloth associated with the Inca military.<sup>81</sup>

A number of feather tabards that feature two snarling felines facing each other (pls. 12–14) can be attributed to the Inca period, although they are not in the imperial Cuzco style seen on the tapestry tunics. The motif recalls that on a woven tunic said to have been found in the Ica Valley on the South Coast in what has been termed the “provincial” Inca style.<sup>82</sup>

A few Inca-period featherworks come from documented excavations on the Central Coast, but they too are in the provincial, or regional, rather than the imperial Inca style. At Puruchuco-Huaquerones and nearby sites in the eastern part of Lima, archaeologists in salvage operations have excavated more than two thousand mummy bundles. The deceased, of both genders and of all ages and ranks, were buried in cemeteries dating from 1470 to 1530. Large quantities of textiles were recovered from the bundles but only a few featherworks, among them a fragment of a feather tabard and a miniature Inca-style tunic and female feather headdress.<sup>83</sup> In 1958, at Rinconada de la Molina not far from Puruchuco, fifteen mummy bundles wrapped in textiles were discovered in an ancient cemetery. Atop the false head on one of the bundles was a grand headdress with predominantly brown, pink, and white feathers featuring a fish motif (fig. 24). The style of the headdress — with a long feathered panel hanging from the back of the cap and two narrow feathered side panels (see pls. 33–36) — is considered typical of the Chimú culture based primarily on technical characteristics of the woven

Figure 24. **Headdress with stylized fish motif.**  
**Ichma (?), 13th–15th century.** Feathers on cotton,  
height approx. 29½ in. (75 cm). Museo de Sitio de  
Puruchuco Arturo Jiménez Borja, Lima (0583)



foundation cloth.<sup>84</sup> A similar but less elaborate headdress, excavated at the nearby site of Rinconada Alta, was found in the funerary wrappings of an intact mummy bundle together with many offerings. It is possible that featherworks of this type continued to be made by Chimú or Ichma artists under Inca rule for the Inca state. According to the chronicles the Inca ruler controlled the production and ownership of feathered garments and bestowed them on individuals who had achieved a certain level of leadership in the Inca provincial bureaucracy, possibly through distinguished service in the military.<sup>85</sup>

It is noteworthy that on these feather headdresses and on the unprovenanced tabards with felines, the feather mosaic consists primarily of white and brown feathers. It has been suggested that such items may have been made during the early colonial period, in the mid- to late sixteenth century, after the Spanish Conquest disrupted east–west trade routes and access to colored tropical feathers diminished.<sup>86</sup> Because the headdresses come from a documented pre-Hispanic context, however, it seems more likely that, in at least some cases, garments with brown and white feathers carried less prestige than those with colorful feathers.<sup>87</sup>

At the beginning of the twentieth century Max Uhle had carried out excavations on San Lorenzo Island off the coast of Lima. The island is thought to have served as a cemetery for the Ichma people during the last centuries prior to the Conquest. Among the many items Uhle recovered from the cemetery La Caleta de la Cruz and now in the collection of the Museo Nacional de Arqueología, Antropología e Historia del Perú, Lima, is at least one feather tabard. It depicts stylized birds and the wave motif in yellow, blue, brown, and red feather mosaic.<sup>88</sup> In 2008 excavations on the island yielded the burial of a high-status woman. Her body was covered with several layers of textiles and a garment with a wave design in red, blue, and yellow feathers. The tomb furnishings included four metal vessels—most likely of silver—and two baskets with close to two hundred carved and painted weaving implements. The deceased is thought to have been an *aqllakuna*, one of the many “chosen” women from across the empire cloistered for service to the Inca king to spin and weave the fine *cumbi* cloth.<sup>89</sup>

A rare discovery of an Inca-period feather tabard in situ on the North Coast occurred in the late 1980s during the excavations at Túcume, about 18 miles (30 km) north of Chiclayo. An important site built by the Sicán (11th–14th century), Túcume became a major Inca regional administrative center after their takeover of the North Coast in the second half of the fifteenth century. Archaeologists excavated a number of high-status burials in the main Inca-period structure, the richest believed to have been that of the last Inca governor of Túcume. The body was wrapped in sixteen layers of textiles, fourteen of which were decorated. One of them was a mantle covered with white and dark green feathers with geometric designs in orange and green.<sup>90</sup> From the main religious structure at Túcume, known as the Templo de la Piedra Sagrada (Temple of the Sacred Stone), archaeologists recovered hundreds

Figure 25. **Miniature female figurine. Inca, late 15th–early 16th century.** Silver, cotton, camelid fiber, spondylus shell, feathers, height 6¾ in. (17 cm). Museo de Sitio Túcume (RHL TPS 195). Photo: Daniel Giannoni



of miniature offerings in metal, shell, ceramic, and cloth, which had been deposited in pits located on both sides of the entrance to the temple. The most spectacular offering was an Inca female figurine in silver dressed in miniature red and yellow *cumbi* garments and a grand red feather headdress (fig. 25).<sup>91</sup> The figurine is identical to others found associated with human burials in high-altitude Inca shrines (see Reinhard, pages 79–87).

## CONCLUSION

Archaeological evidence shows that all of the major cultures of ancient Peru embellished textiles and other media with feathers but that such works were rare, especially prior to 1000 CE. Featherworks of undocumented provenance and context that have found their way into collections are also small in number when compared with the large quantities of Peruvian



textiles without feathers that have survived for thousands of years. Although virtually all feathered garments that are still extant appear to have been made for men, controlled excavations have shown that women of special status also wore feather dresses, as evidenced by the cache found in Cahuachi, or were buried wrapped in feathered cloth, like the mummy bundle of the woman shaman at Cerrillos. Similarly, spectacular feather headdresses generally assumed to have been worn by men were also worn by women who participated in important ritual activity, at least during Inca times.

The suggestion that most surviving feather pieces date roughly from the seventh to the sixteenth century<sup>92</sup> is only partially supported by archaeological evidence. Considerations of iconography and weaving structures and a limited number of scientific dates obtained primarily from tabards suggest that the majority of surviving feather pieces were made during the last centuries prior to the Spanish Conquest. Only a few date from before 1000 CE. The cultural attribution of most feathered textiles without documented provenance—especially those lacking diagnostic iconography—remains problematic, even when Carbon-14 dates are present. In spite of improvements in radiocarbon technology, the method has limitations. In providing a general time frame it is useful, although the range can be as much as two hundred years or more. Furthermore, the use of technical features of the woven cloth to which the feather mosaic is applied to distinguish northern from southern weavings—balanced plain weave with paired warps in the one case, for example, or warp-predominant cloth in the other—is often inconclusive, as both northern and southern characteristics can be present on the same piece. In other words, while an approximate date can be obtained and technical features can place an object or a textile in a specific geographic area, cultural attribution remains elusive. A more thorough understanding of regional peoples and styles is required to clarify these unresolved issues.

The accounts of the chroniclers convey the impression that vast amounts of feathered cloth were produced for the Inca elite in Cuzco.<sup>93</sup> But where is it all today? Undoubtedly much of it was destroyed during the turmoil of the Conquest. Several chroniclers report that when the Inca army was forced to retreat from the advancing Spaniards, the Inca authorities ordered cloth and other items burned so that they would not fall into the hands of the conquistadors.<sup>94</sup> The conquistadors and missionaries also destroyed countless Inca shrines and idols, “many of them with their clothes and ornaments,” and burned the mummy bundles of “ancestors . . . dressed in costly feather or *kumpi* [*cumbi*] shirts.”<sup>95</sup> But despite the massive destruction that accompanied the Conquest and the devastating fire of 1734 in the Alcázar in Madrid,<sup>96</sup> could virtually all Inca feather cloth have disappeared? Could the reports be exaggerated? Or did Inca feather textiles disappear for lack of appropriate storage and careful handling during the centuries following the invasion?

Regrettably, none of the magnificent feather creations from Inca Peru sent to Spain and listed in sixteenth-century inventories are known to have survived, although the inventory of Inca objects in the collection of Charles V of Spain, compiled in 1545, includes ten shirts and other ornaments adorned with feathers and spangles in gold and silver.<sup>97</sup> Under the heading “Cosas Extraordinarias,” in the two-volume inventory of the estate of Philip II, successor to Charles V, mention is made of three feather items (nos. 4760, 4765, and 4769) that were shipped to Spain by Francisco Toledo, viceroy of Peru. The third item is described as “a shirt of the Indians in blue *cumbi* . . . completely covered with red feathers; it is moth-eaten and lost; it has no value.”<sup>98</sup> The oldest feather piece from pre-Conquest Peru that still exists (it is now in the Museo de América, Madrid) was collected during the Spanish scientific expedition of the 1770s–90s led by the botanists Hipólito Ruiz and José Pavón (fig. 26). The format and imagery on this tabard are not Inca, however, but typical of the North Coast.

Even if one considers the fragility of feathers and their susceptibility to environmental damage, controlled excavations would surely have produced more evidence of such works had they existed. Given the extraordinary skill required to produce just one tabard—with thousands of small feathers individually tied into hundreds of yards of feather strings—and the manual dexterity necessary to create glued feather mosaics, it is unlikely that feather-works of any kind were produced in large quantities, not even during the reign of the Inca, who had unprecedented access to valued materials and controlled the production of all goods in their vast empire.

Figure 26. Tabard. Late Chimú, late 15th–early 16th century. Feathers on cotton, 41<sup>3</sup>/<sub>8</sub> × 29<sup>3</sup>/<sub>4</sub> in. (105 × 75.5 cm). Museo de América, Madrid (14660)



It would appear that in the cultures of ancient Peru, objects incorporating colorful feathers were regarded as the most precious of all luxury items. Indeed, scientific excavations in recent years have shown that the Inca, for example, valued feathers so highly that they included feather-covered garments, both miniature and full-size, in their most important religious offerings together with objects in other prized materials such as gold, silver, spondylus shell, and clothing made of vicuña wool.

The Spanish invasion of the Inca Empire in 1532 caused drastic changes in all aspects of the lives of the indigenous peoples. In 1542 Spain established the Viceroyalty of Peru, and nearly three centuries of colonial rule followed. Art was produced during this period primarily for the Catholic Church and for wealthy European or Euro-Peruvian patrons. Andean artists, introduced to European imagery and European aesthetics with the arrival of art objects from Europe, created art that reflects the convergence of Spanish and Inca traditions, particularly in those forms that have a strong Andean history, such as weaving and metalworking. Featherworks, however, which had such a long-standing tradition in Peru, were rarely made in the Viceroyalty either for the Church or for European patrons (pls. 44 and 49 may be two examples). Nonetheless, it would appear that they continued to be made in traditional pre-Conquest forms for high-status indigenous individuals. One

Figure 27a, b. *Deceased Individual Prepared for Burial* (front and back). Watercolor, late 18th century (after Martínez Compañón 1991: 12, 13)



eighteenth-century account from the Trujillo area of north Peru shows such an individual buried in European-style clothing but also wearing a feathered headdress typical of pre-Conquest elite attire (fig. 27a, b).<sup>99</sup> The deceased is seen lying on a European-style pillow and covered with a blanket. And while he wears a European-style vest with three buttons and three buttonholes, his staff of office, which he holds in his proper left hand, is an emblem of authority among indigenous peoples.

In Mexico, by contrast, where featherworking was also a highly developed craft in ancient times, when artists who specialized in the feather arts made luxury items for the Aztec elite, feathers continued to be used in Christian art of the colonial period until the beginning of the nineteenth century.<sup>100</sup> Feather paintings with Christian imagery depicting the saints, the Virgin Mary, and Christ, as well as miters and altar cloths covered with the minutest feather mosaic, today count among the rarest treasures in art museums in Mexico, Europe, and the United States. Comparable featherworks from Peru are currently not known, although it is possible that in Peru some form of decorative featherwork was commissioned during the colonial period by the Church or by individual patrons.

The featherworks that have survived from Precolumbian Peru speak eloquently of the rich imagination of Peruvian artists spanning a period of more than two thousand years. Using the natural resources of their environment, these artists created feather mosaics in vibrant colors on luxury items for the elite, developing complex and intricate techniques to attach the fragile feathers to different surfaces. Objects of great aesthetic appeal, each work also made a statement about its owner and conveyed social and cultural beliefs. Although today the meaning associated with these works is no longer accessible, they continue to be admired not only for their exquisite craftsmanship, brilliant colors, and lush surfaces, but for their extraordinary designs, which range from the figurative to the abstract.









# Early Featherwork from Ocucaje

**ANN POLLARD ROWE**

Burials from the Ocucaje Basin in the Ica Valley of the South Coast, dating to around 350–200 BCE, have yielded the earliest known feathered art objects from pre-Hispanic Peru. The same burials also included ceramics, pyroengraved gourds, baskets, gold ornaments, weapons, musical instruments, and a rich array of patterned garments of cotton and camelid fiber. A group of these materials is now shared between the Textile Museum, Washington DC, and the American Museum of Natural History, New York. A selection of featherwork objects from the Textile Museum is presented here.<sup>1</sup> These Ocucaje burials are contemporary with some of the stylistically related but better-known burials from the Paracas peninsula to the north.<sup>2</sup> Both Ocucaje and Paracas, originally place-names, are also used as style designations for objects found there, as well as for similar objects from nearby sites, but the objects considered here are all from the Ocucaje Basin itself.

Both the Ocucaje and Paracas finds include an impressive repertory of textiles with many complete male garments—including tunics, loincloths, mantles, and headbands—decorated with a complex iconography with nonnatural beings presumably reflecting religious beliefs. The technical and iconographic innovations seen on these garments appear to have originated in Ocucaje, but the artists who designed the Paracas textiles developed a more representational style, first evident on Ocucaje-style ceramics. Paracas textiles, which have primarily embroidered patterns, are also notable for their brilliant colors, which are brighter and more durable than those on any other known Peruvian fabrics.

The preservation of the organic materials in both Paracas and Ocucaje is due to the dry desert environment (burials were placed beyond the irrigated fields) and to the way the burials were prepared. The body was flexed and wrapped in several layers of cloth to form a mummy bundle. In Ocucaje the bundle was placed with other objects in a square tomb chamber that had been dug into the sand and then topped with a roof, which was itself then buried. At Paracas many mummy bundles were found grouped together in disused houses, as if they had been transferred en masse from some other location. In both cases the better-

Figure 28. **Bowl showing the Oculate Being,**  
**ca. 300–200 BCE (Early Horizon 10).** Ceramic,  
 postfired resin paint, height 2 in. (5.1 cm), diam.  
 6⅞ in. (17.3 cm). The Metropolitan Museum of  
 Art, Gift of Nathan Cummings, 1976 (1976.287.31)



preserved decorated textiles are from the larger mummy bundles of the wealthier burials, where they would have been further protected by having more layers and thus less contact with the body.

The preservation of the textiles may not have been entirely the result of environmental conditions but related to new religious beliefs that are reflected in the iconography. That is, because religious belief shapes the conception of death, it also affects how the dead are treated. The image of a supernatural figure of anthropomorphic form, exaggerated facial features, and multiple serpentine streamers appears for the first time on ceramics from Ocucaje dating from the period just prior to that from which textiles were preserved.<sup>3</sup> Called the Oculate Being, it is often depicted holding a knife and a trophy head (fig. 28). Textiles from Ocucaje with this iconography can be divided into two main stylistic phases that serve to define two chronological periods.<sup>4</sup> The earlier period (Early Horizon 9) dates circa 350–300 BCE; the later (Early Horizon 10), circa 300–200 BCE. In the earlier period there is evidence of warfare, indicated by the change from the many small settlements found previously to a few larger ones, some heavily fortified. There is also evidence of the spread of the new

iconography from Ocucaje to all parts of the valley except the far north, though with regional variations.<sup>5</sup> The later period seems to have been more peaceful and the new religion to have become generally accepted, since the settlement pattern reverts to one of many small sites, not fortified, and the ceramics are stylistically unified, although occasional trade pieces from the north are included in burials.<sup>6</sup>

This period also marks the beginning of the lavish textile style found in the mummy bundles from the Paracas Necropolis site. Although the iconography of Paracas and Ocucaje textiles is similar, the embroidered garment borders from Ocucaje are narrow, usually only 1 to 2 inches (2.5–5.1 cm) wide and worked with dark colors, while those found at the Paracas Necropolis are wider, up to 7 inches (18 cm), and with a predominance of brilliant red, making them the most magnificent and iconographically complex textiles ever found in Peru. In the featherwork the iconography involving the Oculate Being is not very apparent. What is important, however, is that the development and diffusion of the new religion become the context for the use of feathered ornaments. It appears that the new religion required new rituals and new paraphernalia.

An Ocucaje grave dating toward the end of the first period (ca. 300 BCE), excavated by the pioneering German archaeologist Max Uhle in 1901, included a “fan-like plume” with macaw feathers positioned behind the head of the mummy and a small rectangle of green “feathered stuff” placed on the upper front.<sup>7</sup> Another burial of only slightly earlier date is shown in a photograph taken in the 1950s (fig. 29). The mummy bundle is seen in the pit, the head area covered with a painted cloth mask topped by a cane framework with large “parrot” feathers along the upper edge. A large cloth shown in the original slide as covered with green feathers is visible at the upper left, apparently having been removed from covering the mummy bundle. The use of green feathers is noteworthy, since they may have been from a local parakeet rather than from an exotic import.<sup>8</sup> These feathers are smaller than the parrot and macaw feathers typically used in most Andean featherwork, which would have been imported from the forests east of the Andes, probably through highland intermediaries. Contact with the highlands is first apparent on the South Coast with the influence of the religious iconography of Chavín in the north highlands between about 900 and 600 BCE. Trade in camelid fiber, which originated in the south highlands, began perhaps around 500 BCE. The featherwork thus reflects a slightly later period of contact.

The large ornament shown on pages 44–45, also originating from an Ocucaje burial, is comparable to the headdress ornament excavated by Uhle and the one in figure 29, so presumably it was used for a similar purpose. It is composed of a base in which camelid fiber yarn is interlaced over and under a warp of radiating slats in a brown and white step block pattern, above which the feathers project. Above and below the interlacing is a row of



elaborate wrapping in brown camelid fiber yarn over both the slats and a perpendicular stick behind them.<sup>9</sup> The use of camelid fiber in place of cotton on the slats suggests that this work may have been done in the highlands. The striped feathers were identified in 1983 as aplomado falcon tail feathers, the yellow feathers as probably blue-and-yellow macaw, by the ornithologist John P. O'Neill, who visited the Textile Museum, where I was then a curator, to identify the feathers on Chimú textiles.<sup>10</sup> At that time I also showed him other featherworks in the collection. This essay includes the first publication of O'Neill's identification of the Ocucaje examples. The aplomado falcon is a highland bird but is occasionally seen on the coast. Macaws, however, are native to the Amazon Basin. The feathers are attached to one another with cotton yarns. Although the upper and lower parts of this ornament are now separated, there is no reason to believe that they were not originally connected.

Other feathered objects are datable to the later of the two periods (ca. 300–200 BCE) on the basis of similar pieces found in Paracas mummy bundles with datable patterned textiles

Figure 29. **Mummy bundle at burial site, Ocucaje.**  
A painted mummy mask is fastened to the top  
of the bundle (after Dawson 1979, fig. 17)



Figure 30. **Panel, ca. 300–200 BCE (Early Horizon 10).** Cotton cloth with feathers of the blue-and-yellow macaw, the cock of the rock, and the scarlet macaw,  $48\frac{7}{8} \times 52\frac{3}{4}$  in. ( $124 \times 134$  cm) excluding ties. The Textile Museum, Washington DC, acquired by George Hewitt Myers (91.949)



or because such objects are represented as carried or worn by people or deities on datable ceramics or on Paracas embroidered textiles. These objects include a large rectangle, a forehead ornament, a fan, and small human figure ornaments. Macaw feathers predominate.

There are three feathered cotton cloth rectangles in the Ocucaje group, two in the Textile Museum and one in the American Museum of Natural History, of which the best-preserved example is illustrated here (fig. 30). The ground fabric of this example is composed of three panels of varying loom widths, with one end hemmed, while the other examples are made of two loom widths. They are all nearly square in proportion and range in size from about 3 to 4 feet (slightly less than 1 m to 1.3 m), although one is slightly trapezoidal, flaring at the bottom.<sup>11</sup> None have figural designs. The example above has six ties across the top, each between  $4\frac{3}{4}$  and  $11\frac{1}{4}$  inches (12–28.5 cm) long. The American Museum piece is entirely in yellow, while the Textile Museum example not illustrated has bands of orange, blue, and yellow, and an outer border of blue. Although intact examples of this style of rectangle are



Figure 31. **Forehead ornament, ca. 300–200 BCE (Early Horizon 10).** Macaw feathers on skin, bird beak, mica,  $4\frac{3}{4} \times 10\frac{7}{8}$  in. (12.2 × 27.7 cm). The Textile Museum, Washington DC, acquired by George Hewitt Myers (91.1045)

not common in the Paracas mummy bundles, a similar piece with all yellow feathers, presumably from the blue-and-yellow macaw, was found in Paracas mummy bundle 400, which is contemporary with the Ocucaje examples dated to 300–200 BCE. That the ties are at intervals across the top suggests that these objects may be hangings, perhaps designed to be placed behind where an important individual (probably male) was seated. An unpatterned but brilliant hanging would certainly have enhanced the effect and prestige of such a person.

The technique of affixing feathers to a woven cotton ground fabric is similar to that seen in many later examples of Peruvian featherwork in that first the feathers were individually knotted with cotton thread to create a string of feathers, which was then sewn to a base of plain undyed fabric (see fig. 64a, b on page 95).<sup>12</sup> The blue and yellow feathers are all likely from the blue-and-yellow macaw. The short blue feathers are slightly iridescent in both examples. The orange feathers are for the most part probably from the male Andean cock of the rock, which lives on the eastern slopes of the Andes, while some may be faded scarlet macaw.<sup>13</sup>

The striking bird-shaped forehead ornament shown in figure 31 is the only known example of its kind; other Ocucaje feathered forehead ornaments have an animal snout with rectangular side flaps instead of the bird shape.<sup>14</sup> In its form it echoes ornaments made of sheet gold found at both Ocucaje and Paracas, which suggests that the gold ornaments are also based on the shape of a bird with outstretched wings.<sup>15</sup> In the same and later periods gold forehead ornaments are ubiquitous on supernatural figures depicted on ceramics and



embroidered textiles. On this example the beak is identified by O'Neill as from the blackbird family Icteridae, and the eyes are mica. The orange feathers he identified as probably faded scarlet macaw, and the blue and yellow feathers as blue-and-yellow macaw. The backing is skin, to which the feathers are affixed, presumably with an organic adhesive.

The group also includes a fan (fig. 32) with a plain interlaced basketry handle and a flared semicircular section in tubular linking into which the feather quills—probably from the blue-and-yellow macaw—are inserted.<sup>16</sup> O'Neill noted that the feathers, half blue and half yellow, were unusual, and suggested that possibly they came from a captive bird with a

Figure 32. **Fan, ca. 300–200 BCE (Early Horizon 10).** Handle probably cattail stems; feathers probably of the blue-and-yellow macaw,  $14\frac{3}{8} \times 16\frac{7}{8}$  in. ( $36.5 \times 43$  cm). The Textile Museum, Washington DC, acquired by George Hewitt Myers (91.950)





dietary deficiency. Although many of the Paracas mummy bundles, which are contemporary or slightly later, also include fans of similar construction, the base is often not so elegantly finished and the feathers are generally less colorful, from local or highland birds (condors, falcons, or wild geese; see fig. 3 on page 15), although sometimes from parrots.<sup>17</sup>

Fans are not depicted in Ocucaje textiles, but at Paracas they are associated with a figure having a backward-bending posture and streaming hair and usually wearing a short skirt (fig. 33).<sup>18</sup> Because there was no writing in pre-Hispanic Peru, the exact significance of this figure is unclear. Many interpretations have been offered, all of them more or less speculative. The backward-bending posture, for example, has been interpreted as representing dance, a shamanic trance, or even an Aztec-style sacrifice by tearing out the heart. In some later representations of the figure, he is placed adjacent to the mouth of a supernatural being. Such a juxtaposition might suggest some type of sacrifice or feeding. But what role the fan would play in such an interpretation cannot be determined.

The set of ten small figures (three are shown in fig. 34) is said to have originally been appliquéd on to a plain tunic.<sup>19</sup> They are not shown with any supernatural attributes, so presumably they represent humans, probably men of some importance. There are a few similar representations of people, usually with weapons, on ceramics of the later period, so they too are likely datable to that time, circa 300–200 BCE.<sup>20</sup> Each of the figures has a different pattern on the face, presumably an indication of face paint. Whether the patterns

Figure 33. Detail of a mantle border showing a backward-bending figure with fan. Necropolis of Wari Kayan, Paracas peninsula, 2nd–1st century BCE. Cotton cloth, embroidered with camelid fiber yarns. The Metropolitan Museum of Art, Bequest of Arthur M. Bullowa, 1993 (1994.35.120)





Figure 34. **Figural ornaments, ca. 300–200 BCE (Early Horizon 10).** Skin with feathers of the macaw, Muscovy duck, and Chilean flamingo. Max. height 4<sup>3</sup>/<sub>8</sub> in. (11.1 cm). The Textile Museum, Washington DC, acquired by George Hewitt Myers (91.1046B,I,E)

refer to some specific identity is of course unknown. Although the figures have been said to be appliquéés, this is doubtful, since they are covered with feathers both front and back. Furthermore, the best-preserved figure (above center) has the remains of a cotton yarn extending from the top, and other figures have similar but smaller yarn remnants, which would suggest that rather than being appliquéés they are pendant ornaments. The construction of these delightful figures is not readily apparent, although it is probable that the substrate is skin. Although they were said to be associated with a tunic, they are more likely to have been hair ornaments.<sup>21</sup>

The feathers have been trimmed to form the designs. According to O'Neill, the yellow feathers are from the blue-and-yellow macaw, the blue feathers are from one of the typical macaws, and the pink feathers are either scarlet macaw or Chilean flamingo. One figure (not shown) has tiny bright blue, chartreuse, and black feathers from the paradise tanager, one of the most luxurious feather sources in South America. The larger black feathers could be from the Muscovy duck, an Amazonian bird perhaps domesticated on the coast.

It did not take long for the wide repertory of forms we see here to be developed in Ocucaje once the exotic feathers became available. These feathered objects are rare and were probably associated only with the most important people in Ocucaje society. Featherwork was an art form in which the artists of Ocucaje appear to have played a leading role as innovators, coastal originators of a long and rich tradition within Andean art.







