If the first influences we can find in northwest Argentina emanated from Early Tiahuanaco, there is no doubt that they continued during the Tiahuanaco Classic period and may very well have contributed to the formation of La Aguada. Or these influences in Tiahuanaco and northwest Argentina may have come from a common source, the center of which we have not yet defined.

essay 27
by CARL SCHUSTER

Observations on the Painted Designs of Patagonian Skin Robes¹

In an essay on "Polychrome Guanaco Robes of Patagonia" in 1929, Samuel K. Lothrop characterized their painted designs as "surprisingly complex in view of the cultural poverty of the Tehuelche in general"; and he added: "This complexity arises not only from varied juxtaposition of design elements, but also from the alternation of colors." Later in the same essay he said: "Painted decorations on specimens collected in recent years, though based on simple elements, exhibit a complexity of rhythm scarcely to be expected among people of such general cultural poverty." These statements, which first came to my attention some fifteen years ago, struck me as appropriate, and also as puzzling. They seemed to present a challenge: how are we to explain the existence of a highly complicated decorative art among a people whose material culture is in other respects very simple?

In the course of comparative studies, in which I observed relations between the traditional designs of modern "primitive" peoples and corresponding motifs known archaeologically from prehistoric times, I felt myself impelled to certain conclusions, some of which I think have a bearing on the question about Tehuelche designs to which Doctor Lothrop first gave expression. In presenting these ideas here, it is perhaps not necessary to emphasize their tentative nature: in studies of this kind one can seldom "prove" anything, but one may hope to indicate new approaches to a problem and new channels through which still further research might be pursued.

In the first place, some distinctions must be made. Doctor Lothrop's comments referred, evidently, only to the decorated cloaks or robes made by the Tehuelche out of guanaco skins. We think that he would hardly quarrel, however, with our extending his characterization to the designs painted by the Tehuelche on horsehide, which are surely at least as complex as those applied by them to guanaco skins. It is, in any event, the decorations on horsehide to which we intend to restrict our observations. From the materials

preserved in museum collections, it appears that these designs are, at least at first sight, considerably different from those customarily applied by the Tehuelche to guanaco skin.3 We must, however, be on guard against assuming that the introduction of horses among the Tehuelche around the beginning of the eighteenth century had anything to do with the essential character of the designs which now appear to be limited to the decoration of the hides of these animals. It may be safely assumed that these designs are far older than the advent of the horse in Patagonia. What happened is, in all probability, that one of several related traditions of decorative design, among one or more subgroups of the Patagonian Indians, came to be applied by preference to horsehides, perhaps because these were especially available to these particular people, while other groups continued to apply their traditional designs to the skins of indigenous animals, such as the guanaco. The designs now found on horsehide are generally coarser and bolder than those applied to the more delicate skins of the smaller animals; but we suspect that ultimately the motifs of both traditions (or both groups of traditions) may prove to be related. In general terms, it may be said that the motifs traditionally applied to guanaco skins, being more schematic, are more difficult to "read"; and that the designs on horsehide, being less evolved toward a geometric formulation (and in this sense perhaps more archaic), may ultimately provide clues to an understanding of the designs on guanaco skinwith which, however, we shall not attempt to deal here.

With these preliminary considerations out of the way, we may turn our attention to a characteristic example of the repeating pattern of one of the horsehide robes of the Tehuelche, figure 2, of which an excerpt is reproduced in color in figure 1. As in all horsehide robes of these people known to me,4 the entire field within the painted borders is occupied by an "endlessly" repeating pattern, of which the most conspicuous element, and, as it were, the frame, is comprised of bands of dark blue color. These run continuously in a vertical sense (as the robe is worn), but alternately approach and diverge from each other in a rhythm that might be described (figuratively, of course) in terms of a dance: "two steps forward, glide, two steps backward, glide, two steps forward," etc. If we take this as the primary framework of the design, what may be regarded tentatively as a secondary scheme is that formed of yellow elements; namely zigzags aligned horizontally, and certain vertically aligned motifs which we shall call, for the moment, "bars." The yellow zigzags occupy the wide spaces formed by the expansions between the blue bands, and the yellow "bars" occupy the narrow spaces between the approximations of the blue bands. The whole polychrome pattern will appear some-

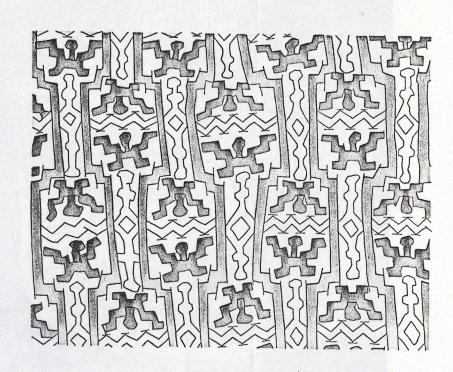


Fig. 1. Painted decoration of a horsehide robe. Tehuelche Indians. Patagonia. (Detail of fig. 2.)

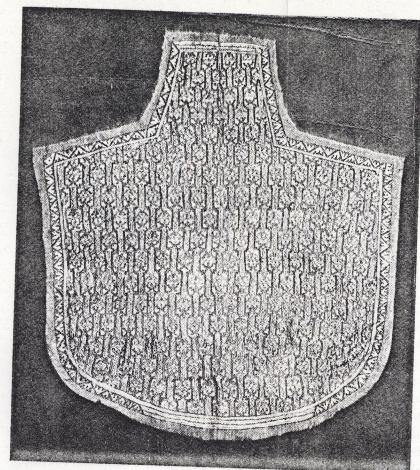


Fig. 2. Horsehide robe with painted decoration. Tehuelche Indians. Patagonia.

what less confused if we regard the yellow bars and yellow zigzags as being connected with each other in horizontal series *behind* or *underneath* the vertically aligned blue bands. We shall see later that there is, in fact, some justification for regarding the "yellow system" in this way.

Evidently constituting a third system (that is, third in the order of mention, because of its chromatic complexity; but conceptually perhaps second) is a series of unconnected motifs in red and green. In order to simplify description and to facilitate a grasp of the pattern as a whole, I shall designate these elements immediately as what I hope later to show them to be, namely human figures. These figures, with fretlike limbs, are, then, arranged in pairs: a red figure with a green head being opposed to a green figure with

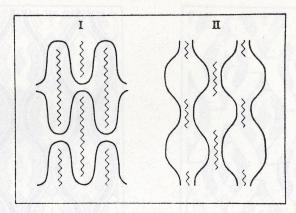


Fig. 3. Schemes of the two main types of "genealogical patterns."

a red head, respectively above and below the yellow zigzag occupying each expansion between the bands of the blue framework. Such a verbal description hardly serves to dispel the impression of complexity which designs of this type made upon Doctor Lothrop!

In attempting to bring order out of this seeming chaos, it will perhaps be best to work from the outside inward; or, more specifically, to begin with the blue system, which we designated as the essential framework, then to consider the pairs of "little men" in red and green; and finally to come to grips with the (somewhat troublesome) yellow system. We hope to show, with at least a fair degree of probability, that all three systems are conceptually related, and that their association in the Tchuelche robes is by no means fortuitous, but rather reflects certain old and important ideas.

In an essay entitled "Genealogical Patterns in the Old and New Worlds," I have shown (or at least hope I have succeeded in showing) the existence, in many different cultures throughout large parts of the world, of patterns composed of concatenations of human figures. These patterns seem to be reducible to two main structural types, which may be represented schematically as shown in figure 3. There the vertically aligned zigzags are shorthand symbols for human bodies (more precisely for the spinal columns, which are frequently emphasized in the actual patterns), and the continuous undulating lines represent the limbs connecting the bodies in an endless continuum. The continuum of human figures finds its most plausible explanation as a symbol of the endless continuity of the genetic process; and the component figures of the patterns can hardly represent anything else than members of a social group, evidently visualized both vertically in terms of ancestors and descendants, and horizontally in terms of living relatives.

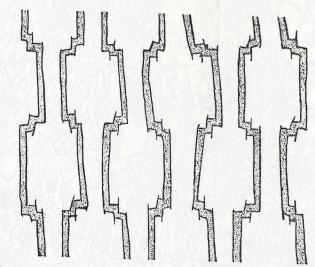
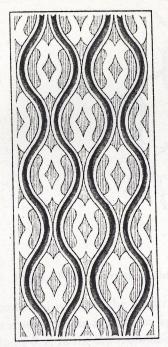
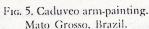


Fig. 4. The "blue framework" of the Tehuelche pattern, figure 1.

