PRE-CERAMIC ART FROM HUACA PRIETA, CHICAMA VALLEY

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While excavating pre-ceramic debris at the Huaca Prieta in the Chicama Valley just north of Trujillo two small carved gourds were found with a burial, a shallow, simple interment in the side of the community refuse dump.[1] Both were inside a woven cotton pouch which measured 12 by 21 cm. The gourds were so rotted that they were scarcely stronger than cigar ash and would have been abandoned except for the fact that they showed traces of carving. It required much painstaking work to harden the fragments and reconstruct the gourds for study.[2]

The results fully justified the effort, for these specimens were the only items of their kind encountered among the 10,770 gourd fragments and objects of gourd found in the same pit. Out of this total only thirteen pieces show any trace of decoration. Some pieces are crudely decorated by scratching away the outer surface or epidermis before the fruit was thoroughly dry, but the scratches in no instance form a recognizable design or pattern. Two fragments have fine incised line hatching. Five others show pyroengraving, but all are too incomplete to reveal the nature, quality, or extent of the design. None of the fragments show the careful cutting and combined use of fine and broad lines found on the two items from the burial. The lack of similar decorated pieces in the refuse suggests that the two containers were not made on the site but were importations.

The more complete of the two, fig. 1, b and c, measures 6.5 cm. in diameter and is 4.5 cm. high; the other, fig. 1 a, is slightly smaller. Both had lids cut from larger gourds, each with a yarn-whipped flange fitting inside the container opening.

The decoration of the better preserved gourd consists of four faces occupying equal segments of the surface, shown in flat projection in fig. 1 b. Its lid, though simply marked, may have been so fitted that its markings coincided with the quadrant plan of the design below it.[3]

The second gourd, fig. 1 a, has a more complex theme, two human figures with their faces visible on opposite sides of the gourd, while their bodies and limbs are cleverly adapted to the small area across the bottom. It is, in fact, difficult to recognize the import of these lines on the original specimen, and they were not understood until Miguel Covarrubias showed me how they separate to form the two figures. Even he, however, could not interpret the lines in the remaining spaces on the sides. These are areas where cleaning was stopped, and in them the course and relationship of all the lines is not clear. The lid of this specimen bears an S-shaped incised figure with bird heads at each end. Although the adaptation to small areas may have modified the proportions of these heads, the shape of the beaks and the projections above them suggest the male condor.

The two containers have been shown to various artists and art historians who were asked for comments. All were in agreement on two significant points: that the work is not that of a beginner or someone experimenting in gourd carving, and that the character of the designs indicates a well established traditional art style. None could suggest a source or even a close parallel. The burial, No. 99.1/903, with which these specimens were found did not differ in arrangement from others above and below it, except that it was the only one in which artifacts other than matting had been deliberately placed with the body.

The position of the burial indicates that it was contemporary with Excavation Layer 0. It was located exactly two thirds of the distance down from the surface to the bottom in sloping strata which expand nearby to a present thickness of 13.7 m. As this large mound is and has been eroding for about 3,000 years, the original depth of refuse may well have been 3 m. greater. The whole mound consists of occupational debris resting on a flat surface, and all of it was deposited prior to the appearance of ceramics in this part of Peru.

The first C-14 measurements on samples from Huaca Prieta were made by the Chicago laboratory in 1950 using the solid carbon method.[4] The mean ages for the samples nearest to the burial (C-313 and C-316) suggest a date in the twenty fourth century B.C. for the burial. However, later measurements suggest that this date is too early. In 1955 the Lamont Laboratory ran two samples from the base of the deposit at Huaca Prieta using the newer carbon dioxide method (L-116A and L-116B).[5] Since publication of the results, the laboratory has corrected the age determinations by adding 200 years to each, because of the Suess effect. The earliest date which fits both of the revised Lamont measurements is 2125 B.C. The standard deviation figures for the earlier solid carbon dates are so large that these dates can be adjusted to the results of the Lamont measurements. If we accept 2125 B.C. as the most probable date for the beginning of the deposit at Huaca Prieta, the burial in question would be dated about 1950 B.C. Whatever the absolute date turns out to be, we have the positive evidence of stratigraphy that these carvings were made long before the appearance of pottery on this part of the coast.

Since the gourds were reconstructed, a study of the fabrics from the preceramic deposit has revealed far more patterning and design than we had previously expected. The commonest construction technique is twining with spaced wefts and exposed warps. Other pieces are woven, knotted, or looped. In the last two categories patterned examples are fairly common, but the techniques limit the design to structurally created diamonds variably spaced with bars or rows of small squares.