# The Feathered Dresses of Cahuachi

**MARY FRAME**

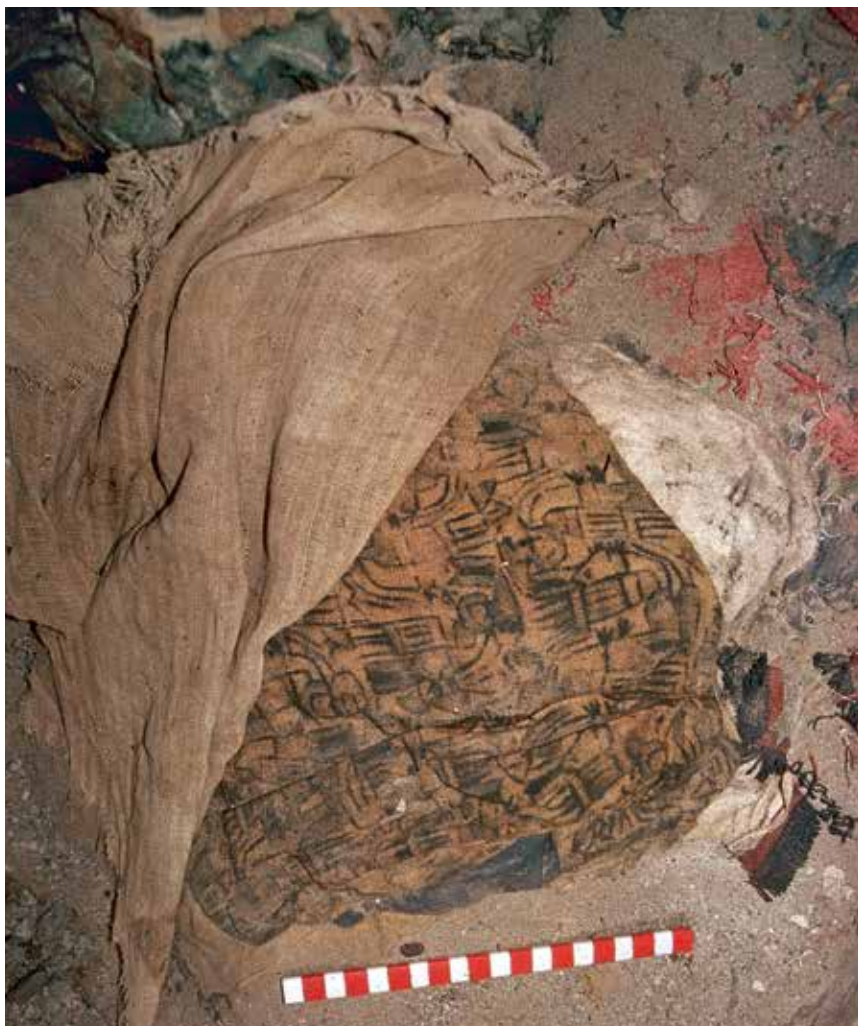
A cache of textiles from the ceremonial center of Cahuachi, many of them decorated with feathers, offers rare insights into the ritual and social contexts of feathered textiles in the ancient coastal culture of the Nasca people. The cache (fig. 35), which was excavated and recorded in 1998 by Giuseppe Orefici and the archaeological team of the Centro Italiano Studi e Ricerche Archeologiche Precolombiane, proved to be a gendered offering that consists of women's clothing and implements and materials used to make them.<sup>1</sup> The offering marks the first discovery of full-size clothing for women in the Early Nasca period (ca. 0–300 CE). Women, who have been largely unidentified in the archaeological record of this period, clearly had access both to skilled labor and to valued materials such as feathers, as well as the right to display symbolic images on their clothing. The cache, which included forty dresses and eight shawls, also indicates that women were the focus of an elaborate ritual. Twenty-five of the dresses and six of the shawls were embellished to some degree with feathers.

The Nasca people, widely known today as consummate makers of polychrome pottery, lived in small villages in the river valleys of the South Coast. The barren, stony plains between the valleys are etched with geometric shapes and giant abstracted animals and vegetal forms that are known collectively as the Nasca Lines. The people practiced agriculture according to a seasonal cycle that corresponded to the rainy season of the highlands, which replenished the rivers and underground aquifers. The vivid imagery on their pottery indicates that a great variety of fruits, flowers, tubers, and root plants flourished in the valleys, and that birds, land mammals, and varied sea life were part of the ecosystem. The Nasca congregated periodically at Cahuachi.<sup>2</sup> Caches of musical instruments, foodstuffs, camelids, and textiles that have been archaeologically excavated indicate that Cahuachi was the locus of important rituals that involved music, feasting, the sacrifice of camelids, and elaborate clothing adorned with feathers.<sup>3</sup> The monuments of Cahuachi, the cached offerings, and the Nasca Lines suggest that the Nasca people engaged in many rituals and ceremonies, quite

Birds feed on small animals and insects in the painted imagery on the skirt of a Cahuachi dress. Museo Arqueológico Antonini, Nasca. Photo: Mary Frame



Figure 35. The deposit pit at Cahuachi.  
Photo: Courtesy of Proyecto Nasca, 1998



possibly directed at controlling the cycles of nature and the water from the highlands, on which agriculture — and life — depended.

Cahuachi is situated near the interface of the desert and the cultivated bottomland of the lower Nasca drainage. A monumental temple and stepped pyramid, known as the Great Pyramid, dominate the plazas, mounds, and enclosures of the 370-acre site (fig. 36). The cache of women's garments was found in a pit near the top of a mound to the north of the temple.<sup>4</sup> The bottle-shaped pit had been dug through a hardened earthen floor near a passageway with four steps leading to the top of the mound.

The cache consisted of two large cloth bundles that were filled with smaller bundles and folded garments.<sup>5</sup> The lower bundle, the first to be put into the pit, included the fragment of a woven bag that probably contained materials and implements found at the bottom

of the pit: needle cases, dyed yarns, cords, a sampler with color patterns, skin pouches, three-dimensional edgings of birds and flowers, braided tumplines, metal beads, stone pendants, and embroidery fragments. It also included folded garments, mainly dresses and shawls, and one packet with sleeveless shirts for an infant and a large rectangular cloth with four corner ties. The upper bundle had many folded garments and several wrapped bundles, one of which contained four kilograms (8.8 lbs) of toasted black beans. Both the upper and the lower bundle included feathered dresses and shawls.

The larger garments can be securely identified as women's dresses. They share construction features with the miniature dresses worn by Nasca figurines (see pl. 6o).<sup>6</sup> Like the dresses of many coastal cultures, they are tubular, usually formed of two or more long panels of cloth oriented horizontally, with horizontal openings for the head and arms in the upper edge. A layer of fabric is folded over the upper bodice, and there is a deep vertical pleat at the back and a horizontal pleat hidden in the shoulder line.<sup>7</sup>

The number of feathers on the front of dresses varies widely; a few examples have feathers on the back as well. One dress that is suitable in size for an adolescent girl is made of cream-colored cotton and embellished with cream-colored feathers on both front and back. This opulently feathered dress was made for a younger child and later lengthened by letting out the horizontal pleats in the shoulder line. Some dresses, in particular those that have

Figure 36. **Reconstructed Great Pyramid at Cahuachi.** Photo: Mary Frame







Figure 37. **Birds feeding on plants painted on a dress from the Cahuachi deposit.** Museo Arqueológico Antonini, Nasca. Photo: Mary Frame

small-scale painted imagery on the skirt, have few or no feathers attached to them. Because birds are depicted on many of the painted skirts, there appears to be a conceptual as well as visual connection to feathers (fig. 37).

A less common type of tubular feathered dress has a vertical panel inserted into the front. Composed of multiple fabrics, the panel sometimes has contrasting borders in the bodice. Blue and blue-green are the favored colors for these dresses, with borders in white or yellow. Although the feather plumes have deteriorated, the quills and the strings used to attach them remain. The method of feather attachment used in the Cahuachi garments differs from that in other styles. For the Cahuachi examples the quill of a feather was folded over a cotton tie and then knotted with the ends of the tie (fig. 38). It was then attached to the foundation cloth by passing the loose ends of each tie through the fabric, presumably with a needle, and knotting the ends together on the underside of the cloth (fig. 39). On some dresses stitched outlines were used to block out the color areas prior to feather attachment. The individual feathers were loosely organized in rows. Even when the plumes





Figure 38. **Detail of a dress with individually knotted and attached feathers.** Museo Arqueológico Antonini, Nasca. Photo: Mary Frame

Figure 39. **Detail of the underside of a feathered shawl panel showing the knotted cotton ties used to attach each feather.** Museo Arqueológico Antonini, Nasca. Photo: Mary Frame



have disappeared, the color of the remaining ties indicates that feathers of different colors were used.

The colors of the feathers include cream, yellow, orange, blue, salmon pink, and green-black, not all of them the bright, saturated colors of rainforest birds. Some, but not all, colors were obtained by dyeing, a practice that has been reported for Paracas textiles as well.<sup>8</sup> Blue feathers on two dresses that were tested proved to be dyed with indigo. The yellow and orange feathers attached to the same garments are natural plumage colors.<sup>9</sup> Feathers were apparently dyed after the quill was knotted, as blue feathers have blue ties.

Women's square shawls, which are made of two panels of cloth, also have feathers attached to one or both panels. Two shawls of solid color have differently colored feathers attached to each panel. Two more have small-scale painted imagery of birds on one panel, and feathers attached to the monochrome panel. The painted images of birds match the painted figures on some dresses and indicate that dresses and shawls were sometimes worn in matching sets. Because the feathers hang downward from the point of attachment, the direction of the feathers indicates how the shawls were worn, with the seam oriented horizontally and with the feathered panel above the painted panel. The warp direction in shawls is horizontal, as it is in dresses, which is a gender indicator of women's garments of many coastal styles.<sup>10</sup> Shawls often have edgings of three-dimensional hummingbirds and flowers. The cross-looped edgings, needle wrought in jewel-like colors of dyed alpaca yarn, are a hallmark of Early Nasca textiles.

Two incomplete shawls combine painting and feathers in a different manner. The panels are painted with large-scale figures and then selectively feathered in colors that correspond with the painted image. On both shawls the image appears to be the lower half of a bird with outspread wings. The missing shawl panels may have depicted the upper half of a bird, possibly a condor. A related figure is delineated in paint and feathers on the smallest dress in the deposit. The dress, suitable in size for a child, was remade from the single panel of an adult-size dress.<sup>11</sup>

The combination of large-scale painted figures and selective feather attachment was used for the most opulent dress in the deposit. Although only fragments from the skirt have survived, one can deduce that the dress would have been dramatic. Big faces with penetrating eyes flanked by vertical serpents were first painted on the skirt panel. After the dress was constructed, feathers of different colors were attached following the painted outlines and interior details. The feathered snakes from the front of the dress have facial features and zigzag patterns on their backs. The extensive fabric loss suffered by this extraordinary dress may be the result of libations having been poured on it before it was placed in the bundle.

The emphasis both on feathered garments and on painted garments that depict birds suggests that birds were strongly associated with women, at least in the garment cache at Cahuachi. The painted images of small-scale birds provide hints concerning the efficacy of the feathered garments. The birds are generally shown as feeding, sometimes on cultivated plants (see fig. 37) and sometimes on small animals, including bees, snakes, frogs, lizards, and hummingbirds (see page 54). Web-footed birds feed on fish and chitons, while hummingbirds sip nectar from flowers and condors feed on human remains.<sup>12</sup> The thematic emphasis on feeding could indicate that both women and birds were associated with the distribution of food, a constant concern, especially in the marginal lands of the arid South Coast. The birds of the field, desert, hills, and shore, which are distinguished by the type of food they consume in the imagery, belong to varied ecological zones of the Nasca heartland. Birds, which are at home in the air, on water, or on land, are at a nexus that links together the cosmological and ecological zones of the Nasca universe. The apparent exclusivity of female garments in the cache may indicate that the biological fertility of women was conceptually associated with the fecundity of the earth and with the production and circulation of food. Birds, through their feathers and the thematic emphasis on feeding, metaphorically connect the idea of fecundity to the entire Nasca cosmos. Thus the feathered and painted garments evoke a worldview of an interconnected universe fueled by the distribution of food, and suggest that the burial of the cache was a supplication for universal fertility and abundance.





# A Woman's Feathered Cloth from Cerrillos

**MERCEDES DELGADO**

Feathered cloths are rare finds in archaeological excavations. One such discovery was made in 2002 at the site of Cerrillos in the upper Ica Valley on Peru's South Coast. Archaeologists uncovered a very large *fardo*, or mummy bundle, with most unusual characteristics. The site (shown opposite), located about 50 miles (80 km) from the Pacific Ocean in the district of San José de los Molinos, was a ceremonial center with adobe architecture built by the Paracas peoples between about 800 and 100 BCE. The bundle (fig. 40) was a chance find and held several surprises for the archaeologists. While other bundles uncovered on this site date from the Paracas period,<sup>1</sup> this one dates from approximately 725 to 730 CE.<sup>2</sup> This means that the bundle had been buried eight or more centuries after the site had been abandoned. The placement of the bundle coincides with the time the Wari peoples, from the highland area of Ayacucho, began to expand into the southern coastal valleys, which had been occupied by the Nasca, considered the successors to the Paracas. Another surprise was that the bundle held the bones of a woman.

The site of Cerrillos was first discovered in 1958 by Dwight Wallace, who carried out initial investigations with a team of archaeologists under the auspices of the California Institute for Peruvian Studies.<sup>3</sup> Work there has continued intermittently to the present day. The main objective of the excavations has been to establish the evolution of the architectural structure over the centuries. Excavators discovered that six terraced structures with multiple rooms and staircases had been built on top of one another over a period of about eight hundred years prior to the beginning of the Common Era. Between the construction levels fragments of exotic objects of obsidian, rose quartz, and high-status ceramics and textiles — many not of local manufacture — provided evidence that Cerrillos was an important ceremonial and elite center.<sup>4</sup> Long after it was abandoned the site continued to hold ritual significance for the people in the region, as evidenced by the burial of the unusual mummy

**Excavation site at Cerrillos.** The findspot of the mummy bundle is at center, above the stairs.  
Photo: Mercedes Delgado



Figure 40. **Mummy bundle in situ.** Photo:  
Mercedes Delgado



bundle. As the 2002 field season was winding down (the project was now funded also by the National Geographic Society), while in the process of removing earth near the top of the structure, workers discovered a blue textile fragment on the floor. It was soon evident that the textile was part of a bundle. As the clearing process advanced more of the fragment was revealed and an unusual feathered textile, unlike any other known from the Paracas culture, appeared. Eventually it was found that the cloth was topped by what seemed to be a beaked mask with a red feathered band across the head and two blue “wings,” forming a human-size effigy of a bird (fig. 41).

The bundle was discovered in a tomb in the upper part of the structure built during the final phase of the Paracas occupation of the site (fig. 42). The pit containing the tomb was circular in shape and located behind a retaining wall on one of the terraces. Two poles made from the wood of the huarango tree, a species common in the region, were found, which suggests that the tomb was originally roofed.<sup>5</sup> The bundle had been placed in an upright position and was oriented toward the south. It measured about 63 inches in height, 51 inches in width, and 23 inches in depth (160 × 130 × 60 cm) and weighed more than two hundred pounds (92 kg), making it the largest bundle in dimension and weight ever found on the South Coast of Peru. Based on its dimensions and weight, the bundle must have required several bearers to transport it from the spot where it had been prepared and to place it in the tomb. The front of the bundle was covered with a beautifully colored feathered



cloth (fig. 43), and on the back was the blue textile with a central band also covered with feathers (fig. 44).

The front cloth, measuring about 51 × 51 inches (130 × 130 cm), is covered with an estimated thirteen thousand feathers, predominantly those of the macaw, in red, yellow, orange, and blue arranged in wide horizontal bands separated by a few rows of black feathers, which may have been dyed.<sup>6</sup> One band has a checkerboard design in the same colors. The blue textile covering the back of the bundle has a most unusual shape, a stepped form with one side longer than the other. It is composed of four pieces of cloth with a vertical feather-covered band in the center. When the bundle was removed from the tomb, the archaeologists noticed that the left part adhered to the tomb wall. Analysis of the material indicated that a liquid, probably *chicha* (a fermented corn beverage), had been poured on it, likely during the burial ritual. Similar ceremonies continue to this day in communities where it is the custom to offer *chicha* to the earth goddess Pachamama and to the deceased.

After the removal of the bundle from its ancient burial place—probably considered a sacred ancestral site by the Nasca—it was taken to the nearby museum in the town of Ica. Its careful opening by archaeologists and conservators revealed a complex construction process involving several steps. Beneath the feathered and blue cloths was a bale filled with an astonishing quantity of many types of plant fiber. Twenty-one species have so far been identified, including achira, maize, bean, pacay, peanut, totora, grama, and reed. Although the site is located at an altitude of 1,640 feet (500 m), some of the vegetation was gathered from altitudes

Figure 41. **Reconstruction drawing of the bird effigy, front and side views** (after Wallace et al. 2004: 138)

Figure 42. **Drawing of the final construction phase at Cerrillos, indicating the location of the bird effigy** (after Wallace et al. 2004: 129)

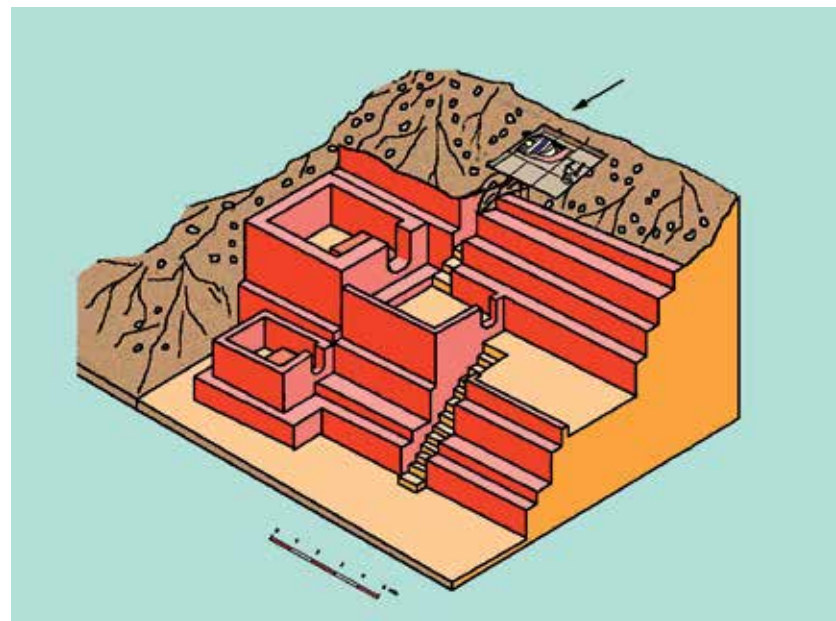




Figure 43. **Cloth that covered the front of the mummy bundle.** Feathers on cotton, approx. 51 × 51 in. (130 × 130 cm). Museo Regional de Ica. Photo: Elisa Alvarado



Figure 44. **Blue cloth with feather band.** Feathers on camelid fiber, 67¾ × 95¼ in. (172 × 242 cm). Museo Regional de Ica. Photo: Elisa Alvarado

from between 8,200 and 14,760 feet (2,500 and 4,500 m), indicating a complex and deliberate selection process of the material included in the bundle.<sup>7</sup> It is possible that the different vegetal materials were meant to represent different ecological zones: the coastal valleys, the highlands, and the Andes.

Like the fill of the bundle, its wrapping also reflects different environmental regions. The feathers on the cloth covering the front are those of rainforest birds; the foundation cloth is made of cotton from the coast; and camelid fiber, probably of alpacas that inhabit the highlands, was used to weave the blue cloth. The plant fill of the wings was the same as that of the central part of the bundle. The upper wing on the right was wrapped in a cream-colored cotton textile, the lower wing in a darker-colored (dark yellow) camelid fiber textile. On the left side the opposite was the case: the upper wing was wrapped in a (grayish brown) textile of camelid fiber, the lower wing in a (sand-colored) cotton textile.

Removal of the plant fill revealed the body of a woman twenty-five to thirty years old in fetal position wrapped in several textiles. There were no offerings inside the bundle. The

absence of offerings—found in most bundles—suggests that the offering was the woman herself. Although it was common in ancient Peruvian cultures of the South Coast for bodies to be wrapped in fetal position, the orientation of the skull and gaze was noteworthy—looking east toward the rising sun, offering the promise of rebirth. The bundle, on the other hand, was buried upright and facing south, traditionally the direction of darkness and death.

Who was this woman who had been given such an elaborate burial at such a special place? Not only had much time been invested in weaving the textiles and covering the cloth with precious bird feathers, but subsequently the bundle had to be assembled and shaped to resemble a gigantic bird. Burial rites followed, and the bundle was transported to its final resting place in the ancient structure at Cerrillos. To have been worthy of such an expenditure of labor, the woman must have been an individual of high status. Because she was buried without riches or possessions, it would appear that she was not wealthy. Nevertheless, she was buried in a very special place and was certainly an important personage. In many indigenous societies birds are shamanic creatures. The shape of the bundle, a gigantic bird, perhaps suggests that she was a shaman, healer and intermediary between the community and the gods.

Known as the Winged Woman Shaman of Los Molinos because of its bird shape and the place where it was found, the effigy is also referred to as Big Bird. The representation of birds in the iconography of the Andes is common, and their association with female figures occurs from an early date. On the South Coast of Peru, at the site of Carhua, a textile was found that depicts a female figure with wings.<sup>8</sup> A textile fragment from Cerrillos shows a staff god similar to those in Chavín motifs.<sup>9</sup> In the iconography of both Paracas and Nasca, winged figures are represented in a pose suggesting flight.<sup>10</sup> And the anthropomorphic mythical being known as Kón is often rendered as a winged figure.<sup>11</sup> On the North Coast the Moche also depicted winged female figures. A feathered cloth associated with a female burial, part of the bundle of the so-called Woman Weaver from San Lorenzo, is found in the archaeological record of the Central Coast. Placed within the wrappings was a featherwork textile with the bone remains of a bird.<sup>12</sup>

Within the context of representations of winged female figures in Andean iconography, the Winged Woman Shaman of Los Molinos is unique. The elaborate preparations of the effigy and its prominent placement at a sacred site suggest that the woman whose body was inside may have played a role as an intermediary between the community, the ancestors, and supernatural forces. Perhaps she was a priestess of Kón, a god who took the form of an anthropomorphic bird.





# Chimú Feathered Offerings from the Huaca de la Luna

**SANTIAGO UCEDA AND HEIDI KING**

The Chimú kingdom flourished on the dry desert coast of northern Peru roughly between the twelfth and the late fifteenth century, when it was incorporated into the Inca Empire. Powerful rulers built great cities of adobe bricks in nearly every valley throughout their desert kingdom, which extended 800 miles (1,287 km) from north of Lima to the present border with Ecuador. By about 1400 the capital, Chan Chan, situated at the mouth of the Moche Valley on the outskirts of the modern town of Trujillo, was the largest city in Peru, covering nearly eight miles (12.9 km) square. Chimú royalty practiced a system of “split inheritance,” by which a king, when he died, passed on to his successor his title and right to rule, while his royal compound and all his wealth were left to his kin group, which was also responsible for the maintenance of his remains.<sup>1</sup> The new king built his own palace compound and acquired his own riches. The core of the city, built by a succession of kings, was composed of the royal compounds (the estimated number ranges from nine to twelve), known as *ciudadelas* (little cities). These were surrounded by the residences of the lesser nobility and the sprawling quarters of the artisans engaged in the manufacture of luxury goods. Enclosed by walls as high as 30 feet (9.14 m), the *ciudadelas* housed the reigning monarch, his extended family, retainers, and administrators. They also included the imperial storehouses and a multichambered mausoleum, known as the burial platform, where the king upon his death was interred with all his riches. The Chimú kings amassed legendary fortunes in the form of sumptuous garments and textiles and elaborate personal ornaments finely wrought in precious materials—gold, silver, shell, and semiprecious stone.

A few miles southeast of Chan Chan, at the foot of the majestic Cerro Blanco Mountain, lies the ancient ceremonial center of Moche (fig. 45). Built between the years 200 and 800 by the earlier Moche peoples and buried beneath the sand for more than a thousand years, the archaeological complex consists of two gigantic stepped adobe pyramids, the Huaca de la Luna





Figure 45. **Huaca de la Luna**, ca. 200–800, at the foot of the Cerro Blanco Mountain, near present-day Trujillo. Photo: Santiago Uceda

(Pyramid of the Moon) and the Huaca del Sol (Pyramid of the Sun), with a dense urban zone in between. Since 1991, under the auspices of the Proyecto Arqueológico Huacas del Sol y de la Luna of the Universidad Nacional de Trujillo, archaeologists have engaged in major excavation projects at the Huaca de la Luna to examine the structure and its function in ancient times.<sup>2</sup>

The excavations have revealed that the pyramid consists of two structures built in different periods. The earlier one, started at the beginning of the first millennium CE and abandoned about the year 600, represents six centuries of Moche rule in the valley. It has five superimposed buildings, three platforms, and three plazas (fig. 46). On the north façade of Platform I, on ramps, and in special interior spaces, it is decorated with extraordinary adobe reliefs and frescoes in brilliant colors—red, blue, yellow, white, and black. The reliefs depict processions of captives, deities, mythical beings, and giant anthropomorphized spiders, and multifigural combat and ritual scenes (fig. 47). The more recent structure of the Huaca de la Luna, comprising Platform III and Plaza 4 (not indicated on fig. 46), was begun between 600 and 650. This terraced building, in use until about 850, features geometric motifs and scenes of women weavers and, on the third terrace, weapon bundles. Large quantities of objects



recovered from burials and caches in the course of the excavations indicate that a variety of ceremonies and ritual activities took place at the site over many centuries.

The excavations also show ample evidence of Chimú occupation hundreds of years after the decline, in the ninth century, of the Moche civilization.<sup>3</sup> It is likely that for the Chimú and even later peoples the Pyramid of the Moon represented, as it had for the Moche, a *huaca*, or sacred place, where the gods were worshipped and the ancestors honored. Moche and Chimú ceremonies involved elaborate offerings of textiles, ceramic vessels, metalwork, wood and bone carvings, and sometimes sacrifices.