Such patterns are accordingly "tribal" patterns in the sense that they actually represent members of a tribe in their social relationship. In patterns of the second type (fig. 3, type II), which are of first concern to us, the sides of each body are continued in such a way as to connect it with the bodies diagonally above and below it, the undulating lines in this instance representing alternately the sides of the bodies and the limbs. In other words, each approximation of the undulating lines implies a body between them. In actual patterns of this type, the body may be represented more or less naturalistically between the approximations of the undulating bands, or it may be omitted altogether. A statement I made when first proposing to classify "genealogical patterns" according to these two systems may now be appropriately repeated: "The two systems, though structurally distinct, no doubt represent the same fundamental idea; and it is because we shall so often find them combined or confused that it is desirable to recognize beforehand as clearly as possible the distinction between them." 6 In the Tehuelche pattern of figure 1 we evidently have an example of such combination, which is, however, saved from confusion by the different coloring of its different parts. This polychrome pattern resolves itself most plausibly, as we shall see, into two distinct manifestations of type II, and one manifestation of type I, as these are shown schematically in figure 3.

That the blue framework of the Tehuelche design, figure 1, is a "genealogical pattern" of our second type appears, or begins to appear, when we align it (fig. 4) comparatively with certain designs painted on the arms of





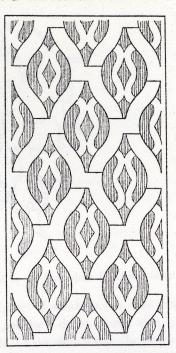
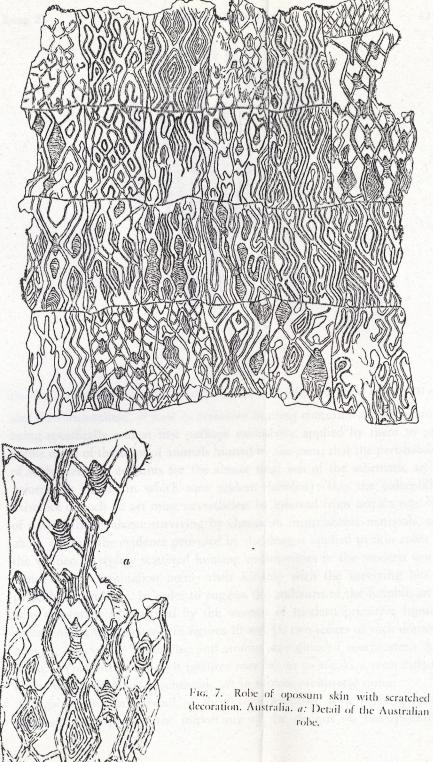


Fig. 6. Caduveo arm-painting. Mato Grosso, Brazil.

Caduveo women of southern Mato Grosso in Brazil, as recorded by Boggiani toward the end of the last century, and here reproduced in figures 5 and 6. It can be easily appreciated that the blue framework of the Tehuelche pattern differs from the broad bands in the Caduveo designs only in being "stepped" rather than curving. The thesis that these designs are homologous is perhaps not proved, but is at least made more plausible, by the consideration of another circumstance. Elsewhere I have sought to show that the decoration of garments of animal skin and of the human skin itself by means of tattooing or painting are two closely related media, in which schematic art probably found its first expression in remote prehistoric times; and that consequently such techniques, where they survive today, may be vehicles for extremely ancient traditions.7 This would explain why the designs of one medium are frequently found in the other. We believe that the designs of the Tehuelche robes and the Caduveo arm-paintings, specifically the designs of figures 4 and 5-6, are in fact closely related survivals of one and the same archaic tradition. An insight into their archaism is provided by a comparison, which we now propose to make, between these South American designs as a group and the traditional decoration of an opossum-skin robe



decoration. Australia. a: Detail of the Australian

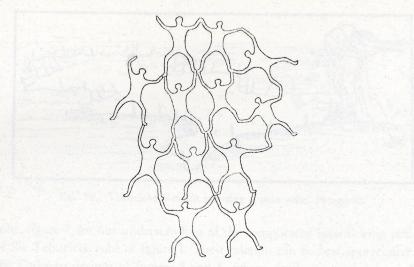


Fig. 8. Figures carved on the ground at an Australian initiation ceremony.

made and worn by the modern aborigines of southeastern Australia, which is reproduced as a whole in figure 7, and by a detail of one of its panels in figure 7, a. In the last-mentioned article, I have shown that the designs on another Australian robe, somewhat different from this one, are closely related to the designs painted by certain Indians of the Argentine Chaco on their otter-skin robes; and that this surprising correspondence finds its explanation in the derivation of both modern traditions ultimately from a common source in the Palaeolithic of the Old World, to which we have an important key in a palaeolithic figurine represented as wearing a skin robe with essentially similar decorations, evidently derived from schematic concatenations of human figures.8 However surprising at first, we believe it will have to be admitted that the remarkable similarity between the traditional decorations of skin garments in southern South America (the Chaco and Patagonia) and in Australia can only be explained in the sense that they represent divergent branches of a common tradition reaching back ultimately to palaeolithic times in a region which may be designated, roughly and tentatively, as "western Eurasia."

It is of course impossible to enter here into an extended justification of this thesis. It is expounded in some detail in the publication just mentioned—to which, in fact, the present article is intended to be complementary. We do, however, wish to lay special emphasis here upon an idea propounded there: namely that schematic art (which in the course of time tends to become "decorative" in the empty sense of the word) was probably first evolved

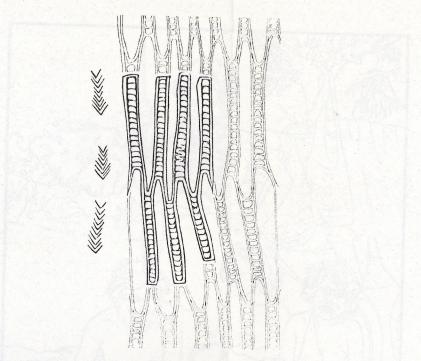


Fig. 9. Design incised on antler (with postulated extension). Denmark. About 5000 B.C. and then transmitted, at least in primitive hunting communities, by women, being specifically and at first perhaps exclusively applied by them to garments made of the skins of animals hunted by the men; that the perishability of such garments accounts for the almost total loss of the schematic art of palaeolithic times (in which men seldom dabbled); that the palaeolithic existence of such an art must nevertheless be inferred from certain rare bits of palaeolithic evidence surviving by chance in imperishable materials, and above all from the evidence provided by the designs applied to skin robes by the women of widely scattered hunting communities in the modern world, which upon examination betray their kinship with the surviving bits of palaeolithic evidence. In order to suggest the archaism of the humble art of skin decoration as practised by the women of modern primitive hunting communities, we juxtapose, in figures 10 and 11, two scenes of such domestic activity, among the Tchuclche, and among aborigines of southeastern Australia.9 What we see in such pictures may be, so to speak, a recapitulation of the very beginnings of schematic art in remote prehistoric times.

Against the background of these considerations, it is perhaps hardly necessary to emphasize the importance of the designs on the Australian

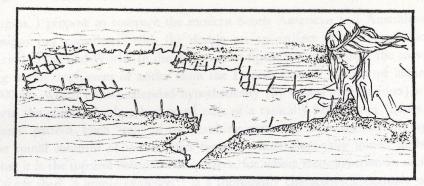


Fig. 10. Tehuelche woman painting a skin robe. Patagonia.

robe, figure 7, for our understanding of the complicated interlocking pattern of the Tehuelche robe of figure 1. Their relation can be best appreciated via the Caduveo designs of figures 5 and 6, whose similarity to the Australian design of figure 7, a, is immediately obvious. Now, if the anthropomorphism of the Australian design is not self-evident, it appears clearly enough in the light of comparison with the design of figure 8, which represents a ritual carving or furrowing of the earth at an aboriginal festival in the same part of Australia where the robe was made. What we see here, according to native informants, is a representation of "the young men who were with Baiamai at his first camp." 10 Since Baiamai is the Creator, it appears that the figures thus carved in the ground constitute something like a diagram of the Creation, or, so to speak, the first "genealogical pattern." As in all conventionalized patterns of our second type, the figures are here joined together by their limbs in such a way as to leave pointed oval spaces between their bodies. It can hardly be doubted that the pattern on the Australian skin robe, figure 7, a, is a conventionalization of this deeply significant diagram of human creation and procreation. But unlike the earth-carving, the design on the robe is complicated by a second pattern, which appears as a displaced "shadow" of it. The bodies of the second pattern occupy the oval spaces between the bodies of the first, whose limbs cut across their limbs. The resemblance of this complicated scheme to that of the Caduveo designs, figures 5 and 6, speaks for itself. However, before testing the applicability of the Australian and Caduveo schemes to the Tehuelche design of figure 1, let us first inquire into the possibility that anthropomorphic schemes of the type here under consideration were already in existence in prehistoric times in the Old World.

