CRANIAL DEFORMATION: POSSIBLE EVIDENCE OF POCHTECA TRADING MOVEMENTS

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ABSTRACT

The archaeological significance of the limited occurrence in the Greater Southwest of skulls with tabular oblique or tabular erect cranial deformation may provide evidence of individuals traveling and trading from Nuclear Mesoamerica. At Casas Grandes few skulls with this type of deformation occurred, although symmetrical occipital deformation was common. In a site near Zape, Durango, Mexico, a semi-mummified skull was recovered exhibiting tabular oblique cranial deformation, including characteristically fronto-occipital flattening and lateral parietal bulges.

The archaeological implications of burials with this type of cranial deformation may relate to the movements of pochtecas into the northwestern frontier along one possible trading corridor of the Sierra Madre Occidental. The inference is that skulls with tabular oblique or perhaps tabular erect cranial deformation are evidence of individual pochteca in an area outside of Nuclear Mesoamerica.

DESCRIPTIONS OF MAP AND PLATES

Map: Shows the location of the cave sites within the Zape region, Durango, Mexico.
Plate 1: Right lateral view of Zape region tabular oblique deformed cranium.
Plate 2: Left lateral view of Zape region cranium.
Plate 3: Close-up of pre-mortem break and reheeling of nasal bones.
Plate 4: Lateral x-ray of Zape region, cranium, showing cervical vertebrae.
Plate 5: Frontal view of Zape region cranium.
Plate 6: Occipital view of Zape region cranium.
Plate 7: Lateral view of a Museo Nacional Zape area skull.
Plate 8: Lateral view of a Museo Nacional Zape area skull.

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INTRODUCTION

Recent discussions of the role of the pochteca in the cultural diffusion of Mesoamerican traits along the Sierra Madres into the Greater Southwest has raised questions as to whether the pochteca themselves traveled from core Mesoamerican urban areas, or whether the cultural diffusion extended northwards through local intergroup contacts. As Reyman states: ‘...we have virtually no evidence for the prehistoric presence of the pochteca, per se, in the Southwest. That is, to date, no one has presented us with body warm or cold, at the sight of which can raise the chorus, ‘Aha! Here is a pochteca member in the flesh (or skeleton)’” (1978:243). Reyman’s comments on the need for direct physical, preferably skeletal, evidence validating the actual presence of pochteca themselves in the Greater Southwest elicited a recollection of an artificially deformed skull recovered from La Cueva de Oos Puertas near Zape, Durango, Mexico (Map).

In April, 1957, as part of an archaeological research project along the eastern slopes of the Sierra Madre Occidental in Chihuahua and northern Durango (supported by a grant from the
Map of Central and Northern Mexico showing the Zape Region. (After Brooks et al, 1962; pg 357)
Associates in Tropical Biogeography, University of California, Berkeley), R. H. and S. T. Brooks excavated a small cave near Zape Chico, Durango. Just prior to the start of this excavation, young boys removed at least two shallow mummified burials from an adjacent cave, La Cueva de Dos Puertas. Some of the materials they took to Durango City expecting to sell them. From the appearance of the midden surface after this vandalism, there had been several shallow mummy bundles burials within this cave. Human bones were scattered around in the vicinity of the area where the boys had disturbed the midden, as well as strips of rabbit skin (one item said to have been taken to Durango for sale was a "rabbit skin serape"), cloth and basketry fragments. An artificially deformed, partially mummified, disconnected skull was lying on the surface with this scattered material. The human bones and other scattered items were reinterred and marked for future investigators.

The artificially deformed skull was later taken with data excavated from the small cave, La Cueva de Los Muertos Chiquitos, to the Instituto Nacional de Antropologia e Historia, Mexico D.F., as evidence of the archaeological potential of this large, relatively undisturbed site. As far as is known no additional excavation has occurred in La Cueva de Dos Puertas, although an archaeologist from the Instituto, Augustin Delgado, conducted further excavation of an adult burial in La Cueva de Los Muertos Chiquitos.