The pyramids at Moche have been subject to illegal excavations for centuries, and most of the Chimú burials and offering deposits found in the Huaca de la Luna between 2001 and 2005 show evidence of such activity. Looters, interested primarily in precious metals, tended to leave textiles and featherworks behind—especially those not in good condition—but because such artifacts were often removed from their original findspot, it is difficult to determine whether they came from a funerary context or were dedicatory offerings. The artifacts recovered from the Huaca de la Luna number in the thousands, most of them made

Figure 46. **Reconstruction model of the Huaca de la Luna.** Photo: Proyecto Arqueológico Huaca de la Luna









Figure 47. **North façade decorated with polychrome adobe reliefs.** The Spider Level is the third from the bottom. Photo: Santiago Uceda

Figure 48. **Small tabard, headdress, and loincloth.** Chimú, 12th–14th century. Feathers on cotton, height 10 in. (25.4 cm); 17 in. (43.2 cm); 9 in. (22.9 cm). Museo Huacas de Moche, Trujillo. Photo: Daniel Giannoni

Figure 49. **Small tabard and headdress (back view).** Chimú, 12th–14th century. Feathers on cotton, height 9 in. (22.9 cm.); 16½ in. (41.9 cm). Museo Huacas de Moche, Trujillo. Photo: Daniel Giannoni

Figure 50. **Small tabard, headdress, and loincloth.** Chimú, 12th–14th century. Feathers on cotton, height 9 in. (22.9 cm); 15 in. (38 cm); 6 in. (15.2 cm). Museo Huacas de Moche, Trujillo. Photo: Daniel Giannoni







Figure 51. **Small tabard, headdress, and loin-cloth. Chimú, 12th–14th century.** Feathers on cotton, height 10 in. (25.4 cm); 18 in. (45.7 cm); 7 in. (17.8 cm). Museo Huacas de Moche, Trujillo. Photo: Daniel Giannoni

Figure 52. **Small tabard, headdress, and loin-cloth. Chimú, 12th–14th century.** Feathers on cotton, height 8½ in. (21.6 cm); 16 in. (40.6 cm); 7 in. (17.8 cm). Museo Huacas de Moche, Trujillo. Photo: Daniel Giannoni

by the Moche, the Sicán, and the Chimú.<sup>4</sup> As recently as 2011 archaeologists unexpectedly discovered even an Inca offering. Consisting of a miniature female figurine and a coca bag covered with white feathers (similar to that seen in pl. 57), the offering had been buried in the floor of Platform I, probably in the late fifteenth or early sixteenth century.<sup>5</sup>

Among the most important object finds at the Huaca de la Luna were at least fifteen sets of small-size male garments covered with brilliantly colored feather mosaic made by the Chimú (figs. 48–53; the Chimú also made matching sets of full-size male garments not covered with feathers).<sup>6</sup> It is the largest find of Chimú featherworks to have come from a controlled archaeological excavation. Unfortunately, most of the garments appear to have been moved from their original location. Four of the sets (figs. 48–51) were found together in loose sand on the Spider Level of the pyramid on the north façade.<sup>7</sup> A second group—also comprising four sets with checkerboard design in similar colors—was discovered on the north side of a small Chimú-period structure known as the Chimú Altar (see fig. 46).<sup>8</sup> The set in figure 53 was found in its original location, associated with an important Chimú burial located on the south side of the altar. It was one of eleven groups of offerings—mostly textiles, but also a few ceramics, metal pieces, and spondylus shells, each group wrapped separately in cloth—placed around the mummy bundle of what archaeologists believe to have





Figure 53. **Small tabard, headdress, and loincloth.** **Chimú, 12th–14th century.** Feathers on cotton, metal, height 9½ in. (24 cm); 16 in. (40.6 cm); 8½ in. (21.6 cm). Museo Huacas de Moche, Trujillo. Photo: Daniel Giannoni

been a young man.<sup>9</sup> The body, in flexed position, was also wrapped in cloth and had been buried approximately 13 feet (4 m) above the floor of Plaza 1.

Standardized in size, form, and design, each complete set of garments—some have lost one or more components—consists of a headdress, a tabard, and a loincloth. The headdresses have tapered caps (now mostly flattened) made of a cane structure covered with cloth. From the back of the cap hangs a feather-covered trapezoidal panel (see fig. 49), and on the front is a crescent-shaped collar tied to the sides. Caps of this shape are also seen on many of the wood figures that were excavated at the site and at several other places in the Moche Valley. Some were found in funerary contexts; others are known to have been placed at the entrance to a *ciudadela* at Chan Chan, perhaps as guardians.<sup>10</sup> The tabards, like their full-size counterparts, are open along the sides and have vertical neck slits and a narrow unfeathered section along the shoulder line. The apronlike loincloths have long, unfeathered “belts” along the



top. On most of the garments the feather mosaic consists of a checkerboard design executed primarily in small blue, yellow, red, and green feathers, probably from the macaw. The design on one set (fig. 51) is unique in the group, with vertical bands of alternating green and dark brown and horizontal stripes of red and yellow. Because they were buried for more than five hundred years in the desert sand, many of the garments are in a remarkably good state of preservation. On the set in figure 50 the foundation cloth of finely spun plain-weave cotton with paired warps—characteristic of Chimú weaving—and the threads that once held the feathers are perfectly preserved, although the barbs of the feathers have been eaten away by insects. Nevertheless, a checkerboard design is still discernible. The feathers in figure 52 were trimmed to create the design. Of particular appeal and distinction are the garments in figure 53, on which round metal plaques, perhaps gilt copper, decorate the surface. Longer wing feathers were used on the top of the headdress and collar, and along the bottom of the tabard and loincloth. The sulphur yellow color of the feathers with a red area near the rachis (central stem) was probably obtained by the process of tapirage (see pages 92–94).

The garments show no sign of wear, and their small size suggests that they were intended as offerings to the deceased or to the *huaca*, possibly as substitutes for full-size garments. They could also have been used as clothing on statuary, although none of the wood figures were found near the garment sets. Carbon-14 dates have not yet been established for the Chimú occupation of the Huaca de la Luna, so that precise dating of the textiles is not possible except to say that, based on ceramic associations, they probably fall somewhere between the years 1100 and 1350.

As noted earlier, the only feature on these small feather garments to suggest Chimú manufacture is the foundation cloth, which has paired warps. They show none of the figurative imagery characteristic of full-size Chimú feathered tabards and headdresses (see, for example, pls. 1, 2, 7, 8, 29–34) or, for that matter, of Chimú textiles without feathers. Indeed, had they not been discovered in a Chimú context, their attribution to the Chimú might have been suggested, but their association with this important Moche structure would have been highly questionable.



# Sacred Featherwork of the Inca

**JOHAN REINHARD**

The culture of the Inca has long fascinated both scholars and public alike. Stories of the Spanish Conquest and eyewitness accounts of the Inca's many achievements have been passed down to us for more than half a millennium. However, it was not until the twentieth century that archaeological and historical studies demonstrated that their empire had existed for less than a hundred years. The Inca began to expand out of the region of Cuzco, their capital, sometime around 1438, and by the time of the arrival of the Spaniards in 1532, they had created an empire that spread over much of western South America. Totalling more than 2,500 miles (4,000 km) in length, its boundaries extended from northern Ecuador to central Chile, making it the largest state to arise in Precolumbian America.

The Inca were renowned for their stonework, roads, agricultural production, and political organization. Only in recent years have we learned about one of their most remarkable accomplishments, not equaled by any other great ancient civilization. The Inca constructed ceremonial sites on the summits of more than a hundred mountains over 17,060 feet (5,200 m) high.<sup>1</sup> They climbed to over 22,000 feet (6,700 m), heights that would not be reached again until the mid-nineteenth century. Many of their ascents in the Andes would not be repeated until well into the twentieth century.

The Inca performed ceremonies on many of the sacred mountains in the lands they conquered, and the offerings they made to the state and to local deities included human sacrifices and precious artifacts associated only with the nobility. The Quechua word *capacocha* was a term often used by sixteenth- and seventeenth-century chroniclers to describe this most important of Inca religious ceremonies.<sup>2</sup> The basic concept underlying the *capacocha* offerings appears to be that major disasters of any type, ranging from the illness of an emperor to a drought, were brought about by acts that provoked a deity (or deities) to cause them. Thus only a major offering could serve to reestablish stability—be it environmental, political, or religious—in the empire.<sup>3</sup> Although *capacocha* ceremonies took place at and near Cuzco,





Figure 54. **Ceremonial site on the summit of Llullaillaco, northwest Argentina on the border with Chile.** People at center left are in the “wind-break” and, to the upper left, at the ceremonial platform. The expedition’s high camp is visible to the lower right. Photo: Johan Reinhard

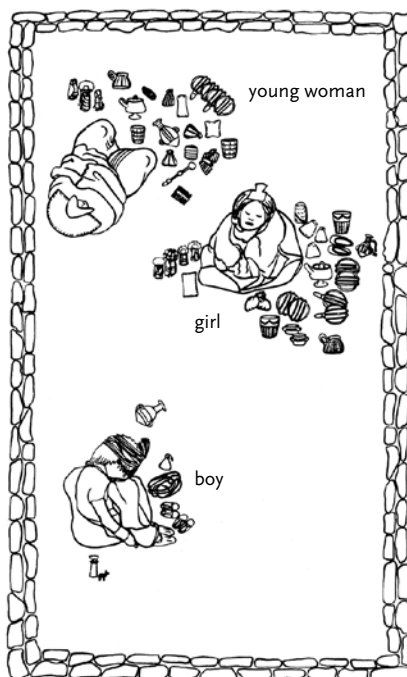
our interest here is specifically in those that involved processions to high peaks well beyond the heart of the empire.

The cold, dry environment of sacred sites at high altitudes has enabled the extraordinary preservation of offering assemblages—human bodies, textiles, food offerings, feathers, figurines, and other objects—providing excellent material for study. Furthermore, such assemblages include what are among the few relatively intact objects of Inca religion to have survived the Spanish Conquest and the destruction of idols by the Catholic Church in the sixteenth and seventeenth centuries.

Unfortunately, many of the mountaintop shrines have been looted, both in the past and in recent times. During the last two decades, however, a few of them have been scientifically excavated, allowing for the artifact assemblages to be studied in context. One of the most spectacular is on the summit of Llullaillaco, at 22,109 feet (6,739 m) the world’s highest archaeological site (fig. 54).<sup>4</sup> Because it shares many features with other high-altitude shrines, it can be used as a model for comparison and to shed light on the role of feathers in Inca rituals.

Figure 55. **Drawing of the walled enclosure in the summit platform of Llullaillaco** that contained the burials of the boy, the girl, and the young woman, each with a selection of offerings. Drawing: Johan Reinhard

Figure 56. **Male sheet-gold figurine found near the boy. Inca, late 15th–early 16th century.** Gold, wool (camelid fiber), spondylus shell, feathers, height including headdress 4½ in. (11.4 cm). Museo de Arqueología de Alta Montaña de Salta. Photo: Johan Reinhard



The isolated volcano of Llullaillaco lies on the border of Argentina and Chile and is the seventh-highest mountain in the Americas. In 1999 three intact *capacocha* burials were excavated in a ceremonial platform on the summit (fig. 55).<sup>5</sup> The platform is  $34\frac{1}{2} \times 19\frac{3}{4}$  feet ( $10.5 \times 6$  m) and was built in part with retaining walls, inside of which a fine gravel and sand fill was placed to create a level surface.

The first burial to be excavated contained the body of a boy about seven years old covered in a red outer mantle. He wore a red tunic under the mantle and had a sling wrapped around his head that served to secure a headdress of white feathers against his forehead. At his side he carried a *chuspa* (see pl. 57) containing coca leaves that was covered in white feathers. Three male figurines made of gold, silver, and shell, together with other ritual offerings, were found nearby.<sup>6</sup> They wear miniature clothing associated with Inca noblemen or with a deity. Under a gray mantle decorated with a black and red ornamental border, the gold figurine (fig. 56) wears a blue and yellow miniature checkered tunic and carries a small red bag with yellow ornamental borders.<sup>7</sup> The headdress is formed of five yellow



Figure 57. Headdress found on the head of the young woman. Inca, late 15th–early 16th century. Feathers on wool (camelid fiber),  $13\frac{3}{8} \times 18\frac{1}{2}$  in. ( $34 \times 47$  cm). Museo de Arqueología de Alta Montaña de Salta. Photo: Johan Reinhard

feathers tied with a red thread and inserted in a cephalic blue *llautu*, the special cord that served as a headband.

The second body, buried in the northern section of the platform and wrapped in two brown outer mantles, was that of a young woman about fifteen years old. A white feathered headdress had been placed on her head (fig. 57), and a male tunic was draped over her right shoulder. The headdress closely resembles miniature headdresses on female figurines buried in conjunction with other *capacocha* rituals; it is especially similar to the one worn by the female silver figurine found next to her (fig. 58).

The conical cap of the young woman's headdress is woven with brown camelid wool and has two braided cords for tying under the chin. Fourteen rows of small white feathers ( $1\frac{3}{8}$  in. [3.5 cm] in length) are attached to the cap, pointing downward and partially overlapping so that the stitches are not visible. The impressive semicircular feather crest is composed





Figure 58. Female silver figurine (front and back) found near the young woman. Inca, late 15th–early 16th century. Silver, wool (camelid fiber), spondylus shell, feathers, height, including headdress, 9 in. (23 cm). Museo de Arqueología de Alta Montaña de Salta. Photo left: Johan Reinhard

Figure 59. **Female gold figurine found near the young girl. Inca, late 15th–early 16th century.** Gold, wool (camelid fiber), spondylus shell, feathers, height, including headdress, 7⅞ in. (18 cm). Museo de Arqueología de Alta Montaña de Salta. Photo: Johan Reinhard

of a row of medium-size feathers (2⅞ in. [5.5 cm] in length) in front of a row of longer ones (5½ in. [14 cm]).

Several textile and ceramic items were placed around the young woman's body on the bottom of the burial. These included typical Inca ceramics, such as a pedestal pot, an *aryballos* (a storage jar with a pointed base), a small jar, and two pairs of plates. Two wood *qeros* (a kind of beaker), a wood spoon, a comb, and six woven bags containing food were also placed in the burial, as well as a small textile band, woolen belts rolled up together, and two small bags containing human hair. Three female figurines made of gold, silver, and the highly valued spondylus shell, all wearing feather headdresses and miniature textiles of camelid wool (mainly alpaca), were found along the left side of the body. The female silver figurine (fig. 58) wears a headdress that is identical to the full-size headdress found on the young woman except that it has a back flap 9 × 4⅞ inches (23 × 12.5 cm) wide completely covered with white feathers. The clothing on the figurine—a red dress folded over at the top and decorated with a geometric banded design in yellow, blue, and green—is typical of garments worn by Inca noblewomen. A red and white shawl, also folded over and with yellow and blue decorated stripes and blue-edged borders, is draped about her shoulders. Three *tupus*, or silver pins, each 2⅜ inches (6 cm) in length, hold the dress and shawl in place. In addition, the figurine is adorned with a red and blue cord, from which are suspended two trapezoidal red spondylus shell pendants.

The third burial, that of a young girl about six years old, was found at the eastern side of the platform. Rather than a feather headdress, a silver metal plaque had been placed on her forehead. Several offerings were arranged around the body, including ceramics of typical Inca style (a pedestal pot, an *aryballos*, three pairs of plates, two bowls, and a jar), a pair of wood vessels, four woolen bags containing food (probably dehydrated potatoes, beans, corn, and dried meat), a pair of leather moccasins, a pair of sandals, and two skin bags containing human hair. Four female figurines—one of gold, one of silver, and two of spondylus shell—wearing grand feather headdresses with back flaps were aligned at the left side of the body, along with a feather-covered bag that contained coca leaves, considered an important ritual offering. The miniature clothing worn by the figurines is similar to that worn by the silver figurine in figure 58. Particularly impressive is the enormous headdress worn by the gold figurine (fig. 59), which is nearly as tall as the figurine itself. The front is completely covered with yellow and green feather mosaic in checkerboard design; the back has a similar pattern in red and orange feathers. The figurine's matching *acsu* (folded dress) and shawl are red and saffron colored with banded geometric decoration in green, black, red, and yellow and ornamental borders; three gold *tupus* secure the dress and shawl. Like the silver figurine in figure 58, the gold figurine is also adorned with a red and black cord with two trapezoidal spondylus shell pendants.<sup>8</sup>





The small figurines found with the burials have sometimes been referred to in the literature as “dolls.” This term could give the impression that they were intended as toys, but nothing could be further from the truth. We know from the chronicles, from the materials the figurines are made of, from their attire, and from the contexts in which they have been found that the Inca presented these types of figurines to many of their most important deities, including the mountain gods.<sup>9</sup> But exactly what they represented is still being debated. Some scholars have suggested that they were substitutes for human sacrifices or, in the case of female figurines, that they may have been symbolic representations of the *aqllakuna*, or chosen women.<sup>10</sup> Male figurines bear attributes of the nobility and appear to represent members of the Inca elite.<sup>11</sup> Several chroniclers, however, state that the figurines represent deities.<sup>12</sup> Of course, meanings probably varied according to circumstances, but at high-altitude shrines, it would indeed seem most likely that figurines represented deities, including those of the mountains themselves.

Examining these three burials, a number of features can be compared with the historical descriptions written by the Spanish chroniclers and with *capacocha* burials investigated at other sites. In the case of the boy, we know that headdresses similar to his were worn on special occasions, such as at major ceremonies, by important Inca men.<sup>13</sup> When wrapped around the head the sling looked like, and could function as, a *llautu*, the headband worn by the Inca elite.<sup>14</sup>

The perfectly preserved white feather headdress of the young Llullaillaco woman (fig. 57) is similar to the few headdresses found in female burials at other high mountain shrines.<sup>15</sup> Closely resembling the miniature headdresses worn by many of the female figurines accompanying the mummies, they lack the panels, usually covered in feathers, that extend down the backs of the figurines.<sup>16</sup> Such back panels (also called back flaps or dorsal pieces) have not yet been found in *capacocha* burials.<sup>17</sup>

Feather headdresses clearly had special ritual importance and were likely related to the status of the *aqllakuna*, since they have been found in association with young women, but not with younger girls. The female figurines—whether of gold, silver, or spondylus—are nearly the same with regard to the style of clothing they wore (compare figs. 58 and 59).<sup>18</sup> Their headdresses also are consistently similar and comparable to those found with the female *capacocha* mummies.

The male figurines had headdresses of a different style (see fig. 56), which also parallel—albeit not as closely—those found with male *capacocha* mummies. Interestingly, the drawings of the Inca by the native Peruvian author and illustrator Felipe Guaman Poma de Ayala, dating from the early seventeenth century, depict Inca nobles wearing headdresses that are markedly similar not only to the type placed on the male mummies but to those on the female

mummies as well.<sup>19</sup> Indeed, the types of headdresses found on female mummies are portrayed by Guaman Poma only on male nobles. This raises the question of whether the female sacrificial victims were allowed to wear such headdresses because of their unique status or whether Guaman Poma simply was not aware of their use by women in ceremonial contexts.

Most male and female figurines in museum collections are unclothed, but on the basis of finds made at sites where conditions allowed for good preservation, it seems clear that the vast majority of—if not all—Inca anthropomorphic figurines made of gold, silver, and spondylus shell originally were clothed.

According to the historical sources, feathered garments were used in ceremonial contexts and worn by nobles.<sup>20</sup> Their use was forbidden to those who did not receive them from the Inca.<sup>21</sup> During festivals, clothing adorned with feathers was worn by some participants, as it was by ritual specialists.<sup>22</sup> Several chroniclers noted the ritual importance of feathers. Pablo José de Arriaga described feathers used as offerings, distinguishing the red and yellow feathers of the parrot from the white feathers of a bird found in the highland lakes and the pink feathers of the flamingo.<sup>23</sup> Of Inca featherwork the Jesuit Bernabé Cobo wrote admiringly: “The feather cloths were the most esteemed and valued, and this was quite reasonable because the ones that I have seen would be highly regarded anywhere.”<sup>24</sup>

It is a tragedy that both natural and human actions have resulted in the destruction of the vast majority of feathered objects made by the Inca. However, thanks in large part to the remarkable preservation of artifacts at some high-altitude sites, enough examples of their craftsmanship have survived to count the Inca among the finest practitioners of the feather arts.







# Techniques and Conservation of Peruvian Feather Mosaics

**CHRISTINE GIUNTINI**

This essay is intended to provide an overview of some of the materials and methods used in the construction of Precolumbian feather mosaics. With the exception of a few works, such as the plumes (pl. 46) and the ritual feathered trees (pl. 65), most of the objects included in this publication are classified as feather mosaics, and their abstract patterns, figural imagery, and occasional monochromatic surfaces were all created by attaching feathers to a support in overlapping rows. Art historians and archaeologists, in addition to studying the ancient cultures and sites that employed these artifacts for ritual use, have collaborated with ornithologists, ethnographers, and scientists to recover information contained within them. Technical examinations of objects in museum collections have also provided evidence for a greater understanding of Precolumbian featherwork traditions.

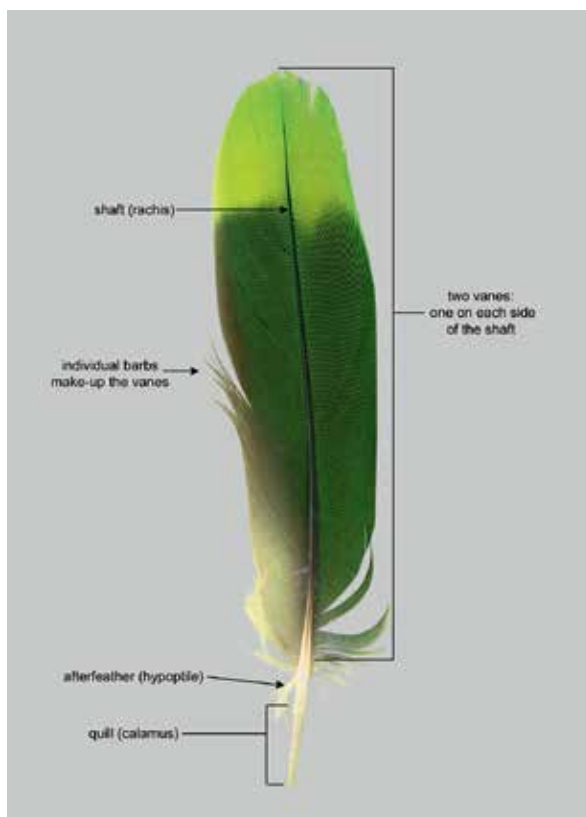
## **FEATHER CONSTRUCTION**

There are a number of different types of feathers found on every bird, and ornithologists have developed sophisticated systems of feather classification. In general the feathers found on Precolumbian artifacts are all contour (also called vaned) feathers, and they fall into two distinct types: the smaller and more symmetrically vaned body feathers and the larger asymmetrically vaned flight feathers. Contour feathers are the outermost feathers that closely cover the body and aid in flight; they give each bird its distinctive silhouette.<sup>1</sup> By far the majority of feathers used in the construction of Precolumbian feathered mosaics are the smaller body feathers.

All contour feathers have a clearly defined central shaft (fig. 60). At either side of the shaft are the vanes, consisting of parallel and almost planar series of barbs that sprout hook-like interlocking structures. On a microscopic level, it is the particular structure and chemical makeup of the barbs and their constituent parts, the barbules and barbicels, that give the feather its overall shape, color and, if present, iridescence. The vane terminates, often

**Detail of a miniature tunic. South Coast, Ica, 12th–13th century.** Feathers on cotton, 6⅞ × 7 in. (15.6 × 17.8 cm). The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection, Bequest of Nelson A. Rockefeller, 1979 (1979.206.669)

Figure 6o. **Simplified feather anatomy.** Photo: Christine Giuntini



in plumaceous barbs or after-feathers, just above the calamus, which is that part of the shaft supported from a follicle within the skin of the bird. Because of their well-developed microstructures, interlocking structures of the vane have been compared to the teeth of a metal zipper since they can be separated and closed over and over.

Feathers are formed from  $\beta$ -keratin, a tough and resilient protein molecule.  $\beta$ -keratins are also found in the claws, carapaces, and scales of reptiles, but the structure found in the feathers (and scales) of birds is unique.<sup>2</sup> The physical properties of keratin allow feathers to prevail against the forces pitched against them during flight. Feathers also help the bird to regulate its temperature. Some feathers and their coloration attract mates or provide protective camouflage against predators, among other functions.

### **FEATHER IDENTIFICATION**

Remarkably, eighteen hundred species of birds are thought to inhabit the various climate zones of Peru.<sup>3</sup> The works in this publication are typically made from the feathers of birds found in the tropical zones at lower altitudes in eastern Peru. For the past thirty years art historians and other specialists have relied on the expertise of neotropical ornithologists for



Figure 61. **Feathers of the blue-and-yellow macaw** (detail of fig. 18b on page 29). Feathers from different locations on the bird have different appearances. Photo: Christine Giuntini

identifying feathers on Precolumbian artifacts.<sup>4</sup> The ornithologist John P. O'Neill has been central to this research. Over the years his list of feather identifications has grown to include about four dozen bird species.<sup>5</sup> These identifications are often speculative, as identification of symmetrically vaned body feathers is difficult once they are removed from the bird; small black or white feathers, as well as some brightly colored and iridescent feathers, can be found on a variety of birds. Feathers that are centuries old can be degraded, faded, or their contours deteriorated. The age, diet, and health of the bird can also affect the coloration and shape of the feathers. Furthermore, trimming or the sectioning of the vanes into shaped elements of an overall design can make identification impossible.

Reliable feather identification requires either field experience with the appropriate birds or access to an extensive collection of bird skins or, ideally, both.<sup>6</sup> With these resources it is possible to tentatively identify some distinctive types of feathers. For example, in general the uniformly sized yellow breast feathers of the blue-and-yellow macaw have a naturally occurring blunt edge with open vanes that look almost hairlike, while the blue mantle (back) feathers have greater size variation, rounded tips, a closed vane structure, and an iridescent sheen that shifts as the viewing angle changes (fig. 61). The larger wing and tail feathers of





Figure 62. **Left: Amazona parrot tail feathers with natural coloration.** Right: Amazona parrot tail feathers with colors that have been altered. Photo: Christine Giuntini

some genera can often be identified or at least narrowed down. For example, the distinctively marked bright green tail feathers of parrots of the genus *Amazona* can be identified on full-size and ritual garments (see pl. 10 and pl. 15 reverse).

#### COLOR

The natural coloring of feathers is produced while the feather is being formed within the skin tissue of the bird. It is created by two different means, structure and pigmentation, and the visible color may be the result of either of these mechanisms or a complex combination of the two. Structural colors arise from the way light waves interact with the three-dimensional microstructures of the vane.<sup>7</sup> Two types of pigmentation compounds are widely distributed in birds; these are the melanins and the carotenoids. Melanin pigments produce two sets of coloration, and they can be found in isolation or in combination. One set ranges from light gray to deepest black, while the second produces many shades of brown ranging from golden and rust tones to deep chocolate. Carotenoid pigments, as the name suggests, produce shades of yellow, orange, and red.<sup>8</sup> These pigments also are expressed singly or in combination with structural coloration.

Keepers of captive birds have long known that the natural color of feathers can be altered by diet.<sup>9</sup> East of the Andes, in the humid rainforest region, feather color may have been altered by a process called tapirage (also tapiragem). According to reports given by early adventurers, explorers, and naturalists,<sup>10</sup> tapirage is a technology that alters the color



Figure 63. **Left: Dyed fowl feather (face and back).** Right: Naturally colored macaw feathers (face and back). Photo: Christine Giuntini

of growing feathers by external means rather than by diet. Apparently parrots were the usual victims of this process. According to the sources, the technology was complex and varied among tribal groups. First the feathers of green parrots — usually the longer tail or wing feathers — were plucked, and then a special compound was rubbed into the skin. The new feathers would display yellow colors shading to red.<sup>11</sup>

Independent efforts to reproduce this technique have failed, and because of the trauma it inflicts on the birds the process has not been fully studied.<sup>12</sup> Nevertheless, the evidence suggests that, as with diet, it is the suppression of melanin that allows the underlying pigmentation to be expressed.<sup>13</sup> The feathered tabard in plate 7, for example, is bordered with bright yellow feathers tinged with red. Similar yellow feathers have been identified by O'Neill as parrot feathers altered by tapirage.<sup>14</sup> Whether the color was induced by diet or by physical substances cannot be determined, but a detail photograph of a border on a Chimú tunic (fig. 62) supports the hypothesis that when melanin is suppressed by tapirage or diet, the underlying pigmentation is revealed. Interspersed among the yellow feathers with unpigmented shafts is a feather (second from left) whose vane coloration at the tip is green-tinged with a dark shaft. As the feather grew the melanin slowly disappeared, leaving a white shaft and yellow-red vanes.

