

Andean Four-Cornered Hats

Ancient Volumes



The Metropolitan Museum of Art

Andean Four-Cornered Hats

Ancient Volumes

From The Collection of Arthur M. Bullowa

Organized by Julie Jones

Text by Mary Frame

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FRONT COVER: Knotted hat with triangular corner peaks, Tiahuanaco style. Checklist 9

BACK COVER: Knotted hat with additional pile elements and cylindrical peaks, Wari style. Checklist 19

Foreword

It is once again my pleasure to introduce a special exhibition drawn from the Precolumbian holdings of the New York collector Arthur M. Bullowa. Just three years ago, The Metropolitan Museum of Art had the opportunity to mount *Houses for the Hereafter, Funerary Temples from Guerrero, Mexico*, in which a group of small, evocative works in stone from the Bullowa collection was presented to the public. Like those stone “houses,” the notable works in the current show, *Andean Four-Cornered Hats, Ancient Volumes*, required a singular vision and dedication to collect, since both groups of objects covered new territory in the field.

The Andean hats are fabric caps with square tops that are punctuated with a peak at each corner. These ancient works of art, many of which remain intact, attracted Arthur Bullowa’s attention many years ago. Their remarkably well-preserved condition offers Mary Frame, a specialist in ancient Peruvian textiles and the author of this catalogue, the opportunity to discuss the complexity of Andean thought as it is demonstrated by the textile medium, a medium of consummate importance to the ancient peoples of the Andes. The three-dimensionality of these hats distinguishes them from other Andean fabrics and invites the insight into Andean spatial concepts that Ms. Frame details here. The brightly colored patterns worked with such care can in fact be read both linearly and volumetrically, an accomplishment that demands attention and respect.

The Museum deeply appreciates Mr. Bullowa’s promised gift of the Andean four-cornered hats. It is also grateful to Reliance Group Holdings, Inc. for funding this exhibition.

Philippe de Montebello
Director

Andean Four-Cornered Hats

Ancient Volumes

The ancient peoples of the Andes left behind impressive evidence of their skills as farmers, builders, and artisans. Their terraces, canals, and buildings attest to a sophisticated mastery of engineering and mathematics, and the vast quantities of plain and decorated cloth that survived in the coastal desert exhibit a similar command of complex structures and construction.

Cloth was the primary medium in ancient Andean art. It required immense labor and bestowed great prestige on its owners. Woven, looped, twined, linked, and knotted fabrics were variously layered, shaped, and otherwise sewn into items for both daily use and ceremonial occasions. Basic to the production and decoration of Andean textiles, and to architectural constructions as well, are number, geometry, and symmetrical repetition. The human-scale art of fabric-making, practiced by virtually everyone in ancient



Figure 1. Ceramic effigy with the figure of a man wearing a four-cornered hat and a tapestry tunic. His outstretched hands probably once held staffs. Courtesy of the Museo Amano, Lima, Peru, 0020

times, may have been used to codify mathematical concepts such as space and number, concepts that had applications in diverse realms of daily life.

Among the most intriguing fabric constructions is a type of close-fitting cap with a square top and four upright peaks projecting from the corners. Such caps were worn by high-ranking men of the Tiahuanaco and Wari cultures that flourished in the second half of the first millennium in the central Andean area of Peru, Bolivia, and Chile. In ceramic depictions, figures with four-cornered hats frequently wear prestigious tunics of tapestry (Figure 1), featherwork, or tie-dyed cloth.¹ The faces are often embellished with painted designs, and some have beaded collars or actual strings of beads,² contributing to their appearance of authority.