In the woven pieces patterning, except for stripes, is accomplished with warp floats. The most elaborate of these pieces, found above the level of the gourds, shows a bird figure, inverted and reversed in a repeat (fig. 2). The design was reconstructed by using a microscope to determine the position of the floats and then plotting them on graph paper.

In the twined fabrics warp stripes are common, though only rarely is their presence indicated by surviving color differences. Structural pattern-

ing was done by warp manipulation, the warps being shifted or transposed laterally and from face to face in various ways. A few patterned pieces, while technically complex, apparently made no use of color. The decoration consists of structurally contrasting areas in simple geometric arrangements. In the remaining twined specimens the manipulation of the warp was for the control and distribution of color. These are the specimens pertinent to the present topic.

Recognition of the designs in pieces where color contrast was used is difficult because of loss of dyes, pigments and natural fiber shades. Only in rare instances do color contrasts survive. Where the color is gone, special photographic techniques can help, but in most cases one must work with a microscope and plot each and every warp yarn movement in order. In this way the original shifts of color position can be determined, and, if enough of the fabric survives, the pattern or figure can be reconstructed.

Some of the designs are purely geometric assemblages of small diamonds and lines to form bold chevrons and squares. Others are representations of people, birds, or animals. These designs are achieved by two basic systems. One, in which the design shown in fig. 3 is executed, is technically identical with the construction of certain Woodland twined bags of North America. In the other system the warp pairs are handled somewhat differently, giving more solid color areas and sharper color divisions. The use of the latter system has not survived into historic times anywhere, as far as I know.

Both methods have technical limitations which give specific characteristics to the designs. In the first method, if the vertical lines of a figure parallel the warp, the horizontal color divisions, running across the warp, are clear, sharp, and straight. Deviations from a continuous horizontal have to be stepped by at least the space between weft rows and are clearly visible. Verticals are inevitably slightly zigzag but can be shifted less abruptly than the horizontals. Diagonals with minimum angles away from the vertical, determined by the ratio of the warp-weft count, are jagged and become increasingly serrated as the angle increases.

The second method produces serrated lines for both verticals and horizontals but has straight diagonals along the angle of the warp shift movement. Any other diagonal shift will be stepped.

In both methods, curves could be indicated as a series of steps but would be effective only in larger figures than those encountered. All figures done in these techniques are markedly angular, and faces shown in front view could have a stylistic resemblance to those on the gourds.

The degree to which such structural factors affect an art style will be directly proportional to the frequency with which the medium is used. At the Huaca Prieta the available media, in addition to textiles and gourds, include bark cloth, matting, basketry, wood, shell, bone, and stone. No decoration has been found executed in any of these materials, a situation which forces us to the conclusion that textiles were the major medium used in artistic expression. What is more, textiles were the major medium from

the beginning of the occupation of the site. The complex techniques appear in the earliest levels and were already fully developed. Curiously, in the upper strata there is a suggestion of cultural, or at least artistic, degeneration. Production of the elaborate fabrics ceased completely, and there was no continuity of this form of expression into the later times.

What happened at Huaca Prieta need not have happened in other areas. Frédéric Engel has published a figured twined fabric from a pre-ceramic burial in the valley of Asia, about 660 km. south of the Huaca Prieta, which may date to late pre-ceramic times.[6] The design consists of large, angular double headed snakes. The construction of the Asia specimen is not exactly duplicated in the Huaca Prieta collection.

Perhaps more significant as a suggestion of continuity is the recurrence and distribution of the double headed snake theme. It appears in fig. 4 with crab appendages. Versions of the same motif are commonly executed in Paracas Cavernas (T-3) embroideries, double cloths and gauze weaves.[7]

Our sample of the other representations is too small to indicate preferences. I doubt that the use of the condor and of animal figures which might be cats has any more significance than the depiction of the crabs. The artists were representing the creatures they were familiar with, and if we find that their preference ran to the more impressive ones in each category, is that grounds for any but broad comparisons? What we should note is the absence of the type of emphasis on fangs which is so strongly apparent in the subsequent art of Chavín and wherever Chavín influence was felt.

