

ANALES  
DEL  
MUSEO DE HISTORIA NATURAL  
DE  
MONTEVIDEO

2ª Serie Vol. VI

1955

Nº 6

HUMAN FIGURES IN SOUTH AMERICAN PETROGLYPHS AND  
PICTOGRAPHS AS EXCERPTS FROM REPEATING PATTERNS

by CARL SCHUSTER

In several parts of South America we find, often carved or painted on stone, conventionalized representations of human or quasi-human figures with certain peculiarities which seem to set them apart as a group by themselves. In these representations, as can be seen in Figs. 1-3, the sides of the body are defined by series of parallel lines whose extensions form the arms and legs; the body itself and the head being represented perfunctorily (Fig. 1), with some degree of elaboration (Fig. 2), or not at all (Fig. 3).

What is the meaning of these representations? In another place I have discussed patterns composed of human figures joined together by their arms and legs in endless repetition, as they occur in various parts of South America and also in the Old World <sup>(1)</sup>. One of the commonest characteristics of the figures in such patterns — multiplication of the lines representing their bodies and limbs — is perhaps best explained by the fact that the limbs, being continuous, tend to form a kind of network of vertically undulating lines, with the bodies inserted at the points of closest approximation. In such arrangements, some of the multiple lines generally delimit the bodies, while others serve as ligatures between them. It may be said, thus, that the multiplication of lines is a structural consequence of the arrangement of human figures in a certain type of repeating pattern. Though it is impossible to discuss here all the examples cited in the essay mentioned above, the evidence there developed justifies an attempt to reconstruct the all-over patterns from which designs like those of Fig. 1-3 are probably derived.

The way in which such patterns are composed is perhaps best illustrated by the hypothetical reconstruction of Fig. 5. Here the limbs are formed of three lines, of which the central one continues endlessly throughout the pattern, while the inner and outer lines are deflected and interrupted in such a way as to suggest the contours of the bodies. Not all patterns composed of human figures follow precisely this scheme; but the reconstruction of Fig. 5 is fairly well grounded on a number of analogies, and it may serve

(1) Schuster, 1956. This study, entitled «Genealogical Patterns in the Old and New Worlds», is based on a communication read at the 31st International Congress of Americanists in São Paulo, August 26, 1954, and repeated before the Sociedad «Amigos de la Arqueología» of Montevideo on September 29, 1954, at a meeting held in commemoration of the first anniversary of the death (on September 12, 1953) of the distinguished Uruguayan archaeologist, and secretary in *perpetuum* of the Society, Prof. Carlos A. de Freitas of Montevideo.



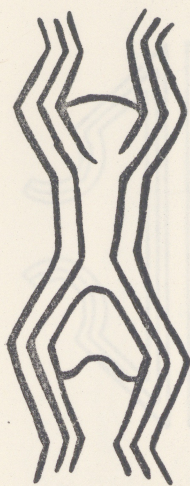


Fig. 1. - Petroglyph.  
Essequibo River.  
British Guiana.



Fig. 2. - Pictograph. Arroyo Maestre Campo.  
Departamento de Durazno. Rep. O. del  
Uruguay.

as an illustration of the principle of combination which explains most examples of the motive of an isolated human figure with multiple outlines.

In Fig. 5 each body has a "head" at one end, and at the other end a motive which might be explained as a vulva; for these patterns are, as we have shown in the essay mentioned above, undoubtedly genealogical, and it would not be surprising if the figures composing them were, at least originally, conceived as females. The alternately upright and inverted positions of the "women" in our reconstruction seems to be required by the shapes of the limbs, and is in any case justified by the design on a wooden club from Guiana illustrated in Fig. 6.

The second example of human figures with multiple outlines, which we shall now consider, is really that which provided the occasion for this article. For the design of Fig. 2, representing one of the pictographs painted on rocks near the arroyo Maestre Campo, Department of Durazno, Uruguay, came to the writer's attention when it was shown in connection with a communication read at the 31st International Congress of Americanists in São Paulo in August of 1954 by Professor J. J. Figueira of Montevideo <sup>(2)</sup>. Recognizing the kinship of the Maestre Campo pictograph with the Guiana

(2) This pictograph had been previously published, in the form of a summary and not very accurate drawing, together with sketches of other pictographs from the same area and other areas in Uruguay, by Larrauri, 1919, pl. 52, fig. 9. After Larrauri's investigations for his publication, which were made in 1905, the pictographs at the arroyo Maestre Campo and other sites in Uruguay received little attention, even their locations being largely forgotten, until their rediscovery and intensive scientific investigation by the late Prof. Carlos A. de Freitas and Prof. J. J. Figueira of Montevideo, beginning in February of 1951. (See their joint report, 1953, and compare Soria Gowland, 1953, p. 25).