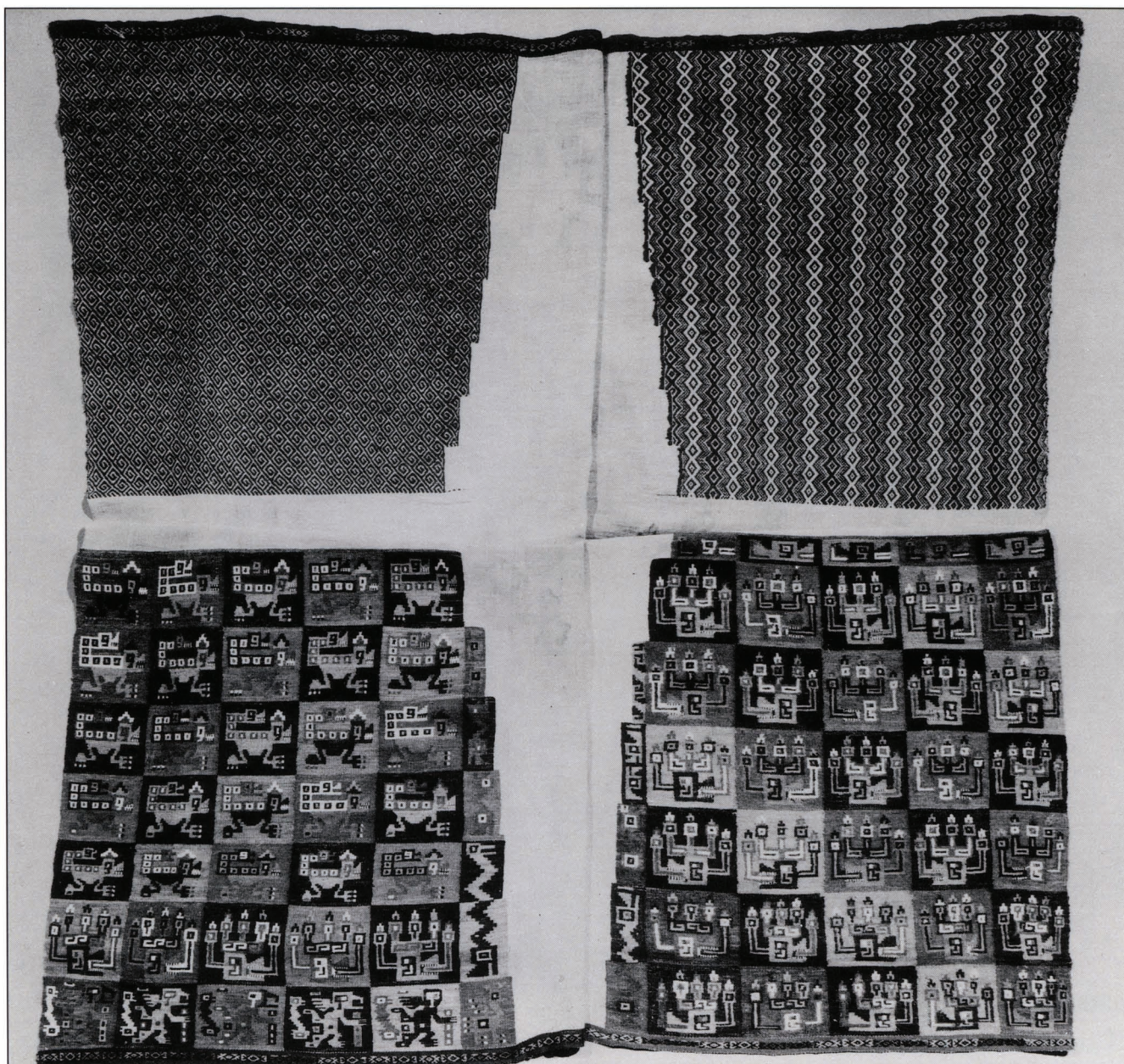


Figure 2. Corner-ornamented cloth displayed with the plain cloth area folded under in the center. The figures, grids, and colors are similar to those on Wari pile hats. The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection, Bequest of Nelson A. Rockefeller, 1979 1979.206.462

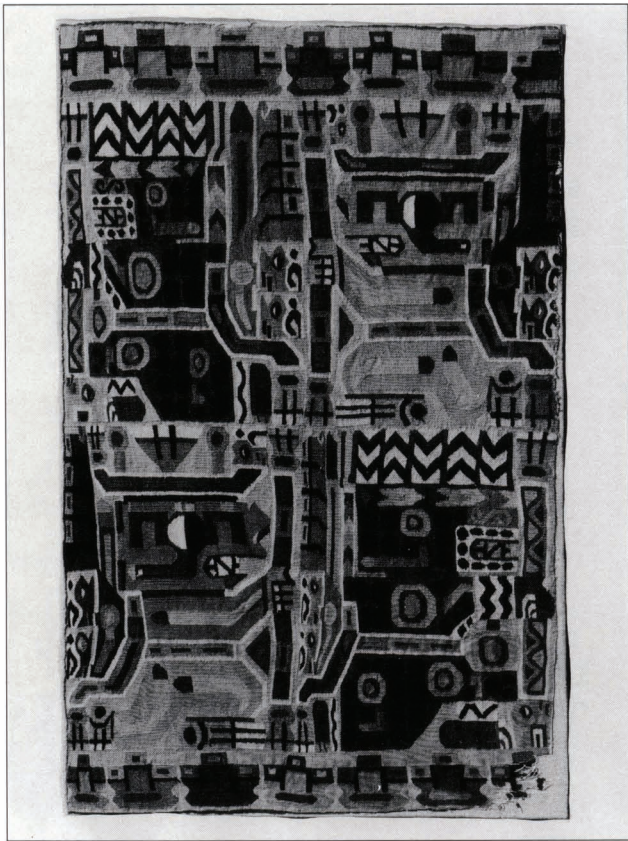


Figure 3. Tapestry fragment with staff-bearing figures, one with the attributes of a spotted feline. The running or kneeling stance, the split eye, and crossed fangs are typical of the staff-bearing figure. The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection, Bequest of Nelson A. Rockefeller, 1979 1979.206.394

Ceramic, wood, and stone depictions offer clues to understanding ancient Andean hats. Representations in ceramics, for example, suggest that the most distinctive feature of the hats, the four corner peaks, may be a vestigial reference to the ears of animals worn as headdresses.³ Some corner peaks represented on ceramics are pointed, triangular at the base, and project from below the top of the hat, resembling the ears of felines.⁴ The presence of four ears may relate to the practice of making Janus-faced, or

In addition to the ceramic representations, the hats themselves also show evidence that they were used in daily life. Many have indelible marks of hard usage: wear along the edges and folds, a crusting of hair oil on the inside, remnants of broken chin ties, and ancient mends. Others, particularly Tiahuanaco-style hats, are remarkably pristine. Deep creases and unfaded areas on some of these hats suggest that they were folded flat for storage or for final interment with the dead. The careful workmanship and lavish use of dyed alpaca attest to the importance attached to this distinctive item of apparel by the ancient people who made and used them.

The four-cornered hat is a purposeful combination of form, texture, iconography, and geometry. Like all ancient Andean art, the hats are poly-iconic; they do not yield to a single, or simple, interpretation. Rather, they contain a myriad of references to themes and ideas that permeated the culture.



Plate 1. Wari pile hat with tasseled corner peaks.
An angular bird is repeated in alternate squares of a grid. Checklist 21

even four-faced, images.⁵ Wood and stone carvings, for instance, show a deity figure wearing a squared headdress with modeled heads of birds or felines projecting from each side.⁶ The unusual pile surface of Wari hats has a quality of pelage or plumage that may reiterate the reference to felines or birds, or even to the alpacas and llamas from which the very fiber of the hats originates. Several rare hats, made in feather mosaic, refer unmistakably to birds on this level of interpretation.

The well-dressed figures appearing on ceramics are represented in various poses. In some, they stand with outstretched arms and clenched hands, their original staffs now gone (see Figure 1). In others, they present a cup clasped in front of them with both hands, or have their hands upraised.⁷ The figures appear to be participating in, or at least dressed for, ceremonial occasions.