Considering this skull as a potential physical clue to the presence of a member of the pochteca in the Zape region, the actual evidence to be utilized is based on a cultural factor, the cranial deformation. Since the skull was found as a result of the boys’ disturbance of the mummy burials, there was no archaeological provenience nor directly associated artifacts. In the two lateral views (Plates 1 and 2) the type of cranial deformation exhibited is unmistakably tabular oblique. The appearance of the Zape region skull laterally is identical with that of the cranium from Vera Cruz illustrating tabular oblique artificial cranial deformation (Romero, 1970:66), a trait that has been present in the Valley of Mexico since the Late Preclassic (Romero, 1970).

None of the burials from La Cueva de Los Muertos Chiquitos exhibit this type of cranial deformation. Further literature search has indicated that this variety of artificial deformation has a limited occurrence in northwestern Mexico and the Greater Southwest. On this basis it is proposed that tabular oblique or erect cranial deformation, which occur with relative frequency in the Nuclear area of Mesoamerica, might be an identifying trait indicative of a member of the pochteca. If this cranium does represent the buried remains of an actual pochteca, what are the cultural factors that would bring tracadores or merchant traders, themselves, into the Zape region.

**PREHISTORIC TRADING POTENTIALS IN THE ZAPE REGION**

On the eastern slopes of the Sierra Madre Occidental, Brooks (1978) has described archaeological sites encountered along the river drainage system of the upper Rio Nazas, which consists of the Rio Zape, Rio Tepehuanes and Rio Santiago forming the Rio Ramos and then flowing into the upper Rio Nazas (Brooks, 1978:map p. 84). Above these rivers on the bluffs, promontories and hill slopes have been located archaeological sites (Brooks, 1971; 1978) of what Kelley (1971) refers to as the Loma San Gabriel culture, which he considers a manifestation of the Chalchihuite culture, extending from southern Durango to east-central Chihuahua. There is easy access into the Sierra Madres along this river system and the alluvial valleys prehistorically provided an agricultural potential that is still being utilized today. Both the Ramos and Zape regions contained population areas of sufficient density that they can be related culturally to the Chalchihuites urban centers, even through these areas are more on the level of developed villages and townsites (Brooks, 1978). In both these regions there are indications of religious centers, in which hilltops were used to simulate a pyramidal structure and several of these sites had locales that may be characterized as small associated playing fields.
In the Zape region there are numerous cave sites, which were used for habitation, in addition to the village sites on the mesa tops. Similar cave/shelters were not observed in other portions of the upper Rio Nazas drainage. The cave that was excavated in 1957, La Cueva de Los Muertos Chiquitos (Brooks, 1971; Brooks et al, 1962; Brooks and Brooks, 1978), produced artifactual material, mainly associated with the child burials, including oliviella-type shells indicating trade with the western coastal areas. This may have been through direct contact or through an intermediary.

In a cache towards the rear of the shelter two large ceremonial knives or lance heads were found—one made from white chert, the other from obsidian—and a low wooden stool carved in the shape of a turtle. Torquoise chips were embedded in pitch on a wooden pendant found in association with one of the child burials (Brooks and Brooks, 1978), and turquoise chips were encountered in several of the village sites during the survey of the Ramos and Zape regions. There is a radiocarbon date of ca. 660 A.D. (Brooks et al, 1962) derived from a single wood sample obtained from the lower levels of the midden deposit. During a discussion in 1964 Delgado, who had previously worked with Kelley at the Schroeder site, described the burial he excavated in La Cueva de Los Muertos Chiquitos as a Chalchihuites-type burial with associated grave goods.

The easy access into these regions of the upper Nazas drainage if from the east and south, and the cultural implications of the architecture and associated artifacts are oriented towards the more sophisticated Chalchihuites urban centers in southern Durango and northern Zacatecas. This is not to imply that there may not have been direct contact with the known prehistoric urban areas of the west coast, but the access is more difficult across the higher Sierran peaks and barrancas to the west. Kelley (1958) has noted similarities to west coast pottery and Chamelita sherds at the Schroeder site, indicating established contact with that area. Trade routes may have been from west coast urban areas through to the Chalchihuites centers and then into the more remote regions where the Loma San Gabriel/Chalchihuites population densities occurred.

This brief discussion indicates that the Ramos and Zape regions had cultural connections through to the Chalchihuites centers in the south and that trading contacts appear to have existed. Under these circumstances it could be anticipated that a pochteca member might have traveled into the Zape or Ramos regions, bringing merchandise and looking for exploitable trade items. If a pochteca died during the trading trip, he would have been appropriately buried in that region, which is the premise on which DiPeso et al (1974), Frisbie (1978) and Reyman (1978) have based their pochteca burial descriptions. If all that is recovered archaeologically is a cranium; the problem is whether the cultural trait of a particular type of artificial cranial deformation could be proved to be sufficiently reliable to serve as an identifying characteristic, as in this case from the Zape region where there are no associated artifactual data.