Dyed feathers seem to have been rarely used in the creation of Precolumbian feather-works.<sup>15</sup> Because the dye evenly colors nearly all parts of the feather, dyed feathers are for the most part easily distinguished from naturally colored feathers. This type of flat coloration is

rarely seen on Precolumbian artifacts (fig. 63 left). The scientific analysis of colorants applied to Precolumbian Andean featherworks is a recent development, and protocols are still being established.<sup>16</sup> To correctly interpret analytical results, colorants produced by the bird must be distinguishable from colorants applied by humans to plucked feathers. Recently, the use of indigo dye on Nasca feathered garments has been confirmed (see page 60), and the feathers that cover an Inca coca bag in the Metropolitan Museum (pl. 57) are currently being tested for evidence of dyes. Preliminary findings suggest that both the yellow and the red feathers were colored by substances not likely to have come from ingested food.<sup>17</sup>

### **TECHNIQUES OF FEATHER MOSAICS**

Feather mosaics can be grouped into two broad technical categories according to how the feathers have been attached to a support. The substrate and function of the object generally demand a specific method of feather attachment. Most often, feathers are attached by stitching strings of feathers to a permeable and flexible substrate. Less often, on objects requiring a solid, inflexible substrate, adhesive is used to attach the feathers. Garments such as the tabards in this publication are always made from stitched mosaics, while for personal items, such as headbands, ear spools, and pins (see, for example, pls. 30, 42, and 45), adhesive is used to form the mosaic, sometimes in combination with wrapping and knotting. Rarely, on some artifacts, such as the Chimú pectoral (pl. 39) and the ritual headdress with checkerboard design (pl. 62), a combination of these two techniques is employed. In both cases the feathers are secured to a substrate in overlapping rows according to a predetermined design.

### **FEATHER STRINGS**

Precolumbian stitched mosaics are made from strings of feathers that have been knotted on to cotton cords or, less commonly, plant fiber cords. Literally thousands of feathers were knotted on to strings and stitched to a foundation fabric in order to cover one tabard with mosaic. The tabard in plate 18, for example, required an estimated 6,500 feathered knots per side. It has been suggested that in some artifacts there could be a relationship between the feather color and the yarn fiber.<sup>18</sup> Feathered strings, like the dyed yarns used in woven Andean garments, are generally made of similarly colored, shaped, and sized feathers, such as blue or green (fig. 64a, b) or the multicolored underwing feathers of some macaws (see pl. 56 bottom and page 88). Feathers may be knotted individually on to the strings, as was done in the Metropolitan's blue and yellow feather panels (see fig. 18a, b on page 29). However, feathers were also gathered into groups of two or more and tied in a single knot. Feather doubling was most commonly used when the feathers were small, with hairlike open vanes. By doubling the feathers the foundation fabric was more evenly covered. Occasionally



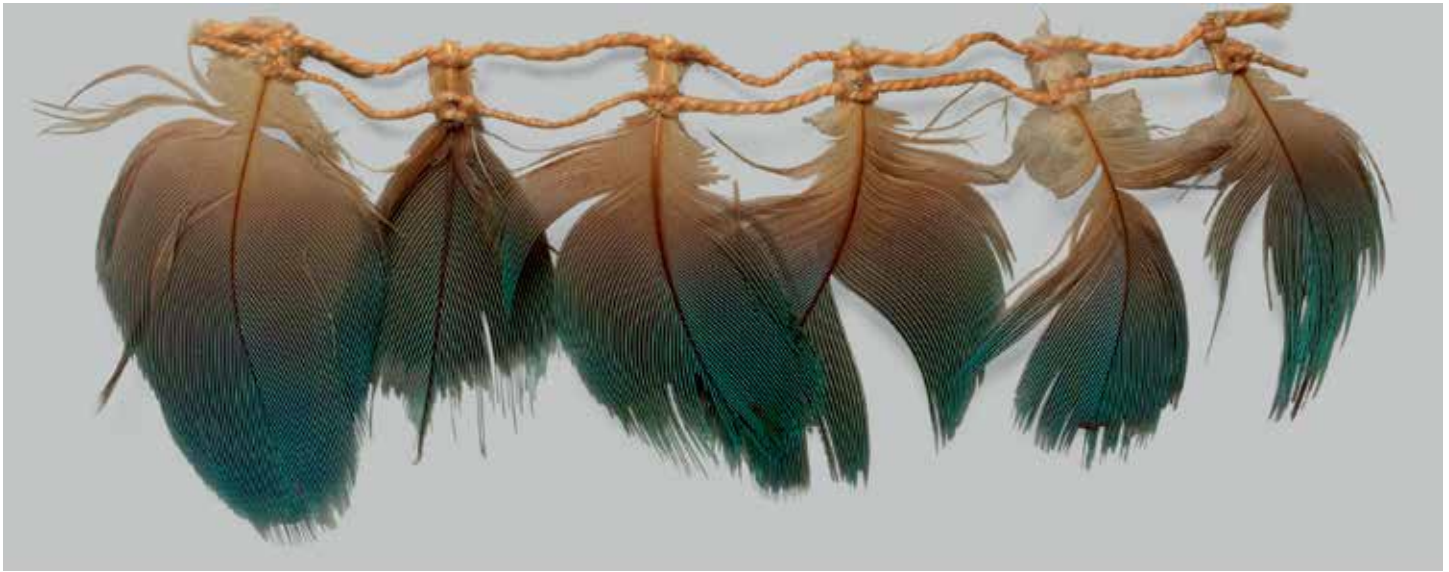
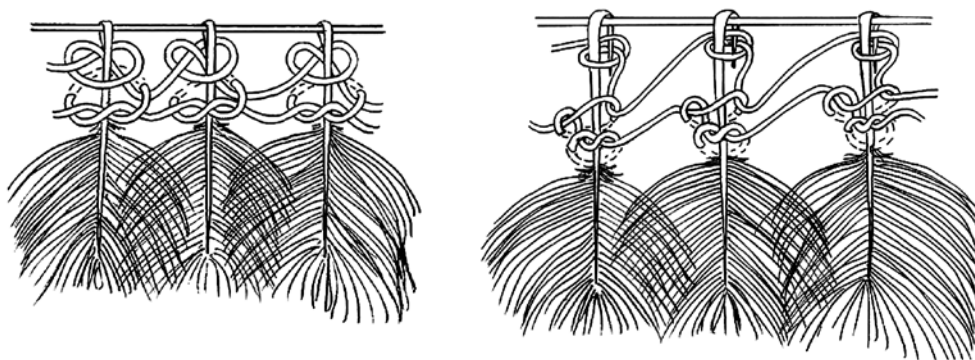


Figure 64a, b. **Top: Feathers tied with two strings; shown three times actual size.** Bottom: Feather string secured to foundation fabric; shown four times actual size. Photo: Christine Giuntini

a tunic will have a very plush surface. In making the green background and orange-red underwings of the birdlike creatures depicted in plate 10, several feathers (the counts vary) were first held together by adhesive before being tied on to the string. This adhesive is now dark and hard, and has been identified as a gum-based, rather than animal-based, substance.<sup>19</sup>

There are a number of differences in the way feather strings are made and how they are stitched to the foundation fabric.<sup>20</sup> Paradoxically, poorly preserved specimens are often the best candidates for analysis, as missing feathers make it easier to study the configuration

Figure 65. **Left: Two-cord knotted feather string with single knot for attachment (see pl. 10).**  
**Right: Two-cord looped feather string with double knot for attachment (see pl. 11).**  
 Drawing: Christine Giuntini



of the knots and the types and disposition of the knotted strings on the surface. In the creation of feather strings, almost invariably the shaft is bent over between the calamus and the lower edge of the vane and a string is knotted at the bend or around the now-doubled shaft. For the work to proceed efficiently, it is likely that one end of the string or strings was held under tension during the tying, while the remaining string(s) would have been gathered on to a shuttle (or shuttles). When the feathers are held with a single knotted string they tend to turn in all directions, which is presumably why a second string was usually added. There were different methods for securing the feathers to the second string. Some strings were drawn through the bend in the shaft, others were looped around it, and still others were knotted. The feathers secured with two strings were, no doubt, more easily and quickly positioned on the substrate because the feathered strings were more likely to lie flat, with all the feathers facing in the same direction.

Once the strings were prepared, rows of feathered strings were shingled over the surface of a woven textile according to the requirements of the design. When the artist needed to change the feather color according to the design plan, the feather string would be cut and a new, differently colored string begun. The feather strings were held in place by stitching them to the foundation fabric with another yarn. The complexity and sophistication of these knotting and stitching techniques are readily seen in the feather strings covering the tabards shown in plates 10 and 11, as illustrated in the drawings above (fig. 65).

When feather mosaics are made with strings and stitching, they usually run horizontally across the surface of the fabric. The tips of the feathers generally point downward, and the feathers are viewed in this orientation when the fabrics are worn or displayed. Less frequently, garments feature exceptions to this orientation. For example, feather strings are used to create circles by spiraling the strings inward from the outer perimeter, which allows the tips of the feathers to overlap so that the strings which have already been stitched down are concealed (see pl. 26). Or they can be manipulated up and down to form bands that undulate across the surface (see pl. 4 front).<sup>21</sup> Some strongly geometric patterns feature vertical

stripes or bands of feathers in which the tips are oriented toward the open side of the tabard. And the outer edge of some U-shaped designs (for example, pls. 17 and 18) feature a single or double outline of feather strings that follows the perimeter edge, with the tips of the feathers also pointing outward and thus creating a smooth contour. None of these are typical attachments, and the remaining portion of the design is worked in the more usual horizontal rows. Once the surface patterning is complete, feathers can be left in their natural shape or they can be trimmed, sometimes quite dramatically, to sharpen the design (see pl. 13).

Cotton foundation fabrics are quite varied, both in yarn makeup and in structural details such as warp orientation and seaming of the cloths. There are also variations in the types of fibers used to make the strings, in the method of attaching the feathers to the strings, and in the stitching of the feathered strings to the woven textile. Collectively, these suggest centuries-long traditions and multiple centers of featherworking.

#### ATTACHMENT WITH ADHESIVE

Feathers can also be attached directly to a substrate with an adhesive. There is much to learn from these substances, and the analysis of adhesives used in Andean featherworks is ongoing. Entire feathers as well as sectioned feathers are found in adhesive settings. The Metropolitan's Chimú feathered headdress (pl. 62) presents an interesting example. A complex object, it is constructed of metal, cotton, skin, reeds, and feathers. The methods used to fabricate its construction are too detailed to be discussed here, but it is relevant to note that to create the multicolored checkerboard pattern, tiny feathers were affixed with a gum-derived adhesive to a thin felted support of light brown cotton fibers (fig. 66).<sup>22</sup> The adhesive, which is now dark and hard, gives body to the joined materials, and together they form a stiff construction. The feathers are applied in overlapping rows from the top down so that all the feathers are pointing up. These four differently colored blocks have been identified as feathers from a single species, the paradise tanager.<sup>23</sup> The immense skill and patience needed to place each of the estimated 22,000 tiny feathers used to create the checkerboard boggle modern concepts of time and practicality.

A feather fan in the collection of Harvard's Peabody Museum (pl. 49) provides a variation of this technique. Here, felted cotton also provides the support. The pattern is created from larger feathers that are sharply trimmed and shaped. The surface is then built up from overlapping layers (fig. 67), starting at the perimeter and moving toward the center. Compared to the elegantly thin feather checkerboard, the substrate of felted fibers is thick and adds perceptible depth and rigidity to this object, properties that surely contributed to the good functioning and endurance of a fan fashioned from chopped bits of feather vane.



Figure 66. **Detail of the Chimú feather crown in plate 62** with felted cotton ground and adhered feathers. Shown actual size. Photo: Christine Giuntini



## RESTORATION

Technical examinations of feather mosaics, such as those briefly described above, can reveal much information about the circumstances of their creation. Such examinations can be complicated, however, by the fact that the materials and construction methods used in making the mosaic lend themselves to restorations that are not readily detected by a study of the feathered surface alone. Concerns arise when it becomes difficult or impossible to differentiate the original from the restoration. While restoration is an accepted method of minimizing the appearance of wear and damage on a wide range of artifacts, it must be clearly documented. Skillful undocumented restorations can be so extensive that both the pattern and the overall dimensions of the object are compromised.

Most restorations can be easily detected, especially those that use new feathers, synthetic adhesives, or patches made from factory-woven cloth, but it is not always possible to determine whether certain refurbishments are ancient repairs or modern restorations. Some restorations can be quite subtle, when, for instance, skilled contemporary artisans make repairs using ancient cloth, handspun threads, and ancient feather strings. Only when the extent and kind of restoration have been established can the original surfaces be accurately analyzed. In some cases scientific tools are employed. With feathered textiles that have been lined or stitched to a support, X-radiography (X-rays) can reveal something of the overall construction techniques and the extent of restoration. In the case of three-dimensional feathered artifacts, a series of X-rays or a computed tomography (CT) scan is used.

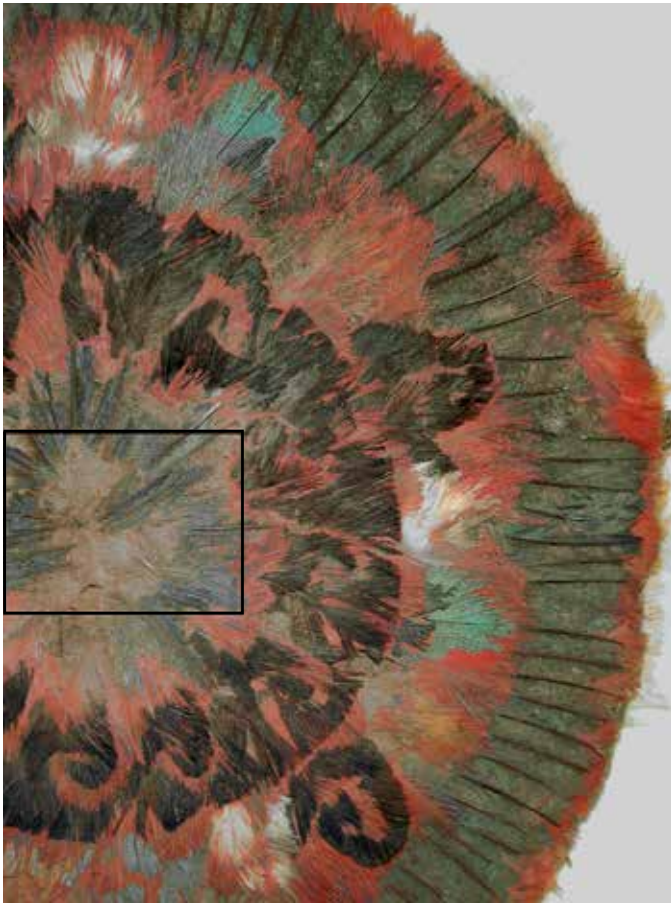
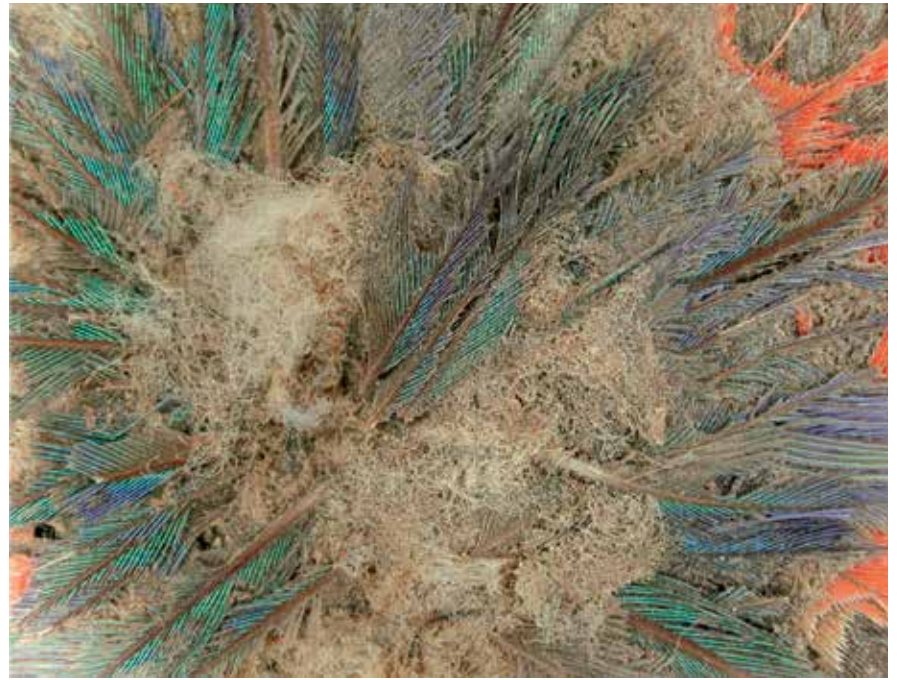


Figure 67. Detail of the feather fan in plate 49 showing trimmed feather motifs built up in layers on a substrate of cotton fibers and adhesive. Photo: Christine Giuntini



### PROVENANCE, DATING, AND CARBON-14

As a result of widespread unauthorized removal of artifacts from archaeological sites and the subsequent dissociation of these materials, it is not possible to securely assign dates and provenance to most featherworks. While the cultural affiliation and dating of many of these objects continue to be based on iconography coupled with analyses of materials and techniques, museums and collectors also rely on the Carbon-14 ( $^{14}\text{C}$ ) method of dating.<sup>24</sup> Since its development more than sixty years ago, it has become the method of choice for estimating the age of artifacts and other materials that were once composed of living tissues. A  $^{14}\text{C}$  date is usually expressed as a range of dates, between which the object was likely to have been made. The dated objects in this publication generally reflect a 95 percent degree of probability, although this high degree often brings with it date ranges that span a century or more and may not help to clarify cultural associations.

## CONDITION

Those unfamiliar with Precolumbian featherworks may assume that they are quite delicate and fragile, but in fact the physical condition of ancient feathered textiles and objects varies greatly, and it is not always clear exactly how factors such as age, function, conditions of burial, and especially the present environment have contributed to their overall condition. This observation is attested to by the group of twenty-three blue and yellow feather panels acquired by the Museum of Primitive Art in New York during the late 1950s and now in the collection of the Metropolitan Museum (see fig. 18a, b on page 29). These works are said to have been part of a buried cache of ninety-six similarly sized and patterned feather panels contained within a group of six to eight enormous jars buried on the site of Corral Redondo, in the Churunga Valley on the far South Coast.<sup>25</sup> All the examples in the Museum employ the same materials: plain-weave cotton foundation fabric, feathers of the blue-and-yellow macaw tied and stitched with cotton strings, and a woven camelid fiber band along the top with braided cords at each side. Creases and disruptions in the feathers strongly suggest that most of the panels were rolled before being placed in the jars. The foundation fabrics vary in the details of their structure, which suggests different weaving centers or time periods, or both. Additionally, the condition of the panels varies dramatically. On some, the feathers appear as brilliant and flexible as those on live birds and the cotton and camelid fabrics remain clean and supple. Others are torn, some have large losses, and still others have worn or missing feathers. To date four of these panels have been Carbon-14 dated.<sup>26</sup> In spite of great differences in overall condition and different woven structures, the panels all appear to have been made during the time of Wari hegemony in the South Coast and highlands. The causes of the differing states of preservation remain unclear and await further study.

The hundreds of Precolumbian featherworks preserved in museums throughout the world remain a rich source of understudied artifacts. In spite of a lack of provenance and associated materials, analysis and comparison of the methods and materials used in their creation coupled with ever more refined dating techniques will continue to contribute to the overall understanding of this sophisticated, unusual, and luxurious art form.



## Plates











Tabards



## 1 Tabard with Frontal Figure

Chimú, 13th–15th century  
Feathers on cotton,  $32\frac{7}{8} \times 28\frac{1}{8}$  in. (83.5 × 71.5 cm)

Acquired in 1912 by Aleš Hrdlička from a grave in the Nasca Valley  
National Museum of Natural History,  
Smithsonian Institution, Washington DC,  
Gift of Aleš Hrdlička (A387710)

REFERENCE: A. Rowe 1984, fig. 186

The traditional men's garment in ancient Peru was a sleeveless shirt or tunic with vertical armholes at the shoulders and a neck opening at the top. Ceremonial tunics densely covered with feathers front and back are open along the sides, probably to protect the delicate feathers from breaking off. Allowing the feathered cloth to move freely with the movement of the wearer also enhanced the iridescence and color variation of the feathers depending on the shifting light. Open-sided tunics, or tabards, were probably worn over other clothing.

Of North Coast manufacture, this tabard came from a burial in the Nasca Valley on the South Coast. It was collected on a field trip to Peru in 1912 by the anthropologist Aleš Hrdlička (1869–1943), founder and first curator of physical anthropology at the United States National Museum (now the National Museum of Natural History, Smithsonian Institution). On April 24, in a note to the museum, he wrote:

*I descended one of the tributaries of the Rio Nasca and then gradually examined a large part of the Nasca Valley, until I reached close down to the coast. I found remarkable conditions in many respects, examined over twenty burial grounds, and selected a number of cases of specimens. Among other things I was fortunate to be present at one of the cemeteries in the Nasca desert when an accidental discovery was made . . . of a burial chamber containing the rests of two ancient mummies of high dignitaries or priests. I secured the precious contents of the grave, which included two feather robes, and am happy to donate them to our Institution.<sup>1</sup>*

It is unclear whether the tabard came to the south by way of an exchange of luxury goods between elites, or whether it was made by Chimú weavers who had been relocated to the south after the Inca had brought Chimú territory under their control.

1. Archives, National Museum of Natural History, Smithsonian Institution, Washington DC.



Reverse







## 2 Tabard with Two Figures

Chimú, 15th–early 16th century

Feathers on cotton, 30½ × 27 in. (77.5 × 68.5 cm)

Reportedly collected in the Lambayeque region,  
North Coast, before 1928

Courtesy, National Museum of the American  
Indian, Smithsonian Institution, Washington DC  
(159404)

REFERENCES: Dockstader 1967, pl. 163; A. Rowe  
1984, fig. 190; T. Hill and R. Hill 1994: 102

Open along the sides, feathered tabards were held in place with three or four ties on the front and back edges (still visible on some examples, as in pl. 17). The unfeathered section between three and six inches (7.6 × 15.2 cm) wide, always along the top of the garment (more clearly visible on pls. 4, 5, and 15), would accommodate the curve of the shoulders.

Frontal figures wearing ear ornaments and prominent crescent headdresses, as seen here and in plate 1, were a common motif in the art of the North and Central Coasts of this time. Both tabards are attributed to the Chimú on the basis of the iconography and technical features of the foundation fabric. They are made of two panels joined along the center with the neck slit left open and have paired warps, considered the most diagnostic feature of Chimú weaving.<sup>1</sup>

1. A. Rowe 1984: 24; see also King, “Feather Arts in  
Ancient Peru,” note 68 on page 205.



Reverse







### 3 Tabard with Staff-Bearing Figures

Wari, 8th–10th century

Feathers on cotton,  $37\frac{3}{8} \times 43\frac{1}{4}$  in. (95 × 110 cm)

Reportedly found at the site of Estaquería, Nasca Valley, before 1936

Staatliches Museum für Völkerkunde München (X.1035)

REFERENCES: Ubbelohde-Doering 1936, pl. 55;

Ubbelohde-Doering 1952, frontis.; Lommel 1957,

cover ill.; Purin 1990, vol. 2, pl. 258

This brightly colored tabard is one of only a few unprovenanced feather pieces that can be attributed to the Wari peoples on the basis of iconography. It features two frontal figures in yellow and turquoise on a red ground. They wear headdresses and hold in each hand a staff with animal heads at top and bottom. Animal heads also project from the crowns; they are thought to depict the heads of birds, camelids, or felines. Such staff-bearing figures are believed to derive from images found on the stone sculpture at Tiwanaku, south of Lake Titicaca in Bolivia. They are also seen on painted ceramics and woven textiles without feathers from the Wari period.

Some feather tabards have the same design on both sides. On others, as here, the designs on front and back are different. Presumably the figural or the more elaborate pattern was on the front, although it is also possible that the more richly decorated side was worn on the back.



Reverse







#### 4 Tabard with Human Figures and Llamas

Far South Coast, culture uncertain, Carbon-14 date 1298–1397 (95% probability)

Feathers on cotton, 43¾ × 49¼ in. (111 × 125 cm)

The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection, Gift of John Wise, 1956 (1978.412.20)

Several feathered tabards with blocklike human figures and quadrupeds—most likely llamas—in dark brown feathers on a yellow or red background similar to the one illustrated here are known in collections. None have a reliable provenance and a specific culture cannot be attributed at this time. The fourteenth-century Carbon-14 date places this example in a period of regional cultural diversity in Peru.

The simplified rendering of the human and animal figures seen here and on the tabard in plate 5 recalls imagery on ceramics, woven textiles without feathers, and rock art from the far South Coast. The warp-predominant foundation cloth as well as the format of the garment—it is wider than it is long—support a southern provenance. The reverse shows three registers with yellow stepped cross motifs in repeat.

On some tabards the neckline is delineated, often with a stepped V-shaped yoke, as in plates 12–14. This was presumably the front. On the example seen here, as in plate 2, the neck-slit pattern is the same front and back.



Reverse







## 5 Tabard with Three Figures

Far South Coast, culture uncertain, Carbon-14 date 1212–84 (95% probability)

Feathers on cotton,  $24\frac{3}{8} \times 39\frac{3}{8}$  in. (62 × 100 cm)

Private collection

REFERENCE: Reid 2005, pl. 5

This tabard on one side shows three stylized frontal human figures with upraised arms, squarish heads, and toothy mouths worked in yellow and red macaw feather mosaic on a blue ground. The upper part of the reverse is covered with long feathers, probably from the Chilean flamingo, some of which may be replacements. The lower part has mosaic in small body feathers depicting two confronted creatures with curved backs and long tails.

A sizable fragment with similar human figures was recently found by archaeologists together with many Wari-style textiles in a burial chamber at La Real in the Camaná Valley on the far South Coast.<sup>1</sup> Scientific dating of the excavated feather piece showed that it was made in the eighth century. The thirteenth-century date obtained for the tabard illustrated here by Carbon-14 dating attests to the longevity of the motif.