Other depictions of men wearing four-cornered hats relate to warfare. On one vessel, a man plays the pan-pipes and carries a throwing stick, while on another, the figure's arms are bound behind his back in the aspect of a prisoner.⁸ A carved wooden lime container, part of the paraphernalia used in coca leaf chewing, shows a man on one bent knee wearing a four-cornered hat and carrying a sling.⁹ A stone carving surmounting a hook that may be part of a throwing stick also shows a man in a four-cornered hat; he is carrying a bow and arrows in one hand and what is possibly an axe in the other.¹⁰

Ceramic cups of the type called headneck vessels generally portray dignified human countenances beneath decorated hats with four corners.¹¹ One example does portray a supernatural visage with bulging eyes and crossed fangs.¹²

The wearing of four-cornered hats appears to be linked with warriors and with ceremonies that were perhaps associated with warfare, including the presentation of a vessel and the implied drinking of its contents. The headneck vessel, in which figure and cup become one and the same, may be a compressed version of the figure presenting a cup.

Four-cornered hats vary in shape, pattern, technique, and construction. The hats range from squat forms with animal figures worked into a colorful pile surface (Plate 1) to elongated forms, somber in color and patterned in low relief ridges. Other hats have highly regular, geometric patterns worked in changing colors on the sides and top.



Plate 2. Tiahuanaco-style hat with a standing figure with up-streaming hair. Head deformation was practiced concurrently with the making of these hats, and the elongated form of them may have emphasized an aesthetically pleasing contour. Checklist 1

Almost all four-cornered hats are made with larkshead knots,¹³ variously manipulated for texture and color change. Rare examples, not included in this exhibition, are woven in the tapestry technique or patterned with feathers glued to a basketry framework.¹⁴

A major distinction can be made between plush hats, patterned with supplementary pile yarns caught into the knotted foundation (Back Cover), and knotted hats without pile (Front Cover). Current archaeological data indicates that the knotted hats without pile generally come from sites in Chile, Bolivia, or southernmost Peru, where Tiahuanaco presence is evident.¹⁵ Pile hats with provenience, on the other hand, come from sites in the south or on the central coast of Peru, where the Wari people held sway.¹⁶

The relationship between the ancient city of Tiahuanaco, situated in the Bolivian altiplano south of Lake Titicaca, and Wari, located over five hundred kilometers away in the central Peruvian highland valley of Ayacucho, is not well understood. Both were important centers during the latter half of the first millennium, and both expanded to coastal and highland areas. They share a religious iconography centered on depictions of a frontal staffed deity with winged profile attendants and also certain technological traditions, for example the weaving of interlocked tapestry tunics and the knotting of four-cornered hats. Their spheres of influence, methods of expansion, and many of their artifacts are distinct and separate. A number of scholars have considered Tiahuanaco to be the source of the iconography, disseminated to Wari through religious proselytization and commerce. Recently, it has been suggested that the shared heritage of the earlier Pucara style may account for some similarities in the art of Wari and Tiahuanaco.¹⁷

Tiahuanaco, a splendid ceremonial center of plazas, temples, and stelae, appears to have expanded peacefully to the eastern highlands of Bolivia and to the Pacific coast of northern Chile and the far south coast of Peru. Four-cornered hats without pile are reported from various sites and collections within this area.¹⁸ A headneck ceramic vessel with a representation of a four-cornered hat was excavated at Tiahuanaco,¹⁹ but no hats or other textiles have been recovered from that location.

The site of Wari, near Ayacucho, Peru, is a large urban complex. The expansion of Wari appears to have been military, short-lived, and focused north of areas with



Plate 3. Wari pile hat. The profile, staff-bearing figure of highland Wari art is loosely rendered in the coastal Wari style of the hat. Checklist 25

Tiahuanaco presence²⁰ in the highlands and on the coast in south and central Peru. Fragments of four-cornered hats and headbands with pile are reported from coastal sites, particularly in the Nasca region to the south, but also on the central coast.²¹ Wari ceramics with representations of four-cornered hats come from both the coast and the highlands within the Wari domain.²²

Wari and Tiahuanaco coincide iconographically and artistically for a relatively short time span during the seventh and eighth centuries, the height of the Wari empire.²³ Many Wari hats, and ceramics with depictions of them, date to this time. However, it is likely that Wari hats continued to be made on the coast after the waning of Wari power, as the images and patterns correspond more closely to those on corner-ornamented cloths, which continued to be made after the decline of Wari.²⁴ Corner-ornamented cloths (Figure 2) are a distinctively coastal type of fabric, combining provincial variations of Wari elements with enduring coastal images such as birds.

Tiahuanaco hats span a considerably longer time period. The earliest type appears to be the elongated hat with small corner peaks, which has been reported from the north coast of Chile beginning in the fourth century.²⁵ The colorful, geometrically patterned hats (see Front Cover) appear to correspond to the “Classic” Tiahuanaco period of the seventh to ninth centuries.²⁶ Angular, monochrome hats with ridged striations may have continued in use until the twelfth century or later.²⁷

The textiles of Wari and Tiahuanaco both draw on a south highland textile tradition²⁸ that differs from the cotton-based, coastal one. Characteristics of the highland tradition such as the use of alpaca fiber, the weaving of interlocked tapestry tunics with horizontal warps, and the knotting of four-cornered hats are common to both Wari and Tiahuanaco fabrics. Distinctions do exist, however. Tiahuanaco tapestry tunics, for instance, are made in one piece,²⁹ while Wari tunics are woven in two separate loom pieces that are sewn together.³⁰

Like the tunics, Tiahuanaco four-cornered hats are made in one piece. Work originates at the center of the hat top and proceeds downward. The corner peaks are continuations of the hat top, and hat top and peaks are constructionally integral with the sides. Tiahuanaco hats are made in larkshead knotting patterned in four ways: simple



Plate 4. Wari pile hat with chin strap. The faces and feather motifs may derive from the frontal staffed deity, a major figure in the highland iconography of Wari and Tiahuanaco. Checklist 11



Plate 5. Hat in the Classic Tiahuanaco style. The geometric patterns repeat in grids and bands, and colors repeat obliquely. Checklist 7



Plate 6. Top view of the hat in Plate 5. The hat top is divided into triangles with a bar element that can be perceived as either the mouths of eight profile faces or the eyes of four frontal faces. Checklist 7

color change in the knotting element (see Front Cover), knotting over a core with color substitution from the core (Plate 2), alternation of the upward face of the knot for low-relief patterns, and the omission of joins for openwork. Corner peaks are triangular, and hat tops have colored or ridged patterns repeated in each quadrant.