In an extensive publication to be entitled *Pictografías y Petroglifos en el Territorio Uruguayo*, which was begun jointly by Professors de Freitas and Figueira, and which is now being carried forward by Prof. Figueira alone, the design here illustrated as Fig. 2 will be included, among other pictographs at the same site, in a section on «Pictografías del Departamento de Durazno», where also a full bibliography of published and unpublished references to these pictographs will be given. The writer is indebted to Prof. Figueira for encouraging his publication of this comparative study of one of the Maestre Campo pictographs in advance of the appearance of his own larger and definitive work,



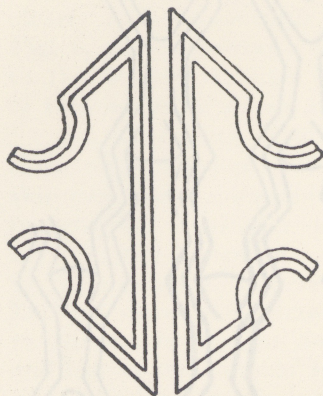


Fig. 3. - Shipaya Painted Design. Río Iriri. Pará. Brazil.

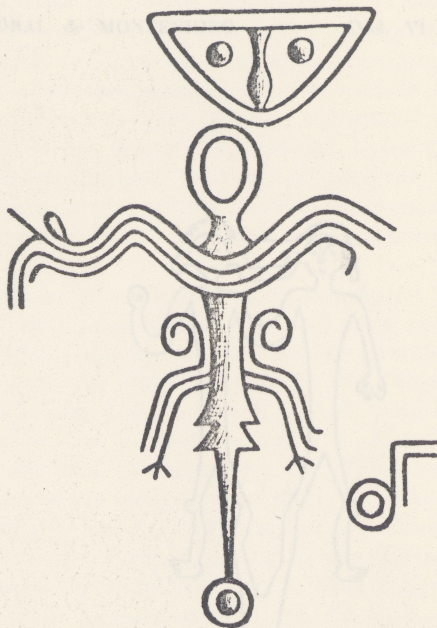


Fig. 4. - Petroglyph. Río Piraparaná. Eastern Colombia.

petroglyph of Fig. 1, and with other designs of the same general type, the writer spoke to Professor Figueira, who later (September 30, 1954) kindly arranged to take him to the arroyo Maestre Campo, for the purpose of making a new tracing of the pictograph, of which our Fig. 2 is an accurate reproduction.

In this design the body of the figure is represented in greater detail than in Fig. 1; and if the bifid appendage at the bottom of the body may be regarded as a vulva, it seems likely that we again have to do with a female. The inner outlines of this figure end below in a pair of feet, while the outer outlines turn sharply upward at the knees, as if to indicate that they once continued outward. At the top of the figure both outlines end abruptly. (For the two spurs projecting inward from the left we have no explanation).

It seems reasonably certain that here again, as in the Guiana design of Fig. 1, we have an excerpt from an all-over pattern of human figures, whose bodies were joined together by common limbs. How such a pattern might have looked is suggested by Fig. 7. It is hardly necessary to emphasize the hypothetical nature of this reconstruction. Obviously, our only guide is one pictograph, which may be, or is perhaps even very probably, the distorted or garbled reflection of an unknown original. Nevertheless, we are confident that the analogy of Fig. 1 and the principle embodied in other all-over patterns of human figures from various parts of South America justify a recon-

and also to Prof. Diego Legrand for kindly extending to him for this purpose the editorial hospitality of the *Anales del Museo de Historia Natural de Montevideo*.

As for the date of the pictographs at the arroyo Maestre Campo, in so far as they are carried out in a dark red pigment, and in so far as they include various designs of the type called «grecas» or frets, it would seem that they are to be associated with the «estilo de grecas» or «fret-style» represented by certain pictographs and «placas grabadas» or engraved plaques of Patagonia, for which Prof. Menghin has most recently proposed a date «not much later than 500 A. D.» See Menghin, 1954.



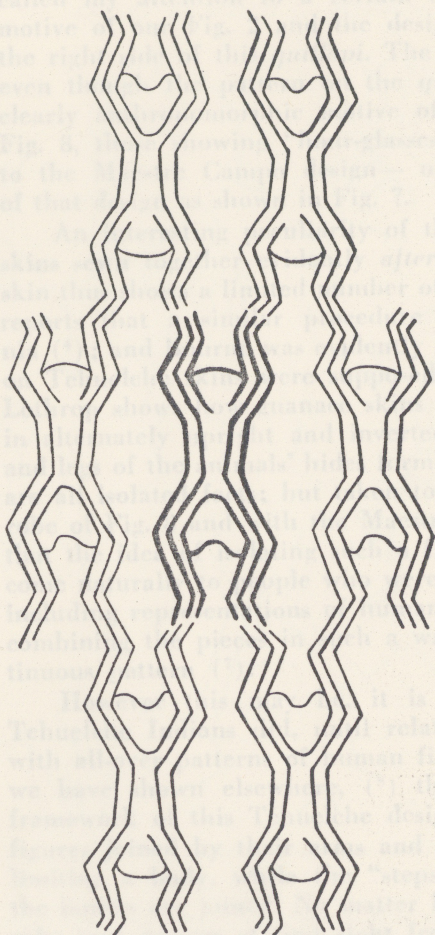


Fig. 5. - Hypothetical Continuation of the Guiana Design, Fig. 1.