This limited evidence suffices to extend the known antiquity of artistic expression in Peru and indicates at least some continuity with the work of later times. It shows that an angular, highly conventionalized style can be an outgrowth of technique and does not have to fit into any theoretical sequence of art forms starting with naturalistic treatment. There is as yet no basis for suggesting the origin or antecedents of this art style. As it is primarily a textile art, the chances of solving the question of its origins are exceedingly remote and will, in any case, involve an understanding of the rise and development of twined fabric technology in various parts of the world.[8]

NOTES

[1]The excavations at Huaca Prieta were made for the American Museum of Natural History in 1946-47. For a general account of the site, see Bird, 1948.

[2]The initial field conservation was effected by slipping the gourd fragments from the pouch to wire screening and dipping them several times in a very dilute celluiose acetate, acetone and amyl acetate solution with no attempt at cleaning. Later each fragment was lined on its inner surface with bits of rice paper and, as contacts were established, the breaks also were covered. This procedure resulted eventually in the formation of a complete paper shell inside each specimen.

Next, over a period of weeks, very small amounts of the hardening solution were injected through the paper into the gourd material. Cleaning of the outer surface was left to the last and was the most delicate step, for the hardened dirt and dust had to be softened and removed without converting the gourds to a paste. In one case the work was completely successful; in the other it had to be stopped before all details were exposed.

[3]This gourd was illustrated by Covarrubias, 1954, fig. 2, p. 16.

[4]Bird, 1951.

[5]Kulp and others, 1952, p. 410; Broecker and others, 1956, p. 163.

[6]Engel, 1959, pl. 2.

[7]O'Neale, 1942.

[8]In using the illustrations to this paper it must be borne in mind that figs. 4, 5, 6 and 7 are plotted reproductions of yarn movements, laid out on graph paper at a warp-weft ratio of two to one. When this ratio differs radically from the warp-weft ratio of the specimen there is distortion. In fig. 6 the wing spread of the bird would be about one twelfth greater if the diagram were drawn in true proportion.

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KEY TO ILLUSTRATIONS

Fig. 1 (Plate II), a, b, projections of the carved decoration on two small gourd containers and their lids. The solidly dark areas and heavy lines have been carved or excised; the finer lines incised or scratched. The two figures shown separately, upper left, interlock across the bottom of gourd a. Below, c is a side view of gourd b and d is a top view of the cover. The two gourds were found together at Huaca Prieta in Excavation 3, Layer O. Cat. No. 41.2/2555, 2554.

Fig. 2 (Plate III). Two bird figures created with a single faced, warp float, weave of two ply cotton yarn. Huaca Prieta, Excavation 3, Layer H_2I_2. Loom width of fabric, 10 cm. Cat. No. 41.2/1205.

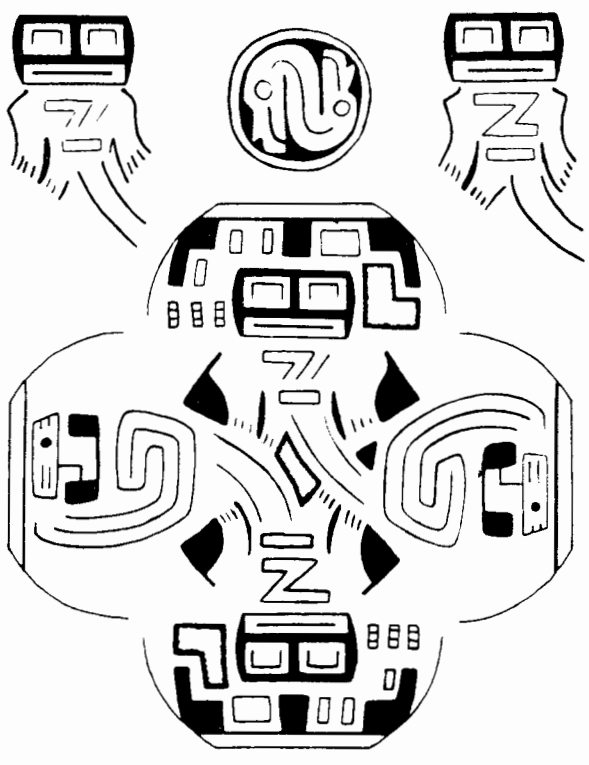
Fig. 3 (Plate III). Two incomplete human figures from a twined construction fabric. The transposed warp technique of this specimen is the same as that used in some Woodland twined bags. Both figures lack heads, as that portion of the fabric is missing. Between the two, in a blue stripe, are an S-shaped figure with bird (?) heads at each end and a small bird seen in profile; both figures are in red. Huaca Prieta, Excavation 3, Layer F. Cat. No. 41.1/9613.

