On the Origin of the Tutelo—An Eastern Siouan Tribe

Ralph W. Alexander, Jr., and Georg K. Neumann, Indiana University

Abstract

This paper is a contribution to the solution of the puzzling problem posed by the discovery of several Indian tribes in the Allegheny Piedmont area who spoke languages related to the Siouan tribes of the Great Plains. The discovery posed the question as to whether the Siouan languages originated in the East, the Plains area, or the intermediate area, the Ohio Valley, that is, the direction of their spread. By correlating linguistic, cultural, and physical variables, the geographic and temporal relationships of these groupings are elucidated. The material that was analyzed is the only known sample representative of the prehistoric Eastern Siouan population which gave rise to the historic Tutelo Indian tribe of North Carolina. The physical characteristics of this group proved to be closely related to those of the Archaic series of crania from Indian Knoll, Kentucky, a fact that traces the Eastern group into the Ohio Valley.

The Siouan tribes of North America may be divided into two main bodies. The larger Western group is composed of such tribes as the Quapaw, Osage, Kansa, Missouri, Oto, Iowa, Omaha, Ponca, Yankton, Santee, Yanktonai, Teton, Mandan, Hidatsa, Crow, Assiniboin, and Winnebago. The Eastern group, located in the region of Virginia, North Carolina and South Carolina, may be divided into two subgroups. The Northern subgroup is typically represented by the Tutelo, and the Southern subgroup represented by the Catawba. Although the Eastern tribes were known to early explorers, they were not recognized as having a linguistic bond with the Western group until 1870, when Horatio Hale suggested the existence of a Siouan dialect east of the Appalachians after obtaining a vocabulary from an old Tutelo man (4). Work by Hale, Gatschet (3), and Dorsey (2) was incorporated by James Mooney (5) into a classic Bureau of American Ethnology bulletin which satisfactorily demonstrated the Siouan connection of the Eastern Groups. The establishment of the widespread diffusion of the Siouan-speaking tribes was summarized by Paul Weer in 1937 in an Indiana History Bulletin (8). The Northern, or Tutelo group of the Eastern Sioux are the most closely related linguistically to the Western Sioux. The Southern or Catawba group is the most aberrant of the Siouan groups linguistically. There is evidence, as yet not thoroughly presented, that the Siouan and Muskhogean linguistic families may be related, and that the Catawba dialect may occupy an intermediate position between the extreme branches of each. The problem, then, is one of the origin of the Eastern Sioux, whose linguistic bond with the Western group demonstrates beyond a reasonable doubt that the two bodies had formerly been in contact. We must conclude that either the tribes occupying the territory between had died out, that the Eastern tribes had migrated farther East or the Western farther West, or that both easterly and westerly movements had taken place.

The ethnohistoric evidence available supports the last supposition. Most of the Western tribes retained until quite recently traditions of a

more easterly origin. The Eastern tribes, according to historic documents, extended farther West. In the Eastern Piedmont area, many local migrations and tribal movements tend to obscure the earliest areas of occupation, but the bulk of the ethnohistoric evidence points to an origin of the Eastern Siouan peoples in the Ohio Valley area. Much of the ethnohistoric evidence bearing on the subject has been assembled by John R. Swanton (7).

Archaeologically, the evidence which bears on the problem is slight, but convincing. Joffre Coe, who is the major contributor to our archaeological knowledge of the Piedmont area, considers the Badin Focus culture of the Piedmont to be directly ancestral to the historic Eastern Siouans (1). Further, Coe feels that the correlation between the Badin Focus culture and the Indian Knoll culture of Kentucky is so great that some direct connection must be postulated. The Badin Focus culture appeared in the Piedmont at the same time the shell-mound culture in Kentucky was replaced by the Adena people. On the basis of trait comparison, the Badin-Indian Knoll relationship is closer than any other yet reported.

Physical evidence bearing on the varietal affiliations of the Eastern Siouan groups has, until now, been almost totally lacking. The senior author was the first to postulate that the skeletal material from the historic Tutelo villages was closely related to that from the Archaic Indian Knoll site, and used the latter as the type series, designated the Iswanid variety after the Catawba words *iswa* (river) and *nie* (people) (6).

The solution of the problem of the origins of the Eastern Siouan people is only possible through the investigation of the physical anthropology of the populations of the Eastern Siouan area, comparison with other established varieties of American Indians, and by correlation of this information with the linguistic, archaeological, and ethnohistoric evidence available. This paper presents the results of the first bioanthropological examination of the only known sample of Eastern Siouan and specifically Tutelo skeletal material. The sample used for description, analysis and comparison consists of twenty-eight adult crania from Northern North Carolina, excavated by Joffre Coe. The original measurements and observations were taken by G. K. Neumann. The several sites from which the sample was obtained all date from late pre-contact times, and are directly ancestral to historic Tutelo villages. Since no other material is available, and since the Tutelo are the most representative of the Northern dialect group of the Eastern Siouans, the sample will serve to answer questions concerned not only with the Tutelo, but will allow inference in regard to the entire Eastern Siouan population. No Catawba skeletal material exists.