1. See King, "Feather Arts in Ancient Peru," note 56 on page 205.







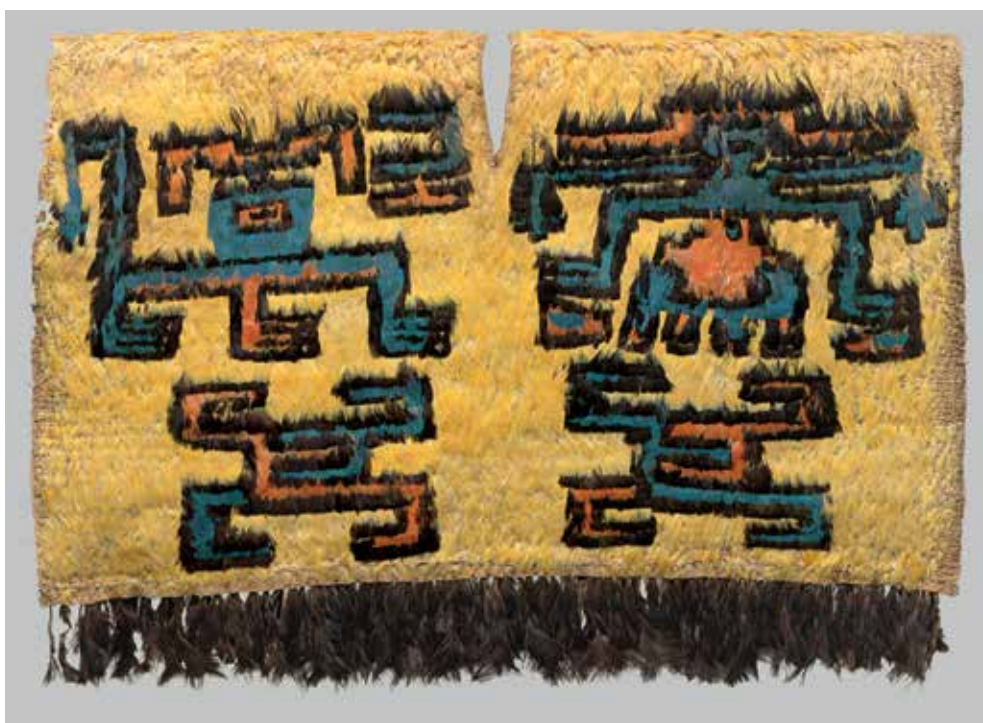
## 6 Tabard with Lizardlike Creatures

Nasca, 6th–8th century

Feathers on cotton, 23 × 30½ in. (58.5 × 77.5 cm)

Virginia Museum of Fine Arts, Richmond,  
Arthur and Margaret Glasgow Fund (60.44.3)

Featherworks made by the Nasca peoples are scarce; only very few have been found by archaeologists (see Frame, pages 55–61). The format of this exceptionally well preserved tabard—it is wider than it is high—and the motifs on the front and back suggest that it is attributable to the Nasca culture of the sixth to the eighth century. The warp-predominant foundation cloth also supports a South Coast attribution. The six-legged lizardlike creatures on the front and the angular, abstract designs on both sides recall similar motifs on Nasca ceramics and on textiles without feathers. Also typical of the Nasca style is the outlining of motifs in black. Most unusual on this tabard is the fringe, which consists of individual brown feather bunches wrapped at the stems and sewn to the inner side of the foundation cloth, as seen in the detail below.



Reverse



Detail showing feathers sewn to inner side of cloth







## 7 Tabard with Birdlike Creatures in Profile

Chimú, 13th–15th century

Feathers on cotton, 27 × 27 in. (68.5 × 68.5 cm)

Private collection

REFERENCE: Schildkraut 1988, pls. 8, 9

A mythical birdlike creature in profile wearing a crescent headdress and with a long, toothy snout, clawed feet, and branched tail is depicted nine times in horizontal rows on this Chimú tabard. The color combination of yellow, blue, and green feathers in which the creature appears on the red ground varies in each row, as does the orientation of the figure. The unnatural coloring of the feathers along the bottom — sulphur yellow with an area of red or pink on either side of the shaft — was obtained by a process known as tapirage (see pages 92–94). The reverse side of the tabard has horizontal rows of longer and shorter pink and blue feathers.



Reverse







## 8 Tabard Half with Birds

Central Coast, Chancay (?), 13th–15th century  
Feathers on cotton,  $41\frac{3}{8} \times 35\frac{3}{8}$  in. (105 × 90 cm)  
Collected before 1907 by Arthur Baessler, reportedly from Pachacámac  
Staatliche Museen zu Berlin, Preussischer Kulturbesitz, Ethnologisches Museum (VA 21540)

REFERENCES: Villa Hügel 1984: 357, fig. 11.24;  
Eisleb, Strelow, and Tesch 1986: 47, pl. 183

## 9 Tabard with Birds and Wave Motif\*

Chimú, 13th–15th century  
Feathers on cotton,  $16\frac{7}{8} \times 12\frac{1}{4}$  in. (43 × 31 cm)  
Museo Amano, Lima (7512)

REFERENCES: Benson and Conklin 1981: 106;  
Cáceres Macedo 2005: 468

\* The tabard is shown open.

Birds and a running scroll or wave motif as seen on these tabards appear frequently in a variety of mediums—including architecture, ceramics, metalwork, and woven textiles not covered with feathers—in the art of coastal cultures for hundreds of years prior to the Spanish Conquest. The Moche peoples, predecessors of the Chimú to whom the tabard in plate 9 is attributed on the basis of the foundation cloth, which has paired warps, depicted birds naturalistically. Chimú birds are more abstracted, making species identification difficult. In this example, however, the long-necked, long-beaked birds are likely meant to represent seabirds. As on many Chimú and Central Coast textiles without feathers, the rhythmic repetition of the same motif in alternating color combinations, seen on both these textiles, carries strong visual appeal.







## 10 Tabard with Four Frontal Birds<sup>1</sup>

South Coast, Ica (?), Carbon-14 date 1400–1610  
(95% probability)

Feathers on cotton, 29 1/8 × 25 in. (74 × 63.4 cm)

The Metropolitan Museum of Art, Fletcher  
Fund, 1959 (59.135.8)

REFERENCES: A. Rowe 1984, fig. 188; Reid 2005,  
pl. 11; H. King 2008b: 66, fig. 7

This vividly colored, well-preserved tabard has a particularly lush surface, the result of grouping two or more feathers together into each knot on the feather strings and then sewing the strings so that they closely overlap, in shingle fashion, on the foundation fabric. The compelling imagery features four frontal birds or birdlike creatures with spread wings, their outlines sharpened by feathers trimmed to shape. Sporting bold red headdresses, they have anthropomorphic faces with fanged mouths, prominent noses, and wide glaring eyes.<sup>2</sup> It is presumed that they depict supernatural beings.

The tabard incorporates technical features found in different geographic areas. The paired warps have been determined to be a North Coast characteristic,<sup>3</sup> while the foundation fabric is a single panel of warp-predominant plain-woven cotton with a woven-in neck slit that is more characteristic of the south highlands and South Coast. The four symmetrical figures quarter the surface as they alternate positions in a type of pattern symmetry also common in the south.

Although the feathers were removed from one side of the tabard, horizontal rows of stitching remain clearly visible on the woven support. While it is not possible to know what types of feathers were used, the disposition of the rows suggests that both small and medium-size body feathers, as well as larger flight feathers (or body feathers from large birds), were used. Deploying rows of small feathers along the bend of the shoulder would have provided a smooth transition along that curved contour when the tabard was worn. The variety of spacing between the rows suggests that several different types of feathers were exploited to create a lively banded composition.

1. This entry was written by Christine Giuntini.

2. The unusual headdresses may be a variant of the “plain crescent” Chimú headdress described in A. Rowe 1984: 122.

3. Ibid.: 24.







**11 Tabard with Four Birds in Brown and White**

North Coast, culture uncertain, Carbon-14 date 1453–1627 (95% probability)

Opposite: Feathers on cotton, 27 × 27½ in. (68.5 × 70 cm)

The Metropolitan Museum of Art, Harris Brisbane Dick Fund, 1963 (63.163)

Below: Feathers on cotton, 25 × 25½ in. (63.5 × 65 cm)

The Metropolitan Museum of Art, Gift of H. L. Bache Foundation, 1969 (69.62.2)

REFERENCE: A. Rowe 1984, fig. 189

This tabard was cut in half along the unfeathered shoulder line, and the two halves entered the collection of the Metropolitan Museum at different times. The feather mosaic on both front and back is identical, showing four quadrants in white and brown, each with a crested bird facing to the right; eyes, beaks, legs, claws, and wings are accentuated selectively in red. When the tabard was worn the birds on the front would have faced left.

It has been suggested that feather tabards and headdresses covered with mosaic in predominantly brown and white feathers date from the colonial period after the Spaniards had disrupted east–west trade routes and the colorful feathers of rainforest birds were no longer readily available.<sup>1</sup> The Carbon-14 dates for this piece (1453–1627) support this suggestion. It is also possible, however, that textiles and garments with brown and white feathers carried less prestige than those with very colorful feathers.<sup>2</sup> This idea is supported by a few scientifically excavated feather headdresses and tabard fragments with mostly brown and white feathers from pre-Conquest Central Coast burials.

1. A. Rowe 1984: 176–78.

2. Frame et al. 2004: 826–28.



Reverse







## 12 Tabard with Felines, Birds, and Fish

South Coast, "provincial" Inca (?),  
14th–early 16th century  
Feathers on cotton, 33½ × 33⅞ in. (85.1 × 86 cm)  
Collected by Eduard Gaffron in Peru between  
1892 and 1912  
The Art Institute of Chicago, Kate S. Buckingham  
Endowment (1955.1789)

REFERENCES: Lehmann 1924, pl. xii; Kelemen  
1943, vol. 2, pl. 290a; Ubbelohde-Doering 1952,  
pl. 51; Bennett 1954, fig. 120; Christensen 1955,  
fig. 253; Mayer 1969, pl. 6; Thomas, Mainguy,  
and Pommier 1985: 20; Reinhard 1992: 301, fig.  
19; Art Institute of Chicago 1993: 224; Troy 2002:  
51, fig. 1.5; Cáceres Macedo 2005: 465

FOLLOWING PAGES:

## 13 Tabard Half with Birds and Quadrupeds

South Coast, "provincial" Inca (?),  
15th–early 16th century  
Feathers on cotton, 28 × 28 in. (71 × 71 cm)  
Collected by Eduard Gaffron in Peru between  
1892 and 1912  
Lippisches Landesmuseum Detmold (v 1834)

REFERENCE: Cáceres Macedo 2005: 466

## 14 Tabard Half with Felines

South Coast, "provincial" Inca (?),  
15th–early 16th century  
Feathers on cotton, 35 × 27⅞ in. (88.9 ×  
70.2 cm)  
Collected by Eduard Gaffron in Peru between  
1892 and 1912  
The Art Institute of Chicago, Kate S. Buckingham  
Endowment (1955.1778)

A woven tunic in the Metropolitan Museum with two snarling confronted felines in profile on the front and back, with an alleged provenance of the Ica Valley, has been identified as "provincial" Inca in style and dated from the fifteenth to the sixteenth century.<sup>1</sup> The tabards illustrated in plates 12–14, which are without reported provenance, feature this motif in feather mosaic mostly in white, brown, and yellow on warp-predominant cotton cloth.<sup>2</sup> The most elaborate example, in plate 12, has additional representational motifs of birds and fish and a border of step-fret designs, motifs found in the art of many coastal cultures during the late Precolumbian period. The stepped V-shaped yoke at the neck slit—probably marking the front of the garment—recalls the finely woven imperial Inca tapestry tunics with checker-board design that are, however, strictly geometric and identical front and back. The feather tabards shown here were likely made during the Inca period on the South Coast, perhaps by the Ica/Chincha or other cultures about which little is known at present.<sup>3</sup>

1. A. Rowe 1992: 10–13, fig. 7. The term "provincial" Inca style implies that the pieces were made during the reign of the Inca for use in the provinces. Works made for the Inca nobility in Cuzco are in what is termed the Cuzco or imperial Inca style.

2. A tabard fragment with a design and color combination identical to those in plate 14 is in the collection of the Linden-Museum Stuttgart.

3. A full-size feather tabard with a stepped V-shaped yoke on the front and back in the collection of the Textile Museum, Washington DC, features four profile felines on one side and two profile birds on the other (A. Rowe 1992, fig. 8).



Reverse









13







## 15 Tabard with Blue Yoke

Ica/Chincha, 13th–early 16th century

Feathers on cotton, 48 × 55½ in. (122 × 141 cm)

Reportedly found in the Chincha Valley, South Coast

Private collection

REFERENCES: H. King 2008a: 84, fig. 1; H. King 2008b: 66, fig. 9; H. King 2008c: 55; H. King 2008d: 62, fig. 7

Featuring a bold turquoise blue U-shaped yoke on a solid field of intense yellow macaw feathers, this spectacular tabard is arguably among the grandest and best preserved to survive from Precolumbian Peru. It is said to have come from the Chincha Valley, the northernmost valley on the South Coast. The paired wefts and the striped foundation fabric woven with finely spun cotton in shades of natural light tan and brown—visible along the unfeathered shoulder—support a southern provenance. The playful profile birds at the lower corners, with zigzag bodies and wings—a frequent motif in the art of the North and Central Coasts during this time<sup>1</sup>—and the inverted stepped triangles along the bottom are also seen on ceramics and textiles without feathers produced by the Ica/Chincha cultures on the South Coast during the last centuries before the Conquest.<sup>2</sup> The reverse side of the tabard, seen below, is covered with alternating rows of longer green and pink feathers, probably from the Amazona parrot and the Chilean flamingo, respectively.

1. For examples in textile arts, see A. Rowe 1984, pl. 4, and Ruiz Estrada 1999: 520–21, pls. 11, 12.

2. A. Rowe 1979: 185–218; Garaventa 1979, figs. 11, 14, and A. Rowe 2003, figs. 18, 27, 28.



Reverse





## 16 Tabard Fragment

Central Coast, Chancay (?), 10th–16th century (?)  
Feathers on cotton, 26¾ × 26 in. (68 × 66 cm)  
Collected by Wilhelm Gretzer before 1903,  
reportedly at Pachacámac  
Staatliche Museen zu Berlin, Preussischer  
Kulturbesitz, Ethnologisches Museum  
(VA 60303)

The design and color combination of the feathers on this regrettably very fragmentary tabard — most of the front, but only a small corner of the back, remain — attest to a highly sophisticated sense of design. The upper half of both the front and the back showed a wide squared U-shape in blue stripes on green (seen now only on the front), and the lower half is divided diagonally into halves and filled with geometric motifs in blue and red on green, respectively. The more damaged side of the tabard originally had the same design but in reverse.



Hypothetical reconstruction of entire tabard. Drawing: Daniel Kershaw







## 17 Tabard with Yellow Yoke

South Coast, Ica (?), 12th–15th century  
Feathers on cotton, 27½ × 30½ in. (70 × 77.5 cm)  
British Museum, London

REFERENCE: Dransart and Wolfe 2011: 58–59

The graphic vigor of this tabard and the one in plate 18 lies in the contrast between the simple bold curve of the half circle in yellow on red and on blue, respectively, and the angularity of the blue stripes that define the vertical neck slits and the squarish shape of the garments themselves. A few of the original ties are still in place on the tabard seen here. A number of tabards with large single-color half circles such as these are known; most have a color combination of yellow, red, and blue and identical fronts and backs. Here, the dense feather mosaic is applied to the warp-predominant paired-weft cotton cloth common on South Coast weavings. A large fragment of a tabard with design and colors similar to those in plate 18 was reported from a surface find in the Camaná Valley on the far South Coast.<sup>1</sup>

A tabard in a private collection identical to this one was dated by Carbon-14 from the eleventh to the thirteenth century.<sup>2</sup>

1. Bruce Owen, personal communication, 2010.

2. Reid 2005: 218.



Reverse







## 18 Tabard with Yellow Yoke

South Coast, Ica (?), Carbon-14 date 1276–1390  
(95% probability)

Feathers on cotton, 35 × 29<sup>7</sup>/<sub>8</sub> in. (89 × 76 cm)

The Metropolitan Museum of Art, Gift of  
George D. Pratt, 1929 (29.146.25)

REFERENCES: H. King 2008c: 52; H. King 2009:  
38, 39, figs. 1, 2; H. King 2010: 13, fig. 2

Large quantities of feathers were required to cover the entire surface of a tabard. The front of this tabard has sixty horizontal rows of feather strings with, on average, 108 knots per string, each knot holding one or sometimes two feathers, resulting in a total of approximately 6,500 feathers.









## 19 Tabard with Hook-Motif Border

Late Nasca/Wari, Carbon-14 date 780–985

(95% probability)

Feathers on cotton, 55<sup>7</sup>/<sub>8</sub> × 52 in. (142 × 132 cm)

Private collection

REFERENCES: Reid 2005, pl. 91; H. King 2008a:

87, fig. 8; H. King 2008d: 59, fig. 3

This boldly patterned tabard is one of several with identical colors and designs front and back. They are especially impressive for their size. The angular hook motif around the border is known also from woven textiles in the discontinuous warp-and-weft technique made by the Nasca/Wari peoples in the south from the seventh to the tenth century. The unfeathered section on the reverse suggests that the tabard was left unfinished, perhaps purposefully.

Textiles with myriad designs ranging from representational to abstract fulfilled important functions in ancient Peruvian cultures as indicators of ethnicity, social status, and occupation. From the Spanish chroniclers it is known, for example, that Inca tunics with a black-and-white checkerboard design were associated with the military. It is possible that the designs on feathered tabards such as the hook motif seen here or the large half circles shown in plates 17 and 18 also encoded professional or status associations.



Reverse







**20 Tabard Half with Scroll-Motif Border**

South Coast, culture uncertain, 13th–15th century  
Feathers on cotton, 20½ × 35 in. (52 × 89 cm)  
Collected by Eduard Gaffron in Peru between  
1892 and 1912

Courtesy of the Division of Anthropology,  
American Museum of Natural History, New York  
(B/8581)

REFERENCES: Mead 1907, pl. 1; Kelemen 1943,  
vol. 2, pl. 289a

In the absence of scientifically documented — or even anecdotal — provenance or diagnostic iconography, cultural attribution for these two tabards is problematic. Other considerations, such as format and technical characteristics of the foundation fabric (which may not, however, be considered conclusive) must be taken into account. Similar in size, format, and decoration, both these tabards are made of two panels joined along the center, a feature commonly seen on North and Central Coast garments. The ground fabric of both, however, has a warp-predominant weave, with paired wefts on the tabard in plate 21 and single wefts on the one in plate 20, suggesting a provenance from the south.

**21 Tabard with Scroll-Motif Border\***

South Coast, culture uncertain, 13th–15th century  
Feathers on cotton, 21⅞ × 32¼ in. (53.8 × 82 cm)  
Courtesy of the Peabody Museum of Archaeology  
and Ethnology at Harvard University, Cambridge,  
Mass. (14-38-30/85947)

\* The tabard is shown open.









**22 Tabard Half with Checkerboard Design**

South Coast, Inca (?), late 15th–early 16th century  
Feathers on cotton, 44½ × 29½ in. (113 × 75 cm)  
The Textile Museum, Washington DC (91.276)

FOLLOWING PAGES:

**23 Tabard with Checkerboard Design\***

Late Chimú (?), 15th–early 16th century  
Feathers on cotton, 35 × 29⅞ in. (89 × 76 cm)  
Collected in Peru before 1920  
Courtesy, National Museum of the American  
Indian, Smithsonian Institution, Washington DC  
(100000)

\* Both sides of the tabard are shown.

During Inca times, tunics—knee-length sleeveless men's garments that are usually longer than they are wide—with checkerboard designs in black and white were associated with the military. Checkerboard garments are also known from earlier cultures, although they may not have been linked to soldiers and warfare. On painted vessels of the Moche culture (2nd–8th century), for example, individuals wearing such tunics are seen participating in ritual activity rather than engaging in battle. It is likely that the meaning of the design varied from culture to culture and changed over time. Finely woven Inca black-and-white checkerboard tunics invariably consist of one panel folded at the shoulder; they always have identical designs front and back and V-shaped stepped yokes in red.

The tabards shown here, on the other hand, are made of two panels joined along the vertical center line. It is likely that they date from the Inca period but were made in the coastal provinces for local elites rather than for Inca royalty. The tabard in plate 22 with its warp-predominant foundation cloth probably came from the south, while the example in plate 23 is likely of northern or Central Coast origin since its base fabric features balanced weave with paired warps. The scroll or wave motif, seen on the bottom register of plate 23, also occurs more frequently on artistically elaborate objects in North and Central Coast art.











Reverse







## 24 Tabard with Geometric Design

South Coast, Ica (?), Carbon-14 date 1288–1393  
(95% probability)  
Feathers on cotton, 39¾ × 52 in. (101 × 132 cm)  
Private collection

This tabard is highly unusual among known feather tabards for the complexity of its design and for the range of colors used. The purely geometric mosaic, which covers the front and more than two-thirds of the reverse, is intricate and small in scale and must have been created by a master feather worker. Made in the customary fashion by sewing strings of small red, blue, yellow, green, and white feathers to the warp-predominant cotton ground fabric, the feathers were trimmed to define and clarify the design. The basic design elements are stepped diamonds and triangles, motifs often seen in the arts of the Wari and later peoples of the south, where this piece probably originated. The designs are arranged in horizontal and vertical registers and can be read singly or as forming a unit of a square or rectangle with a stepped diamond in the center framed by stepped triangles. A similar design, albeit in very large scale, appears on the tabard fragment in plate 25.









25 **Tabard Fragment with Stepped  
Diamond Design**

South Coast, Ica (?), 12th–15th century

Feathers on cotton,  $44\frac{1}{2} \times 34\frac{1}{4}$  in. (113 × 87 cm)

Saint Louis Art Museum (113.1942)





## 26 Tabard with Concentric Circles

South Coast, Ica (?), 13th–15th century  
Feathers on cotton,  $41\frac{3}{4} \times 32\frac{1}{4}$  in.  
(106 × 81.8 cm)

Collected by Paul Berthon in Peru before 1911  
Musée du Quai Branly, Paris (71.1911.21.500)

REFERENCES: Berthon 1911, pl. VII; Musée de  
l'Homme 1965: 228, pl. 88; Musée de l'Homme  
1988: pl. 586

In general, abstract designs on feather cloth are created by sewing on the feather strings in straight rows. Designs with curved lines (see pl. 4) or even full concentric circles, as on this tabard, are less common. A few examples, albeit in poor state of preservation, are known in museum collections in Lima, Berlin, and Washington. One tabard with five solid circles in red and yellow on a field of blue feathers came from a salvage operation at Huaca Malena. The tabard was the outermost layer of a mummy bundle of an important individual who had been laid to rest between 700 and 1100.<sup>1</sup>

1. Angeles Falcón 2005: 119–48, figs. 5, 6.











## 27 Four-Cornered Hat

Wari, 7th–10th century

Cotton on cane, feathers,  $6\frac{3}{4} \times 5\frac{1}{2}$  in.

(17 × 14 cm)

Brooklyn Museum, A. Augustus Healy Fund

(41.228)

REFERENCES: Zimmern 1949, no. 8; Ubbelohde-Doering 1952, pl. 105; Bennett 1954, fig. 86; Easby and Rosenthal 1967: 248–49; Grey 1978, pl. 31; Brooklyn Museum 1988, fig. 42; Banco de Crédito del Perú 1990: 113; Brooklyn Museum 1997: 82–83; H. King 2008a: 86, fig. 4; H. King 2008b: 65, fig. 4; H. King 2012, fig. 1

Headgear was an essential part of elite costume in ancient Peru and was made in many different shapes, sizes, and materials. The most distinctive head cover for men during the time the Wari people controlled a large part of present-day Peru (7th–10th century) was a hat with a flat square top. The hats usually have upright peaks projecting from the corners, and this hat too may originally have had peaks that are now missing. Commonly made in a knotting technique with brightly dyed yarns, the hats have both geometric patterns and designs derived from religious iconography. This hat is one of only a few known examples from the period constructed of a cane framework covered with cotton cloth to which feather mosaic has been applied.<sup>1</sup> The feathers were precut to form the design. Each side of the hat is divided into quarters filled with patterns of stepped diamonds and profile puma heads—with lozenge-shaped eyes, tear bands on the cheeks, and bared teeth—repeated at the diagonal. The division of the design into four likely held special meaning for the Wari people.

1. Baessler (1902–3, vol. 4, pl. 147) describes and illustrates a four-cornered hat with four peaks excavated at Pachacámac. The feather mosaic is “executed [so] that only the finest tips cut from the feathers without stems have been glued to the

material.” Two winged creatures in profile holding staffs are depicted in blue, yellow, white, and black on red. A third example of a feathered four-cornered hat is illustrated in Brinckerhoff 2000, no. 37.



View of top





## 28 Head Ring with “Dice” Motif

Late Moche/Wari, 8th–9th century  
Cotton, cane, feathers, height 7 $\frac{7}{8}$  in. (20 cm)  
Linden-Museum Stuttgart (M 32205)

REFERENCES: Aimi 2003: 187, pl. 158; Clados  
2010: 167, fig. 1

This rare head ring—it has no Carbon-14 date or anecdotal provenance—can be attributed to the late Moche culture based on its shape. Several examples of similar head covers worn by individuals of rank engaged in various ritual or ceremonial activities are seen in the fineline drawings on Moche vessels. The characters in these multifigural scenes who wear such head rings are often shown carrying war clubs and shields, as seen in the drawing below, or sometimes musical instruments. A large crescent ornament probably of metal and a fan-shaped plume perhaps of feathers are usually attached at the top of the hat in front and back, respectively, as also seen in the drawing.<sup>1</sup> A Wari attribution for this example has been suggested on the basis of depictions of prominent individuals in Wari art.<sup>2</sup>

An unusual aspect of the mosaic is that the feathers, mostly the barbs, are glued sideways rather than vertically to the plain-weave foundation cloth; in all likelihood an organic adhesive was used. The feathers were trimmed to create the design.

1. For additional examples of Moche figures wearing such headdresses, see Donnan and McClelland 1999, figs. 4.54, 4.106.

2. Clados 2010: 165–79.



Detail of a drawing on a Moche stirrup-spout vessel showing a figure wearing a head ring similar to that shown opposite. The marks on the crown may depict the barbs of feathers (after Donnan and McClelland 1999, fig. 1.20 right)





## 29 Helmet with Frontal Figure

Chimú, 13th–15th century  
Reeds, wood, feathers, 16¾ × 20¼ in.  
(42.5 × 51.5 cm) including tassels  
Private collection

REFERENCE: H. King 2008c: 55

Conical helmets are often seen worn by important individuals in multifigural scenes painted on eighth-century Moche ceramics. The Moche helmets are decorated with a variety of geometric motifs and are often topped by a large crescent-shaped ornament.<sup>1</sup> The Chimú people adopted this headdress form. The hat seen here is covered with fine feather mosaic showing the characteristic Chimú frontal figure with outstretched arms and wearing round ear ornaments and a large crescent headdress (see, for example, pls. 1 and 2). It is further embellished with three impressive tassels of yellow feathers, the coloring of which was obtained by tapirage. The tiny turquoise, red, and purple feathers are probably those of the paradise tanager.

1. See, for example, Donnan and McClelland 1999, figs. 1.20 left, 4.16, 4.17.







### 30 Headband with Profile Figures

Sicán/Chimú/Ichma, 11th–15th century  
Feathers on skin, height 4 in. (10 cm),  
diam. 8 in. (20.3 cm)  
Private collection

REFERENCES: Reid 2005, pl. 48; H. King 2008a:  
86, fig. 7; H. King 2008b: 67, fig. 11

### 31 Crown with Seated Profile Figures

Sicán/Chimú, 11th–15th century  
Reeds, cotton, skin, feathers, height 6½ in.  
(16.5 cm), diam. 7½ in. (19 cm)  
Private collection

REFERENCES: H. King 2008a: 86, fig. 6;  
H. King 2008c: 54; H. King 2008d: 59, fig. 2

Headdresses dating from the eleventh to the fifteenth century made by different peoples on the North and Central Coasts often share similar forms and motifs, making cultural attribution problematic. As in other cultures, certain headdresses were likely worn on specific occasions. Tall cylindrical crowns with cutout designs are known in gold and in silver from the Sicán and the Chimú. On the two crowns shown here the foundation material to which the delicate feather mosaic is applied is skin. On both examples the figures in profile wearing large crescent headdresses appear as repeats in seven frames. The two figures facing each other in plate 30, as if conversing, carry loads on their backs. This headband was probably also once attached to a cane or basketry structure covered with cloth, as seen in plate 31.<sup>1</sup> A feathered headband with a palette identical to that in plate 30 shows frontal figures with large crescent head-dresses.<sup>2</sup> Excavated at the site of Pachacámac in the 1990s, it is attributed to the Ichma peoples.