Fig. 4 (Plate IV). A double-headed figure with appended rock crabs, created in a twined fabric with a transposed warp technique. The shaded background indicates the extent of the surviving textile, beyond which all portions of the figure are reconstructed. Huaca Prieta, Excavation 3, Layer G. Original length perhaps 40.5 cm. Cat. No. 41.1/9826.

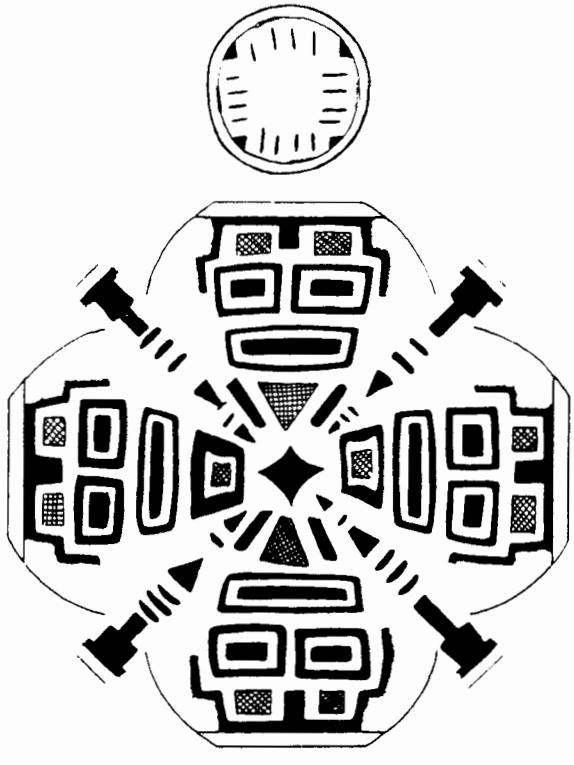
Fig. 5 (Plate IV). A plotting of the figures in a small, rectangular twined fabric of transposed warp technique. The area, measuring 18.3 x 28.7 cm., is divided into four separate units, the first containing two rock crabs, the other three of uncertain interpretation because sections are missing. Huaca Prieta, Excavation 3, Layer M. Cat. No. 41.2/1711.

Fig. 6 (Plate V). Figure of a male condor with a snake in his stomach, from a transposed warp technique, twined fabric. As plotted, the height is exaggerated; the dimensions of the original figure are 17.2 x 10.5 cm. Huaca Prieta, Excavation 3, Layer K. Cat. No. 41.2/1501.

Fig. 7 (Plate V). Bird figures in twined, transposed warp construction from two specimens. Fig. 7a, incomplete stylization of the male condor in profile, repeated in a pattern stripe. Original length of figures, beak to tail, 18 cm. Color, blue against natural cotton. Huaca Prieta, Excavation 3, at juncture of the M and N layers. Cat. No. 41.2/1716. Fig. 7b, a reconstruction of a possible placing of the bird figures of 7a within the stripe area. Fig. 7c, succession of parrot-like bird figures, each 5.6 cm. long, within a pattern stripe. Huaca Prieta, Excavation 3, Layer M. Cat. No. 41.2/1695.



1a



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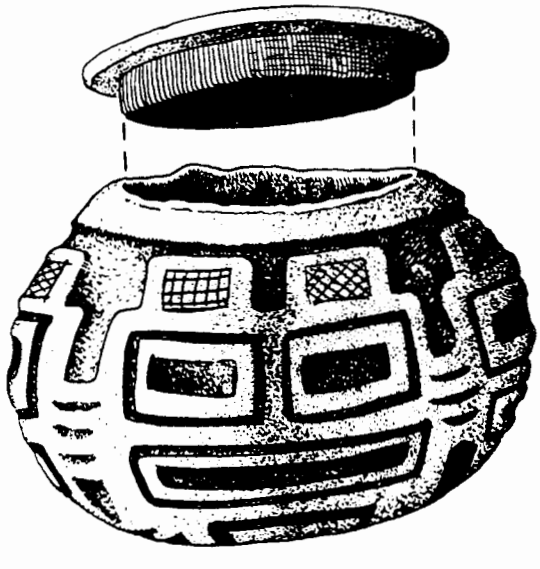

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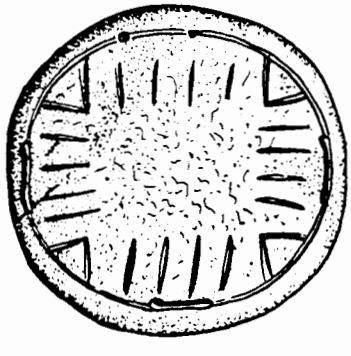

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Plate II. Fig. 1, carved gourds from Huaca Prieta. a,b, projections of the designs; c, side view of gourd shown in b; d, cover of same gourd. (See key to illustrations for explanation.)