Wari-style hats, by contrast, are made in several pieces and sewn together. The sides of the hats are begun along the lower edge and worked upward in larkshead knotting with the addition of pile elements. Most side panels are made in sections, each joined to the previously worked section in the process of knotting. A final seam joins the side panels to form a circle.³¹ Corner peaks on Wari hats are sometimes triangular, like those on Tiahuanaco hats, but cylindrical peaks, covered with pile and topped by an ebullient tuft or tassel, are also common. Hat tops, both Wari and Tiahuanaco, are flat, square, and knotted without pile. Most Wari hats have ridged patterns that conform to the four-part division of the top, but a few have concentric color squares.

The imagery on the four-cornered hats is complex and varied, but it is often clarified by repeating certain ideas both directly and allusively. The surface quality of the knotted pile refers to the pelage and plumage of animals that are depicted concurrently on that very surface. Zoomorphs combining attributes of birds, felines, and possibly llamas or alpacas are favored images on Wari pile hats, as are bird and feather motifs (see Plate 1). Such small-scale zoomorphs tend to oscillate, at first appearing bird-like but on further inspection often revealing toothy mouths and disproportionately large legs and bodies. A greater diversity of figures, such as felines, humped-back quadrupeds, and grotesque birds with contorted limbs, can be perceived when only one large-scale, more detailed creature appears on a hat side. Birds also appear on Tiahuanaco hats, where they are usually paired, in profile, and facing downward.

One diagnostic feature of Wari hats is a staff-bearing attendant figure with an animal muzzle and the stance of a running or kneeling human (Plate 3). The figure may have a wing attached to its back, as well as an elaborate headdress, a mouth scroll, and a vertically split eye that is half black and half white. The profile attendant is one of the religious images shared by Wari and Tiahuanaco, and it is found on tapestry tunics and



Plate 7. Wari pile hat with a four-part concentric diamond on each side. Concentric squares occur on the hat top, at the corners of each panel, and on one interior outline of the diamond. Checklist 18





ceramic vessels as well as on the monumental stonework of Tiahuanaco. Some tapestries alternate depictions of different types of attendant staff-bearers, with attributes of felines, birds, or humans dominating (Figure 3). The staff-bearing figure may sometimes be reduced to a profile head with split eye, headdress, animal muzzle, and mouth scroll. The vertically split eye, so characteristic of the staff-bearer, sometimes appears on a creature of uncertain pedigree, probably endowing it with special significance.

A frontal face, surrounded by a corona of feathers and usually arranged in a vertical stack, appears on many Wari pile hats (Plate 4). On a Tiahuanaco hat, what may be the same face appears, surrounded by the spurs of an eight-pointed star (see Front Cover). This image is probably a reduced form of the frontal staffed deity, the central figure on the monolithic gateway at Tiahuanaco and a recurrent image on both Wari and Tiahuanaco ceramics. Wari hats with the image often include a horizontal band of blue diamonds, a feature that is evident on many ceramic representations of hats. On the ceramics, the diamond band has a raised appearance, as if it were separately made; on the hats, it is incorporated into the design of the side panels.

Four-cornered hats are persistently geometric in form, style, motif, and spatial organization. Even figurative motifs have an angularity imposed by the knotted structure. Color-patterned Tiahuanaco hats are predominantly geometric (Plate 5). Most have a lower band of zigzags that may be the equivalent to the diamond band on some Wari hats, since it is, in effect, one-half of a diamond band. The sides above the band are usually vertically zoned and partitioned. Diamonds, interlocked hooks, zigzags, and occasionally figurative motifs repeat symmetrically within the zones. The hat top is divided diagonally by structural axes and redivided by two more axes into four and eight triangular modules (Plate 6). Sometimes squares or rectangles are positioned within the triangles in such a way that a fleeting image of faces, eight in profile and four frontal, materializes. The intense patterning of the hat tops

PREVIOUS OVERLEAF:

Plate 8. Three Wari hats patterned with grids of diamonds, triangles, and squares. Four-cornered hats may have been models of three-dimensional space, layered and sliced by the grid axes on their surfaces.

Center hat, The Metropolitan Museum of Art, Gift of Arthur M. Bullowa, 1983

1983.497.7. Checklist 29, 30, 31

suggests that the hats were conceived as geometric volumes and that the grids and axes scoring their planes define three dimensions. The prime module of the geometric divisions is the right-angle triangle, which is repeated in the triangular corner peaks.

The color patterning, in particular the consistency of the color relationships from different viewpoints, provides further evidence that the hats were conceived volumetrically. Colors repeat obliquely within four-part divisions of the sides (see Plate 5), and the same colors often repeat on the opposite side. When viewed from directly above, the colors of the sides also repeat obliquely across the top of the hat (see Plate 6).

Wari hats are also intensely patterned. The angularity of figurative imagery, the use of geometric motifs, and the repetition of figures and colors in grids indicate the extent to which the hats are formatted geometrically. The concentric diamond with a four-part center is the most elaborate of the geometric motifs and can take up an entire side (Plate 7). Intermediate outlines are made of nested squares, and colors generally repeat on opposite sides of the hat. The tops of Wari hats are divided diagonally and subtly ridged within the triangles or patterned with concentric color squares. The attention to the top of the hat suggests that the viewpoint from above was as important as viewpoints from the sides and that all viewpoints were considered simultaneously.

Smaller-scale motifs, such as nested diamonds and crosses, recur in square grids on Wari hats. Colors usually repeat obliquely within groups of four on one side of the hat and sometimes on the opposite side as well, a pattern also seen in the hats with gridded animals.

The most common type of grid used to organize repetitions of zoomorphic or geometric figures on the hats is a checkerboard. Diamond grids, based on intersecting oblique lines, are not as common but do occur in Wari pile hats (Plate 8, center) and on Tiahuanaco hats with monochrome textural patterns. Grids of right-angle triangles, simultaneously square grids, also occur (Plate 8, right). All the grids are constructed from the intersection of horizontals, verticals, and forty-five-degree diagonals.