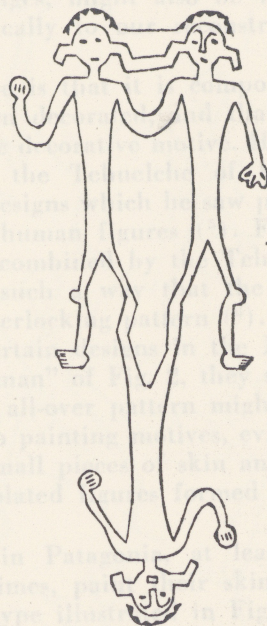


Fig. 6. - Design on a Club, British Guiana.

struction at least *approximately* like that shown in Fig. 7. It will be observed that the outer outline of the Maestre Campo figure here serves the same purpose as the median line of the Guiana petroglyph of Fig. 1: namely, that of a connection with the four figures diagonally above and below it, and thence with all the other figures in the pattern, *ad infinitum*.

How does it happen that designs like that of Figs. 1 and 2 were excerpted from all-over patterns and perpetuated on stone? A broad study of "genealogical" patterns composed of human figures in South America shows that they were applied in many different techniques to a wide variety of objects made of various materials. For the Maestre Campo design, at least, we may find a clue in the peculiar composition and decoration of certain skin robes formerly worn by the aboriginal inhabitants of large parts of southern South America. From the wreckage of the extinct Charrua culture of western Uruguay there are hardly any material remains, and perhaps none at all in perishable materials. However, Lothrop has inferred, from 18th-century engravings, that Charrua robes of skin were probably decorated in much the same fashion as the skin robes of the Tehuelche Indians of Patagonia; and he illustrates a surviving otter-skin robe of the Mataco Indians of the Chaco with a type of decoration which seems to have been current (no doubt with



considerable variations) from Uruguay almost to Tierra del Fuego (3). This Mataco robe or *quillapí* is reproduced in our Fig. 8. Professor Figueira has called my attention to a certain resemblance between the Maestre Campo motive of our Fig. 2 and the design in the compartment at the middle of the right side of this *quillapí*. The resemblance is perhaps not accidental — even though the pattern on the *quillapí* is far more "geometric" than the clearly anthropomorphic motive of Maestre Campo. Two other patterns in Fig. 8, those showing "hour-glasses" within lozenges, might also be related to the Maestre Campo design — or more specifically to our reconstruction of that design as shown in Fig. 7.

An interesting peculiarity of the Mataco robe is that it is composed of skins sewn together evidently *after* they had been decorated, and that each skin thus shows a limited number of repeats of one decorative motive. Hatcher reports that a similar procedure was used by the Tehuelche of Patagonia (4); and Bourne was evidently told that the designs which he saw painted on Tehuelche skins were supposed to represent human figures (5). Finally, Lothrop shows how guanaco skins were cut and combined by the Tehuelche in alternately upright and inverted columns in such a way that the heads and legs of the animals' hides formed a neatly interlocking pattern (6). These are all isolated facts; but taken together with certain designs in the Mataco robe of Fig. 8 and with the Maestre Campo "woman" of Fig. 2, they suggest that the idea of isolating such a figure from an all-over pattern might have come naturally to people who were accustomed to painting motives, evidently including representations of human figures, on small pieces of skin and then combining the pieces in such a way that the isolated figures formed a continuous pattern (7).

However this may be, it is certain that in Patagonia, at least, the Tehuelche Indians did, until relatively recent times, paint their skin robes with all-over patterns of human figures, of the type illustrated in Fig. 9. As we have shown elsewhere, (8) the dark stepped bands forming the basic framework of this Tehuelche design undoubtedly represent series of human figures joined by their arms and legs, each convergence representing or delimiting a body, while the "steps" represent the common limbs by which the bodies are joined. No matter how different the design of this Tehuelche robe may appear at first sight from our reconstruction of Fig. 7, it can be said that the design of Maestre Campo at least provides a useful analogy for one feature of the Tehuelche design, while the Tehuelche design as a whole provides a considerable measure of justification for the reconstruction of Fig. 7. The general and particular analogies must be considered together. Thus, if the extensions of the outer outlines of the Maestre Campo figure as vertically undulating bands (shown as thin lines in Fig. 7) are equivalent to the stepped framework of the Tehuelche pattern of Fig. 9, it might be reasonably inferred that the upright element inserted between each of the approximations of the stepped framework in the Tehuelche design (Fig. 9 a) has its equivalent in the body of the Maestre Campo "woman", (Fig. 7 a). This would explain an otherwise inexplicable feature of the Tehuelche design; for the peculiar expansions of this Tehuelche element seem to find

(3) Lothrop, 1929, pp. 22-24.

(4) Hatcher, as cited by Lothrop, 1931, p. 32.

(5) Bourne, as cited by Lothrop, 1929, p. 12.

(6) Lothrop, 1929, fig. 6 and p. 14.

(7) The vertical «split» which can be seen in the middle of several of the patterned panels of Fig. 8 is probably derived from the symbolism of genealogy, as we have shown in connection with figs. 17 and 21 of Schuster, 1956. A similar splitting of all-over patterns, probably with a similar connotation, occurs in the art, especially the facial painting, of the Caduveo Indians, where it is often effected horizontally as well as vertically. See Boggiani, 1895, fig. 90, and Métraux, 1946, pl. 54, left.

(8) Schuster, 1956, fig. 37.





Fig. 7. - Hypothetical Continuation of the Uruguayan Design, Fig. 2.

a fairly plausible explanation in the triple expansions of the head, chest and pelvis (?) of the Maestre Campo figure, which must once have been similarly situated in the meshes of an endless "genealogical" pattern.