**DESCRIPTION OF THE CRANIUM**

Prior to describing the physical attributes of the Zape region cranium, an important aspect of the specific type of artificial cranial deformation under consideration needs emphasis. This cultural trait is not a casual, but a long term, process that must be started in infancy with specific methods of application. Saul (1972:10) has incorporated a clear definition of the terms and devices used in forming a tabular type of cranial deformation.

... a Tabular category produced by fronto-occipital compression between thin boards...

Each category was further subdivided into Erect and Oblique varieties according to the inclination of the occipital area upon the Frankfort plane. In the Erect variety, pressure was confined to the upper portion of the occipital and adjacent portions of the parietal (the lambdoid area) resulting in an essentially vertical orientation or occasionally an anterior inclination of the occipital...

The Oblique variety was subjected to overall pressure on the occipital bone to such an extent that the entire occipital was flattened and tilted posterior-
ly. Although the orientation of the occipital bone has been used to differentiate between varieties, there is likely to be concurrent deformation (flattening) of the frontal bone in both the Erect and Oblique varieties, owing to the nature of the deforming apparatus.

The Zape region cranium is that of an adult male, possibly in his late thirties at time of death, to judge by the occlusal surface wear of his teeth, particularly the left upper third molar. The age estimate is further confirmed by beginning osteophytic growth on the centra of the cervical vertebrae. Both nasal bones appear to have to have been broken and resealed premortem (Plate 3).

The skull is partially covered with dried integument, some hair is still present in the vault area, and dried pigmented and other soft tissues are holding six of the cervical vertebrae in position. These consist of the atlas, axis and cervical vertebrae 3 through 6. The cranial vault and facial bones are intact, but the mandible is absent and a number of teeth are missing post-mortem, including all the anterior teeth. From the right lateral view (Plate 1), it almost appears as if the anterior portion of the mandible is still present, as the skin and soft tissues have retained their original shape. On the parietal, superior to the temporal line and just posterior to the coronal suture is a break, through the dried scalp tissue and into the bone (Plates 2 and 4). This broken area was probably the result of handling by the boys when they vandalized the mummified burials.

No anthropometric measurements were taken as the dried integument and other tissues cover large portions of the cranium, as is shown in the plates. X-rays were taken (Plate 4) to explore the possibility of any cranial anomalies. No anomalies were observed and only age-related traits such as beginning tooth loss, caries and, on the right side, alveolar resorption where the upper right first and third molars had been lost. Some alveolar prognathism occurs and can be seen in the left lateral photograph (Plate 2). In the frontal view (Plate 5) on the right there is visible a supra-orbital foramen, while on the left a supra-orbital notch. The nasal bridge is concavo-convex in profile, which may relate to the breaking of the nose during life. There is a slight amount of glabellar swelling, but little or no brow ridge development, perhaps a result of the fronto-occipital deformation.
The nuchal area is covered with integument or ligamentous attachments, but there is development of a nuchal ridging that is apparent in the lateral x-ray (Plate 4). In the asterica portion of the left lambdoidal suture, where the bone is exposed, there are a number of wurmian bones, several of which are large. A few small wurmian bones occur in the left masto-occipital suture and are prominent ridges. A few small wurmian bones occur in the left masto-occipital suture and one on the right at the parieto-mastoid section of the squamosal suture. Both right and left auditory meati are medium thick. The tabular oblique styly of cranial deformation has caused the parietal bosses to bulge prominently (Plate 6), with a slight depression at the sagittal suture. This is obscured in the photographs by the hair, but can be seen in direct observation.