Leaving out of consideration for the moment the question of palaeolithic

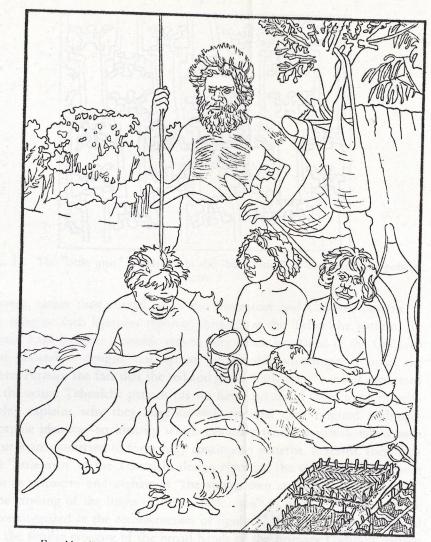


Fig. 11. "An Australian family of New South Wales," after Ratzel.

origins, I propose to compare the modern South American and Australian designs just considered with the design on an artifact of the mesolithic period in the Old World. In the dark part of figure 9 is reproduced the carving on an implement of antler from the Danish Coastal Culture of about 5000 B.c., which I have extended hypothetically (by means of finer lines) to form the pointed oval or hexagonal cells of a typically Maglemose "honeycomb" pattern. Each "cell" of the resulting pattern is bounded laterally by the spinal columns of two human figures, whose diagonally joined limbs close it at the top and bottom. This pattern, for whose reconstruction in such a sense there is ample evidence,11 is a thoroughly characteristic example of our second type (fig. 3, type II)—even down to the representation of the bodies as mere spinal columns (whose vertebrae coalesce in one place to form a "spinal zigzag"). A study of other decorated artifacts from the closely related and contemporary or slightly antecedent Maglemose Culture of Denmark suggests that this design may have been transferred to antler from the decoration of a skin garment (or perhaps from the skin of the human body itself).12 If so, then this mesolithic pattern corresponds to the Australian and South American designs not only in morphology, but also in the material to which we assume it must have been originally applied.

Though the mesolithic design of figure 9 lacks a "shadow" like that of the Australian design, figure 7, a, it is possible that the groups of inverted chevrons at its left may in fact constitute a second anthropomorphic scheme related to its "honeycomb." 13 It is thus at least theoretically possible that the principle of the double pattern, as exemplified in the Australian robe of figure 7, a, and in the Caduveo arm-paintings of figures 5 and 6, was already established in mesolithic times in the Old World; and if so, such patterns were already then most probably applied to skin. But let us return from speculation to observation: it is at any rate a fact that "double" genealogical patterns remarkably like the Australian one of figure 7, a, do occur in the traditional body-painting of the Caduveo Indians of the Brazilian Mato Grosso. Could it be that the complicated pattern on the Tehuelche robe of figure 1 also includes a "shadow"? I think that it does; and in order to show it, I have prepared a drawing, figure 12, in which the red-and-green "little men" of the Tehuelche design appear in their relation to the "primary" pattern of the blue bands, without the distraction of the yellow elements. Near the middle of this drawing I have added hypothetical ligatures between the limbs of the "little men," in accordance with the analogy of the Caduveo designs of figures 5 and 6, and of the Australian design of figure 7, a-making them angular, in keeping with the angularity of the Tchuclche blue

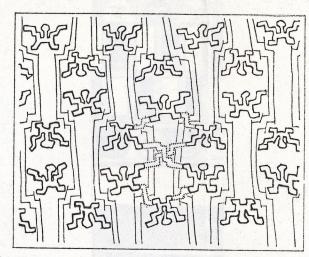


Fig. 12. The "little men" in relation to the "blue bands" of the Tehuelche pattern, figure 1.

pattern, rather than curved, as in the Australian and Caduveo designs. If we imagine such ligatures repeated throughout the Tehuelche pattern, we would have in effect a double system very much like those of the Caduveo and Australian designs, one system presumably superimposed upon the other. Perhaps the fact that the red-and-green "little men" are not connected in the actual Tehuelche pattern (as we have postulated them to be in principle) explains why they have so well retained their original anthropomorphic identity—an identity which evidently tends to vanish when such figures are connected to form fully continuous patterns. It seems, then, that the "little men" of the Tehuelche design represent the survival of something just as primitive and archaic as "the young men at Baiamai's first camp." The crossing of the limbs of these "little men" to form a swastika, as we have suggested in the reconstruction of figure 12,14 is, we think, warranted by the similar crossing of the broad bands of the primary Caduveo pattern in figure 6-which we have elsewhere interpreted as symbolic of marital unions in a genealogy.¹⁵ Though I think that the reconstruction in the center of figure 12 is adequately supported by the analogy of the curvilinear Caduveo patterns, it may be pointed out that stepped compartments, like those postulated by extending the limbs of the "little men" in figure 12, do actually occur rather frequently in South America, especially in rock-paintings and mobiliary art in stone of about 1500 years ago in northwestern Patagonia; and that the anthropomorphic character of the "stepped" patterns in that so-called "estilo de grecas" is for the most part fairly obvious. 16 We propose,

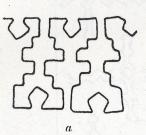




Fig. 13. a: Design incised on a stone axe. Neuquén, Argentina. b: Bichromatic pattern reconstructed from a.

thus, to regard the blue framework and the disjointed bits of red and green fretwork in the Tehuelche design of figure 1 as constituting, in fact, a pair of essentially identical interlocking patterns, both of which were originally composed of human figures.

If the human identity of the bits of red and green fretwork in figure 1 is thus fairly well established, there are still questions to be answered about these "little men." Why do the red ones have green heads and the green ones have red heads? One might, of course, assume a playful whimsy. But we think that the matter goes deeper, and that this alternation of color can be, at least in a measure, explained. Again in my article of 1956-58, I developed (or as it subsequently turned out, partially developed) an explanation for certain motifs incised on "ceremonial axes" of stone associated with the above-mentioned "fret style" of northwestern Patagonia. One of these designs in particular, a linear motif here reproduced as figure 13, a, I explained as a "cutting line," by which it must have been customary to cut through two layers of pliable material, originally, no doubt, animal skin, of contrasting colors, to produce cut-outs, which were then assembled to form a skin-mosaic of interlocking human figures, alternating in both color and direction, as shown in figure 13, b. It may now be added that such "reciprocal patterns" are attested archaeologically at least as early as neolithic times in the Old World, but that since they can hardly be understood except as the product of a skin-working technique, we may assume that they were first evolved in a pre-neolithic hunting culture. Fur-mosaics embodying reciprocal patterns, some of them certainly anthropomorphic, are still made by "palaeo-Siberian" hunting peoples today. In fact, such "reciprocal" patterns may have

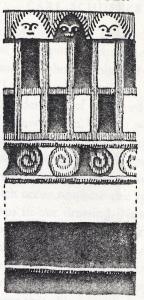


Fig. 14. Detail of a painted house-wall. Northwestern Brazil.

been anthropomorphic, so to speak, from the very beginning, and they may even have provided the first impetus toward the development of what we designate generally as "genealogical patterns." ¹⁷ The significance of figure 13, b, for our understanding of the "green men with red heads and red men with green heads," is perhaps self-evident; for such a skin-mosaic best explains both the alternating color and the alternately upright and inverted position of these "little men" in the Tehuelche robe. Even though they are merely painted on the skin and not cut out of it, their color and position imply a technique which, if it was not actually known to the modern Tehuelche of Patagonia, must have been practised not very far away or long ago. ^{17a}

But this technical explanation by no means excludes a conceptual one. Insofar as reciprocal patterns are "genealogical," the human figures composing them are opposed not only in color and position but also, by definition, in some social sense. Precisely what type of social opposition or interaction is implied by such arrangements is not always easy to say: it may be assumed that "genealogical patterns" have in many cultures outlived the social patterns to which they must at one time have referred. Nevertheless, we do have what appears to be a significant analogy for the reciprocal coloring of the Tehuelche "little men" in the designs painted on the house fronts of certain Indians of the tropical rain forest of the northwestern Amazon basin. An excerpt of such copainted decoration is shown in figure 14. Above

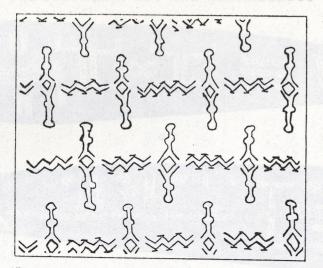


Fig. 15. The "yellow system" of the Tehuelche pattern, figure 1.

a lower band of solid color, the entire entrance wall of the dwelling is occupied by a checkerboard of dark and light rectangles, apparently representing a characteristic pattern of the local dancing costumes (whose fringes appear at the bottom as spirals); and the heads of the wearers of these costumes (perhaps conceived as masks) are represented in a frieze of alternately dark and light faces at the top, just under the overhanging "cornice" of the roof thatch. Because of other evidence that these Indians symbolized social ideas in their domestic architecture, we may take the decoration of this façade for a kind of genealogical diagram representing schematically the enlarged family which occupies the house and constitutes it in the figurative sense.18 Somehow, then, the alternate or reciprocal coloring of the heads and bodies on this façade must refer to the warp and woof of the social fabric of the tribe. I have always been intrigued by the circumstance that when Koch-Grünberg originally photographed the façade on which the drawing of figure 14 is based, the inmates of the house posed themselves before it in two groups: the men and boys on one side of the central door, the women (and presumably a girl-child) on the other side. 19 Koch does not tell us whether he asked the people to pose in this way. It seems rather likely that they acted in accordance with native custom or habit. If so, we might perhaps see in the alternately dark and light heads of figure 14 simply a representation of the male and female partners in the family structure-or perhaps, by extension, representatives of exogamous clans? In any event, this façade has an obvious bearing on the postulated pattern of figure 13, b, and on the

bichromatic "little men" of the actual Tehuelche robe. Perhaps, after all, the reciprocal coloring of the opposed Tehuelche figures represents a simple sexual differentiation, and we should think of them henceforth as "little men and little women"!