It is perhaps unnecessary to emphasize again the tentative nature of these conclusions; for we are obviously forced to deal with materials representing but a small fraction of what once existed. Perhaps the associations here suggested may serve to bring to light some "missing links" in the chain of evidence.

We are perhaps on firmer ground when seeking to determine the origin of our third example of the type under consideration: a design from the Shipaya Indians of north central Brazil, illustrated in Fig. 3. So far as we know, this design was not applied to stone, like Figs. 1 and 2; but it may have been used for body-painting <sup>(9)</sup>. However, regardless what purpose was served by the design, its general resemblance to the two preceding designs is obvious. Like these, it represents, or rather suggests, a human figure by means of series of parallel lines separated by a central cleavage. But unlike the preceding designs, it is completely headless—or rather it should be said that it appears to be headless—for its head is, in a manner of speaking, hidden in its arms! If a certain latitude is permissible in the reconstruction of the all-over patterns from which Figs. 1 and 2 were excerpted, no such latitude is possible in the reconstruction of Fig. 3, which demands the solution indicated in Fig. 10, and hardly permits of any other. Undoubtedly the arcs terminating the arms and legs of each anthropomorphic unit were

<sup>(9)</sup> Unfortunately, the statement accompanying this illustration in the only place in which we know it to be published (Nimuendajú, 1948) is somewhat ambiguous. If the design was used in body-painting, there is no indication as to just how it was used. Various efforts made by the writer to learn more about this design, and especially to get access to Nimuendajú's original manuscript or notes, have remained fruitless.



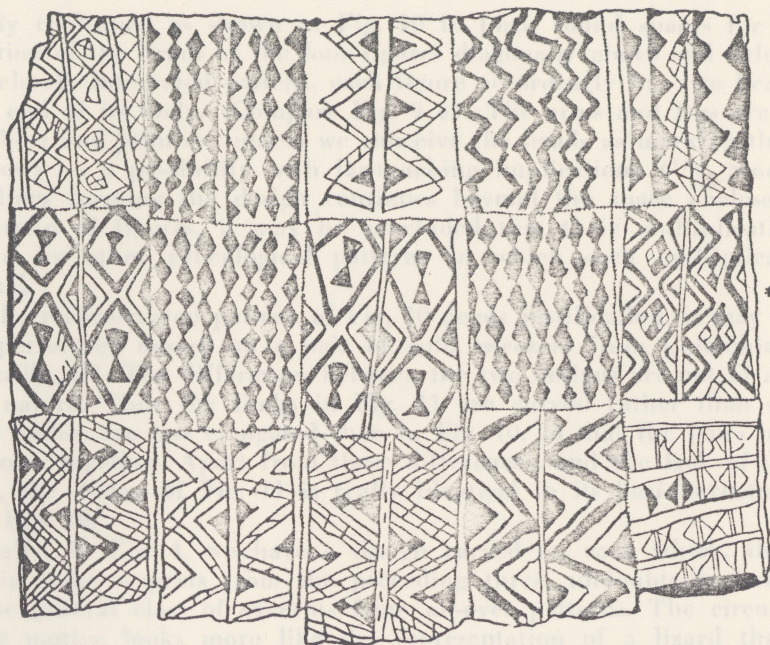


Fig. 8. - Painted Skin Robe. Mataco Indians. Río Bermejo. Argentine Chaco.

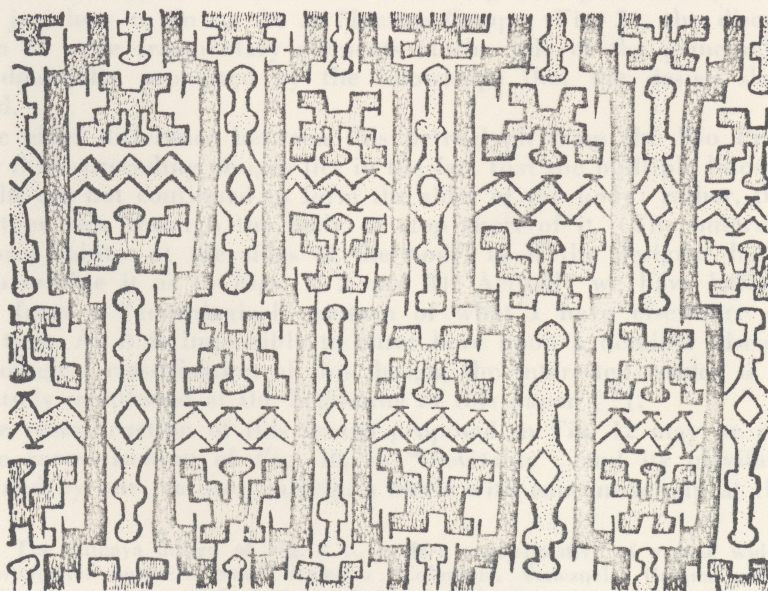


Fig. 9. - Design Painted on a Skin Robe. Tehuelche Indians. Patagonia.



originally continued as shown in Fig. 10 to form round spaces for the accommodation of the heads of the four figures diagonally above and below <sup>(10)</sup>. In this closely integrated pattern, each figure accordingly has two heads, one at each end of its body. (Compare Fig. 9 a). The arms and legs are inordinately short and jointless, unless we conceive the heads as marking the knees and elbows — a possibility with far-reaching implications <sup>(11)</sup>. Since none of the lines forming the design continues beyond the space enclosed by a single group of figures, it may be concluded that their multiplication was suggested by other genealogical patterns in which such multiplication is functional.