**DISCUSSION**

During the Brooks’ excavation of La Cueva de Los Muertos Chiquitos only crania of children or infants were encountered, although Delgado excavated at least one complete adult burial. The crania of the children exhibited bilateral occipital flattening, with concomitant enlarged parietal bosses, but no frontal flattening. A colleague, Raymond Rawson, through the cooperation of Arturo Romano, was able to photograph two skulls from the collections of the Museo Nacional in Mexico D.F. Both of these were identified as from an archaeological site in the Zape area. Plates 7 and 8 show lateral views demonstrating a similar cranial deformation to that exhibited by the children’s crania from the small cave of Zape. The lack of flattening of the frontal area is most noticeable laterally. Comparison was made with the illustration of tabular erect cranial deformation (Romero, 1970:65), but both of the crania, photographed by Rawson, show rounder occipitals in addition to marked post-coronal depressions. The only way in which they resemble the Zape region cranium with tabular oblique deformation is in the enlargement of the parietal bosses as an effect of artificial deformation.

On the basis of the proposed prehistoric contact between the Zape region and the urban centers of the Chalchihuites culture in southern Durango, it was originally presumed that the tabular oblique deformed Zape region cranium might prove to have been the burial of a Chalchihuites individual. Robert Pickering, who is describing burials from Chalchihuites archaeological sites, wrote that “In my notes, there is reference to the tabular erect form of cranial deformation and an erect bi-lobed form” (1970), but as yet no comments on a tabular oblique type. For further comparison of skeletal data from sites within northwestern Mexico, east of the Sierra Madres, to obtain additional information on types of artificial cranial deformation common to the area, the Casas Grandes Reference Volume 8 (DiPeso et al, 1974) was consulted. Artificial cranial deformation was characteristic of
the burials from Casas Grandes, with symmetrical occipital deformation predominating. During the Viejo Period three individuals are described as exhibiting fronto-occipital deformation, two adult males, and a young adult female. "This fronto-occipital deformation was of particular interest, because this custom, which did not prevail in the northern portion of the Gran Chichimeca, was practiced by some Mesoamericans" (DiPeso et al, 1974:339). Unfortunately no illustration of the fronto-occipital deformation is included and from the description, it cannot be determined whether this was tabular oblique or tabular erect cranial deformation. There is a reference to three possible "pochtetes" burials, one from the Diablo Phase and two from the Medio Period, but all three burials consisted only of post-cranial bones, with no associated crania (DiPeso et al, 1974:371).

Romero (1970) described several types of artificial cranial deformation, utilizing Dembo and Imbolloni's nomenclature for classification. He states that "in any case, the predominant head deformation in Middle America was the tabular form in its two types, erect and oblique. Although both types are well represented throughout the whole pre-Spanish epoch, there is no doubt that the tabular oblique was much more frequent during the Late Classic period, especially within the Maya area" (Romero, 1970:66). Certainly Saul's (1972) description of artificially deformed crania from the Altar de Sacrificios in the southwestern Peten confirms the predominance of tabular types of cranial deformation occurring in both male and female burials. Tentatively the "Oblique variety of Tabular deformation seems to predominate in the Late Classic, while the Erect variety seems to be the primary form in the Postclassic . . . although both sexes are represented in all categories, more males are classified as Tabular Erect and more females as Tabular Oblique when time is held constant" (Saul, 1972:17).

Present evidence from prehistoric sites in Mesoamerica supports the statement that "head deformation had a very wide distribution in this area and dates from very remote time" (Romero, 1970:65). In referring to this practice Romero is essentially discussing head deformation in the Nuclear Mesoamerican areas and according to his data "tabular erect deformation is the most ancient in Middle America, having appeared in the cultural level corresponding to the Early Pre-classic (1400-1000 B.C.) in the Valley of Mexico; tabular oblique deformation was present also in the Valley of Mexico since the Late Preclassic (500-200 B.C.). In these two cultural levels both sexes exhibited deformation" (Romero, 1970:66). These tabular types of cranial deformation occurred through to Aztec and late Mayan pre-contact times (Saul, 1972). There are other types of cranial deformation described by both Romero and Saul, but no mention of these alternate types is made by Pickering (1978) in referring to the Chalchihuites burial data, nor by DiPeso et al (1974) with reference to the burial sequences from Casas Grandes. Consequently if a specific type of cranial deformation might be selected as a physical trait to identify individuals, buried in Northwestern Mexico or the Greater Southwest, who derived from Nuclear Mesoamerica, tabular cranial deformation, oblique or erect, may be that trait. The people who would be traveling from Nuclear Mesoamerica into the outlying regions of Northwestern Mexico and the Greater Southwest are most logically the pochteca, or merchant traders.