The pattern most frequently shown on ceramic representations of four-cornered hats is the concentric diamond grid with four-part divisions (see Figure 1). Among the ancient people, this pattern might have stood for or symbolized the four-cornered hat.

Significantly, all of the grid axes are used in the generation of this pattern, and, therefore, all the modules of diamonds, triangles, and squares are present simultaneously.

The purposeful focus on geometric grids is highlighted by one particular hat. On it, a checkerboard grid is isolated, given borders, and repeated in rows and columns (Plate 8, left). The treatment of the checkerboard grid as a motif suggests that, like the figurative motifs, it had symbolic content.

One exceptionally large and well-wrought hat (Plate 9) does not conform to the general distinction previously drawn between the Wari and the Tiahuanaco styles. Like Tiahuanaco hats, it is knotted without pile starting at the top and working downward, and it has an elaborately patterned top. However, it has the gridded format, bird and feather motifs, and strong colors of Wari pile hats. The profile bird does have a split eye and the beak of a bird of prey, features not often found on the benign birds represented on most coastal Wari hats. The large size might suggest that it was made for a Wari leader, but perhaps not on the coast, where pile hats were probably made.

The careful manufacture, crisp outline, and vivid colors enhance the geometry of this hat. The angularity is pronounced, and each side is regularly gridded into four modules. The colors repeat obliquely within groups of four centered on the corners, and they repeat again on the opposite side of the hat. Profile birds and a composite motif of feathers and bird heads alternate in the grid. The hat top is divided by four axes, and a profile bird head is repeated eight times in the triangular spaces (Plate 10). The eight profile heads can be perceived simultaneously as four frontal faces. The colors on the hat top repeat diagonally. From the bird's-eye viewpoint, one can see that the colors on the gridded sides also repeat diagonally across the hat top.

The gridding of the sides and top and the repetition of colors from multiple viewpoints suggest that the four-cornered hat is a compendium of abstract spatial concepts, a map of spatial divisions and interrelationships. The four-cornered form itself suggests that such a hat may have been conceived as a cubic module of an infinitely repeating grid in three dimensions and simultaneously as a chunk of three-dimensional space, cut into layers, slices, and wedges by the axes that divide the surfaces.

Particular features of Andean abstract space, as charted in the four-cornered hats, are a resonating emphasis on fourness and an infinite repetition in all directions, both in two and three dimensions. Patterns are generated by regular symmetrical motions around the center point of the top and across axes on the surfaces. The grids and modules arise from the intersection of horizontal, vertical, and diagonal axes. The right-angle triangle is the prime, or irreducible, module from which diamonds, squares, rectangles, and larger triangles can be unfolded. Superimposition of grids and multiple viewpoints are inherent in the space sketched on the hat maps.

As a group, the four-cornered hats are an economical representation of many Andean concepts. The images provide a glimpse of the denizens that inhabited the ancient cosmos: creatures of diverse parentage and supernaturals with mouth scrolls and split eyes. The hats also function as a compendium of theorems, nested one within the other, that describe abstract space. The conjunction of grids, color patterns, and supernatural beings may reflect a cosmological ordering, but that is beyond the recall of current research.

The structuring of space represented in the four-cornered hats is probably an applied, as well as an abstract, concept. Modular buildings, square stelae, and the layout of ceremonial precincts at Wari and Tiahuanaco centers conform to similar grids and repetitions. Absent from the gridded space of the hats are the equilateral triangle and regular polygons with more than four sides. These Euclidean figures that occur in the ancient art of Egypt and the Near East, for example, are also absent from ancient constructions associated with Wari and Tiahuanaco.

The encoding of systematic information in fabric belongs to a long Andean tradition that continues to the present day. The abstract space represented in the four-cornered hats of Wari and Tiahuanaco may also prove to be more broadly Andean. Conceived and constructed in three dimensions, the four-cornered hats provide a rare insight into the conceptual unfolding of volumetric space during at least one cultural phase in the ancient Andes.

Mary Frame



Plate 9. Large Wari hat without pile. The orderly color and figure patterns extend to the hat top and corner peaks. Checklist 32



Plate 10. Top view of the hat in Plate 9. The image of eight profile bird heads, possibly hawks or condors, is simultaneously an image of four frontal faces. Checklist 32

Exhibition Checklist

The Andean four-cornered hats in the list that follows are made of camelid fiber, probably alpaca, and are constructed in a knotting technique worked with the aid of a needle. Five variations on the basic larkshead knot are used for patterning.

A general distinction between Tiahuanaco- and Wari-style hats can be made, based on the limited provenience information available. Hats in the Tiahuanaco style are usually made in one piece, from the top center downward, and do not have pile on the sides. Tiahuanaco hats are patterned with low-relief ridges (Figure 4, p. 30) or colored geometric motifs that sometimes extend to the hat top. Wari-style hats have pile on the sides and are made from the bottom upward. They are constructed by sewing the side panels to a separately made hat top and corner peaks. Corner peaks can be pile or non-pile and vary in shape. Wari pile hats are richly colored, and designs range from geometric grids and motifs to figural combinations of animals, humans, and supernatural beings.

The exhibit groupings reflect the distinction between the Tiahuanaco and the Wari styles as well as distinctions between types of patterning. One hat (32) has the technical and constructional features of Tiahuanaco-style hats, but the images and design organization are those of pile hats found at provincial Wari centers on the coast. Measurements are given in centimeters. Height, including corner peaks, precedes circumference.

Five hats in the current exhibition were given to The Metropolitan Museum of Art in 1983 by Mr. Arthur M. Bullowa. The remaining

hats were lent for the exhibition by Mr. Bullowa.

The earliest hats in the Tiahuanaco style have small corner peaks, an elongated form, and a somber color range. Colored patterns are produced in larkshead knotting over a core with color substitution from the core. Ridged patterns are made by alternating the upward face of the larkshead knot. Hats are constructed in one piece, from the top downward.