If the reconstructed pattern of Fig. 10 needs justification, it may be seen in the perforated design on a pair of gold tweezers from Colombia reproduced in Fig. 11. The differences between the two designs are not of a fundamental nature. Thus the limbs in Fig. 11 are curved rather than straight, and the bodies are less elongated than in Fig. 10, so that the pairs of heads come closer together. Apart from these differences, and the lack of multiple outlines, the design of Fig. 11 is really identical in its basic structure with that of Fig. 10.

Finally, in Fig. 4, we have a design carved on rock which, though it differs in some respects from the preceding three, undoubtedly belongs to the same general class of excerpts from all-over patterns. The circumstance that the motive looks more like the representation of a lizard than of a human being need not disturb us. Such transfers of identity, perhaps based on mythology or arising from simple playfulness, are easily accomplished. No matter whether human or lacertine in effect, this figure obviously shares one significant trait in common with those already considered: namely, the representation of its arms and legs by means of series of parallel lines. The way in which the outermost lines are bent outwards at their extremities is obviously reminiscent of Fig. 2, and even of Fig. 1. These terminal recurvatures show that the carver had cut his design from a repeating pattern, and wished to suggest its connection with neighboring elements, but was at a loss just how to do so. As at Maestre Campo (Fig. 2), the disorganized addition of some fragmentary elements at the side of the principal motive was undoubtedly prompted by the knowledge that the design should be repeated.

The chief difference between this petroglyph from the Río Piraparaná and the three preceding designs lies in the fact that the multiple lines forming the limbs are not continued to form the sides of the body: rather, the limb-lines either pass through the body or stop short of it. (The outermost leg-lines form volutes at the sides of the body, as if the designer had half a mind to outline it as in Figs. 1, 2 and 3). Actually we have before us an excerpt from a "genealogical" pattern of what I have elsewhere called a *hybrid* type. As it is impossible to enter here upon a detailed discussion of the typological classification of this design, the interested reader is referred to the study mentioned at the beginning of this paper <sup>(12)</sup>.

The reconstruction of this design proposed in Fig. 12 may be regarded, like the reconstruction of Fig. 10, as "inevitable"; and its inevitability is determined by one feature: namely, a circle with concentric cup at the point

<sup>(10)</sup> The Shipaya design of Fig. 3 is, in fact, representative of a type widely distributed throughout northern South America (Colombia, Venezuela, Guiana and the Antilles). The most characteristic feature of the type is recurvature of the limbs, similar to that of Fig. 3, but often more pronounced, leading to volutes or circles. Most such designs are, like Fig. 3, headless in the proper sense, and most have similarly cleft bodies, often represented by several parallel lines. In a future publication of the Museo de Ciencias Naturales de Caracas, the writer plans to publish a note about these designs, for the understanding of which Fig. 10 of the present article probably provides the best key.

<sup>(11)</sup> See Schuster, 1951.

<sup>(12)</sup> See Schuster, 1956, Fig. 4.