Certainly DiPeso et al (1974), Frisbie (1978), and Reyman (1978) support the strong probability of the physical presence in these regions of pochteca or trocadores on the bases of cultural and artifactual associations. DiPeso et al (1974:372) even speculate that "the entire Mount of the Offerings complex suggested that three high-ranking individuals, perhaps the original pochteca patriarchal family, were given such ritual service." This description has reference to the three burials of the post-cranial skeletons of two males and a female in separate large "Ramos Poly" vessels. In his extensive review of high status burials in the Greater Southwest, including northwestern Mexico, Frisbie (1978) is concerned with the associated grave goods and bases his interpretation on these. He does refer occasionally to the stature of the high status individual, apparently where there is information available, but there is no description of the rest of the skeleton. His conclusion is that "Casas Grandes and Chaco Canyon represent the northernmost sites in a long chain of centers connecting the northern frontier to the Valley of Mexico. Thus an approach
which favors the *pochtecta* or *trocador* concept for the interpretation of status burials is, I believe, more congruent with the archaeological record than distinctions afforded by autonomous and egalitarian tribal organizations’’ (Frisbie, 1978:227). If a particular type of cranial deformation were determined to be a trait characterizing the physical presence of a member of the *pochtecta*, who had died while traveling and was buried appropriately, this factor would greatly strengthen Frisbie’s *pochtecta* model.

Although in Reyman’s description of the *pochtecta*, as derived from Mexican ethnographic and archaeological sources, there are listed numerous items as canes or staves, lip, ear and nose plugs, hair styles and facial makeup, there is no mention of cranial shape. He has data indicating that pochtecta membership came from ‘‘specific residential locales within Postclassic cities and towns’’ (Reyman, 1978:244). From this statement it might be feasible to speculate that such individuals living in urban centers of Mesoamerica and from a high social status, in addition to having their lips, ears and noses modified to allow for Mesoamerican data infer that artificial cranial deformation was also an indication of high social status. Consequently the assumption is not illogical that *pochtecta* members could be identified skeletally in burials outside of Nuclear Mesoamerica by artificial cranial deformation of a tabular type, either oblique or erect.

What appears to be needed now is specific research analyzing the crania from each of the high status burials described by both Frisbie and Reyman and a determination if there is artificial cranial deformation present and if so what type. There is the possibility that *pochtecta* could have employed local people, “incorporating them into their trade organization’’ (Reyman, 1978:248), so that these individuals might demonstrate either no cranial deformation or a different type than has been discussed here. This aspect of the problem could perhaps involve additional osteological research utilizing discontinuous or discrete morphological trait analysis, which has aided in differentiating skeletal populations (Brooks et al, 1977). Reyman has suggested, for a specific burial, that ‘‘a more thorough osteological examination is certainly in order to determine whether or not the individual falls within one of the generally recognized Southwestern physical ‘types’; serological data, if they can still be obtained, might also be useful in this identification . . . ’’ (1978:258).

The archaeological implications of ongoing research, specifically oriented towards accumulating information on the distribution of types of cranial deformation in northwestern Mexico and the Greater Southwest, could have the intent of relating this data to the movements of *pochtectas* into the northwestern frontier along one of the possible trading corridors of the Sierra Madre Occidental. The inference would be that crania with a tabular type of cranial deformation, perhaps oblique or erect, are evidence of individual *pochtecta* from Nuclear Mesoamerica. Additional osteological research utilizing methodologies that differentiate archaeologically recovered skeletal populations, even serology if possible, might then provide the substantiating evidence that Reyman called for to validate the presence of *pochtecta* per se: ‘‘a body warm or cold . . . a *pochtecta* member in the flesh (or skeleton)’’ (1978:243).