Shorter, monochrome hats occur later in the coastal Tiahuanaco sequence. Some rare forms, like the openwork examples, have not been recorded previously and dating would be speculative. The smaller openwork hat (5) is included here because it does not have pile. However, its sewn construction may indicate that it was made in the Wari domain.

1. *Standing figure with up-streaming hair and hook motif on alternate sides. Plate 2*
h. 15.2 cm; c. 40.6 cm
4th–8th century
2. *Low-relief zigzag pattern; dark blue with a red top. Figure 4*
h. 17.8 cm; c. 50.8 cm
4th–8th century
3. *Rectangles and vertical stripes in low relief; monochrome black.*
h. 10.2 cm; c. 52.1 cm
10th–12th century
4. *Openwork grid on sides; obliquely divided top with eight banded triangles.*
h. 10.8 cm; c. 52.1 cm
5. *Openwork with checkerboard grid on sides; concentric color squares on top. Hat construction from bottom up; sides sewn to top.*
h. 10.0 cm; c. 43.0 cm

Hats with colorful geometric patterns worked into the base knotting are found in association with artifacts in the Classic Tiahuanaco style at sites in northern Chile, Bolivia, and southernmost Peru. The symmetrical repetition of geometric motifs on the hat sides and tops may reflect ancient concepts of spatial divisions in three dimensions.

Larkshead knotting with color changes; one-piece construction.

6. *Paired profile birds and horizontal zigzag band; top divided into triangles with faces.*
h. 14.6 cm; c. 46.4 cm
Said to be from highland Bolivia
7th–9th century
 7. *Four part diamonds, interlocked hooks and horizontal zigzag band with faces; hat top divided into triangles. Plates 5, 6*
h. 12.7 cm; c. 43.8 cm
Said to be from highland Bolivia
7th–9th century
 8. *Four part diamonds, interlocked hooks and horizontal zigzag band with faces.*
h. 12.7 cm; c. 47.6 cm
Said to be from highland Bolivia
7th–9th century
 9. *Eight-pointed stars with faces and zigzags and crosses on corners; hat top divided into serrated triangles with eye motif. Front Cover*
h. 12.7 cm; c. 50.8 cm
7th–9th century
- Fragments of pile hats and headbands are found at Wari sites on the south and central coast of Peru. A frequent image on Wari pile hats consists of a frontal face surrounded by feathers. The faces are usually stacked in vertical bands with head-

dress and wing elements extended laterally. The image of a frontal face with a corona of feathers is a major icon on monumental architecture, ceramics, and textiles of this time period. A contrasting band with diamonds, or occasionally zigzags, cuts through the stacks of faces and feathers. Geometric motifs, such as triangles, are sometimes arranged in vertical bands and combined with the blue diamond band.

Larkshead knotting with supplementary pile elements; sewn construction.

10. *Vertical diamond band flanked by stacked faces with adjacent feather motifs.*

h. 15.9 cm; c. 56.5 cm

7th–9th century

The Metropolitan Museum of Art, Gift of Arthur M. Bullowa, 1983 1983.497.4

Pub. Lapiner 1976, fig. 573, top center

11. *Vertically stacked faces and flanking feather motifs; horizontal diamond band. Plate 4*

h. 14.0 cm; c. 50.8 cm

7th–9th century

12. *Vertically stacked faces and flanking feather motifs; horizontal diamond band.*

h. 9.5 cm (no corner peaks); c. 50.8 cm

7th–9th century

13. *Faces and feather headdresses; horizontal zigzag band.*

h. 11.4 cm; c. 50.2 cm

7th–9th century

14. *Vertical bands of triangles; horizontal diamond band.*

h. 10.8 cm; c. 49.5 cm

7th–9th century

15. *Feather elements flanking concentric squares; horizontal band of stepped diamonds.*

h. 10.8 cm; c. 52.7 cm

7th–9th century

The Metropolitan Museum of Art, Gift of Arthur M. Bullowa, 1983 1983.497.8

Pub. Lapiner 1976, fig. 573, bottom right

Many Wari hats are patterned with geometric motifs, some of which are repeated within geometric grids. The image of a concentric diamond with a four-part center is the most elaborate and takes up an entire side. Smaller-scale motifs usually appear with four on each side. Regular color alternations, within the four modules on one side or between two opposite sides of the hat, emphasize the orderly arrangement of the hat.

Larkshead knotting with supplementary pile elements; sewn construction.

16. *Outlined crosses repeated in a square grid.*

h. 10.8 cm; c. 52.7 cm

7th–9th century

17. *Concentric diamonds repeated in a square grid.*

h. 11.4 cm; c. 50.8 cm

7th–9th century

18. *Nested diamond motif with a four-part center; hat top has concentric squares. Plate 7*

h. 12.4 cm; c. 51 cm

7th–9th century

The Metropolitan Museum of Art, Gift of Arthur M. Bullowa, 1983 1983.497.6

Pub. Lapiner 1976, fig. 573, bottom left; New York, 1983–84, p. 114

Many Wari pile hats combine rectangular grids with the repetition of figural motifs. Birds, shown with wings and tail feathers, are the most frequent image, although many repre-

sentations combine avian attributes with the long legs and toothed maw of land mammals, possibly the alpaca or, at times, the feline.

Colors are generally repeated obliquely within groups of four and sometimes across the volume of the hat. The iconography and design layout of this group of hats are clearly related to the local tradition of corner-ornamented cloths from the Peruvian south coast (see Figure 2, p. 5), although the hat form and knotting technique derive from the highland tradition. One hat (22) repeats flying birds against a background of a single color in a zigzag color pattern.

Larkshead knotting with supplementary pile elements; sewn construction.