1. The cloth covering the cane structure of the crown in plate 31, although archaeological, is a replacement.

2. Eeckhout 1999: 333–34; Eeckhout 2005: 52–57.







## 32 Crown with Checkerboard Design

Sicán/Chimú, 11th–15th century  
Cotton, skin, reeds, feathers,  $5\frac{1}{8} \times 8\frac{1}{4}$  in.  
(13 × 21 cm)

Brooklyn Museum, Ella C. Woodward  
Memorial Fund (61.11a, b)

REFERENCE: H. King 2008b: 65, fig. 3

This crown has two rectangular panels attached to the front and back (for the construction, see fig. 20 on page 32). It is of a type often seen in depictions of a prominent personage — perhaps a deity, ruler, or mythical ancestor — on ceramic vessels and on metalwork of the period (see below), where it is further enhanced by long plumes emerging from the top. Here, each panel has a central checkerboard design and a vertical band on either side with a cutout motif in repeat.



Double-spout vessel with figure wearing a headdress similar to that shown opposite. Sicán, 10th–13th century.

Ceramic, height  $7\frac{1}{4}$  in. (18.5 cm). Museo Nacional de Arqueología, Antropología e Historia del Perú, Lima





**33 Headdress with Back Panel:  
Figures with Head Crescents**

Sicán/Chimú, 12th–15th century  
Feathers, cotton, fiber, height 34½ in. (87.5 cm)  
Collected between 1875 and 1884 by Ernesto  
Mazzei, reportedly at the Hacienda de Chocope,  
Chicama Valley, north of Trujillo  
Museo Nazionale Preistorico Etnografico “Luigi  
Pigorini,” Rome (MPE 49254)

REFERENCES: Giglioli 1894: 223–24, pl. XV.2, .3;  
Purin 1990, vol. 1, no. 284

**34 Headdress with Back Panel:  
Moon Animals**

Sicán/Chimú, 12th–15th century  
Feathers on cotton, camelid hair, height 23⅝ in.  
(60 cm)  
Said to have been collected in the vicinity of  
Lima before 1931. Former José A. Gayoso  
Collection, Lima  
Courtesy, National Museum of the American  
Indian, Smithsonian Institution, Washington DC  
(178959)

Among the grandest feather headdresses to survive from Precolumbian Peru is a group that features a long trapezoidal back panel hanging from the cap (as seen in the views at right), which is surmounted by a tall flared crest often of multicolored longer feathers. Two narrow bands at the sides would frame the wearer’s face (see, for example, pl. 36 side view). The free-swinging bands are feathered on both sides, while the back panel is feathered only on the outside, the part that would have been seen when worn. This type of headdress seems to have been popular on the North and Central Coasts for several hundred years prior to the Spanish Conquest in the early part of the sixteenth century. Two examples excavated by archaeologists in the late 1990s in the Lima area date from the Inca period.<sup>1</sup> A watercolor drawing made for the archbishop of Trujillo in the late eighteenth century shows a prominent indigenous individual prepared for burial (see fig. 27a, b on page 42). He wears European-style clothing and a headdress of the kind illustrated here, suggesting that such headgear continued to be worn during the colonial period.<sup>2</sup>

Stylized frontal figures and profile creatures in human posture with animal heads, long snouts, and tongues and wearing head crescents are frequent motifs in Sicán and Chimú art. The latter motif has been called the moon animal; it appears in many variations in North Coast art from the beginning of the first millennium CE.

1. Cock 2002: 91; Mendoza Neyra 2004: 141–55;  
Frame et al. 2004: 826–28.

2. Martínez Compañón 1978–94, vol. 9: 12, 13.





**35 Headdress with Back Panel:  
Stepped Design**

Chimú (?), 13th–15th century  
Feathers on cotton, camelid fiber, height 34 $\frac{5}{8}$  in.  
(88 cm)  
Private collection

On some headdresses with back and side panels, the cap from which the panels hang and to which the feathers are applied is made of a reed or basketry structure covered with cloth or of cotton cloth with padding, as in plates 34 and 36. On others the cap is knotted meshwork, as in plates 33 and 35. On the latter two headdresses bunches of fiber, possibly camelid hair, are tied into the knots of the mesh; most of the camelid hair is now missing.

**36 Headdress with Back Panel:  
Checkerboard Pattern**

Late Chimú/Ichma (?), Carbon-14 date 1410–1620  
(95% probability)  
Feathers on cotton, height 33 $\frac{1}{2}$  in. (85 cm)  
The Metropolitan Museum of Art, The Michael C.  
Rockefeller Memorial Collection, Purchase,  
Nelson A. Rockefeller Gift, 1955 (1978.4.12.1)  
REFERENCE: A. Rowe 1984, fig. 195







Side



Back

## 37 Headdress

Ichma (?), 13th–15th century  
Feathers on cotton, height 20½ in. (52 cm),  
max. width 13¾ in. (35 cm)  
Museos Oro del Perú y Armas del Mundo,  
Fundación Miguel Mujica Gallo, Lima

The construction of this headdress differs from that in plates 33–36. Here, the cap and back panel are made of a single piece of balanced plain-weave cloth. One end of the rectangular cloth was shaped to form the cap, and inside the cap is a small round fabric pad to which the long blue-and-yellow feathers are attached. The shafts, or rachis, of each of the feathers on the crown are neatly wrapped with yarn, which would have provided support when the feathers moved with the wearer. Such movement of the feathers on textiles and headgear would bring out their iridescence and color variation.

A similar headdress with the same construction, now in the collection of the University of Pennsylvania Museum of Archaeology and Anthropology, was acquired by the German archaeologist Max Uhle in 1896.<sup>1</sup> It is said to have come from the site of Caudivilla, now part of Lima, in the Chillon Valley on the Central Coast.

1. Greene 1991: 16–19.

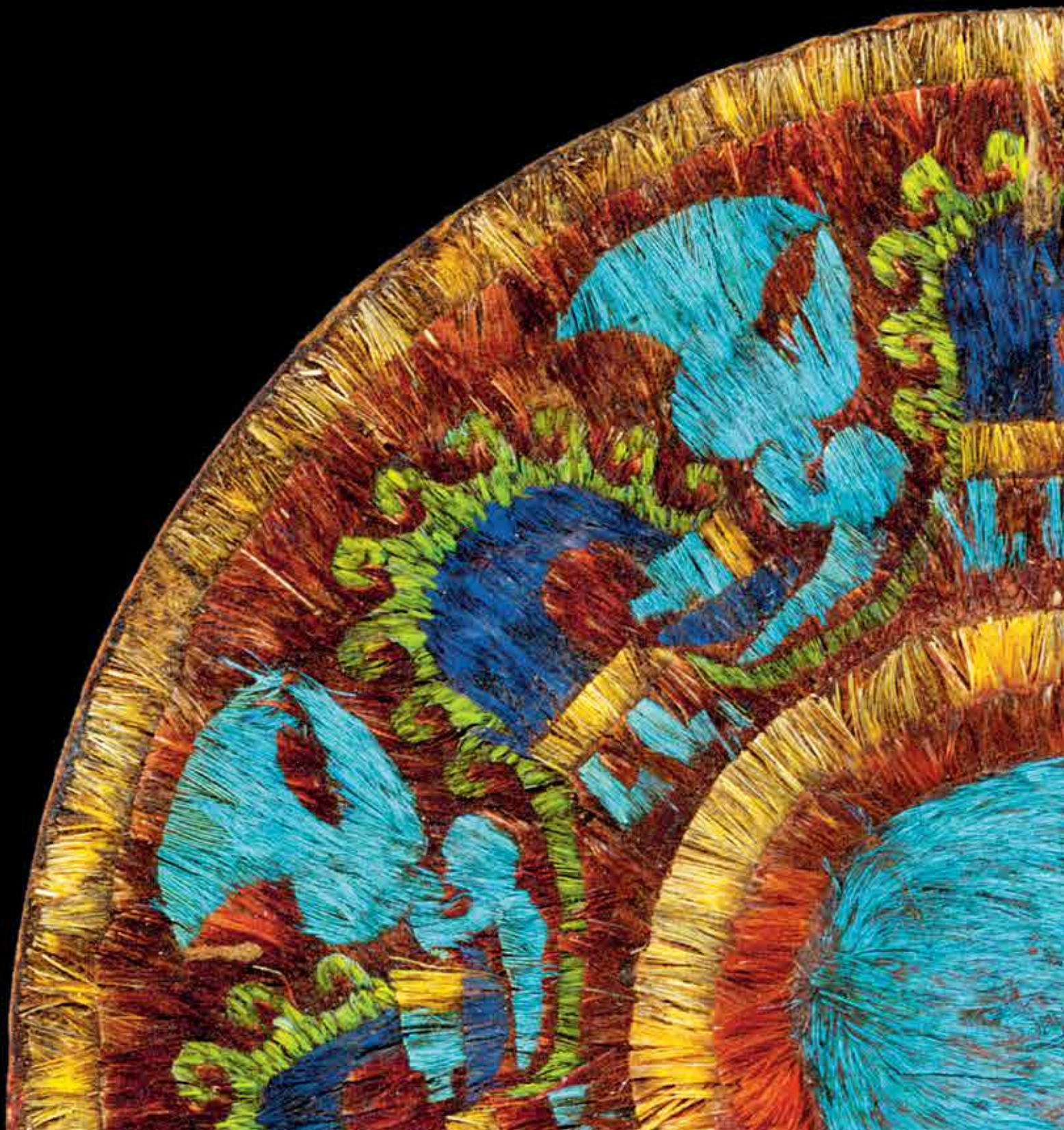


Detail of headdress crown

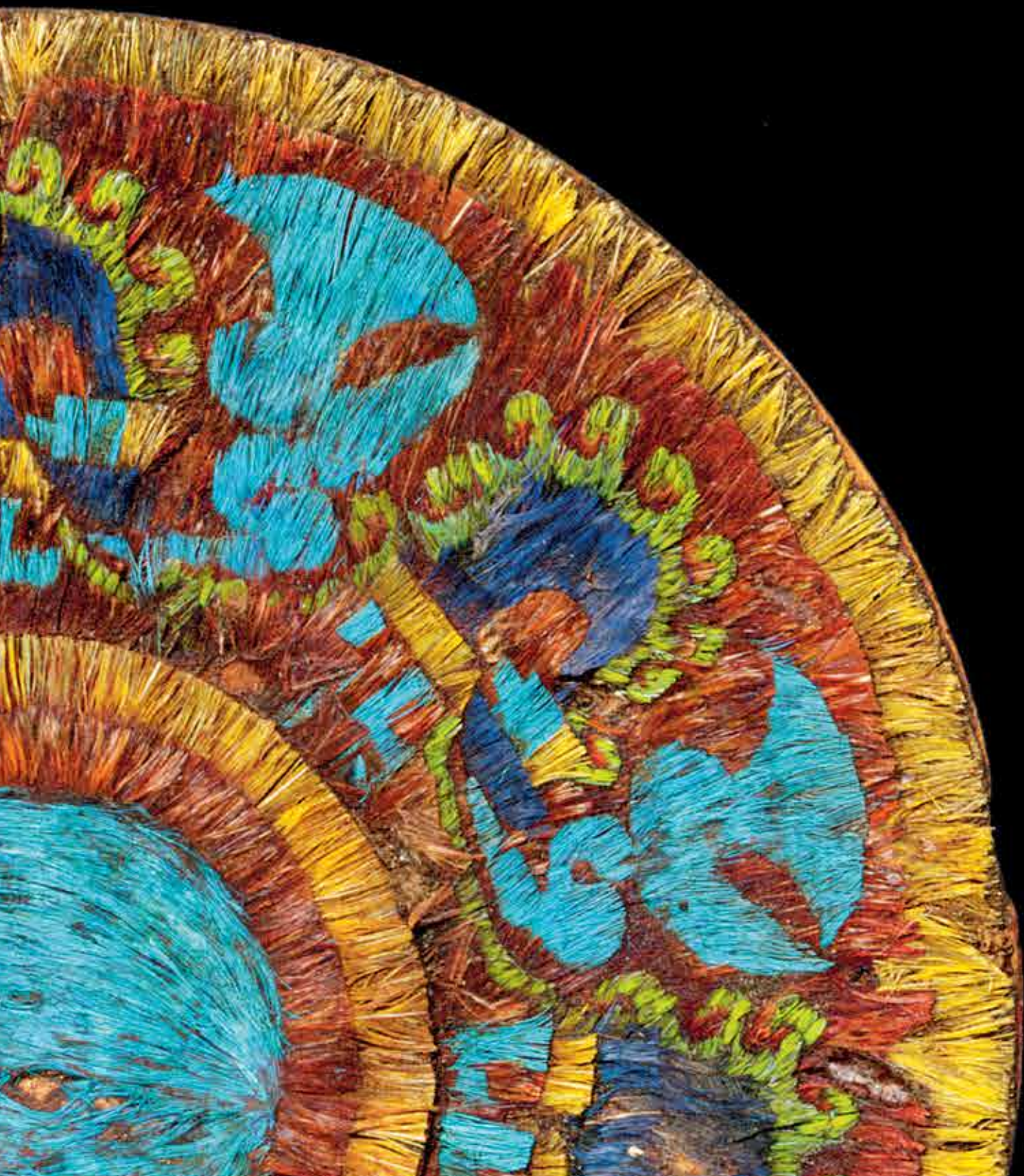














### 38 Pectoral with Human Figure, Birds, and Fish

Chimú, 13th–15th century

Feathers on cotton, spondylus shell, height

13¼ in. (33.5 cm)

Reportedly found in Ica, South Coast

Dallas Museum of Art, The Eugene and Margaret

McDermott Fund (1972.21.1McD)

REFERENCES: Grey 1978, pl. 25; A. Rowe 1984, pl. 27

From as early as the late second millennium BCE, artisans on Peru's North Coast produced chest ornaments for the elite in luxury materials such as semiprecious stone and shell. During the last centuries before the Spanish Conquest, when the Chimú were dominant in the area, biblike pectorals of cloth were fashionable; examples are also known in shell, beadwork, and silver. On this pectoral seemingly two techniques were used to attach the feathers to the plain-weave backing: the red feathers, tied in strings, appear to have been sewn on to the fabric, while the purple and turquoise feathers are glued on.<sup>1</sup> The motifs—fish, birds, a human figure, and heads with crescent headdresses—are symmetrically arranged and consistent with North Coast iconography of the period. The alleged provenance from the South Coast may indicate that the ornament reached this area through exchange between North and South Coast elites or was locally made by Chimú artists (see also pl. 1). The two birds and human heads at the top would have been seen right-side up when the pectoral was worn, folded over the shoulders.

1. A. Rowe 1984: 171.





### 39 Ear Spools and Pectoral

Sicán/Chimú, 10th–15th century

Pectoral: Feathers on cotton, spondylus shell, 15½ × 12 in. (38.4 × 30.5 cm)

Ear spools: Feathers on wood, silver, diam. of frontals 4 in. (10.2 cm)

Said to have been found together in the Lambayeque region, North Coast, before 1936

Courtesy, National Museum of the American Indian, Smithsonian Institution, Washington DC (190750, 190751)

Matching sets of ornaments, such as this pair of ear spools and pectoral, rarely survive millennia, or even centuries, of burial. It is reasonable to assume that many more similar sets were made in ancient times, but have since disintegrated or been separated. The domed frontals of the ear ornaments are of wood with posts in back—probably balsa wood—that were inserted into the sheet silver tubes. The purple feathers are probably from the paradise tanager.

This pectoral and the one in plate 38 are further embellished with tiny spondylus shell beads. Shells as products of the sea were symbolic in ancient Andean cultures and important in mythology. They were often depicted on ceramics and metalwork and have been found in burials of high-status individuals. Spondylus (also known as spiny oyster) shells in particular were highly prized, probably because of their colors and because they were not found locally but had to be traded from Ecuador.



#### 40 Pair of Ear Ornament Frontals

Chimú, 13th–15th century

Feathers on wood, copper, cotton, diam.  $4\frac{3}{8}$  in.  
(11 cm)

Museo Nacional de Arqueología, Antropología  
e Historia del Perú, Lima (MO-3173a, b)

To display their wealth and power, the Chimú kings who ruled on Peru's North Coast during the last centuries before the Spanish Conquest commissioned large, ostentatious accessories for their personal adornment. Crafted by highly skilled artisans, these ornaments were made in such luxury materials as gold, silver, spondylus shell, and feathers. The barbs of turquoise feathers, likely those of the paradise tanager, form a large swirl on these ear ornament frontals (the posts are now missing), adhering to the wood backing by means of an organic adhesive. The rims are circled by individual copper loops held in place with cotton string, as seen in the detail below.



Detail of copper loops on borders

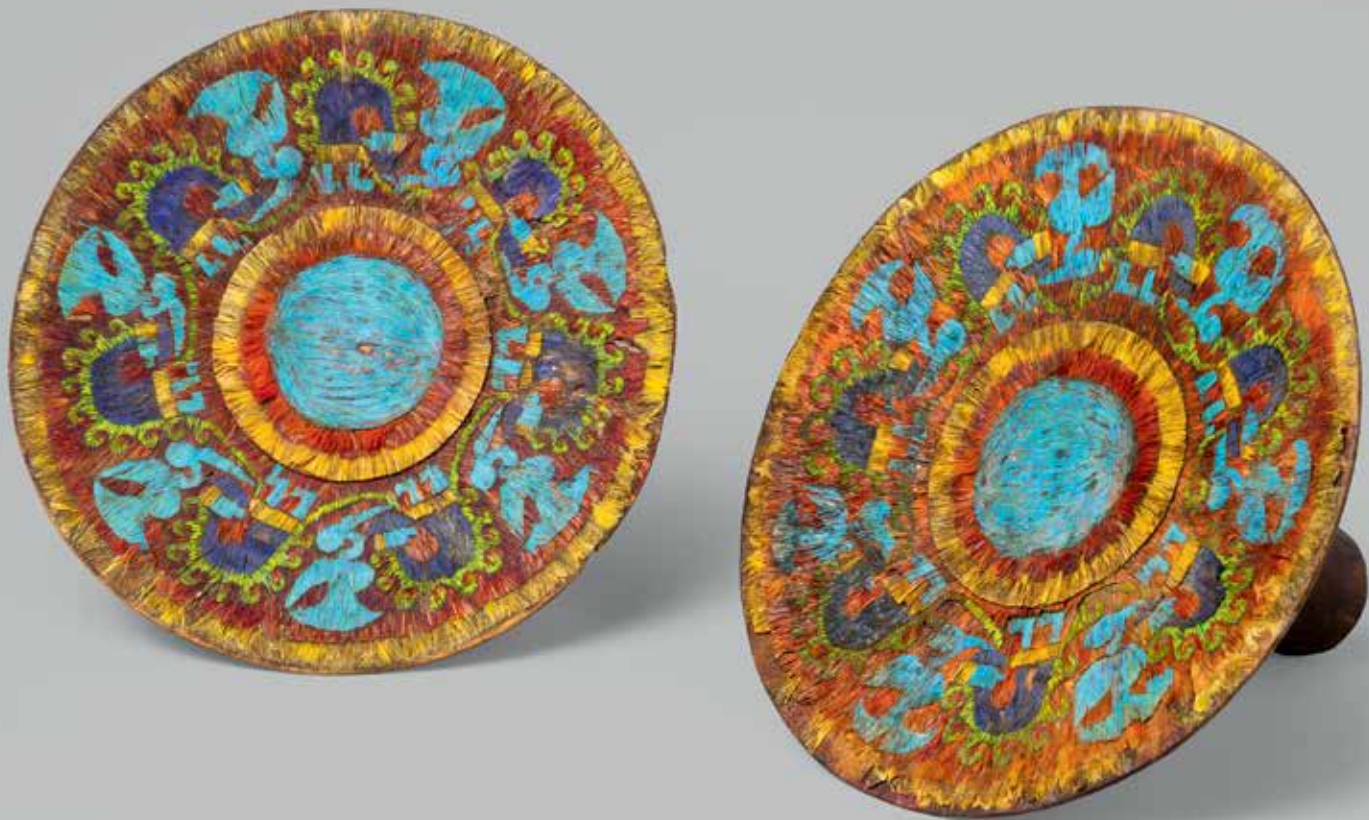


#### 41 Pair of Ear Ornaments

Chimú, 13th–15th century  
Feathers on wood, diam.  $5\frac{1}{8}$  in. (13 cm);  
the posts are modern replacements.  
Private collection

REFERENCES: H. King 2008a: 87, fig. 9;  
H. King 2008c: 54; H. King 2008d: 60,  
fig. 4

These grand frontals, a tour de force of Peruvian featherwork, are covered with exceptionally fine mosaic using predominantly the barbs of the feathers, which are precisely cut to form the motifs. The design is arranged in registers around a circle and rendered in five different colors. Seven human figures are shown bending forward. With yellow hair and turquoise faces and feet, they wear purple garments hemmed with yellow. Between the figures are long-beaked seabirds. A fine green line undulates over the backs of the figures and around the heads of the birds, forming a series of scrolls or waves. The bent figure in Chimú art is known as the anthropomorphized wave. Although a frequent motif, its meaning is not known.



#### 42 Pair of Ear Discs

Inca (?), late 15th–early 16th century  
Feathers on wood, diam.  $2\frac{3}{4}$  in. (7 cm)  
Collected by Wilhelm Gretzer between 1872 and 1903, reportedly at Pachacámac  
Staatliche Museen zu Berlin, Preussischer Kulturbesitz, Ethnologisches Museum (VA 41833)

#### 43 Pair of Ear Ornaments with Birds

Chimú, 13th–15th century  
Feathers on wood, cotton, diam. of frontals  $2\frac{3}{8}$  in. (6 cm)  
Collected by Wilhelm Gretzer between 1872 and 1903, reportedly at Pachacámac  
Staatliche Museen zu Berlin, Preussischer Kulturbesitz, Ethnologisches Museum (VA 41836)

#### 44 Pair of Ear Ornaments

Culture unknown, 16th or 17th century (?)  
Feathers on wood, cotton, diam. of frontals  $3\frac{1}{2}$  in. (9 cm)  
Courtesy of the Godwin-Ternbach Museum, Queens College, New York (2002.7.3a, b)

REFERENCE: Winter 2009, fig. 2



Sombrero with design and palette similar to those on the ear ornaments at right, 18th century. Feathers on basketry foundation. Museo de América, Madrid

Ear ornaments made of precious materials were among the favorite personal adornments of men and women of rank in ancient Peru. Numerous examples survive from even the earliest excavated burials dating to the second millennium BCE;<sup>1</sup> they remained popular until the time of the Spanish Conquest. Sixteenth-century chroniclers report that Inca noblemen wore large discs known as *paku* inserted in their earlobes similar to the type seen in plate 42, which led them to call the royal Inca *orejones* (big ears). In this pair the concave rim covered with dark purple feathers served to accommodate the extended lobes.

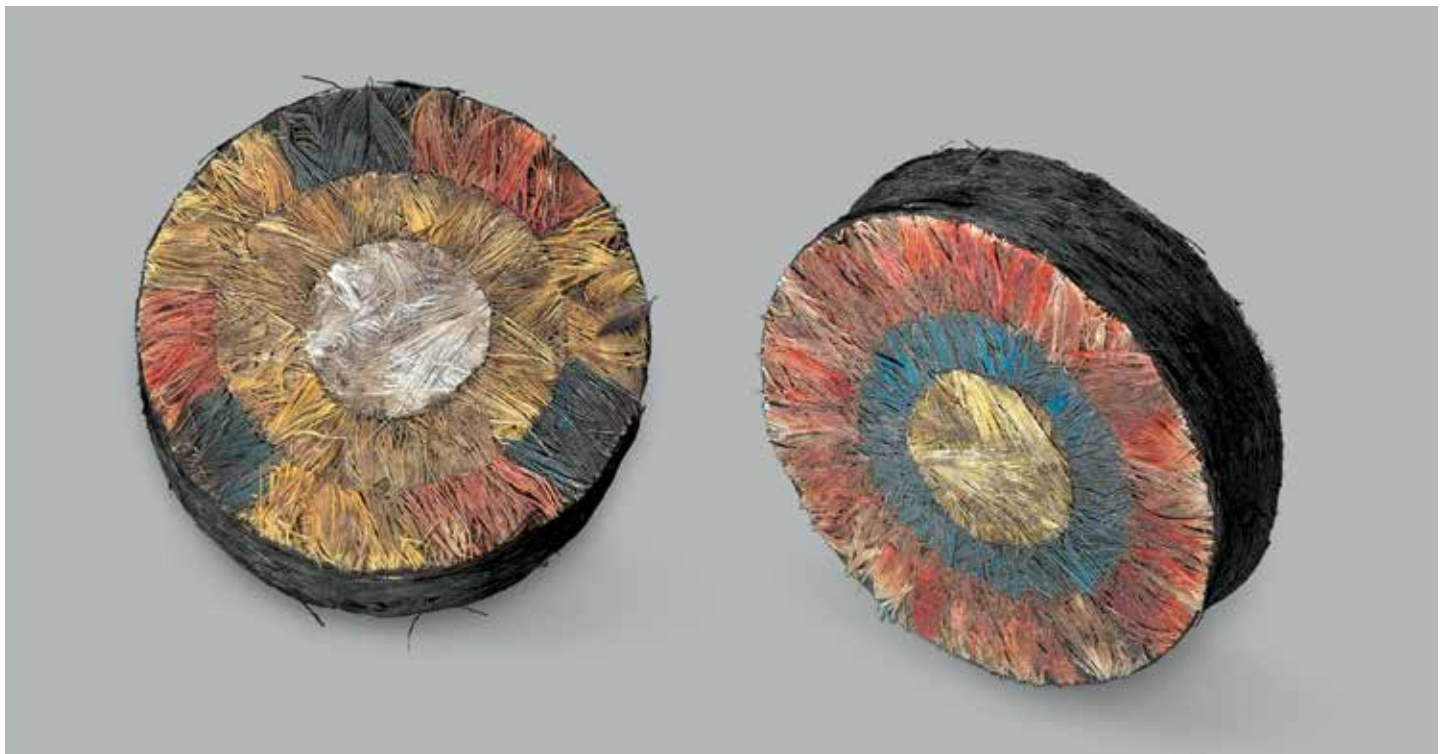
The frontals of the ear ornaments in plate 43 are divided into quarters, each with a small bird in profile. This pair of ornaments is one of only a very few that still have the original wood posts and cotton cord. The latter likely served to hold the post in place and to join the ornaments together.

The design on the ornaments in plate 44 is unusual and not known from other surviving works dating from the pre-Conquest era. It recalls designs found on sombreros made by Chilón Indians of the upper Amazon region (below left). Possibly the ornaments date from after the Conquest, by which time indigenous artisans had been exposed to European taste.

1. Burger 1992: 74.







42



43

## 45 Feather Pin with Flowers and Insect

Chimú (?), 13th–16th century (?)