**CONCLUSIONS**

One aspect of archaeological writings has become apparent even in the limited research and readings related to the problems discussed in this paper. In the sources consulted there were frequent mentions of burials and of skeletons, but with the exception of Frisbie’s commentary on stature, there is no physical or morphological description of the burial. Even in the Casas Grandes Reference Volume 8, where burials are discussed in some detail, there is only half a page (1974:334) describing the general morphology of the burials, and the exact type of cranial deformation is not clearly delineated. That fronto-occipital cranial deformation is noted for three individuals from Casas Grandes has been mentioned previously but this is hardly sufficient information, considering the significance that Romero and Saul attach to the various forms and types of cranial deformation and their potential for providing prehistoric cultural information.
That is not to say that physical anthropologists are not equally at fault. Both Romero (1970) and Saul (1972) discuss the difficulties of comparing the descriptive terminology used by physical anthropologists to delineate various types of artificial cranial deformation. Fortunately for this research, they both prefer the classification of Dembo and Imbolloni, which is based on the kind of pressures applied to the skull and the devices employed. Frequently it is necessary to compare an author's photographs with the cranium at hand to determine what type of deformation is being described. Uniform descriptive standards of classifying cranial deformation are needed (Saul, 1972) and should be agreed upon internationally. Only then can archaeologists and physical anthropologists understand precisely what they are talking about when delineating a particular style of artificial cranial deformation.

"The culturally controlled trait of cranial deformation" (Saul, 1972:28) could prove valuable to both archaeologists (as considered in this paper) and to physical anthropologists. "Varieties of artificial deformation may very well prove to be important indicators of population movements or at least of cultural diffusion...What is needed, of course, is...to evaluate and re-evaluate properly dated remains from many sites in middle America so that chronological flow charts might be prepared" (Saul, 1972:17). To Middle America there needs to be added the northwestern Mexico area, the Greater Southwest and perhaps other New World areas where the cultural trait of cranial deformation effectively has changed the biological patterns of the developing child's skull.
In a recent letter, David Browman (1978) has discussed a problem in Peru, similar to the one presented here concerning the presence of *pochteca* per se in northwestern Mexico and the Greater Southwest, and the possibility of artificial cranial deformation being the identifying trait.

Briefly in Peru, we have unsolved questions on the relationship between two empires during the Middle Horizon (ca. A.D. 500-1000), the Wari and the Tiwanaku. Religion is obviously exported from Tiwanaku to the Wari, but we have trouble isolating other definite traits. My recent argument has been:

(a) High status burials in Tiwanaku have cranial deformation as early as A.D. 100.
(b) Cranial deformation does not occur in the Wari areas with such burials until after A.D. 800.
(c) There are however, some unique, in some cases two and three story, stone slab tombs at Wari, where the burials had cranial deformation (excavated unfortunately before we had any archaeologists in the area, decades ago). Reported goods indicate high status, and they are located in a part of the Wari capital city that some believe was a mercantile or market area.
(d) Therefore I argued they were the merchant missionaries from Tiwanaku, or at least those trading with Tiwanaku, and that we might speculate on a variety of obvious correlations between cranial deformation, trade, and status.

With reference to Browman's proposal and Saul's concept of a chronological flow chart for Middle American cranial deformation, it is suggested that the flow chart be expanded to include South America, as well as North America. It should be considered whether there may be a common area from which both South American and Mesoamerican cranial deformation originated and from which this cultural trait diffused. The ideal aspect of utilizing artificial cranial deformation is that it is culturally controlled trait that can only be applied in early infancy and childhood by the adult generation. It directly affects the shape of the skull permanently and once the deformation is completed, it cannot be reversed. In effect there is created a culturally identifying impression on one aspect of the human skeleton that can always be recognized as long as the cranium is preserved. A clear delineation of the varieties of cranial deformation, in correlation with an accepted set of standards of classification, is essential. It will be necessary, as Saul suggests, to begin with well-dated burials and keep expanding the data base. After a distribution of types of cranial deformation has accumulated, centers where the highest frequencies of certain types of deformation occur can be plotted geographically and chronologically. The potential of this research is apparent for questions as those that are asked in this paper, or proposed by Browman for Peru, or as Saul has suggested for indicators of population movements.

In conclusion, a broadly based study of the distribution of the various forms of artificial cranial deformation in Mesoamerica, South America and North America has numerous ramifications for contributing to archaeological research in particular areas where alternate evidence is either lacking or insufficient. The problem of the actual presence of members of the *pochteca* in northwestern Mexico and the Greater Southwest might be resolved through knowing whether proposed *pochteca* burials evidenced cranial deformation. The diffusion of both cultural traits and population mobility could be traced chronologically through the analysis of dated burials with specific types of cranial deformation. There is also the possibility of establishing correlations between cranial deformation, trade and status, which not only has applicability to the situation in Peru, but also to that in Mesoamerica, and those areas of North America with which there was cultural contact, directly or through diffusion.

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