We come now to consideration of the third element in the Tehuelche design of figure 1: the "yellow system," which we have isolated in figure 15. That the alternating zigzags and uprights of this system were conceived as being connected in horizontal series "behind" the vertical blue bands is suggested by the way in which the latter cut across and interrupt the former. These interruptions, which occur nowhere else systematically in the Tehuelche design, appear as gaps in our drawing. Now, it is much more difficult to find satisfactory analogues in the aboriginal art of South America for the yellow part of the Tehuelche design, taken as a system, than it is for the blue, green and red components of the composition. This circumstance cannot, however, deter us from taking the "yellow system" seriously. In fact, it seems reasonable to assume that this part of the Tehuelche design must be the product of a tradition at least as venerable and significant as that of the other elements with which it is so intimately associated. Perhaps the fact that the fullest analogues for this "system" come from the Old World, where they can be traced back to early archaeological horizons, may enhance our estimate of the antiquity of the whole Tehuelche pattern, from which the yellow elements appear to be inextricable.

But let us first consider certain archaeological evidence from the New World which seems to have a bearing on at least some features of this "yellow system." In figure 16 is reproduced the engraved decoration on two sides of a stone plaque of uncertain date from northwestern Patagonia. On the surface a, which more immediately concerns us, the decoration shows some degree of correspondence with the repeating pattern of the Tehuelche robe, figure 1. It might, in fact, be regarded as something like an excerpt from the blue and yellow parts of that pattern. The pairs of zigzags incised longitudinally along the middle of the stone might be equated with the "yellow" zigzags of figure 15; while the two vertically aligned motifs with which the zigzags alternate on the stone would have their equivalent in, or could be regarded as excerpts from, the system of blue bands on the robe. The intervals separating these alternate motifs on the stone seem to imply an interruption of one by the other, like that effected by their actual intersection on the robe. If the equivalence is valid, it helps us, however, not so much to understand the yellow zigzags as the blue bands of the Tchuelche robe; for here we seem to have in isolation the human figures out of which the blue bands

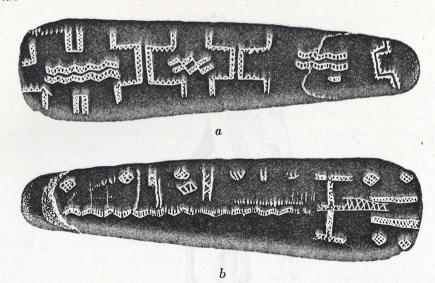


Fig. 16. Incised stone plaque from northwestern Patagonia.

of the robe are formed. Other elements in the incised decoration of this stone, especially those at the two ends of figure 16, a, might represent an attempt to indicate the continuity of a complex pattern painted on a robe, with which the engraver (presumably a man) must have been familiar as an observer, but not as an executant—for, as we suggested above, and as can be seen from figure 10, it was undoubtedly the women who painted the complicated traditional designs on the robes, and who alone knew how to co-ordinate them properly.

The whole subject of the Patagonian "placas grabadas," in the general class of which this engraved stone may be reckoned, is too vast and complex for consideration here; but since Lothrop called attention to these archaeological relics in connection with the problem of the designs of the Tehuelche robes, 20 and since Bórmida has given us, for the first time, a hint of their antiquity and their cultural importance by calling attention to their extensive and no doubt significant similarities to the Australian *churingas*, 21 we wish to make some tentative observations on this topic. Various authors, besides Lothrop, have noted a general similarity between the designs engraved on certain types of "placas grabadas" and the decorations of the modern skin robes of various South American Indian tribes. I agree that there undoubtedly is such a relationship, but I think that the "placas grabadas" are not so much representations of robes as representations of *clothed human figures*. It is in this sense that it may be possible to trace their ancestry (via archaeo-

logical evidence from North America) ultimately to early prehistoric manifestations in the Old World. To cite certain significant details: the bands comprising the decoration of the Patagonian plaque, figure 16, formed as they are by two parallel lines with crosshatching, zigzags or cross-bars between them, remind us of analogous motifs in the mesolithic (especially Maglemose) art of Northwestern Europe,22 which can themselves be traced back (like so many Maglemose elements) to palaeolithic origins.²³ Without attempting to substantiate it here, I should like to put forward the hypothesis that the motifs carried out by means of such bands in mesolithic and probably also in palaeolithic times in the Old Word were really bits and fragments, or at the very most, excerpts (fig. 9), of what must have been in fact well-organized patterns of connected human figures, of which the full forms are generally lost to us archaeologically because they were applied by women to skin garments—just as the male engraver of the "placa grabada," figure 16, "clothed" it with badly apprehended bits of an anthropomorphic pattern traditionally applied to skin garments by the women of his tribe. The fact that in both the mesolithic and the palaeolithic art of the Old World such hatched bands are often made to intersect each other should, I think, be brought into relation with the (not quite) intersecting hatched bands of the Patagonian plaque, figure 16, a, and also with the intersecting blue and yellow systems of the Tehuelche robe of figure 1 (or perhaps rather with the intersections postulated in figure 12)—as well as ultimately with the intersecting limbs of the figures in the Australian robe, figure 7, a, and analogous formations in the Caduveo body-painting of figures 5 and 6. It is true, of course, that not all of these intersecting bands are hatched; but on the other hand we must take note of the fact that precisely such hatched bands are used to form concatenated schemes of human figures by certain "primitive" peoples of another part of the world: namely in Eastern Indonesia, Southern New Guinea, and Northwestern Australia.24 I would regard all these manifestations, together with the design of figure 16, a, as survivals of a basically palaeolithic tradition, the prime vehicle of which must have been the decoration of skin garments or, alternatively, the skin of the living human body.

It is interesting to compare the design of the Patagonian stone plaque, figure 16, with that of a Tchuelche robe shown in an eighteenth-century engraving, of which a re-drawn detail is shown in figure 17. Apparently the whole decoration of this robe consisted of bands formed by zigzags confined between parallel lines. The analogy of the plaque suggests that these zigzags are derived from or equivalent to crosshatching. Though we cannot say that



Fig. 17. Tehuelche Indian, after Pernety, 1771.

the bands on the robe formed an anthropomorphic design analogous to that of figure 16, a, still the fact that they do form, in at least one place, a kind of capital letter H, similar to that formed by the crosshatched bands near the broad end of figure 16, b, indicates the general relation of the designs on the robe to those on the stone. Assuming that the eighteenth-century engraver is reasonably reliable,25 I find it significant that near the throat of the wearer of this robe, two of the zigzag bands obviously intersect. For intersecting hatched bands are a motif which turns up repeatedly in both the mesolithic and the palaeolithic art of the Old World. In fact there is, in my opinion, good reason to suspect that one of the palaeolithic artifacts bearing this motif is actually the representation of a clothed human figure.26 This suggests that the decoration of the Patagonian robe shown in figure 17 may very well represent the survival of a distinctively palaeolithic tradition of design, in primeval association with the perishable medium to which it was originally applied. Regardless of the epoch in which such designs occur, from palaeolithic to modern times, it seems to me at least very probable that

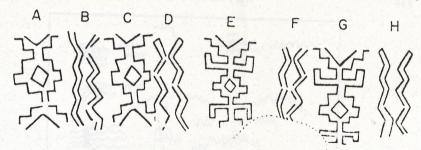


Fig. 18. Design incised around a pottery vessel from northeastern Argentina.

they represent the debris of double systems of concatenated human figures with crossing limbs, of which we see the full forms in the Australian robe, figure 7, a, and in the Caduveo body-painting, figures 5 and 6. Because of what we may regard as the extreme archaism of its design, the presumable loss of the actual robe of figure 17 through neglect since the eighteenth century cannot but evoke a shudder of regret. There may be more coelacanths still living in the depths of the Mozambique Channel; but we shall hardly find any more "living" palaeolithic robes in Patagonia!