Feathers, wood, cotton, height 13¾ in. (35 cm)

Said to have been found in the Huarmey River region, Central Coast

Staatliches Museum für Völkerkunde München (34-50-40)

REFERENCES: Villa Hügel 1984: 356, fig. 11.23;

Schindler 2000, fig. 300

Pins with feathers attached are known in different styles and materials from a number of ancient Peruvian cultures. Probably used in headdresses, some may have been held as staffs or scepters. This pin is particularly appealing. Orange and white feathers emerge from an elegantly shaped base of wood covered with fine feather mosaic in red, green, and blue.

Between the feathers are “flowers” of white, red, and brown feathers; an insect with spread wings, perhaps a butterfly, flutters between them.







## 46 Three Plumes

Chimú, 13th–15th century

Feathers, wood, camelid fiber, *Furcraea*, bull sea lion whiskers, length 11 in. (28 cm)

Reportedly found at Chan Chan, North Coast  
Courtesy of Library Services, American Museum of Natural History, New York (B/3167, 3168, 3169)

REFERENCE: A. Rowe 1984, pl. 26; the entire group given by J. Pierpont Morgan is shown in figs. 171–77.

These three plumes with long green and yellow parrot feathers (the yellow and red coloring was obtained by tapirage) have flat wood handles. They may have been held as staffs or scepters. At the top of the yellow plume three insects (probably bees) covered with tiny feathers, likely those of the paradise tanager, have alighted. Attached to springy but sturdy bull sea lion whiskers, they would have been in constant motion when the plume was held, like bees hovering around a flower.

The plumes were given to the American Museum of Natural History by J. Pierpont Morgan in 1896 together with seven other objects, all of extraordinarily fine workmanship. The group, said to have been found together in an elite tomb near Trujillo (most likely Chan Chan), included two additional feather pieces and four objects made of shell beads.





## 47 Feather Plume

Culture uncertain, 14th–early 16th century  
Feathers, wood, cotton, fiber, length 9½ in.  
(24 cm)  
Staatliche Museen zu Berlin, Preussischer  
Kulturbesitz, Ethnologisches Museum  
(VA 15928)

The objects illustrated in plates 45–49 show the creative ways in which artists in ancient Peru used feathers in combination with other materials. The mosaic is often “painted” on the foundation material with pretrimmed feathers, as in plates 45, 47, and 48; in plates 45 and 47 the artists created three-dimensional works. This plume has long, bushy dark brown fiber (probably hair) held in a collar of yellow, red, blue, and black feather mosaic. The feathers were trimmed to create the stepped design.



## 48 Staff with Face

Sicán, 10th–13th century  
Feathers, wood, cotton, length 57/8 in. (15 cm)  
Collected by Wilhelm Gretzer between 1872  
and 1903, reportedly at Pachacámac  
Staatliche Museen zu Berlin, Preussischer  
Kulturbesitz, Ethnologisches Museum  
(VA 41878)

This rare object, probably a staff, has a face on both front and back worked in red, blue, and yellow feathers of rainforest birds. The shape of the eyes, resembling inverted commas, is typical of the Sicán (Lambayeque) culture, which flourished on the North Coast between the tenth and the thirteenth century. The headdress, made of long brown wing or tail feathers in a circular arrangement, probably those of a coastal bird, recalls a design in repoussé on fourteen gold discs excavated in an elite Sicán tomb at the Huaca Loro pyramid at Batán Grande in the La Leche Valley.<sup>1</sup> This similarity in design further supports a Sicán attribution.

1. Shimada 1995: 95–99.







## 49 Feather Fan

Colonial (?), 16th or 17th century (?)

Feathers on wood, cotton, length 9½ in. (24 cm),  
diam. 5¾ in. (14.5 cm)

Collected by Julio Tello in 1915 at Usaca, Nasca  
Valley

Courtesy of the Peabody Museum of Archaeology  
and Ethnology at Harvard University, Cambridge,  
Mass. (15-41-30/86904)

The shape and the design on this fan (both sides are shown at right) are very unusual for a Precolumbian object from Peru. The circular form recalls the fans held by elegant Spanish ladies in the drawings by Christoph Weiditz in his *Trachtenbuch* following his trip to Spain in 1529 (see below). And the design, although delineated in very small colorful feathers in a technique used by pre-Conquest Peruvian feather workers, is also not known from other feather pieces made before the arrival of the Spaniards. It is possible that the fan was made shortly after the Conquest by indigenous artisans for a European patron. If this is the case, it would be a very rare example of a colonial-period object covered with feather mosaic from Peru.



Drawing of a 16th-century lady from Seville carrying a  
feather fan. Plate from *Das Trachtenbuch des Christoph  
Weiditz* . . . (1529) (after Hampe 1927, pl. 92)





Reverse

## 50 Tassel or Plume

Culture uncertain, 8th–15th century  
Feathers, vegetal fiber, camelid fiber, height 9½ in. (24 cm), max. width 9⅞ in. (25 cm)  
Collected by Heinrich Ubbelohde-Doering in 1931–32 in the greater Nasca area  
Staatliches Museum für Völkerkunde München (X.347)

## 51 Tassel or Plume

Culture uncertain, 8th–15th century  
Feathers, vegetal fiber, height 13⅞ in. (34 cm), max. width 16⅞ in. (41 cm)  
Courtesy of the Division of Anthropology, American Museum of Natural History, New York (B/7721)

Tassels or plumes of this kind are the most frequently found feather pieces in collections. They vary greatly in size and in the quality of manufacture. Many are carefully made, with neat fiber braids holding the feathers; some are grand and sizable and have many dozens of braids with feathers in different colors, as in plate 51. While the majority of the plumes were not archaeologically excavated, a number are known from excavated contexts at several sites on the Central and South Coasts. Most date from the Wari to the Inca period (7th–early 16th century), although some may have an earlier date.<sup>1</sup> The examples found in their original context were parts of headdresses (see figs. 15 and 16 on page 27) or they were placed on the head of the deceased.<sup>2</sup> It is also possible that such ornaments were worn in other ways or had other functions.

1. Reiss and Stübel 1997, pls. 21, 77.

2. Tung 2005; Cock 2002: 79–86.







## 52 Ceremonial Staff with Figures

Ica, 13th–15th century  
Feathers on wood, height 33<sup>7</sup>/<sub>8</sub> in. (86 cm)  
Museo Regional de Ica (MRI 00208-05)

## 53 Ceremonial Staff Finial with Bird

Ica, 13th–15th century  
Feathers on wood, copper, height 51 in.  
(129.5 cm), staff head 3<sup>5</sup>/<sub>8</sub> in. (9.3 cm)  
Museum zu Allerheiligen Schaffhausen,  
Sammlung Ebnöther (Eb 15156)  
REFERENCE: H. King 2010, no. 6

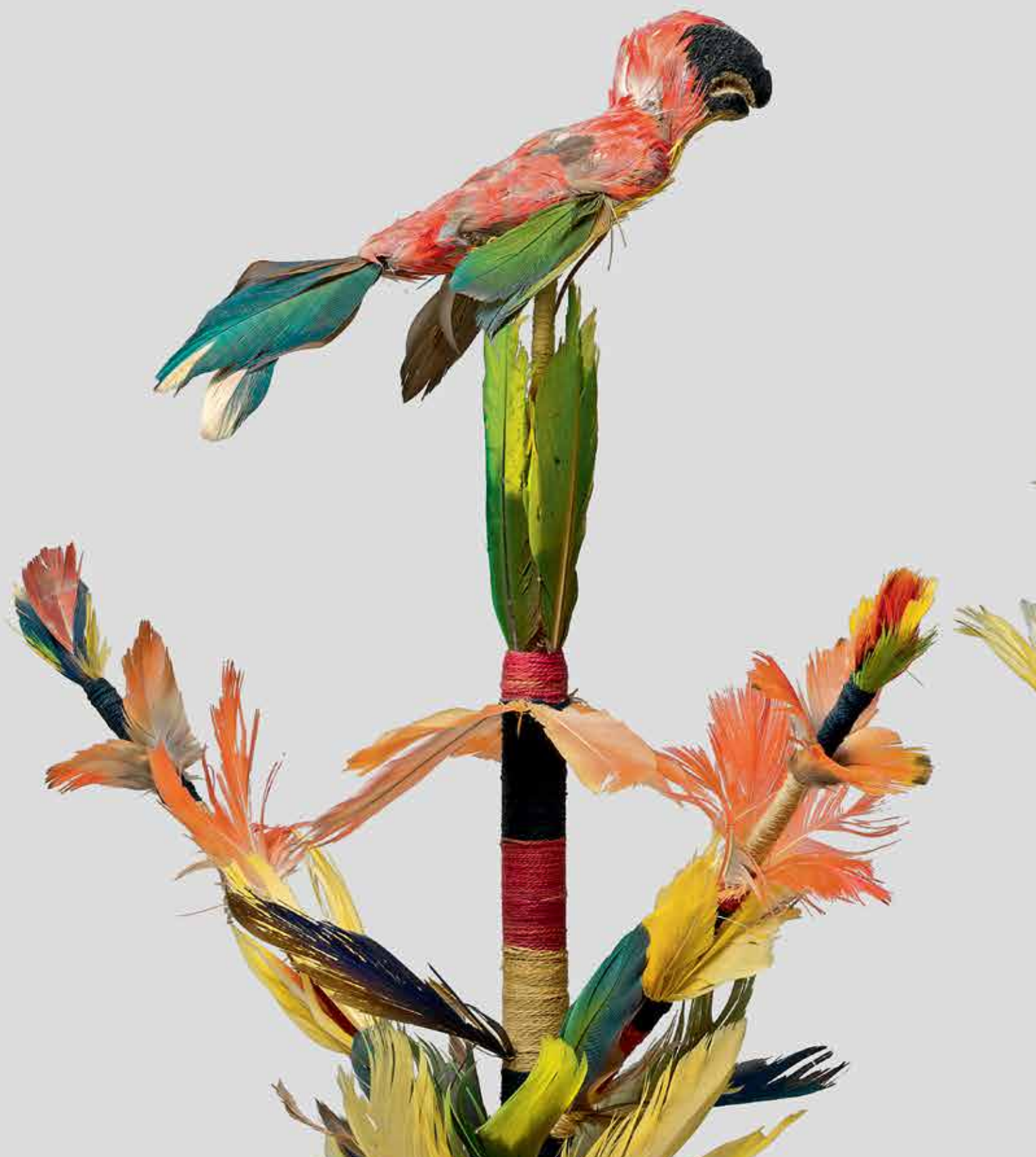
The wood poles or staffs—some decorated with the small yellow feathers of the macaw, others carved—that were excavated from the Necropolis of Wari Kayan on the Paracas peninsula (1st century BCE–1st century CE) may have been symbols of authority or social rank.<sup>1</sup> The poles, some of which are more than 51 inches (130 cm) in height, were found placed vertically near or against mummy bundles. Their positioning may have been intended to mark the burial spot. More than a thousand years later the Ica people, who resided in the Paracas region, carved staffs with elaborate finials embellished with brilliantly colored feathers that often depicted birds or human figures wearing animal headdresses, as in plate 52 below. The carved bird perched atop the domed finial of the staff in plate 53, with its long beak and long legs, is likely a seabird that has just caught a fish.

1. Lavallée 2008: 84.













## 54 Three Miniature Dresses

South Coast, Ica, 12th–13th century

Feathers on cotton,  $6\frac{3}{4} \times 8$  in. (17.2  $\times$  20.3 cm);  
 $11\frac{3}{8} \times 13$  in. (29  $\times$  33 cm);  $9\frac{1}{2} \times 8\frac{1}{2}$  in. (24  $\times$  21.5 cm)

The Metropolitan Museum of Art, The Michael C.  
Rockefeller Memorial Collection, Bequest of Nelson  
A. Rockefeller, 1979 (1979.206.639, .626, .633)

1979.206.639: Carbon-14 date 1154–1273 (95%  
probability)

The six miniature dresses and tunics illustrated here and on the following pages are part of a large group of similar small items of clothing reportedly found in a cache in Ullujaya in the lower Ica Valley in southern Peru and now dispersed in public and private collections throughout the United States, Peru, and Europe. Textile experts who studied a group of the garments concluded that their manufacture followed the same conventions used for full-size male and female clothing.<sup>1</sup> The distinction made between the miniature women's dresses and the miniature men's tunics is based on technique, construction, and design. The dresses have small openings for the arms and necks in the horizontal seam along the top, while the tunics have vertical arm openings at the shoulder and vertical neck slits sometimes cut into the fabric or indicated only by a feather in a contrasting color. The dresses show greater variety in design, including stepped triangles and checkerboard, often created by clipping the feathers. The tunics invariably have a yoke design on the front in different color combinations; the front is sometimes further embellished with metal discs, as in plate 55 bottom. On the back both male and female garments often have a single color or horizontal stripes, as seen in plate 56 top, or variegated feathers, as in plate 56 bottom and on page 88. Such miniatures were probably votive offerings.

1. A. Rowe et al. 1996: 419–23.







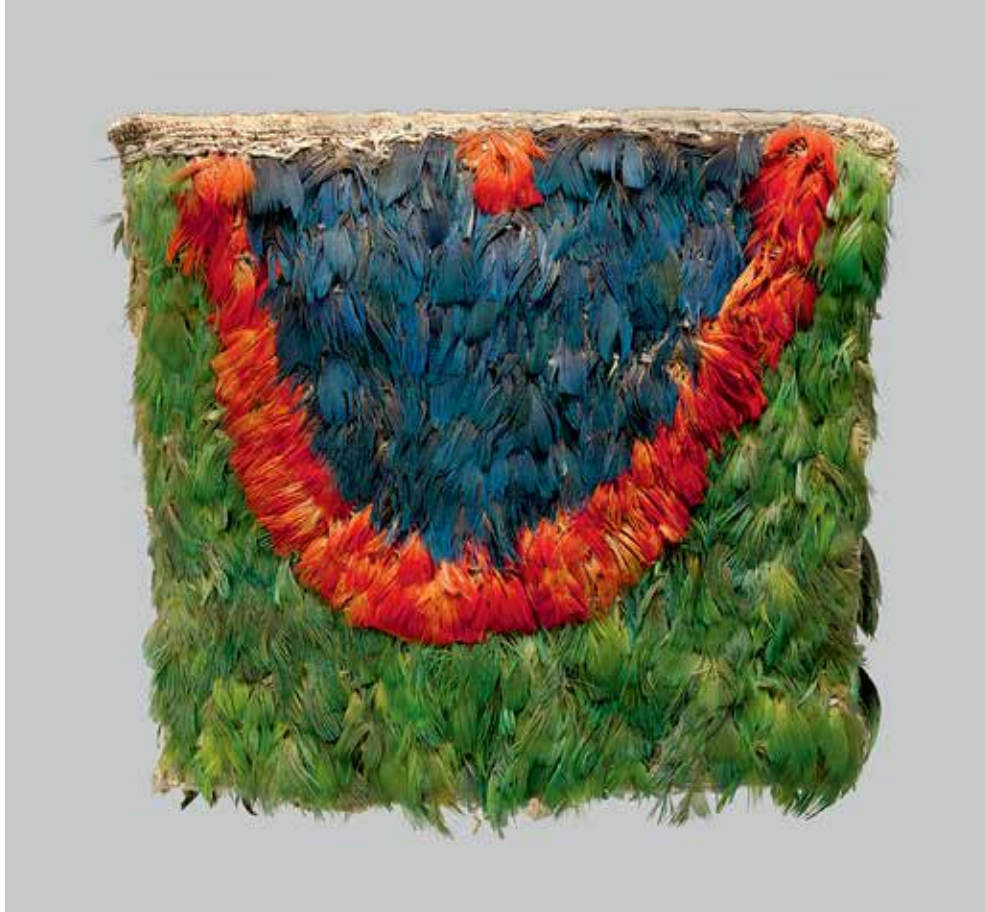


## 55 Two Miniature Tunics

South Coast, Ica, 12th–13th century

Feathers on cotton,  $9\frac{3}{4} \times 10\frac{3}{8}$  in. (24.7 × 26.3 cm); feathers on cotton with silver discs,  $13\frac{1}{4} \times 14$  in. (33.6 × 35.6 cm)

The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection, Bequest of Nelson A. Rockefeller, 1979 (1979.206.683, .689)





## 56 Backs of a Miniature Dress and Tunic

South Coast, Ica, 12th–13th century

Dress: Feathers on cotton,  $8\frac{1}{2} \times 8\frac{5}{8}$  in.  
(21.6 × 21.9 cm)

The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection, Bequest of Nelson A. Rockefeller, 1979 (1979.206.639)

Tunic: Feathers on cotton,  $8\frac{1}{4} \times 8\frac{3}{4}$  in. (21 × 22.2 cm). The Metropolitan Museum of Art, Bequest of Arthur M. Bullowa, 1993 (1994.35.117)



## 57 Bag with Coca Leaves

Inca, 15th–early 16th century  
Feathers on cotton, coca leaves,  $6 \times 4\frac{3}{4}$  in.  
(15.2  $\times$  12.1 cm)  
The Metropolitan Museum of Art, Bequest  
of Arthur M. Bullowa, 1993 (1994.35.101)

## 58 Bag with Raw Cotton

Wari (?), 8th–10th century (?)  
Feathers on cotton, height  $9\frac{5}{8}$  in. (24.5 cm)  
Collected by Heinrich Ubbelohde-Doering in  
1931–32 in the greater Nasca area  
Staatliches Museum für Völkerkunde München  
(X.345)

Woven cloth bags (*chuspas*) are known from many cultures and were an essential part of ancient Peruvian dress, used primarily to carry dried coca leaves. The custom of chewing the dried leaves—for medicinal, hallucinogenic, and other purposes—was widespread among all social classes throughout the Andean highlands for thousands of years; it continues to the present day. Coca bags are frequently found in tombs. Ranging in size from a few inches to, on average, seven or eight inches square, many are plain, while others are embellished with a variety of patterns; most have carrying straps. During Inca times feather-covered *chuspas* like the one shown in plate 57 were placed as offerings in pits. In 2011 one such offering, a bag covered with white feathers, was unearthed by archaeologists on the top of Platform I at the Huaca de la Luna at Moche (see fig. 46 on page 71).<sup>1</sup> Also found with the bag was a small female figurine of carved spondylus shell and wearing miniature garments. Inca feather-covered coca bags are also often part of *capacocha* offerings that include child burials. Several of these burials have been archaeologically excavated in recent years.<sup>2</sup> The red and yellow feathers on the bag in plate 57 appear to have been dyed (see pages 92–94).

The bag with the step-fret design in blue, red, and yellow feathers seen in plate 58 is unusual in both size and content. It is very tightly packed, likely with unspun brown cotton, and, unlike the coca bags, quite heavy. It was probably a votive offering.

1. Moisés Tufinio, Proyecto Arqueológico Huaca de la Luna, personal communication, March 2011.

2. See Reinhard, this volume, and Reinhard 2005.





## 59 Miniature Container

Wari (?), 8th–10th century (?)

Feathers on a gourd, height 2½ in. (6.5 cm),  
diam. 1⅝ in. (4 cm)

Collected before 1920 in Peru, reportedly  
in the Ica/Nasca region, South Coast  
Museum für Völkerkunde Hamburg  
(52.57.318)

This precious little gourd covered with a step-fret motif in feather mosaic may have been a container for lime or some other special substance. When coca leaves were chewed, small amounts of powdered lime were often added to the coca quid to help release the hallucinogens. The lime powder, often of ground seashells, was kept in small containers that, depending on the status of the owner, were frequently made of valued materials and were elaborately embellished. A number of finely crafted lime containers survive from the Wari period. The holes at the top and bottom of the container would have been plugged with small stoppers.



Detail of top





## 60 Figure Wearing Feather Dress

Nasca, 1st–3rd century  
Feathers, cotton, camelid fiber, spondylus shell,  
height 2 in. (5 cm)  
Private collection

## 61 Figure Wearing Feather Garment

Nasca, 1st–3rd century  
Feathers, cotton, camelid fiber, height 5½ in.  
(14 cm)  
Private collection

REFERENCES: H. King 2008a: 89, fig. 13; H. King  
2008c: 54; H. King 2008d: 61, fig. 5; H. King 2010:  
12, fig. 1

In many parts of the Precolumbian world small figurines—mostly females of clay, but also of stone, wood, shell, and precious metals—were made as early as the third millennium BCE. They have been found in both burials and caches. In Peru figurines in any material are rare. The Nasca are one of only a few groups who made such figures, of fiber and cloth, but very few are known.<sup>1</sup>

The minute detail in the rendering of the anatomy of the figures seen here—the fingers and toes with red nails and the deformation of the skull on the smaller figure below—and their finely elaborated clothing and miniature ornaments point to the significance these works must have held for the ancients. The figure on the opposite page wears a male garment decorated along the neckline and armholes with a border of minuscule long-beaked birds, probably hummingbirds. The tiny figure below wears a woman's dress and armbands made of shell discs. The garments on both figures are adorned with white feather tufts individually tied to the cloth. This method of attaching the feathers appears to be unique to the early Nasca culture and differs from the more common method using feather strings (see Frame, pages 55–61). It is also possible that this method was employed only on very special items.

The function of Nasca miniature cloth figures is unclear, and none are known to have been found in context. The fragile nature of their construction precludes daily use, as with a toy. The fine craftsmanship required to make such figures suggests ritual use; most likely they were burial offerings.

1. Horié 1991: 77–92; A. Rowe 1991: 93–103; Frame 2005: 19–27.







## 62 Small Crown with Checkerboard Design

Chimú, 13th–15th century,  
Feathers on skin, reeds, cotton, copper, height,  
including plumes, 10¼ in. (26 cm), diam. 5⅞ in.  
(13 cm)

Reportedly from a tomb in the Chancay Valley,  
Central Coast, probably at the site of Caqui  
The Metropolitan Museum of Art, Bequest of  
Jane Costello Goldberg, from the Collection of  
Arnold I. Goldberg, 1986 (1987.394.655)

REFERENCES: A. Rowe 1984, fig. 156; H. King  
2010: 14, fig. 3

## 63 Wand and Sling

Chimú, 13th–15th century

Wand: Silver, feathers, height 15 in. (38 cm)

Sling: Shell, cotton, feathers on wood,  
length 56¾ in. (144 cm)

Reportedly from a tomb in the Chancay Valley,  
Central Coast, probably at the site of Caqui

The Metropolitan Museum of Art, Bequest of  
Jane Costello Goldberg, from the Collection of  
Arnold I. Goldberg, 1986 (1987.394.671, .669)

REFERENCE: A. Rowe 1984, figs. 157, 164

The objects illustrated here and a ceremonial cloth similar to the three cloths with tassels shown in plate 64 are said to have been found together with a large number of silver miniatures, including vessels, tools, weapons, furnishings, and musical instruments, in a tomb in the Chancay Valley on the Central Coast. It is possible that the cloth served as a *mesa*, or table, on which the precious silver offerings found with it were displayed before burial. An assortment of several hundred similar metal objects in miniature was scientifically excavated from the Temple of the Sacred Stone at the site of Túcume in the early 1990s.<sup>1</sup> Miniature versions of full-size objects are known from all major cultures that flourished in prehistoric Peru. Found in burials and caches, the objects, whose function in ancient times is not clear, are nevertheless worked with such care and such skill that they must have held special meaning for their makers. Suggestions range from children's toys — some have indeed been found in children's tombs — to models for larger objects to symbolic substitutions for full-size pieces.

The striking, well-preserved checkerboard design on the crown in plate 62 is composed of the tiny chartreuse, red, purple, and turquoise feathers of the paradise tanager, which have been attached to the surface with an organic adhesive.<sup>2</sup> The velvety, intensely colored feathers of this bird were particularly valued as embellishment for small luxury objects. They also cover the tassel on one end of the sling (below) and the tassels on the ceremonial cloths in plate 64.

1. Heyerdal, Sandweiss, and Narváez 1995: 101–12.

2. Giuntini (2006: 13) provides a detailed description of the construction of the crown.







## 64 Group of Ceremonial Cloths and Small and Miniature Garments

Chimú, 13th–15th century

Feathers on cotton, silver, wood, largest  
27½ x 27¾ in. (70 x 70.5 cm), smallest  
4⅜ x 5⅞ in. (11 x 15 cm)

Said to have been found together in the  
Chancay Valley, Central Coast

The Textile Museum, Washington DC  
(62.9.1-4,6)

REFERENCE: A. Rowe 1984, figs. 148-52

The feathered textiles illustrated here are part of a group of seven pieces in a range of sizes. They were reportedly found together and, according to Ann Rowe, “can be taken to form a unit of association.”<sup>1</sup> A similar group, also ranging from miniature to full-size, is preserved in the collection of the Museo Oro del Perú, Lima, and a number of the small square cloths bordered in feathers and with tassels on all corners are known in other collections; one was excavated in 1998 on Platform I at the Huaca de la Luna at Moche (see fig. 46 on page 71). Without exception these textiles share the same color combination — yellow and blue feathers on natural medium brown cotton fabric — suggesting that they fulfilled a very specific function.

1. A. Rowe (1984: 151–55) provides a detailed description of each piece, with dimensions.







## 65 Trees with Parrots

Chancay (?), 13th–15th century  
Feathers, reeds, camelid fiber, wood, height  
15<sup>7</sup>/<sub>8</sub> in. (40.3 cm); 19 in. (48.3 cm)  
Private collection

The Chancay people of the Central Coast, contemporaries of the Chimú to the north, were among the most skilled textile artists in ancient Peru and worked in many different, often complex techniques. They are also known for the creation of multifigural genre scenes made of cloth, yarn, and wrapped cane that appear to depict everyday activities. Most scenes are no longer complete, and only component parts, such as these trees, survive. The trunks and branches of the trees are of cane neatly wrapped with dyed yarns. The roots, still present on the tree at left, are shown as loose looped threads. The feathers, perhaps representing leaves, are inserted into the wrappings. Birds of different species, carved of lightweight balsa wood and covered with feathers, perch on the branches. With their imposing curved beaks, they likely represent parrots and larger macaws. Although none have been found in context, genre scenes are thought to have been part of grave furnishings.





## NOTES

### Introduction

1. Much literature is available on the subject. Only three publications will be mentioned here: Rabineau 1979, Reina and Kensinger 1991, and Braun 1995.

2. Several scholars have dealt with specific aspects of the feather arts: Mead 1907: 1–17; Yacovleff 1933: 137–58; M. King 1965: 135–44; A. Rowe 1984: 144–87; Candler 1991: 1–15; Greene 1991: 16–25; and Giuntini 2006: 1–13. Short informative texts on feather pieces have also been published in exhibition catalogues, among them Stone-Miller 1992: 120, 168, and A. Rowe et al. 1996: 417–23. Reid (2005) illustrates 130 feather pieces of various kinds in color.

### King, “Feather Arts in Ancient Peru,” pages 9–43

1. Massing 1991: 516, fig. 3.

2. Bujok 2003: 80–98.

3. Levenson 1991: 574, fig. 408.

4. A number of authors have written about birds in Precolumbian art and their possible symbolism (e.g., Benson 1997) and about birds in the mythology of native South American peoples (e.g., Urton 1985; Reina and Kensinger 1991). It is not known, for example, whether the macaw, whose feathers were among the most widely used in ancient Peruvian featherwork and which was associated with the sun among the ancient Maya (Fash 1991: 125) and the present-day Desana of Brazil (Furst 1991: 94), had the same meaning in ancient Peruvian cultures.