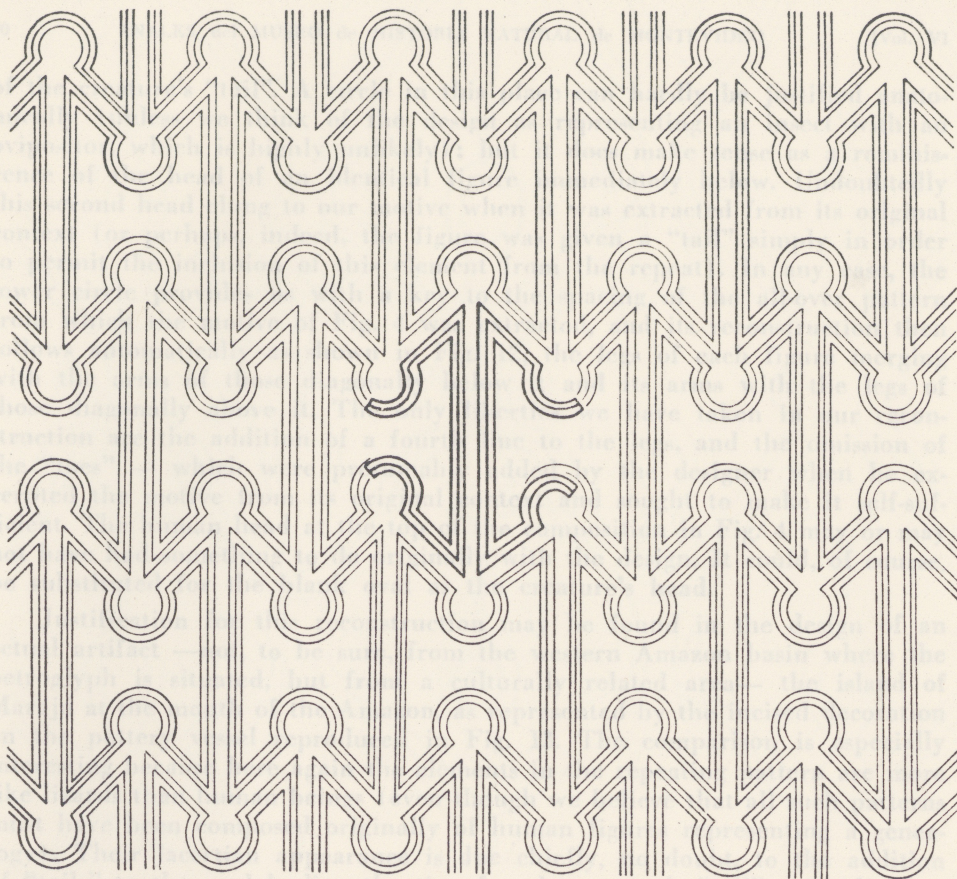


Fig. 10. - Hypothetical Continuation of the Brazilian Design, Fig. 3.

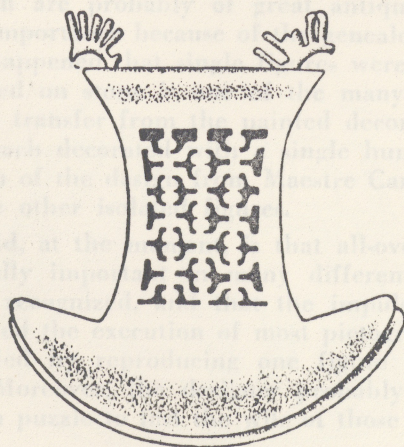


Fig. 11. - Gold Tweezers. Tolima, Colombia.



of the creature's "tail". A circle in this place can hardly be justified anatomically (unless we think of the design as representing an insect with an ovipositor, which is highly unlikely); but it does make sense as a reminiscence of the head of an identical figure immediately below. Undoubtedly this second head clung to our motive when it was extracted from its original context (or perhaps, indeed, the figure was given a "tail" simply in order to permit the inclusion of this element from the repeat). In any case, the lower circle provides us with a key to the spacing of the all-over pattern from which the motive of Fig. 4 was extracted, and its reconstruction then follows automatically as shown in Fig. 12, the legs of each figure merging with the arms of those diagonally below it and its arms with the legs of those diagonally above it. The only liberties we have taken in our reconstruction are the addition of a fourth line to the legs, and the omission of the "toes" — which were presumably added by the designer when he excerpted the motive from its original context and sought to make it self-sufficient. The human head at the top of the composition in Fig. 4 may or may not have had something to do originally with the design. It could, of course, be substituted for the blank oval as the creature's head.

Justification for this reconstruction may be found in the design of an actual artifact —not, to be sure, from the western Amazon basin where the petroglyph is situated, but from a culturally related area—the island of Marajó at the mouth of the Amazon, as represented by the incised decoration on the pottery vessel reproduced in Fig. 13. The comparison is especially interesting because here again the elements in the repeating pattern are more like lizards than human beings (even though we believe that all such patterns must have been composed originally of human figures representing a genealogy). Their lacertian appearance is due chiefly, no doubt, to the addition of "tails" to the oval bodies, the tip of each creature's "tail" coinciding, as in Fig. 12, with the head of the creature immediately below it. Otherwise the Marajó design conforms to the scheme of our Figs. 5 and 7, in so far as the multiple outlines of the bodies are continuous with the limbs.

The comparisons made in this article perhaps raise as many questions as they settle. At least, however, they may serve to emphasize the importance of all-over patterns of human figures as a constantly recurring element in the cultures of many different and widely separated peoples of South America. Designs of the type of Figs. 1-4 can hardly be understood except in terms of such patterns, which are probably of great antiquity in the continent, and clearly of central importance because of the genealogical principle which they embody. How it happened that single figures were excerpted from such patterns and perpetuated on stone is one of the many problems that await solution. The idea of a transfer from the painted decoration of a robe composed of many skins, each decorated with a single human figure, which we proposed in explanation of the design from Maestre Campo, Fig. 2, is hardly applicable to our three other isolated figures.

All that can be said, at the moment, is that all-over patterns of human figures were undoubtedly important in many different cultures, that their social significance was recognized, and that the impulse of commemoration which probably prompted the execution of most pictographs and petroglyphs was more easily satisfied by reproducing one figure from such a pattern than a whole repeat. Moreover, the designer probably knew perfectly well that he was providing a puzzle to test the wits of those who would see it.