A second archaeological document from Argentina which may help our understanding of the "yellow system" of the Tehuelche robe, figure 15, is the incised decoration of a pottery vessel reproduced in figure 18. Though found in northeastern Argentina, this vessel is of a type which seems to have been known to and used by, though evidently never made by, the nomadic Tehuelche of the more southerly parts of Patagonia.²⁷ The decoration consists of four pairs of double zigzags aligned vertically, with their points opposed. (B, D, F, H), alternating with four upright motifs in two dissimilar pairs (A and C; E and G). The illustration permits us to forego a description of the latter motifs. They are characteristic of the "estilo de grecas," an offshoot of the Barreales Culture of northwestern Argentina, for which Menghin suggested a tentative dating some time after A.D. 500.28 That the motifs of figure 18, A, C, E, G are conventionalized human figures is suggested, among other things, by their similarity to the surely anthropomorphic motifs of figure 14.29 What is, then, the relation of these conventionalized human figures to the vertically aligned zigzags between them; and how is this sequence of motifs on the pottery vessel related to the somewhat different arrangement of similar elements in the "yellow system" of the Tehuelche robe, figure 15? It must be observed, in the first place, that vertically aligned pairs of opposed zigzags of the type of figure 18, B, D, F, H also occur elsewhere in South America, notably in the painted decoration of skin robes from

the Argentine Chaco, where I have identified them as "limb-lines" in the sense of Type II in figure 3.30 In the Chaco robes, the expansions between the zigzags are sometimes occupied by elements which appear to be rudimentary bodies;31 and this suggests that the "human figures," A, C, E, G, might stand in a similar relation to the zigzags, B, D, F, H, of figure 18: that is to say as bodies to limbs. Taking the elements A, C, E, G, in figure 18 as equivalent to the upright elements of the Tehuelche "yellow system," figure 15, one might proceed to equate the vertically aligned zigzags of figure 18, at least tentatively, with the horizontally aligned zigzags of that system. Of course, the vertical zigzags of figure 18 may not be arbitrarily turned on their sides to make them match the horizontal zigzags of figure 15-from which they differ not only in orientation but also in being arranged in opposed pairs rather than singly. Nevertheless, I do think that these zigzags are equivalent in the sense that both represent the limbs of the "bodies" with which they alternate; and that if the scheme of the pottery vessel conforms essentially to that of our Type II, the "yellow system" of the Tehuelche robe, figure 15, may be plausibly equated, at least in principle, with the scheme of our Type I. As a matter of fact, neither the pottery design of figure 18 nor the robe design of figure 15 perfectly represents either of the ideal types proposed in figure 3: in the former, the bodies have been, so to speak, extracted from between the limbs and expanded out of proportion to them; in the latter, the limbs are likewise reduced in proportion to the bodies, and they serve only the bodies of one tier, instead of two simultaneously. In both of these designs, then, we observe what amounts to a reduction and partial detachment of the zigzags (or undulating bands) from the bodies which they would normally serve to connect in "genealogical patterns" of Types I and II in figure 3.

The deviation of the Tehuelche "yellow system," figure 15, from the basic scheme of Type I in figure 3 may be accounted for in various ways: in the first place, perhaps, by its role in relation to the blue system which is evidently superimposed upon it. For it is obvious that the yellow "bodies" serve as "bodies" also for the blue bands; but since the "bodies" implied by the approximations of the blue bands have their own "limbs" (in the stepped parts of the blue bands themselves), the zigzag yellow "limbs" have no real function in relation to the blue system. Perhaps this circumstance, combined with lack of space in the crowded and otherwise complicated Tehuelche pattern, suffices to explain the reduced status of the zigzags in figure 15; and perhaps we may also have to reckon with the influence of another principle widely prevalent in South American design: the crossing, at right angles, of

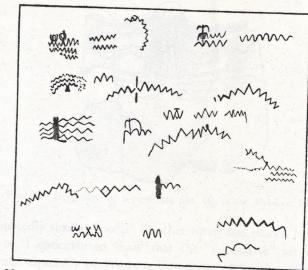


Fig. 19. Human figures with zigzag limbs in Spanish neolithic rock-paintings.

two distinct and differently orientated "genealogical patterns." For though the orientation of the blue and yellow patterns in the Tehuelche robe is uniformly vertical, these patterns nevertheless represent the crossing of two distinct concatenations of human figures.

The exceptional character of the "yellow system" of figure 15 (for which I know of no really close analogue in the ancient or modern art of South America) may, however, find its explanation in terms of derivation from prototypes in the Old World, of which it may in fact be a unique survival in the New World. In an article published in 1920, Breuil showed how, in the neolithic rock-paintings of Spain, the flexed limbs of a human figure were commonly extended or repeated laterally to form zigzags.33 The resulting arrangements, as can be seen from figure 19,-are in some instances surprisingly close to the arrangement of the Tehuelche pattern of figure 15. Of course, the relation can hardly be a direct one. But there might very well be an indirect relation between these motifs at the geographical extremes of the Old and New Worlds. In an essay now in preparation,34 I plan to show that the "anthropomorphic zigzags" identified by Breuil in Iberian rock-paintings of perhaps the fourth or third millennium B.C. are but relatively late manifestations of a type which really has its origins in very much earlier times. In figure 20 I have juxtaposed one of the Spanish neolithic "human zigzags" (B) with a motif (A) taken from the incised decoration on a figurine of mammoth ivory, which was probably intended to represent the decoration on a contemporary (i.e., palaeolithic) skin robe. In other words, the principle

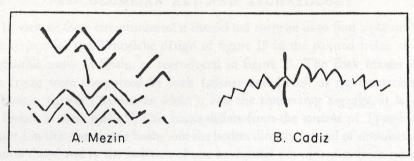


Fig. 20. Human figures with zigzag limbs in palacolithic and neolithic art.

of multiplying the flexed limbs of a human figure to form horizontal zigzags was a palaeolithic and not a neolithic invention; and since this motif was obviously applied to skin robes already in palaeolithic times in the Old World, the inference is, I think, justified that what we have in the Tehuelche design of figure 15 is really a survival, in a peripheral outpost of the New World, of a palaeolithic motif, still traditionally associated with the type of garment to which it was originally applied. But this palaeolithic motif is undoubtedly representative of Type I in our figure 3; and as I hope to show on a later occasion, motifs of Type II were undoubtedly also known in palaeolithic times in the Old World. Thus, what we have in the complex polychrome pattern on the Tehuelche robe, as shown in figure 1, is a closely integrated combination of two basic and extremely ancient types of concatenations of human figures, both of which were, in all probability, first applied to robes of animal skin by palaeolithic hunters-or, more specifically, by their womenfolk. The tradition of applying such patterns to skin robes must have been brought to the New World by such nomadic hunters in the course of long migrations already in remote prehistoric times.

While the modern Patagonian skin robes thus seem to provide a "pool" of palaeolithic survivals in the *cul-de-sac* of southern South America, there

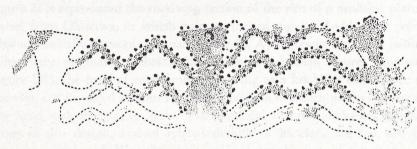


Fig. 21. Painted decoration of a Spanish dolmen. Encolithic period.

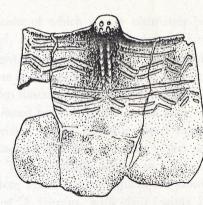


Fig. 22. Fragment of a neolithic pot. Okinawa, Ryukyu Islands.

are undoubtedly similar "pools" in other times and places. In the essay just referred to, I endeavor to show that the "decorative" art on megalithic monuments, especially of Western Europe, at about the time of transition from the Neolithic to the age of metals (roughly, the time of our figure 20, B), is really a repository of palaeolithic traditions; and that the designs painted (and sometimes scratched) on these megalithic monuments are, at least in a large measure, simply copied from the traditional decorations of the skin garments worn by the deceased who were commemorated in the monuments. It is only in this way that we can account for the surprisingly extensive correspondences that undoubtedly exist between "megalithic" designs from Western Europe and the designs still applied especially to skin garments by modern "primitive" peoples in Patagonia—and in Australia.³⁵

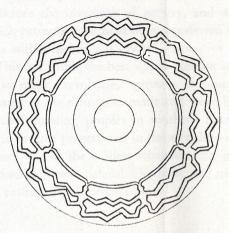


Fig. 23. Carved wooden basket-cover, Yami of Botel Tobago (Formosa),

In view of these circumstances, it should not surprise us to find a plausible counterpart for the Tehuelche design of figure 15 in the painted frieze of a megalithic tomb in Spain, as reproduced in figure 21. The dark masses in this frieze were recognized by both Leisner and Breuil as representations of human figures ("Almerian idols"), and the connecting zigzags, at least by Breuil, as their limbs. 36 This frieze differs from the scheme of Type I in figure 3 in that the zigzag limbs join the bodies directly instead of undulating around them, and in the isolation of one horizontal tier of bodies from what, I think, must have been originally a pattern extending in all directions (compare figure 20, A). Regardless of these differences, the sense of the frieze can only be that of a "genealogical pattern," in which the zigzag limbs ultimately symbolize bonds of kinship. (The rupestrian designs of figure 19, in most of which the zigzags are attached to only one central body, might be regarded as excerpts from a frieze like that of figure 21). Evidently the Tehuclche pattern of figure 15 represents a modification of Type I in figure 3 analogous to the scheme of the Spanish frieze, while retaining the original character of an "all-over" pattern. The relevance of the Spanish frieze of figure 21 to the Tehuelche pattern of figure 15 is enhanced by the fact that another pattern, composed of undulating bands, aligned vertically, in both parallel and opposed series, is painted on the upper surface of the same stone which carries the frieze. In other words, we have here (as on many megalithic monuments) concatenations of more or less simplified human figures of both Type I and Type II in figure 3, closely associated with each other. In the Tehuelche design of figure 1, these two systems are not only associated, but inseparably integrated.