19. *Gridded repetition of a creature with bird and possibly alpaca attributes.*

Back Cover

h. 11.4 cm; c. 51.4 cm

7th–9th century

20. *Gridded repetition of birds; sides divided by vertical red band.*

h. 10.2 cm; c. 55.9 cm

7th–9th century

Pub. Lapiner 1976, fig. 573, top left

21. *Gridded repetition of birds in alternation with colored squares. Plate 1*

h. 11.4 cm; c. 54.6 cm

7th–9th century

22. *Repetition of flying birds in rows and columns against a red background.*

h. 10.2 cm; c. 54.6 cm

7th–9th century

Larger, more elaborate figures are depicted singly or in pairs on each side of Wari pile hats. The figures are likely supernatural, as they frequently combine several traits of humans, felines, camelids, or birds in a single depiction. Some figures, like the

kneeling or running staff-bearer, have their origin in highland Wari and Tiahuanaco art. However, the stylization and color organization are related to the coastal tradition as seen in the corner-ornamented cloths of Nasca.

Although the sides of most of these hats are not gridded, the color relationships between opposite sides of the hats suggest that they were conceived as a three-dimensional module of a volumetric grid.

Larkshhead knotting with supplementary pile elements; sewn construction.

23. *Grotesque bird with wing, tail, and legs akimbo has a split eye and tooth-filled mouth. Figure colors alternate on all sides against red background.*
h. 12.7 cm; c. 52.1 cm
7th–9th century

24. *Pairs of four-legged animals with splayed limbs, split eyes, and shared mouth bands. Figure/ground colors rotate on two sides and repeat on the others. Top patterned with three concentric squares.*
h. 12.7 cm; c. 61.0 cm
7th–9th century

The Metropolitan Museum of Art,
Gift of Arthur M. Bullowa, 1983
1983.497.5
Pub. Lapiner 1976, fig. 573, top right

25. *Running or kneeling staff-bearer with split eye; double-headed serpent behind him. Colors repeated on opposite sides of the hat. Plate 3*
h. 11.4 cm; c. 53.3 cm
7th–9th century

26. *Creature with feline attributes; bands of triangles, zigzags, or squares above on each side. Figure and ground colors inverted on opposite sides.*
h. 7.9 cm (no corner peaks); c. 48.9 cm
7th–9th century

27. *Gridded repetition of full figures on two opposite sides, and birds and heads on the other two sides. Figure has an animal muzzle and tail but an upright, human stance.*
h. 11.4 cm; c. 50.5 cm
7th–9th century

Some Wari pile hats with grids repeat more than one type of figure. Here, a bird is alternated with the head of a staff-bearing figure. The toothed mouth, split eye, and elaborate head-dress can be seen on the full-figure representation on another hat (25).

Larkshhead knotting with supplementary pile elements; sewn construction.

28. *Gridded repetition of faces and birds; colors repeat on opposite sides.*
h. 12.7 cm; c. 52.7 cm
7th–9th century

Geometric grids comprise a large class of patterns used on the sides of Wari pile hats. Axes on the horizontal, vertical, and diagonal produce infinitely repeating grids of triangles, diamonds, and squares. Several grids may be simultaneously present, masked, or highlighted by color.

Representations of four-cornered hats on ceramics usually have grids of concentric diamonds. Checkerboard grids often have another motif, either figural or geometric, within modules. In one unusual hat (31), the checkerboard grid is isolated as a motif. The coarser scale of knotting and the variation in the hat tops and tassels may suggest that this type of large hat with long pile was made after the waning of Wari power on the coast.

Larkshhead knotting with supplementary pile elements; sewn construction.

29. *Six-color triangular and square grid.*
Plate 8, right

h. 15.2 cm; c. 55.9 cm
8th–10th century

30. *Concentric diamond grid; concentric diamond on top. Hat top looped.*
Plate 8, center
h. 15.2 cm; c. 50.2 cm
8th–10th century
The Metropolitan Museum of Art,
Gift of Arthur M. Bullowa, 1983
1983.497.7
Pub. Lapiner 1976, fig. 573, bottom center

31. *Checkerboard motif repeated in two rows. Plate 8, left*
h. 11.4 cm; c. 54.6 cm
8th–10th century

The hat exhibited here has the gridded format and bird and feather motifs common to Wari pile hats. However, it is constructed in a single piece from the top down, without pile, and has an elaborately patterned top, like Tiahuanaco hats. A hat with some of the same features was excavated at Nieveria, a coastal Wari site. One possible explanation might be that hats of this type were made by the highland Wari, as opposed to the pile hats, which were probably made on the coast. The exceptionally large size, fine workmanship, and orderly patterns suggest that it was used by a person of exalted status.

32. *Gridded repetition alternating an abstracted motif composed of two bird heads and feather motifs with a profile bird that has a split eye and raptorial beak. The top is patterned with raptorial bird heads repeated eight times along reflection axes; simultaneously, the eight profile heads can be perceived as four frontal faces. Plates 9, 10*
h. 17.8 cm; c. 57.8 cm
7th–9th century