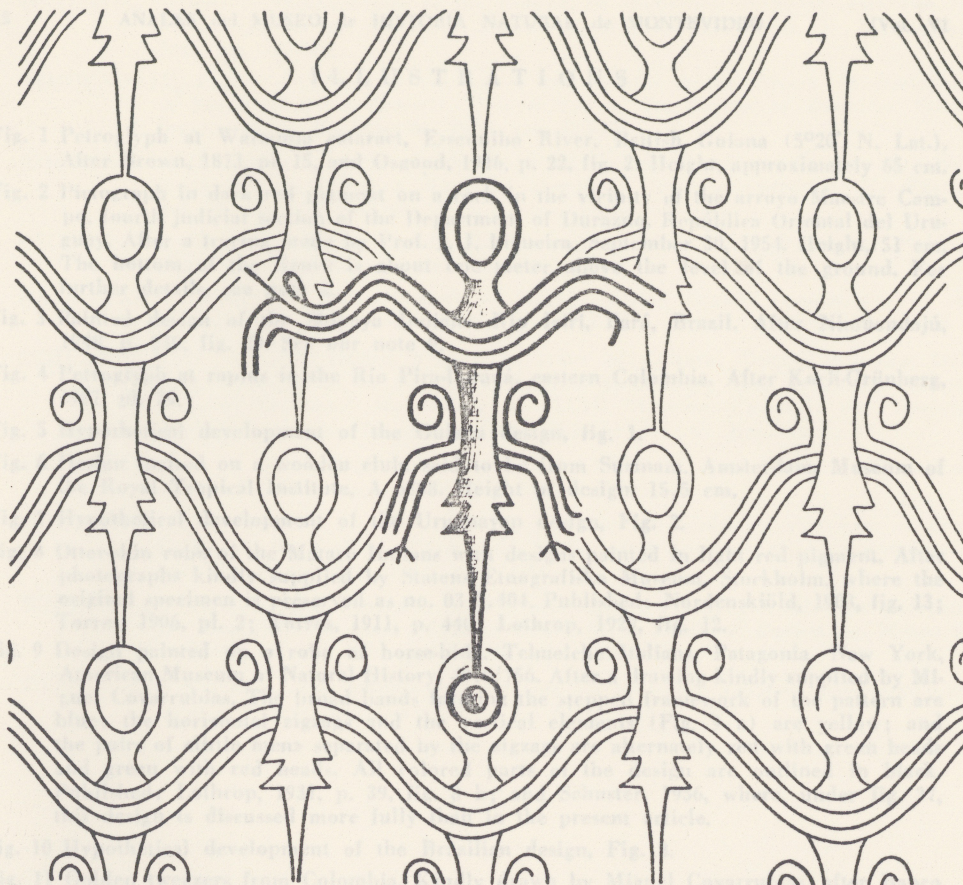


Fig. 12. - Hypothetical Continuation of the Colombian Design, Fig. 4.

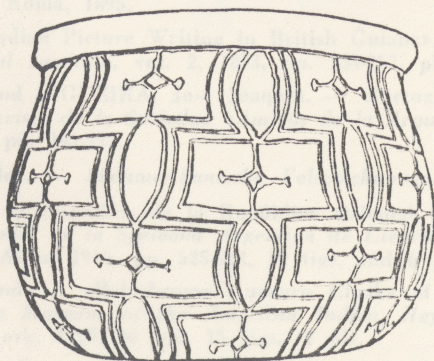


Fig. 13. - Pottery Vessel. Marajó, Brazil.



## ILLUSTRATIONS

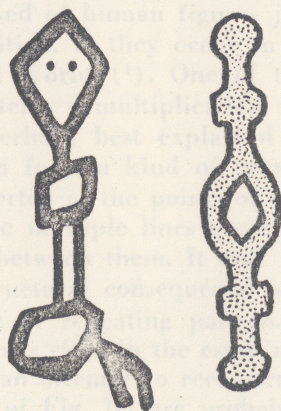
- Fig. 1 Petroglyph at Waraputa cataract, Essequibo River, British Guiana (5°20' N. Lat.). After Brown, 1873, pl. 15, and Osgood, 1946, p. 22, fig. 2. Height, approximately 65 cm.
- Fig. 2 Pictograph in dark red pigment on a rock in the vicinity of the arroyo Maestre Campo, fourth judicial section of the Department of Durazno, República Oriental del Uruguay. After a tracing made by Prof. J. J. Figueira, September 30, 1954. Height, 51 cm. The bottom of the figure is about one meter above the level of the ground. For further details, see note 2.
- Fig. 3 Painted design of the Shipaya Indians. Rio Iriri, Pará, Brazil. After Nimuendajú, 1948, p. 239, fig. 29. See our note 9.
- Fig. 4 Petroglyph at rapids in the Río Pira-Paraná, eastern Colombia. After Koch-Grünberg, 1907, pl. 29.
- Fig. 5 Hypothetical development of the Guiana design, fig. 1.
- Fig. 6 Design incised on a wooden club, said to be from Surinam. Amsterdam, Museum of the Royal Tropical Institute, A 6368. Height of design, 15.5 cm.
- Fig. 7 Hypothetical development of the Uruguayan design, Fig. 2.
- Fig. 8 Otter-skin robe of the Mataco Indians with designs painted in light red pigment. After photographs kindly supplied by Statens Etnografiska Museum, Stockholm, where the original specimen is preserved as no. 03.3.404. Published: Nordenskiöld, 1903, fig. 13; Torres, 1906, pl. 2; Torres, 1911, p. 440; Lothrop, 1929, fig. 12.
- Fig. 9 Design painted on a robe of horse-hide. Tehuelche Indians, Patagonia. New York, American Museum of Natural History, 40.0/756. After a drawing kindly supplied by Miguel Covarrubias. The broad bands forming the stepped framework of the pattern are blue; the horizontal zigzags and the vertical elements (Fig. 9 a) are yellow; and the pairs of «little men» separated by the zigzags are alternately red with green heads and green with red heads. All colored parts of the design are outlined in black. Published: Lothrop, 1931, p. 39, fig. 8 b; and Schuster, 1956, where, under fig. 37, this design is discussed more fully than in the present article.
- Fig. 10 Hypothetical development of the Brazilian design, Fig. 3.
- Fig. 11 Golden tweezers from Colombia. Kindly drawn by Miguel Covarrubias, after Banco de la República [Colombiana], 1948, pl. 93: «Depiladora Pijao. Pinzas para depilar de oro elaborado por el procedimiento de la cera perdida. Proceden de Chaparral, en el Departamento del Tolima. Miden 6.5 centímetros de alto y pesan 35.40 gramos.»
- Fig. 12 Hypothetical development of the Colombian design, Fig. 4.
- Fig. 13 Pottery vessel with incised decoration from Marajó Island, Brazil. Recife, Museu do Estado de Pernambuco, «Severino, 1925». Height, 7 cm. (Another vessel in the same museum with a similar design is published by Palmatary, 1950, pl. 17 a).