Schemes of laterally connected human figures occur not only in prehistoric Europe and modern (and possibly ancient) Patagonia. Two designs from a geographically intermediate area may suggest the route by which such schemes must have found their way from one hemisphere to the other. In figure 22 is reproduced the surviving section of the rim of a neolithic pottery vessel from Okinawa, in which pairs of incised zigzags (with their points characteristically opposed: compare figure 20, A) represent the limbs joining what were originally probably four peripheral human figures (compare figure 18!), the head of each figure appearing as a knoblike excrescence on the rim, and its spinal column as a double column of punch-marks connecting the head with the zigzag limbs. The historical and morphological implications of this design, and of related designs of its class, are too vast for consideration here.³⁷ We only wish to suggest that this type of pottery decoration has close affinities on the one hand with neolithic traditions as far away

as Eastern Europe, to some of which it may ultimately provide clues; and that, on the other hand, surprisingly similar designs have survived until protohistoric times in certain pottery traditions of the Eastern Woodlands of North America. These indications may suffice to suggest the pertinence of such a neolithic relic from Eastern Asia to the general problem of the survival of the motif of concatenated human figures in the skin robes of Patagonia.

No doubt closely related to the neolithic sherd from Okinawa is the carved decoration around the rim of a wooden basket cover made by the modern Yami of Botel Tobago Island, off the southern tip of Formosa, as shown in figure 23. Here again human figures are connected laterally by their limbs in the form of zigzags, with their points for the most part opposed. The fact that the designs of figures 22 and 23 are peripheral is important both semantically and historically; for the endlessness of the genetic process is best symbolized by the projection of series of connected human figures "endlessly" around a cylindrical (or circular) surface. This conceptual requirement suggests that such patterns may have been applied first of all, long before the invention of pottery, around the limbs and torso of the human body itself, by means of painting or tattooing (compare figures 5 and 6)—the living head of the wearer serving to animate the (generally) headless bodies of such patterns, so that he would appear as the tribal ancestor.38 The wide prevalence of such patterns (as yet unrecognized) in the decoration of pottery (not only in the Old World: compare figure 18) is then to be explained by the circumstance that pottery vessels, once they came into existence, supplied cylindrical surfaces to which the traditional designs of such body-painting or tattooing could be conveniently transferred.³⁹ But long before the invention of pottery, and surely already in palaeolithic times, such patterns must have been transferred from the human body to the garments with which it was clothed—wherever conditions made clothing necessary. This is, I think, the best way to account for the prevalence of "endless," or so to speak "revolving," patterns of concatenated human figures in the decoration of the skin robes made and worn by still living (or now dying) "primitive" hunting peoples in southern South America and Australia. Indeed, the designs perpetuated in these traditions may be, in the most literal sense, survivals of the earliest schematic art, still applied as it must have been applied in remote palaeolithic times, and still pregnant with the record of man's earliest social consciousness.

San Juan. Facultad de Filosofía y Letras, Universidad Nacional de Buenos Aires, Publicaciones de la Sección Antropológica, no. 15. Buenos Aires.

1931. L'ancienne civilisation des Barreales. Ars Argentina, vol. 2. Paris.

GONZÁLEZ, ALBERTO REX

1951. Recientes investigaciones arqueológicas en la Provincia de Catamarca (resumen). Museo de La Plata, Communicaciones Científicas, no. 3, pp. 4-7, La Plata.

1955. Contextos culturales y cronología relativa en el área central del N.O. argentino (nota preliminar). Arqueología y Etnología, Anales, 1950, vol. XI. Mendoza.

1956. La cultura Condorhuasi del Noroeste argentino (apuntes preliminares para su estudio). Runa, vol. VII, parte primera, pp. 37-85, Buenos Aires.

1957. Dos fechas de la cronología arqueológica argentina obtenidas por el método de radiocarbón. Rosario.

1958. A note on the antiquity of bronze in N.W. Argentina. Actas del XXXIII Congreso Internacional de Americanistas, San José, 20-27 julio 1958. San José, Costa Rica.

1959. Nuevas fechas de la cronología arqueológica argentina obtenida por el método de radiocarbón. Ciencia e Investigación. Junio.

IBARRA GRASSO, DICK EDGAR

1950. Nueva interpretación sobre la arqueología del Noroeste argentino. Revista de Etnología y Arqueología, Ciencia Nueva, año CL, no. 1. pp. 11-37. Tucumán.

IBARRA GRASSO, DICK EDGAR, AND BRANISA, L.

1956. Nuevos estilos en la cerámica indígena de Bolivia. Museo Arqueológico de la Universidad Mayor de San Simón, Publicaciones, no. 1, pp. 1-43. Cochabamba. JOYCE, THOMAS A.

1912. South American archaeology. New York.

KROEBER, A. L.

1956. Toward definition of the Nazca style. University of California, Publications in American Archaeology and Ethnology, vol. 43, no. 4, pp. 327-432. Berkeley and Los Angeles.

LAFONE QUEVEDO, SAMUEL A.

1892. Catálogo descriptivo e ilustrado de los huacas de Chañar-Yaco. Museo de La Plata, Revista, vol. 3, pp. 23-63. La Plata.

1905. Viaje arqueológico en la región de Andalgalá 1902-1903. Paraguay.

1908. Tipos de alfarería en la región Diaguito-Calchaquí. Museo de La Plata. Revista, vol. 15, pp. 295-395. La Plata.

LEVILLIER, ROBERTO

1926. Nueva crónica de la conquista del Tucumán. Buenos Aires.

LOTHROP, S. K., AND MAHLER, JOY

1957. Late Nazca burials in Chaviña, Peru. Peabody Museum, Harvard University. Papers, vol. L, no. 2. Cambridge.

MEANS, PHILIP AINSWORTH

1917. A survey of ancient Peruvian art. Connecticut Academy of Arts and Sciences. Transactions. New Haven.

PALAVECINO, ENRIQUE

1932. Areas culturales del territorio argentino. Actas del XXV Congreso Internacional de Americanistas, t. I, pp. 223-34. La Plata.

1948. Areas culturales del territorio argentino. En Gaea.

PONCE SANGUINES, CARLOS

1957. Arqueología Boliviana. (Primera mesa redonda.)

RALPH, ELIZABETH K.

1959. University of Pennsylvania Radiocarbon dates III. American Journal of Science Radiocarbon Supplement, vol. 1, pp. 45-58. Philadelphia.

SERRANO, ANTONIO

1943. El arte decorativo de los diaguitas. Instituto de Arqueología, Lingüistica y Folklore, Universidad Nacional de Córdoba, Publicaciones, no. 1. Córdoba.

1947. Los aborígenes argentinos; síntesis etnográfica. Buenos Aires.

Consideraciones sobre el arte y la cronología en la región diaguita. Instituto de Antropología de la Facultad de Filosofía y Letras de Rosario, Publicaciones, no. 1. Rosario.

STUBEL, A., REISS, W., AND KOPPEL, B.

1889. Kultur und industrie Südamerikanis cher Völker, nach dem in Besitze des Museum für Völkerkunde zu Leipzig. Berlin.

UHLE, MAX

1912. Las relaciones prehistóricas entre el Perú y Argentina. Congreso Internacional de Americanistas, 17 sesión, pp. 509-40. Buenos Aires, 1910.

VALCARCEL, LUIS E.

Arte antiguo peruano. II: el personaje mítico de Pukara. Museo de Lima, Revista, t. I, pp. 16-30. Peru.

WEISER, VLADIMIRO

1925-26a. Diario de la VII expedición arqueológica de Benjamín Muñiz Barreto. Noviembre 1924 a Mayo de 1925. Ms. depositado en el Museo de Ciencias Naturales. La Plata

1925-26b. Diario de la VIII expedición. Noviembre 1925 a Marzo de 1926. Ms.

WOLTERS, FRANCISCO

1927. Correspondencia de la IX expedición arqueológica de Benjamín Muniz Barreto. Febrero a Junio 1927. Ms. depositado en el Museo de La Plata.