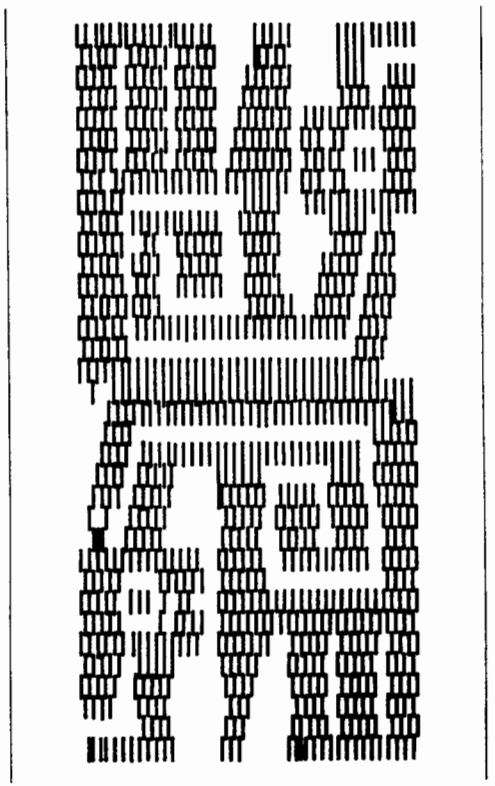

Fig: 2

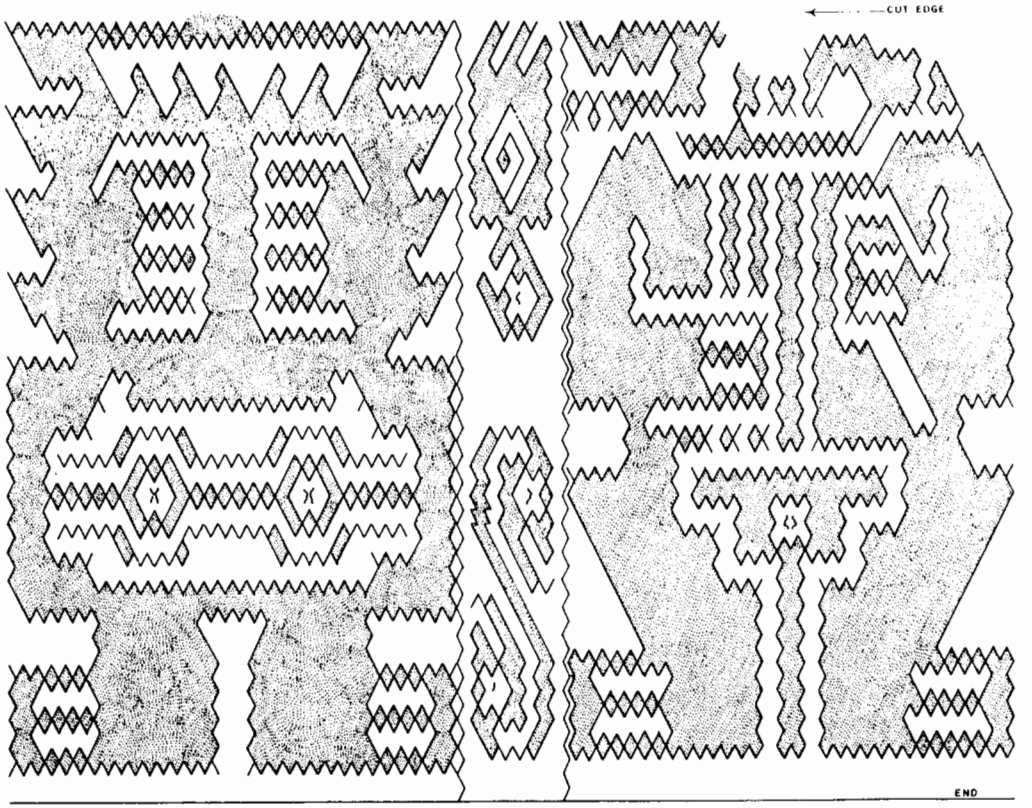

Fig. 3

Plate III. Fig. 2, bird figures on woven textile from Huaca Prieta; fig. 3, human figures from twined fabric. (See key to illustrations.)