## CITED LITERATURE

- BANCO de la República [Colombiana]. — *El Museo de Oro*. Bogotá, 1943.
- BOGGIANI, Guido. — *Viaggi d'un artista nell'America meridionale; i Caduvei (Mbayá o Guaycurú)*. Roma, 1895.
- BROWN, Charles B. — «Indian Picture Writing in British Guiana». *Journal of the Royal Anthropological Institute*, vol. 2, 1873, pp. 254-257, pls. 15-18.
- FREITAS, Carlos A. de, and FIGUEIRA, José Joaquín. — «Pictografías en el Territorio Uruguayo». *Revista de la Sociedad «Amigos de la Arqueología»*, vol. 12. Montevideo, 1953, pp. 191-213.
- KOCH-GRÜNBERG, Theodor. — *Südamerikanische Felszeichnungen*. Berlin, 1907.
- LARRAURI, Agustín. — «Pictografías de la República Oriental del Uruguay», *Primera Reunión Nacional de la Sociedad Argentina de Ciencias Naturales, Tucumán, 1916*. Buenos Aires, 1919, pp. 525-528, 12 figs. and 6 pls.
- LOTHROP, Samuel Kirkland. — «Polychrome Guanaco Cloaks of Patagonia». *Contributions from the Museum of the American Indian, Heye Foundation*, vol. 7, no. 6. New York, 1929. 30 pp., 15 figs., 2 pls.
- LOTHROP, Samuel Kirkland. — «Painted Skin Articles from Patagonia». *Bulletin semestriel du Musée d'Ethnographie du Trocadéro* [now Musée de l'Homme], no. 2. Paris, July, 1931, pp. 31-41, 8 figs. and 1 folding color-plate.
- MENGHIN, Osvaldo F. A. — «El Arte Rupestre de Patagonia». *Neuquenia*, año 5, -no. 24. Buenos Aires, November and December, 1954, pp. 11-13.



- MÉTRAUX, Alfred. — «Ethnography of the Chaco», in *Handbook of South American Indians* (Bureau of American Ethnology, Bulletin 143), vol. 1. Washington, 1946, pp. 197-370.
- NIMUENDAJÚ, Curt. — «Tribes of the Lower and Middle Xingú River», in *Handbook of South American Indians* (Bulletin 143 of the Bureau of American Ethnology), vol. 3. Washington, 1948, pp. 213-243.
- NORDENSKIÖLD, Erland. — «Präcolumbische Wohn- und Begräbnisplätze an der Südwestgrenze von Chaco.» *Kungliga Svenska Vetenskapsakademien, Handlingar*, vol. 36, no. 7. Stockholm, 1903, 22 pp., 5 pls., 17 figs.
- OSGOOD, Cornelius. — «British Guiana Archaeology to 1945», *Yale University Publications in Anthropology*, no. 36, 1946.
- PALMATARY, Helen C. — The Pottery of Marajó Island, Brazil. *Transactions of the American Philosophical Society*, n.s. vol. 39, part 3. Philadelphia, 1950.
- SCHUSTER, Carl. — «Joint-Marks; a Possible Index of Cultural Contact between America, Oceania and the Far East», *Koninklijk Instituut voor de Tropen* (Royal Tropical Institute), Mededeling no. XCIV, Afdeling Culturele en Physische Anthropologie no. 39. Amsterdam, 1951, 51 pp., 82 figs., map.
- SCHUSTER, Carl. — «Genealogical Patterns in the Old and New Worlds». *Revista do Museu Paulista*, n.s. vol. 10. São Paulo. 1956.
- SORIA GOWLAND, Ignacio. — «Prólogo» [al volumen publicado en homenaje al Prof. Carlos A. de Freitas]. *Revista de la Sociedad «Amigos de la Arqueología»*, vol. 12. Montevideo, 1953, pp. 11-27.
- TORRES, Luis María. — «La Geografía física y esférica del Paraguay y Misiones guaraníes por Don Félix de Azara; Exámen crítico de su Edición». *Revista del Museo de la Plata*, vol. 12, 1906, pp. 139-203, pls. I-III.
- TORRES, Luis María. — «Los primitivos habitantes del Delta del Paraná». *Biblioteca Centenaria. Universidad Nacional de La Plata*, vol. 4, 1911.



Figs. 7a and 9a.  
Details of Figs. 7  
and 9.