1928. Idem de la X expedición. Diciembre 1927-Abril 1928. Ms.

1929. Idem de la XI y última expedición de Benjamín Muñiz Barreto. Enero-Junio de 1929. Ms.

Essay 27. Schuster: Observations on the Painted Designs of Patagonian Skin Robes

BOGGIANI, GUIDO

1895. Viaggi d'un artista nell' America meridionale; i Caduvei. Rome.

BÓRMIDA, MARCELO

1952. Pámpidos y Australoides; Coherencias ergológicas y míticas. Archivos Ethnos, serie B, no. 6, pp. 51-82. Buenos Aires.

BREUIL, HENRI

1920. Les roches peintes de Minateda. L'Anthropologie, vol. 30, pp. 1-50. Paris. 1933-35. Les peintures rupestres schématiques de la péninsule ibérique. 4 vols. Lagny.

BREUIL, HENRI, AND BURKITT, M. C.

1929. Rock paintings of Southern Andalusia. Oxford.

BREUIL, HENRI, AND SAINT-PÉRIER, RÉNÉ DE

1927. Les poissons, les batraciens et les reptiles dans l'art quaternaire. Institut de Paléontologie humaine, Archives, Mémoire 2. Paris.

CLARK, JOHN GRAHAME DOUGLAS

1936. The Mesolithic settlement of northern Europe, Cambridge.

ETHERIDGE, R., JR.

1918. The dendroglyphs, or "carved trees" of New South Wales. Geological Survey

of New South Wales (Department of Mines), Ethnological Series, Memoirs, no. 3. Sidney.

GARCÉS, ANTONIO

1943. Placas líticas grabadas del Neuquén. Centro de Estudios Pampeanos, Revista, año 2, no. 3, pp. 1-8, Abril, Santa Rosa.

GENNEP, ARNOLD VAN

1907. Dessins sur peaux d'opossum australiennes. Rijks Ethnographisch Museum te Leiden (Vreslag van den Directeur over het tijdvak van 1 Oct. 1905 tot 30 Sept. 1906, Bijlage B), pp. 66-72, 14 pls. 's. Gravenhage.

GRAZIOSI, PAOLO

1956. L'arte dell' antica età della pietra. Florence.

GREENWAY, ARCHDEACON

1910. Kamilari Tribe. Royal Anthropological Society of Australasia, Science of Man, Journal, n.s., vol. 11, no. 10, pp. 197-98. Sidney.

GRESLEBIN, HECTOR

1931. Dos vasos indígenas hallados en Puerto Basilio (Prov. de Entre Ríos). Solar, vol. 1, pp. 161-72. Buenos Aires.

HADDON, ALFRED CORT

1947. Smoking and tobacco pipes in New Guinea. Royal Society of London, Philosophical Transactions, series B, vol. 232. London.

HATCHER, JOHN BELL

1903. Reports of the Princeton University Expeditions to Patagonia, 1896-1899. Vol. 1. Princeton and Stuttgart.

KIDDER, J. EDWARD, JR.

1957. The Jomon Pottery of Japan. Artibus Asiae, Supplementum XVII. Ascona. KOCH-GRÜNBERG, THEODOR

1906. Indianertypen aus dem Amazonasgebiet. 2 vols. Berlin.

1908. Das Haus bei den Indianern Nordwestbrasiliens. Archiv für Anthropologie vol. 35, pp. 37-50. Braunschweig.

KRICKEBERG, WALTER

1949. Felsplastik und Felsbilder bei den Kulturvölkern Altamerikas. Vol. 1. Berlin.

1934. Die Malereien des Dolmen Pedra Coberta. IPEK, pp. 23-44. Leipzig. LOTHROP, S. K.

1929. Polychrome guanaco cloaks of Patagonia. Museum of the American Indian: Heye Foundation, Contributions, vol. 7, no. 6, pp. 1-30. New York.

1931. Painted skin articles from Patagonia. Musée d'Ethnographie du Trocadéro (Musée de l'Homme), Bulletin semestriel, no. 2, pp. 31-41, July. Paris.

MATHEWS, R. H.

1895. The Bora, or initiation ceremonies of the Kamilaroi Tribe. Royal Anthropological Institute, Journal, vol. 24, pp. 411-27. London.

MATSUMURA, AKIRA

1920. The shell-mounds of Ogido in Riu-Kiu. (In Japanese, with English resume). Imperial University of Tokyo, Anthropological Institute, College of Science. Papers, no. 3, 70 pp., 10 pls., 15 text figures, September. Tokyo.

MENGHIN, OSWALD

1956. Vorgeschichtliche Labyrinth-Symbole aus Argentinien. Kosmos, vol. 52, no. 4. pp. 177-79, April. Stuttgart.

PERNETY, A. J.

1771. The History of a Voyage to the Malouine (or Falkland) Islands made in 1763 and 1764, under the Command of M. de Bougainville. . . . , with an Account of the Patagonians, translated from Dom Pernety's Historical Journal written in French. London.

PEYRONY, DENIS AND ELIE

1938. Laugerie-Haute près des Eyzies (Dordogne). Institut de Paléontologie humaine, Archives, Mémoire 19. Paris.

RATZEL, FRIEDRICH

1887-88. Völkerkunde. 3 vols. Leipzig.

1931. Industrie en os de la station paléolithique de Mizyn interprétée par Fedir RUDYNS'KYI, M. vovk. Académie des Sciences d'Ukraine, Laboratoire d'Anthropologie de Th. Vovk. Kiev.

1951. Designs incised on pearl shell. Mankind, vol. 4, no. 6, pp. 219-20. Sydney. SCHUSTER, CARL

1955. Human figures in South American petroglyphs and pictographs as excerpts from repeating patterns. Musco de Historia Natural de Montevideo, Anales, 2a Serie, vol. 6, no. 6, pp. 1-13. Montevideo.

1956-58. Genealogical patterns in the Old and New Worlds. Museo Paulista, Revista,

n.s., vol. 10, pp. 7-123. São Paulo. Schematic motives of Upper Palaeolithic art; a reconstruction from the evidence of later prehistoric periods and modern survivals. (In preparation.)

SERRANO, ANTONIO

1947. Los aborígenes argentinos. Buenos Aires.

STOLPE, HIALMAR

1927. Collected essays in ornamental art. Atlas: South America. Stockholm.

New finds of Mesolithic ornamented bone and antler artifacts in Denmark. VEBAEK, CHRISTEN LEIF Acta Archaeologica, vol. 9, pp. 205-28. Copenhagen.

M.C.C.—Museo Calchaquí, Catamarca, Argentina,

M.E.—Museo Etnográfico, Faculty of Philosophy and Letters, Buenos Aires.

M.I.L.R.-Museo Incahuasi, La Rioia, Argentina,

44. Ambrosetti, 1908.

45. González, 1958.

46. Debenedetti, 1931. lám. LXVIII.

47. We believe that much of the metal from the Calchaquí Valley should be restudied. It would not be surprising to find that many of the pieces catalogued as typical of Diaguita culture, are products of those Indians, but in post-Conquest periods, made during the lapse of more than a century during which these people remained in rebellion and independence. The pacification and final overthrow of the Indians in the Yocavil and Hualfin valleys was accomplished after 1640.

48. Personal communication.

49. According to a drawing in an album kept in the Museo de La Plata.

50. Boman, 1923, p. 7.

51. Lehmann, 1926, pl. 62, bottom.

52. Kroeber, 1956, pp. 404, 406.

53. Lothrop and Mahler, 1957, p. 10.

54. See e.g., González, 1955; 1956, p. 63ff.

55. González, 1951.

56. González, 1955, p. 70.

57. González, 1958.

58. Uhle, 1912, p. 519ff.

59. Ibid., p. 521.

60. Boman, 1923, p. 9.

61. Ibid., p. 5.

62. Uhle, 1912, p. 525.

63. Ibid., p. 510.

64. Debenedetti, 1912, pp. 15; 55.

65. Levillier, 1926, lám. IV.

66. Joyce, 1912.

67. Means, 1917.

68. Boman, 1923, p. 11.

69. Baessler, 1902-1903, vol. III, fig. 333.

70. Ibid., pl. 83, figs. 285, 285, a.

71. Stubel, Reis, Koppel, 1889, vol. I, pl. 15.

72. Ibid., pl. 17.

73. Ponce Sanginés, 1957, p. 54.

74. Ralph, 1959, p. 54.

75. Ibarra Grasso, 1956.

76. González, 1956, p. 77.

Essay 27. Schuster: Observations on the Painted Designs of Patagonian Skin Robes

1. The writer is greatly indebted to the Wenner-Gren Foundation for Anthropo logical Research, New York, for generous assistance in the preparation of most of the drawings for this article.

2. Lothrop, 1929, pp. 17, 27.

3. To my knowledge, the only published illustrations of the designs traditionally

painted on guanaco-skin robes by the Tehuelche are those in Lothrop, 1931, figs. 4 and 5. In those illustrations, the letter d designates the repeating pattern of the field, corresponding to our figure 1.