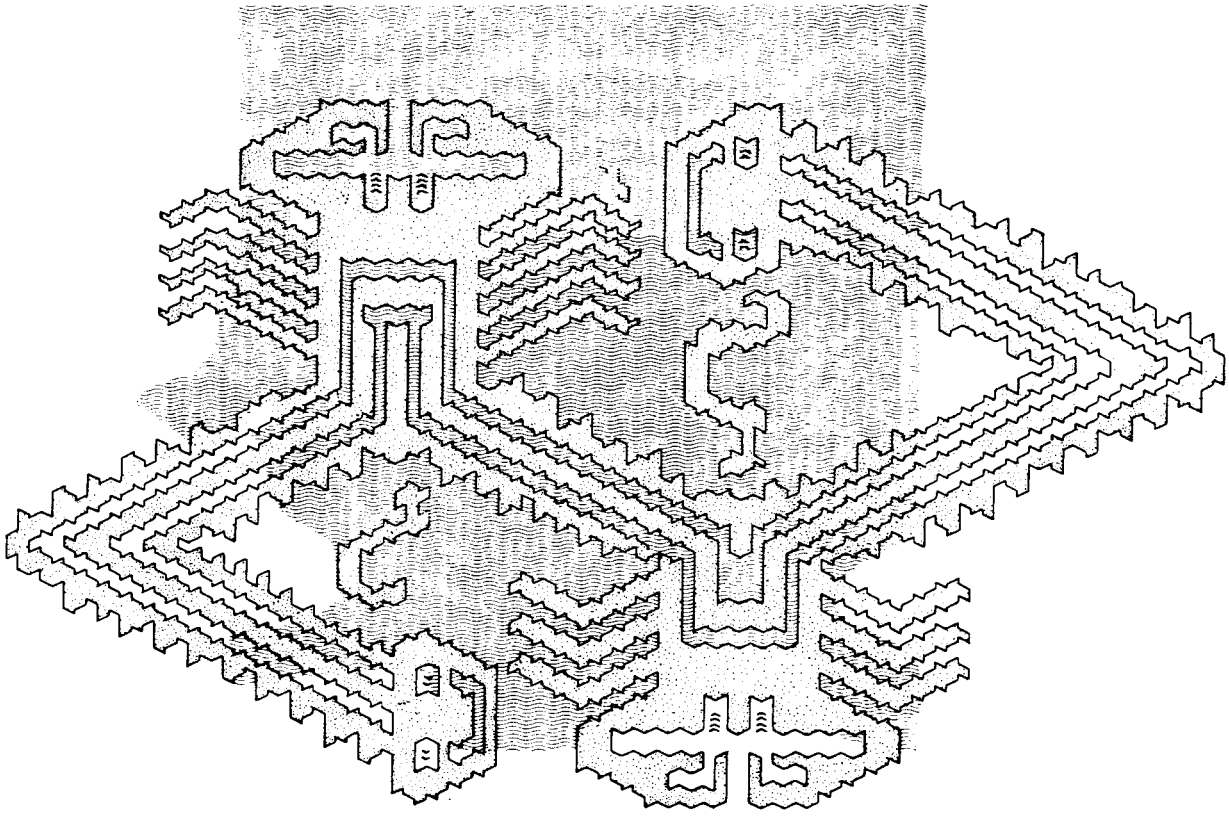

Fig. 4

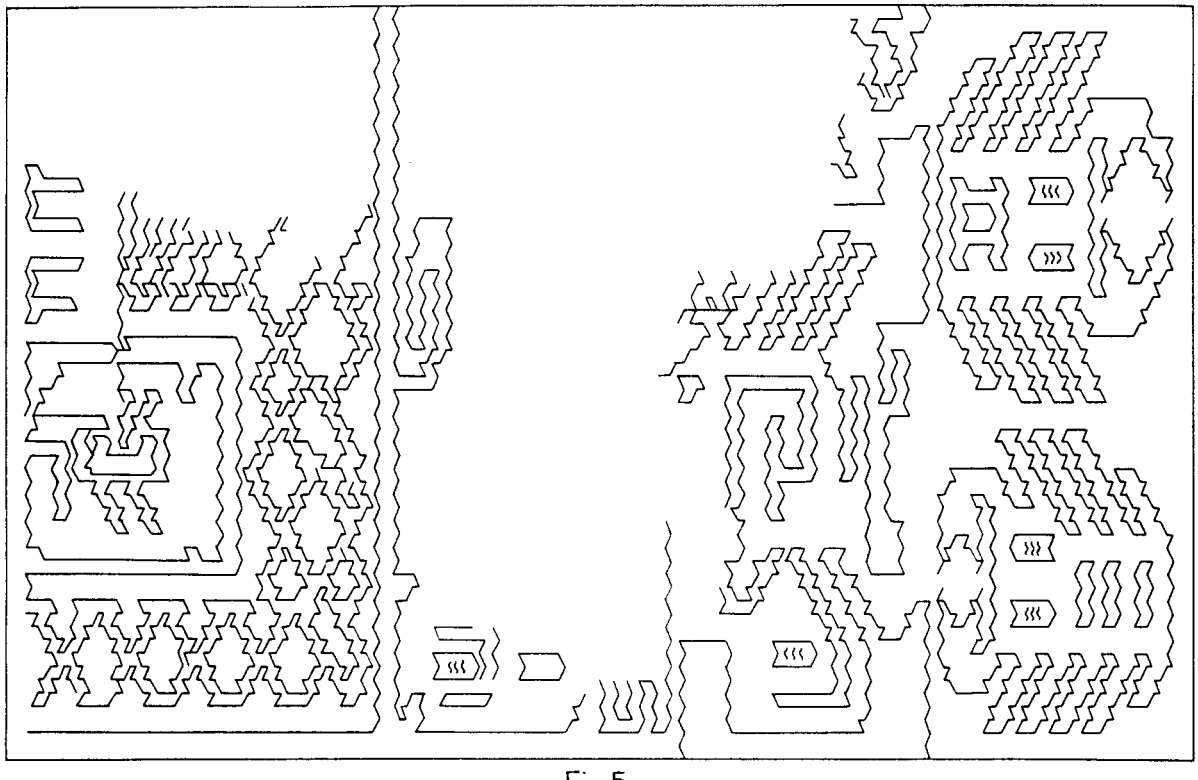

Fig. 5

Plate IV. Fig. 4. double headed figure with appended rock crabs from a twined fabric; fig. 5. rock crabs and unidentified design units from a twined fabric. (See key to illustrations.)