Footnotes to Text

1. Lapiner 1976: fig. 576; Schmidt 1929: 267.
2. Menzel 1968: fig. 48; Dockstader 1967: fig. 141.
3. de Lavalley 1984: 159.
4. de Lavalley 1984: 158; Eisleb and Strelow 1980: fig. 248.
5. de Lavalley 1984: 163; Lapiner 1976: figs. 577, 578.
6. Lapiner 1976: fig. 554; Schmidt 1929: 412 (top right).
7. Anton 1962: 120; Lumbreras et al. 1978: fig. 55; Eisleb and Strelow 1980: 260; Lapiner 1976: fig. 576.
8. Sawyer 1975: fig. 176; Clifford 1983: 276–277.
9. Lapiner 1976: fig. 557.
10. Ferber, Fane et al. 1987: fig. 33.
11. Posnansky 1958, vol. IV: fig. LXVI; Santiago 1983: 85, entry 0998; de Lavalley 1984: 130.
12. Baessler 1902–3, vol. 4: fig. 421.
13. The same knot is referred to as a “square knot” in d’Harcourt 1962: fig. 81 and Rowe 1986: 161. Although a square knot and a larkshhead are interlaced identically, the knot used in the hats is set as a larkshhead or suspended knot (see Emery 1966: 36–37 for this distinction). Larkshhead is used here because a new variant, which is worked over a core, is included, and it cannot be construed as a square knot.
14. Kajitani 1982: fig. 73; Baessler 1902–3: IV, pl. 147; de Lavalley 1984: 113.
15. An exception is a hat without pile excavated at the Wari site of Nieveria (see O’Neale and Kroeber 1930: pl. 26). The hat pictured in Plates 9 and 10 may be another exception.
16. Rydén 1944: fig. 100 illustrates a round pile hat from a Tiahuanaco site.
17. Cook n.d.: 52–58; Conklin 1985: 1–2.
18. Uhle 1922: pl. XXV (Tacna); museum (Mochegua); Santiago 1985: 78, 79, 82 (Arica); Santiago 1983: cover (Arica); museum (Cochabamba); Montell 1929: 20–21 and fig. 2 (said to be highlands); d’Harcourt 1962: pl. 72b (Ollachea).
19. Posnansky 1958, vol. IV: fig. LXVI.
20. An exception to this occurs in the Mochegua Valley, where the Wari sites of Cerro Baul and Cerro Mejia are intrusive into an area of Tiahuanaco occupation (Cook n.d.: 47).
21. Benson and Conklin 1982: 92 (Palpa); O’Neale and Kroeber 1930: pl. 20 (Cahuachi); d’Harcourt 1962: pls. 73a, b (Nasca); Eisleb and Strelow 1980: 348 (Chuquitanta) and 341 (Ica); Izikowitz 1933: pls. 1a, b (Acari); Eisleb and Strelow 1980: 347 (Ancon) and 342 (Chancay); Baessler 1902–3, vol. IV: fig. 408 (Pachacamac); Rowe 1986: fig. 38 (Chilca).
22. Menzel 1968: fig. 48 (Ica-Nasca region); Baessler 1902–3, vol. IV: fig. 421 (Pachacamac); Schmidt 1929: fig. 267 (Pachacamac); Anton 1962: pl. 113 (Anja in the Mantaro Valley).
23. The Wari sequence is based on the stylistic seriation of Menzel 1964 and 1968.
24. Rowe 1986: 161–162.
25. Santiago 1985: 20.
26. See Cook n.d., Table 3, for a summary of seven different dating sequences for Tiahuanaco; a rough median of these dates is used.
27. Uhle 1922: pl. XXV; Santiago 1985: 79, entry 150.
28. Conklin 1985: 1–2.
29. Oakland 1986: 101–102.
30. Sawyer 1963: 27; Bird and Skinner 1974: 5–13.
31. The number of seams and constructional joins in the side panels varies widely in individual hats; for variations on starting edges, see Rowe 1986: 164, note 8.

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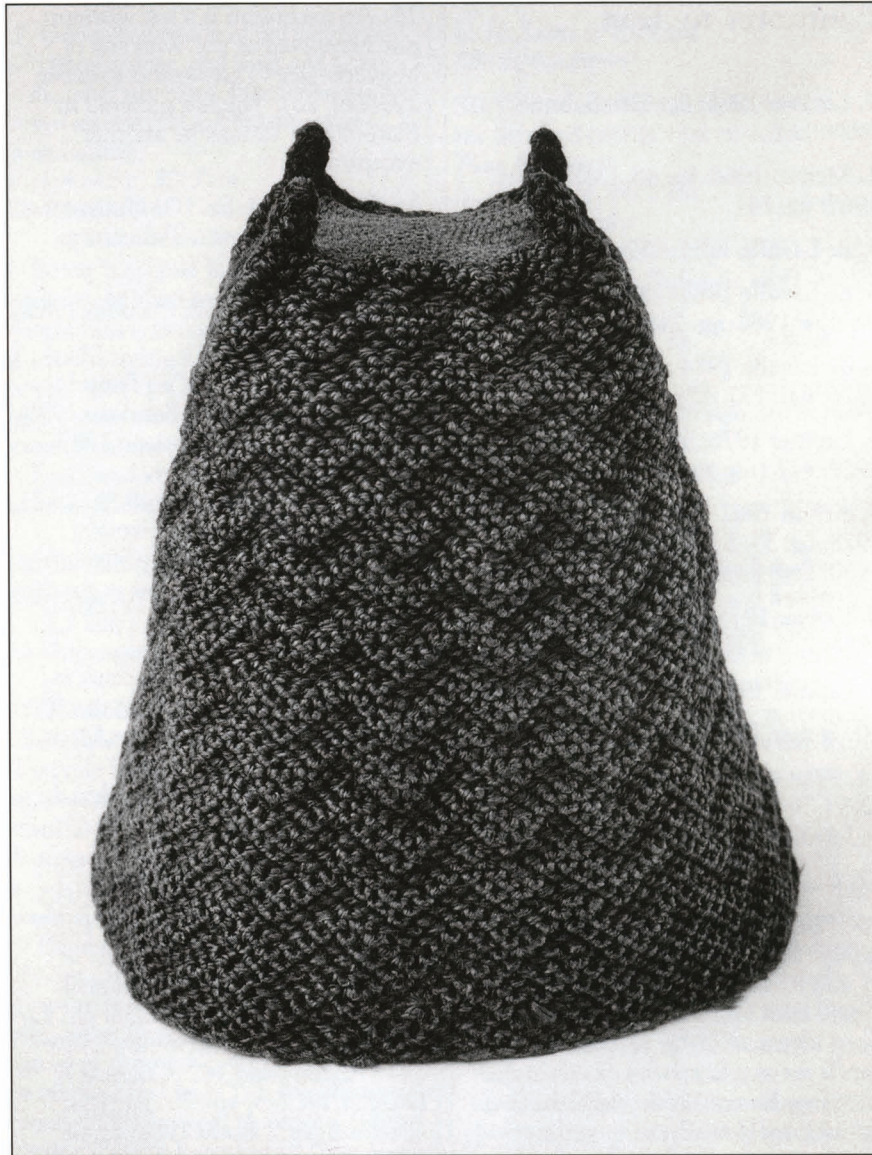


Figure 4. Tiahuanaco-style hat of the earliest type. The low-relief pattern of zigzags results from alternating the upward and downward face of the knot. Checklist 2

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Andean Four-Cornered Hats

Ancient Volumes



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