4. Besides the specimen illustrated here, and three specimens in the Musée de l'Homme, Paris, illustrated by Lothrop, 1931, figs. 6 and 7, I know of two such horsehide robes in the Museum für Völkerkunde, Hamburg (one of them formerly in Lübeck); at least four specimens in the Musco de La Plata; one in the Musco Etnográfico, Buenos Aires; and one evidently in a museum in Valparaiso, Chile, as illustrated by Stolpe, 1927, pl. xx, fig. 1. In the United States, I am not aware of other specimens than that illustrated here, though there may be others, both here and abroad. Though the color-schemes vary somewhat from robe to robe, that of our figure 1 may be described as typical. Variations in the design-motifs in the repeating patterns of such horsehide robes may also be described as minimal—and as probably less than in the repeating patterns of the guanaco robes, which merit further study in themselves.

Dr. Junius Bird has called my attention to the fact that the extreme stiffness of these horsehides makes it difficult to suppose that they were worn as clothing. In the absence of reliable first-hand observations (other than the recorded statement of the collector of the specimen here illustrated, to the effect that it was used as a wrapping for extra clothing), one can only fall back upon speculation: could such "robes" perhaps have been used also as sleeping-pads and the like? I retain Lothrop's term of "robes" as being general enough to include some such alternative usages. In the characteristic cut of these "robes," and especially in the protruding tab which evidently corresponds to the neck of the horse, I confess that I am still tempted to see some reference to the convenience of a human wearer. Could it be that the shape into which these horsehides are cut reflects a tradition established when the Tehuelche were using the more pliable skins of some other rather large animal to make one-piece robes (rather than stitched robes, such as are necessitated by the use of guanaco-skins)?

5. Schuster, 1956-58.

6. Ibid., p. 11.

7. Ibid., ms. in preparation.

8. For the "robe" represented on a palaeolithic figurine, see Schuster, 1960, fig. 4 (after Rudyns'kyj, 1931, pl. xii; cf. also figure 20, A in the present article). For the modern Australian and Chaco robes which are to be compared with it, see Schuster, 1960, figs. 19-20 and 40-41, respectively.

9. Ratzel does not say that the woman sitting by the pegged-out squares of skin in the lower right-hand corner of this picture is the person who decorated them; but I think there can be little doubt that such decoration was in fact the work of women. Greenway, 1910, p. 197, says that it was the women who stitched the robes of the Kamilaroi in New South Wales; and on July 25, 1959, Mr. C. P. Mountford wrote me from Adelaide that in northern South Australia it was an aboriginal woman who decorated a rug of kangaroo skins for him.

10. Mathews, 1895, p. 415.

11. See the discussion of figs. 44-48 in Schuster, 1956-58.

12. See the discussion of fig. 11 in Schuster, 1960.

13. Cf. Schuster, 1956-58, p. 77f and note 96, a; ms., note 15.

14. Compare a "double genealogical pattern" from Marajó with swastikas at the crossings; Schuster, 1956-58, fig. 14.

15. Schuster, 1956-58, p. 37f.

16. Cf. Schuster, 1956-58, figs. 11, 16, and especially the discussion of fig. 38, with note 40. On the "estilo de grecas" or "fret style," see note 28 below. 17. This idea was first expressed as a surmise in Schuster, 1956-58, p. 47f. It is 506

NOTES

507

considerably developed in Schuster, ms. in preparation; and I hope to develop it still further (with perhaps palaeolithic evidence) in a congress communication in Paris in 1960.

17a. In this connection I wish to call attention to what appears to be a rare (perhaps unique?) specimen of appliqué of colored skin cut-outs, from Neuquén, in Buenos Aires, Museo Etnográfico, 24039, discussed in Schuster, 1956–58, note 41; and a "single en peau de jumente peinte, collection De la Vaulx," in Paris, Musée de l'Homme, 99.8.37. The latter specimen, apparently without exact provenience, is in any event Patagonian. It is evidently not an appliqué: its decoration seems to have been accomplished by scraping away parts of the horse's hair and coloring these. The designs of both specimens strongly recall the archaeological "fret style" of the Neuquén, though neither is "reciprocal" in character.

18. Cf. Schuster, 1956-58, note 15, and figs. 17 and 27.

19. Koch-Grünberg, 1908, pl. vi, fig. 13.

20. Lothrop, 1929, p. 26.

21. Bórmida, 1952.

22. Clark, 1936, fig. 60, g and f.

23. Clark, 1936, p. 178, s. v. Motif g (citing Breuil and Saint-Périer, 1927, fig. 23, no. 11: better in Peyrony, 1938, fig. 48). Cf. note 26 below.

24. For Eastern Indonesia and Northwestern Australia, see Schuster, 1951, figs. 2 and 1, respectively; for Southern New Guinea, Schuster, 1956–58, fig. 5 (or the same in Haddon, 1947, fig. 20).

25. Lothrop, 1929, p. 22, gives his reason for trusting the engraver's accuracy. I

think it is supported by the evidence of our figure 16, b.

26. I refer to a pebble with incised decoration from the cave of the Barma Grande, Grimaldi, illustrated by Graziosi, 1956, pl. 105, b. My identification of the design as that of a palaeolithic skin robe is proposed on the basis of the side of the pebble shown at the left of Graziosi's illustration, as reproduced in Schuster, 1960, fig. 37. The motif of intersecting hatched bands to which reference is made here occupies the other side of the pebble, shown at the right of Graziosi's illustration. I hope to develop this theme on a later occasion, with reference to further palaeolithic and mesolithic evidence.

27. In 1954 I saw and photographed in the Salesian Seminary at Rawson (Chubut) a fragmentary pottery vessel obviously related to that of which the design is reproduced in figure 18. It had presumably been found locally. On ceramic analogies for the Tehuelche robe designs generally, see Lothrop, 1929, p. 20, f; and compare especially Schuster, ms. in preparation, fig. 50.

28. Menghin, as cited in Schuster, 1956-58, note 38.

29. For the anthropomorphic identity of such motifs in the "fret style" of northwestern Patagonia, see Schuster, 1956–58, figs. 38 and 38, *a-c*, and notes 43 and 73. Cf. also Schuster, 1955, figs. 7, *a* and 9, *a*.

30. Schuster, 1960, figs. 43 bis, 44 bis and 45 bis.

31. Schuster, ms. in preparation, fig. 41, panels B-1, B-3, B-5, and fig. 44 bis.

32. Schuster, 1956-58, pp. 17-19, figs. 10-15.

33. Breuil, 1920, fig. 46. These motifs are more fully illustrated and discussed by Breuil, 1933–35, *passim*; and one of them, our figure 20, B, by Breuil and Burkitt, 1929, pl. xvii and p. 52.

34. Schuster, ms. in preparation.

35. See Schuster, ms. in preparation. I there suggest that the perpetuation of "vestimentary" designs in the European megalithic monuments may have been stimulated by the new knowledge of metal tools, by means of which designs, which had been theretofore inscribed or painted for mortuary purposes probably on wood,

were for the first time transferred to imperishable stone. This would help to explain the alternative use of wood for stone in many "megalithie" traditions still current among modern "primitive" peoples, and the surprisingly strong "megalithie" reminiscence particularly in the designs carved on trees around graves by some of the Australian aborigines (Etheridge, 1918). We may assume that it was mortuary "monuments" of this kind, probably traditional ever since palaeolithic times, which were suddenly turned into stone in encolithic Europe. Behind all these manifestations must lie the traditional designs decorating the skin garments with which the effigies of the deceased were "clothed."

36. Leisner, 1934, p. 36; Breuil, 1933-35, vol. 4, p. 91.

37. In a letter of Nov. 5, 1959, Dr. J. Edward Kidder, Jr., suggested to me a date of 4500 to 4000 for the class of Okinawan pottery represented by our figure 22. (For the relation of Ryukyuan neolithic pottery to that of the main Japanese islands, see Kidder, 1957, pp. 94–96.) Regardless of the date of this vessel, its design does appear to me both more archaic and more intelligible than the decoration of most Jomon (Japanese neolithic) pottery. The peripheral frieze of human figures connected by zigzag limbs has its obvious counterpart in the painted decoration of late neolithic pottery from Kansu, China, and, I think, likewise in the incised decoration of certain Siberian neolithic pottery from the region of Lake Baikal. The whole question of such concatenations of (often highly stylized) human figures in neolithic pottery generally, of their meaning, and of their ultimate derivation from a palaeolithic tradition, will have to be considered within a much broader framework than is possible here.

38. See the discussion of figures 17-28 in Schuster, 1956-58.

39. Cf. Schuster, 1956-58, p. 71f. Also more on this topic in Schuster, ms. in preparation; and, I hope, still further and more fully in a later special study of the origins of neolithic pottery decoration as such.

Essays in Pre-Columbian Art and Archaeology

by Samuel K. Lothrop and others

HARVARD UNIVERSITY PRESS

Cambridge, Massachusetts

1961