5. The iridescent feathers of hummingbirds—a species common along the entire coast of Peru and a frequent theme in ancient Peruvian art—seem to have been used only on occasion (O’Neill 2005: 350). A few parakeet species are indigenous to the coast and highlands, and their feathers may also have been used.

6. Kensinger 1991: xix. Feather identification requires the expertise and experience of an ornithologist, who needs to consider the shape, size, color, texture, and structure among other characteristics of each feather. The most reliable information on the types of feathers used in ancient Peruvian art is provided by John P. O’Neill, who examined numerous feather pieces in museum

collections; see A. Rowe 1984: 145–50. O’Neill also identified feathers on works in collections worldwide from high-resolution transparencies; see Reid 2005: 348–63.

7. For birds in Peru, see Schulenberg et al. 2007.

8. Guaman Poma 1980: 181–83.

9. Sancho de la Hoz 1938: 179.

10. For example, at Dos Cabezas (Donnan 2007: 155), at Pachacámac (Schmidt 1929: 561), and at the Necropolis of Ancón (Reiss and Stübel 1997, pl. 34a). At Pueblo Viejo, near Nasca, Giuseppe Orefici found a mummified macaw wrapped in a textile and placed in an offering on the steps to a temple (personal communication, 2009). So far there has been no evidence of Muscovy duck remains in burials or offerings at coastal sites (Enrique Angulo, personal communication, 2010). Guaman Poma (1980: 132) reports that some Inca queens were fond of birds and kept parrots and macaws as pets.

11. Silverman and Proulx 2002: xx.

12. Cobo 1990: 223–26.

13. Betanzos 1996: 105.

14. Greene (1991: 16–25) provides a detailed description of the techniques employed on several Peruvian feather pieces in the collection of the University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.

15. Burger 1992: 39.

16. Feldman 1986: 35.

17. Quilter 1985: 293.

18. Grieder et al. 1988: 73–75.

19. Grieder 1982: 46–48.

20. Burger 1992: 73–74.

21. Shady Solís 2004: 112–24, 188–90.

22. Shady Solís 2007: 37.

23. Engel 1963: 39, figs. 80–82.

24. For detailed descriptions of some of the opened bundles, see Yacovleff 1933; Tello and Mejía Xesspe 1979; and Paul 1990.

25. For an example of a reconstructed feather cape, see Aponte Miranda 2006, fig. 23; for a staff, see Lavallée 2008, fig. 6.

26. Enrique Angulo, personal communication, 2009; Yacovleff (1933: 149–53) provides a detailed description with illustrations of the manufacture of this and other fans found on Paracas bundles.

27. Paul 1990: 43.

28. Lavallée 2008, fig. 11.

29. Paul 1990: 134.

30. Tello and Mejía Xesspe 1979: 349; Tello 2005: 297.

31. For an example, see Tello and Mejía Xesspe 1979, pl. 4D.

32. M. King 1965: 135–44.

33. Frame 1991, fig. 4.13, and Sawyer 1997, fig. 129.

34. Silverman 1993: 272–73.

35. For this essay Uhle’s Nasca collection, housed at the Phoebe A. Hearst Museum of Anthropology, University of California, Berkeley, was surveyed, as was Kroeber’s Nasca material at the Field Museum in Chicago and the Strong collection in the Department of Anthropology, Columbia University, New York.

36. Biermann 2006: 227–40, fig. 12 right.

37. Markus Reindel and Daniela Biermann, personal communications, 2009.

38. On Cahuachi, see Silverman 1993 and Orefici 1993.

39. Taullard 1949, pl. 37.

40. Strong and Evans 1952: 159, pl. XXVc, d.

41. Ibid.: 166.

42. Ubbelohde-Doering 1983, fig. 15; Donnan and McClelland 1997: 35–36, fig. 17.

43. Alva and Donnan 1993: 106–9, figs. 116–18.

44. Prümers 2007.

45. Uceda Castillo 2008a: 107–11, and 2008b: 153–78.

46. Mujica Barreda et al. 2007: 216–17; Donnan 2007: 105, fig. 5.75, illustrates a drawing of a ceramic vessel with a figure wearing such an ornament.

47. Three similar loose feather ornaments (Mogrovejo 2008: 294, fig. 1) appear in the reconstruction drawing of an intact Moche elite burial excavated by archaeologists at Huaca de la Cruz (Strong and Evans 1952).

48. The information on this find was made available to me by Jorge Gamboa Velásquez, codirector of the Proyecto Arqueológico Pañamarca. The data from the excavation are currently being evaluated and will be discussed in a forthcoming dissertation by Lisa Trever, Harvard University.



49. Excavations of Moche sites in the Santa Valley yielded thousands of textile fragments, mostly undecorated but some with designs, from funerary and architectural contexts. Only a very few had traces of feathers (France-Eliane Dumas, personal communication, 2010)
50. Ubbelohde-Doering 1983: 25.
51. Donnan 2007: 83, fig. 5.24, and 89.
52. For a history of the scientific explorations of the site, with full references, see Kaulicke 1997: 14–16.
53. Reiss and Stübel 1997, pls. 21, 77.
54. *Ibid.*, pl. 40; Kaulicke 1997: 86 n. 45.
55. Angeles Falcón 2005: 119–48, figs. 5, 6.
56. The information on feathered cloth finds made by a joint Peruvian-Canadian team of archaeologists at La Real was generously made available to me by Justin Jennings of the Royal Ontario Museum, Toronto. Their findings were reported in a paper by Willy Yépez Álvarez and Justin Jennings (“A Middle Horizon Mortuary Site in Southern Peru”) presented at the annual meeting of the Society for American Archaeology, St. Louis, in 2010. A detailed excavation report is planned in Arequipa.
57. Bruce Owen of Sonoma State University (personal communication, 2010) has reported several surface finds at various sites in the Majes River basin of fragments of feathered cloth left behind by looters. Some of the fragments may have once been part of tabards.
58. *La Crónica* (Lima), February 23, 1943; *El Deber* (Arequipa), February 18, 1950; Linares Málaga 1987–90: 141–52. For a discussion of the find by American scholars, see Bird 1958, no. 3, and Menzel 1964: 86–87.
59. Seven of the jars are reported to be in the collection of the Museo Nacional de Arqueología, Antropología e Historia del Perú, Lima.
60. H. King 2012.
61. The two most spectacular litter backrests to survive from Precolumbian Peru—one in the Museo Oro del Perú, Lima, the other at the Peabody Museum of Archaeology and Ethnology at Harvard University—are from the Sicán and Chimú cultures. Both sustain remains of once colorful feather mosaic (Carcedo Muro 1989: 249–59, and H. King 2000: 37, pl. 19).
62. To date no feather-covered textiles have been found by archaeologists at Sicán or Chancay sites. However, evidence of feathers has been recorded on many metal objects excavated from an elite Sicán burial at Huaca Loro, Batán Grande, near the La Leche River (Shimada 1995: 99). Two objects allegedly from Pachacámac can also be attributed to the Sicán on the basis of the distinctive shape of the figures’ eyes (fig. 19 and pl. 48 in this volume). Four plumes or tassels similar to plates 50 and 51, now in the Museo Amano, Lima, are said to have come from the Chancay Valley; two were found at the site of Pisquillo Chico.
63. A few pieces in the University Museum in Philadelphia are illustrated in Candler 1991 and Greene 1991. The featherworks Uhle excavated have not been studied and may have been made by groups other than the Chimú.
64. Baessler 1902–3, vol. 4, fig. 474, pl. 165.
65. Eeckhout 1999: 333–36, fig. 9.25; Eeckhout 2005: 52–57.
66. Jane Feltham, textile expert on the Eeckhout Ichma project, personal communication, 2010.
67. Tufinio 2003, 2004, 2006, and 2008.
68. A. Rowe 1984: 24. Paired warps are also found on Moche weavings excavated at Sipán (Prümers 2007), and they have been observed in the corrosion products on early Moche metalwork from Loma Negra in the Metropolitan Museum (Julie Unruh, unpublished manuscript). Many of the textiles found on mummies excavated in *chullpas* at the Laguna de los Cóndores in the Chachapoyas area east of the Andes in northern Peru also have paired warps (Bjerregaard 2007). It appears that paired warps are found on weavings in the north of Peru from as early as the beginning of the first millennium CE to the time of the Conquest in the sixteenth century. This characteristic also becomes more prevalent in Central Coast weaving in the fifteenth and sixteenth centuries (Jane Feltham, personal communication, 2010).
69. Cobo 1990: 225–26.
70. *Ibid.*: 187.
71. Guaman Poma 1980: 320, 326.
72. Murúa 1946: 235–36.
73. Rostworowski de Diez Canseco 1999: 105.
74. Guaman Poma 1980: 331, also 120, 137, 140, 142.
75. Cobo 1990: 27, 74, 154.
76. Murra 1962: 718.
77. Cobo 1990: 226.
78. On Inca textiles, see A. Rowe 1992, A. Rowe 1997, and Pillsbury 2002: 68–103.
79. Dante Casareto Mognaschi, archaeologist, personal communication, 2011. A second fragment with this design is in the collection of the Ethnologisches Museum, Berlin (VA 19954).
80. Phipps, Hecht, and Esteras Martín 2004: 137, fig. 9; Pillsbury 2002, fig. 4.
81. Phipps, Hecht, and Esteras Martín 2004: 140–41, figs. 11, 12.
82. A. Rowe 1992: 10–13, fig. 7.
83. Guerrero Zevallos, archaeologist, personal communication, 2009.
84. A. Rowe 1984: 175–84.
85. Frame et al. 2004: 826–28.
86. A. Rowe 1984: 176–78.
87. Frame et al. 2004: 826–28.
88. Hudtwalcker Morán 2010, fig. 13.
89. Hudtwalcker Morán 2009; Hudtwalcker Morán 2010, fig. 14.
90. Heyerdahl, Sandweiss, and Narváez 1995: 90–97, fig. 55.
91. *Ibid.*: 107–10, figs. 81, 82.
92. M. King 1965: 135, and Silverman 1993: 273.
93. For additional references to feather cloth in the chronicles, see Candler 1991: 1–15.
94. Murra 1962: 718.
95. *Ibid.*, 714.
96. The Real Alcázar de Madrid, the ninth-century Muslim fortress that had been converted into a royal palace, was famous for its superb art collection and unusual architecture. It was completely destroyed when a fire broke out Christmas Eve 1734.
97. Cabello Carro 1994: 50–61.
98. Sánchez Cantón 1956–59: 333–34.
99. Martínez Compañón 1978–94, vol. 9 (1991): 12, 13; Cabello Carro 2003: 94–95.
100. Castelló Yturbe 1993; Russo, Wolf, and Fane, n.d. (forthcoming).

**Rowe, "Early Featherwork from Ocucaje,"  
pages 45–53**

1. The Ocucaje collection was purchased as a group by the founder of the Textile Museum, George Hewitt Myers (1875–1957). Approximately two-thirds of the objects were given in 1957 to the Textile Museum and one-third to the American Museum of Natural History. The textiles in both museums are described in detail in M. King 1965.
2. Scientifically excavated objects from the Paracas burials are in the Museo Nacional de Arqueología, Antropología, e Historia del Perú, Lima, and additional textiles are in museum collections in North America and Europe. The literature on Paracas is extensive, but a convenient source in English is Paul 1990.
3. Menzel, Rowe, and Dawson 1964: 171.
4. For the Ocucaje ceramic chronology (Early Horizon 9–10), see Menzel, Rowe, and Dawson 1964. For the textile chronology, see Dawson 1979.
5. Menzel, Rowe, and Dawson 1964: 175; J. Rowe 1963: 9.
6. Menzel, Rowe, and Dawson 1964: 209–12; J. Rowe 1963: 9.
7. Dawson 1979: 86, figs. 14–16.
8. The feathers have not been examined by an ornithologist, but possibilities listed by Schulenberg et al. 2007 are the mountain parakeet (pp. 172–73) and the scarlet-fronted parakeet (pp. 168–69).
9. This wrapping is not identical to any of the structures diagrammed in Fraser 1989. The most similar are diagram 131 (p. 141) and diagram 182 (pp. 168–69).
10. See O'Neill in A. Rowe 1984.
11. See M. King 1965: 136–40, 393–94, 437–39, for detailed descriptions of each piece.
12. For diagrams of the Paracas and Ocucaje technique, see Yacovleff 1933: 145, fig. 2, and M. King 1965: 140, fig. 15a.
13. See M. King 1965: 144.
14. For these ornaments, see *ibid.*, 139, 141, 380–81, 395–96, 490–91, and Morris and von Hagen 1993: 65, fig. 44. They are also datable to the later period (ca. 300–200 BCE), since the one in the Textile Museum arrived as a unit with a painted cloth mask of the late Ocucaje style (Early Horizon 10).
15. See Sawyer 1960 and Sawyer 1997: 51, figs. 25, 26.

16. A similar fan, with blue feathers, is in the Ocucaje collection of the American Museum of Natural History, New York (41.2/6015). Another example, also with blue feathers and probably from Ocucaje, is in the collection of the Ethnologisches Museum, Berlin (VA 44822); see Schmidt 1929: 533 top. Yacovleff (1933: 149) identifies the material as *Typha domingensis*, which is cattail. Thanks to Ann Peters for her confirmation.

17. Yacovleff 1933: 149–56.

18. A. Rowe 2006.

19. Seven figures are in the collection of the Textile Museum, Washington DC; three (41.2/6153) are in the American Museum of Natural History, New York.

20. Menzel, Rowe, and Dawson 1964, fig. 60.

21. See Horié 1991, figs. 5, 8–10, 15, 16; A. Rowe 1991, figs. 4, 5. A possibly related ornament is shown in fig. 5 in King, this volume.

**Frame, "The Feathered Dresses of Cahuachi,"  
pages 55–61**

1. Frame 2005: 15–18. I would like to thank Giuseppe Orefici and Elvina Pieri for their collaboration and for their hospitality during several stays in Nasca at the Centro Italiano Studi e Ricerche Archeologiche Precolombiane. The support of the Selz Foundation, which provided travel funds for trips to Nasca in 1999 and 2000, is gratefully acknowledged.
2. Silverman 1993: 300–319.
3. Orefici 1999: 102–4; Orefici and Drusini 2003: 96–101, 119–21, 163–70.
4. Frame 2005: 15, fig. 3; Orefici, Pieri, and Sánchez 1999.
5. Orefici, Pieri, and Sánchez 1999.
6. A. Rowe 1991: 96–101, figs. 4 and 5; Horié 1991: 80–89, figs. 8–17.
7. For a detailed description of Nasca women's dresses, see Frame 2005: 20, fig. 8.
8. Fester and Cruellas 1934: 156.
9. Nathalie Boucherie, doctoral candidate, Université Lumière Lyon, personal communication, August 2010.
10. Desrosiers 1992: 23–24.
11. Frame 2005: 51, pl. 12.
12. *Ibid.*, 32–53, fig. 18 and pls. 6, 13b, and 14.

**Delgado, "A Woman's Feathered Cloth from Cerrillos," pages 63–67**

1. During the 2003 excavation season, two bundles were uncovered in a platform at the north end of the site. They have been catalogued as dating from the fourth to the third century BCE on the basis of associated textiles. The bundles have not yet been opened.
2. The dating was carried out at the Rafter Radiocarbon Laboratory, Institute of Geological and Nuclear Sciences (R26997/1–R22997/2), New Zealand. The dating indicated is an average obtained from the calibrated data.
3. Wallace 1962.
4. Wallace et al. 2004: 129.
5. The identification of the wood was carried out by David-Beresford Jones (Cerrillos Wood sample PV62-63) at the George Pitt-Rivers Archaeobotanical Laboratory, McDonald Institute for Archaeological Research, University of Cambridge, 2009.
6. Bird feather identification was provided by Marcy Heacker-Skeans, Division of Birds, National Museum of Natural History, Smithsonian Institution, Washington DC.
7. The analysis of the bundle's fill was carried out by specialists at the Museo de Historia Natural, Universidad Nacional Mayor de San Marcos; see Roque, Cano, and La Torre 2007.
8. Wallace 1991: 70–78.
9. Museo Regional de Ica, acc. no. 61-1-2003.
10. Proulx 2006: 59–60, 67–68, figs. 5.12, 5.14.
11. Rostworowski de Diez Canseco 1993: 195–96.
12. Hudtwalcker Morán 2009.

**Uceda and King, "Chimú Feathered Offerings  
from the Huaca de la Luna," pages 69–77**

1. Conrad 1981: 3–26.
2. Excavation projects at the Huaca del Sol are planned for the near future.
3. Tufinio 2006: 60–77.
4. Detailed reports of the excavations have been published annually by the Universidad de Trujillo, Facultad de Ciencias Sociales, in the series *Proyecto Arqueológico Huaca de la Luna: Investigaciones en la Huaca de la Luna 1995–1999*, and subsequently in *Informe técnico 2000–2011*.



5. Moisés Tufinio, personal communication, March 2011. The figurine was carved of spondylus shell and dressed in the same finely made miniature clothing commonly found on Inca offerings (see, for example, figs. 25, 58, and 59 in this volume). The figure did not wear a feather headdress.
6. The garments have not received any professional conservation treatment and are shown here as they were found.
7. Tufinio 2003: 19–24.
8. Tufinio 2006: 70–72.
9. Tufinio 2004: 37–50.
10. Tufinio 2008: 15, fig. 4; Abadía de Daoulas 1999: 32, pls. 15–21.

# **Reinhard, “Sacred Featherwork of the Inca,” pages 79–87**

1. Beorchia Nigris 1985 and Beorchia Nigris 2001.
2. Reinhard and Ceruti 2010: 6.
3. See MacCormack 2000: 124.
4. Reinhard 1993: 31.
5. Reinhard 2005: 299–307; Reinhard and Ceruti 2010: 66–84.
6. For descriptions of typical figurines found with *capacocha* burials, see Millán de Palavecino 1966; Beorchia Nigris 1985; Michieli 1990; Palma Gaete 1991; Dransart 1995; A. Rowe 1997; Beorchia Nigris 2001; Schobinger 2001, passim; Schobinger, Ampuero, and Guercio 2001; Ceruti 2003; and Schobinger 2004.
7. Reinhard and Ceruti 2010: 196.
8. Ibid., 197.
9. Arriaga 1968: 11; Cobo 1990: 13, 45–46.
10. Farrington 1998: 56.
11. Betanzos 1996: 48.
12. For example, see Cobo 1990: 46.
13. Ibid., 151, 187.
14. Instead of a sling, the boy found by looters in a *capacocha* burial on Mount El Plomo wore a headdress of feathers (Quevedo and Durán 1992: 198). The boy found sacrificed on Mount Aconcagua also had a feather headdress (Abal de Russo 2001: 217, 238). When reconstructed it was of a different style from the Llullaillaco and El Plomo headdresses, forming a circular crown.

15. A similar headdress was documented with one of the females found at an altitude of 19,200 feet (5,850 m) on Ampato in Peru. However, in that example the feathers had been folded over, as the Inca were unable to dig deeper into the frozen ground (Reinhard 2005: 63). Another partially preserved feather headdress was found with the older female sacrifice recovered from a disturbed burial on the summit of Cerro Esmeralda in Chile (Baker 2001: 104–7; Checurea Jeria 1977: 136).
16. Dransart 1995: 6; Palma Gaete 1991: 67; A. Rowe 1997: 24. Techniques employed in making feathered headdresses for figurines can be found in Baker 2001: 105, 320–22, and Palma Gaete 1991: 67–69.
17. A possible exception would be that of a feathered textile recovered with the older girl on Esmeralda. However, it is still unclear whether this back panel was attached to the headdress or worn separately (Baker 2001: 107–8).
18. See Dransart 1995: 6–8, 12–16.
19. Guaman Poma 1980: 78–95, 124–40.
20. A. Rowe 1997: 10.
21. Betanzos 1996: 195.
22. See *ibid.*, 66. A rare, badly damaged feathered tunic was found with the Aconcagua boy (Abal de Russo 2001: 216).
23. Arriaga 1968: 45. Entire birds were reportedly sacrificed (Cobo 1990: 113), but they have not yet been reported from *capacocha* burials. Isolated feathers were also offered; a few were found buried in the ceremonial platform on Llullaillaco.
24. Cobo 1990: 225.

# **Giuntini, “Techniques and Conservation of Peruvian Feather Mosaics,” pages 89–100**

1. Gill 2007: 83ff.
2. Ibid., 79ff.
3. Schulenberg et al. 2007: 12.
4. A. Rowe 1984; Paul 1990; Reina and Kensinger 1991; Reid 2005.
5. Reid 2005: 352.
6. I am especially grateful to Paul Sweet, Collections Manager, Department of Ornithology, American Museum of Natural History, New York, for sharing with me his vast knowledge of birds and for allowing me to study specimens in the bird skin collection in support of this research.

7. Prum 2006: 295ff.
8. Hill 2010: 60–63.
9. Ibid., 111.
10. For an extensive bibliography, see McMichael 2008: 49–50.
11. Sick 1993: 253.
12. McMichael 2008: 35–47.
13. Sick 1993: 254.
14. O’Neill in A. Rowe 1984: 147.
15. Fester and Cruellas 1934: 156; Frame 2005: 22–23.
16. McGraw in Hill and McGraw 2006: 354–55.
17. Different instrumental techniques are being applied in the analysis of the colorants. The studies are being conducted by Marco Leona and Nobuko Shibayama, both of the Department of Scientific Research at the Metropolitan Museum.
18. Greene 1991: 25.
19. This adhesive was identified using FTIR and ELISA instrumentation by Julie Arslanoglu and Hae Young Lee at the Metropolitan Museum in 2011. A full report can be found in the files of the Department of Scientific Research.
20. For additional descriptions and diagrams of techniques, see Mead 1907, Yacovlevff 1933, and Greene 1991.
21. For an example of spiraling strings, see Peabody Museum of Archaeology and Ethnology at Harvard University, Cambridge, Mass., acc. no. 42-12-30/3368. See also plate 26 in this volume.
22. See note 19 above.
23. O’Neill in A. Rowe 1984: 156.
24. A very simplified description of the <sup>14</sup>C method includes the following information. All living things incorporate carbon into their tissues, and this process continues until the death of the organism. After death, some of the carbon (known as the <sup>14</sup>C fraction), which is unstable, begins to disappear through a process known as radioactive decay. Scientists have determined that the amount of <sup>14</sup>C (as a percentage of the weight) absorbed by living organisms remains fairly constant over time and decays at a fairly steady rate after death. Thus in a pure carbon sample of known weight, the portion that would have been <sup>14</sup>C can be estimated and compared to the amount left in the sample at

the time of testing. The minuscule amount of  $^{14}\text{C}$  remaining in the sample then undergoes a further refinement known as calibration, which is provided by specialized software that compares data to similar information gathered from living or once-living reference samples of known age. Most often these are taken from overlapping sections of tree rings. Because the samples are small, and the several measurements and calculations contain variables that cannot be controlled, the results are usually expressed as a probable range of dates in the past.

While the method of  $^{14}\text{C}$  dating is generally accepted, the methodology of acquiring samples is not standardized nor is it always documented by reports and images. Additionally, although refinements in pretreatments, which remove contaminating substances from the sample, have made dating ever more precise, research to independently verify the removal of contaminants is ongoing.

25. Bird 1958: n.p.

26. Three blue and yellow panels, at the time in the collection of the Museum of Primitive Art, New York, were  $^{14}\text{C}$  dated at the request of John Rowe (see J. Rowe 1967). The fourth panel (see fig. 18a, page 29, in this volume) was dated in 2011 at the NSF Arizona AMS Laboratory, University of Arizona, Tucson, A. J. Timothy Jull, director.



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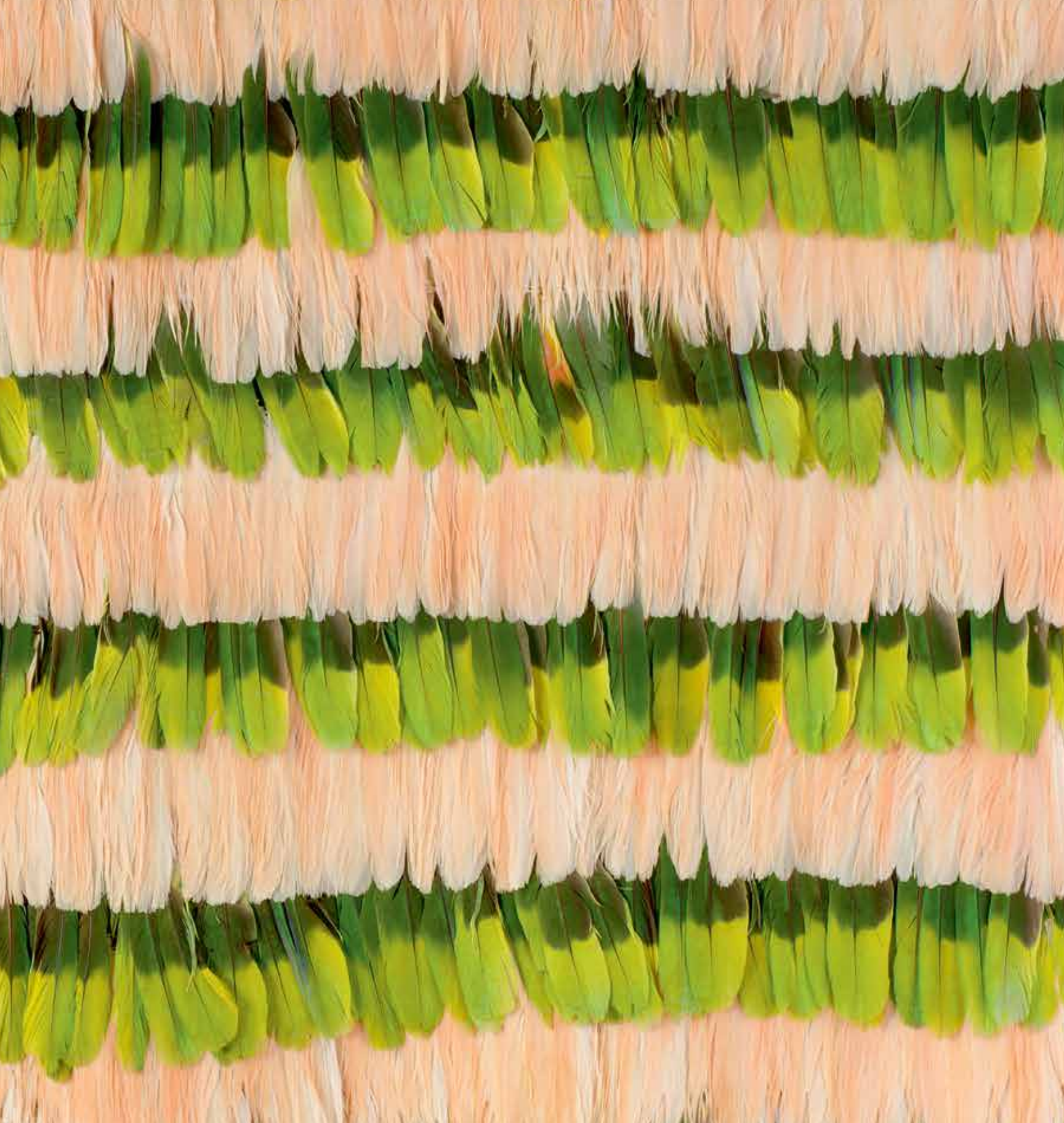
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