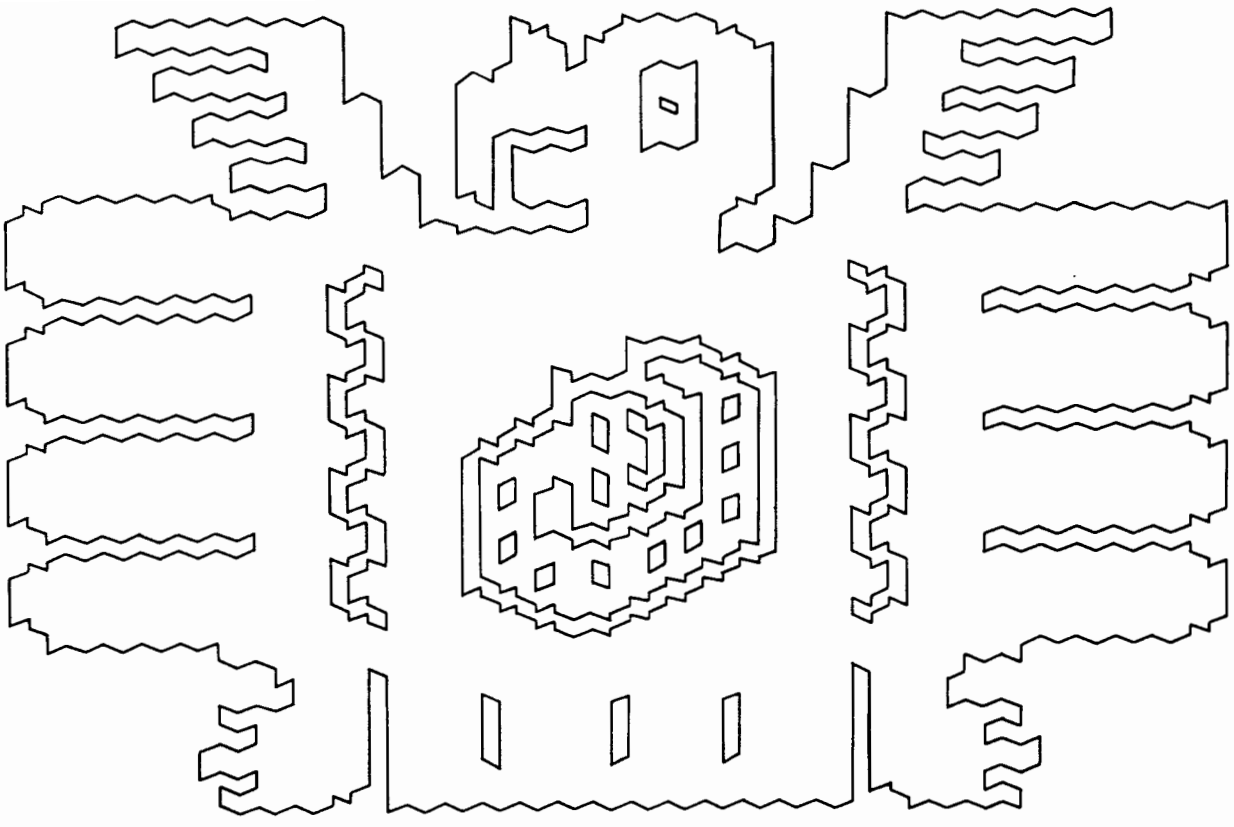

Fig: 6

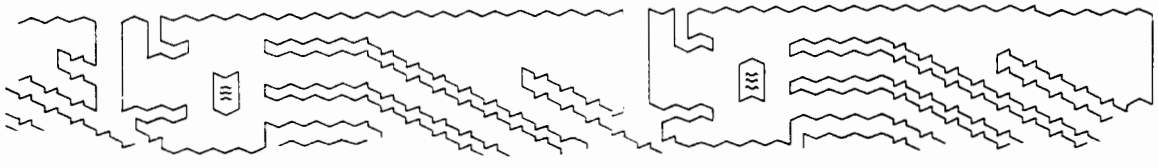

Fig: 7a

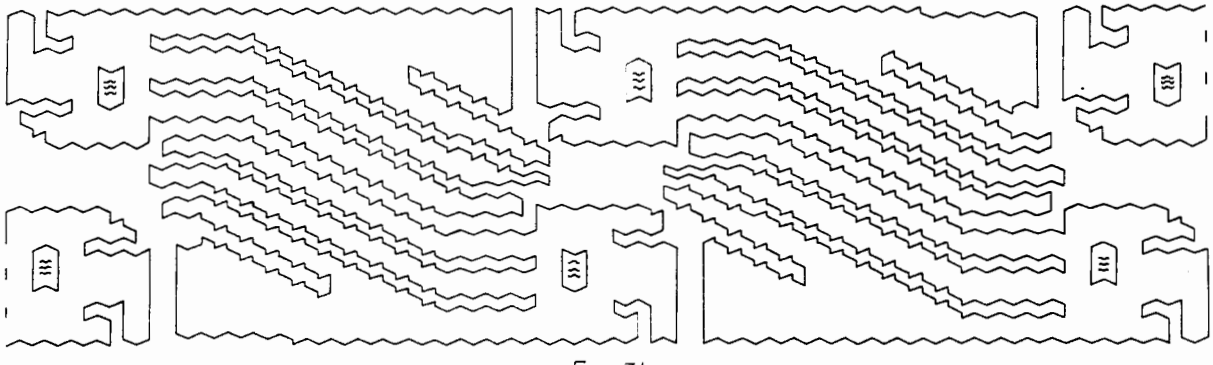

Fig: 7b

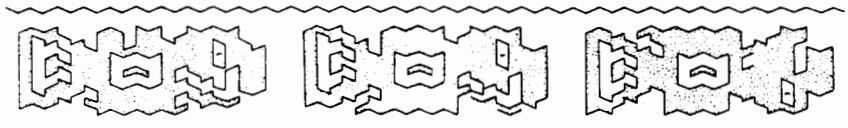

Fig: 7c

Plate V. Fig. 6, figure of male condor with a fish in his stomach (height exaggerated); fig. 7a, incomplete bird figure design; 7b, suggested reconstruction of 7a; 7c, band of parrot-like birds, all from twined fabrics. (See key to illustrations.)