Three types of comparisons were possible: (*1*) a comparison with Archaic groups, the Lenid or Iswanid varieties; (*2*) a comparison with more recent groups such as the Muskogid or Ilinid varieties; or (*3*) with a more modern variety, the Dakotid of the Plains. The Lenid variety is

represented in the coastal Algonkian populations, which are unlike the Tutelo, and was ruled out as unlikely to bear much similarity. The Dakotid groups are very unlike the Eastern Siouan material morphologically, and were likewise ruled out. The Ilinid variety is geographically less likely to be related to the Eastern Siouans than the remaining groups, the Muskogid and the Iswanid. There is a strong possibility that the Muskogid groups may be related to the Southern or Catawba Eastern Siouans, and this is also suggested linguistically, but there is no Catawba material available. The Iswanid variety bears obvious morphological resemblance to the Tutelo sample, and the type series for this variety is the Indian Knoll population responsible for the Indian Knoll culture which closely links the Eastern Sioux with the Ohio Valley area. A rigorous statistical analysis and comparison of the Indian Knoll Iswanid series and the Tutelo Eastern Siouan series was therefore undertaken, and the linguistic, archaeological, and racial traits correlated to find the best fit, an explanation of the origin of the Tutelo Eastern Sioux.

The statistical methods used in the complete analysis and comparison were the F test for homogeneity of variance of the two samples, upon which the t test for significant difference in means was based. A further test for significant difference in means was employed, the 3 X.P.Es test, or three times the probable error of the difference between the means. The results were virtually identical in each case, and may be considered highly reliable. Morphological observations were also compiled in tables of frequency distribution for each observation. The computations for the various statistical tests employed were done through the facilities of the Research Computing Center at Indiana University.

The Tutelo Eastern Siouan skull may be briefly described as follows: the skull is medium in size, with a glabello-occipital length of 182.2 mm., a maximum breadth of 137.1 mm., and a basion-bregma height of 137.4 mm. These dimensions yield a cranial index of 75.24, and a length-height index of 75.44. The cranial vault is therefore on the lower border of mesocrany and high in relation to its length. It is ovoid in form, with medium muscular relief, large to very large divided brow ridges, medium frontal height and slope, small to medium frontal breadth, a slight amount of sagittal cresting, medium parietal eminences, medium lambdoid flattening, and an occiput with medium curve and low position. The face as a whole is of moderate and not rugged build, and not large in relation to the braincase. All facial dimensions tend to be moderate, with a total facial height of 117.9 mm., an upper facial height of 71.1 mm., and a total facial breadth of 133.1 mm. The indicial proportions are also moderate, with a total facial index of 88.6, mesoprosopic, and and upper facial index of 53.51, mesene. The size and height of the zygomatic bones are medium, and the anterior projection of the zygomatics is small to medium. The lateral projection of the zygomatics is less moderate, and is medium to large. The orbit shape is most frequently square, often rhomboid, with a small to medium amount of inclination. The left orbital index is 80.82 if the breadth is taken from maxillofrontale, and 85.30 from dacryon. The first

index is mesoconch, the second barely falls into the hypsiconch indicial category. The nasal index is 48.28, or mesorrhine. Absolute diameters of the nasal structures are small, with a nasal breadth of 24.1 mm., and a nasal height of 50.0 mm. Both nasal root and bridge dimensions are moderate; the nasal root breadth small to medium, the nasal bridge medium, and the nasal bridge breadth small to medium. Midfacial prognathism is absent to slight; aveolar and total prognathism are slight. The size of the mandible is medium. The most common chin form is bilateral, with a wide bilateral the modal subtype. Gonial eversion is varied, but predominantly small. In a description of this nature, the Tutelo Eastern Siouan skull is found to be virtually identical with the Indian Knoll Iswanid series. Computer analysis at the sensitivity level of the t test for significant difference in means between the two series reveals only nine significant differences out of thirty-four measurements, five significant differences out of twenty-three indices, and five significant differences out of seventy-eight morphological observations. These differences may be attributed to the slightly larger Tutelo skull, and represent variation well within the limits of a local series of a variety.

The consideration of the linguistic, ethnohistorical, and archaeological evidence available, and the detailed metric and morphological analysis of the available Eastern Siouan skeletal material leads to the following conclusions:

1. The Tutelo Eastern Siouan cranial series exhibits a high degree of similarity with Neumann's Iswanid variety as represented by the Indian Knoll series. The metric differences between the two series, such as the slightly larger Tutelo skull and the slightly higher Iswanid vault represent local differences which would be expected considering the time span separating the two series and, when viewed in the light of the great majority of measurements and indices which exhibit no statistically significant difference, are not sufficient to negate the conclusion that the Tutelo Eastern Siouan series is representative of the Iswanid variety of American Indian. Morphologically, the two series are also extremely similar, and the morphological observations substantiate the metric data completely. The Tutelo Eastern Siouan series may then be described as a local series of the Iswanid variety, with the differences between them and the type series being negligible on a varietal level.

2. From the standpoint of methodology, this study has demonstrated that the use of the combination of metric, indicial, and morphological characteristics as employed by G. K. Neumann (6) along with tests of statistically significant differences in means such as the t test and the 3 X.P.Es. test is sufficiently sensitive to detect minor differences and therefore adequate for historical reconstruction.

3. The correlation of the linguistic picture, the archaeological and ethnohistorical evidence, and the physical evidence assembled in this paper provide a new insight into the origins of the Eastern Siouan peoples. The first detailed description of Eastern Siouan crania which can be documented as to their tribal affiliation has been provided, and

the connection with the Archaic Iswanid variety makes a contribution in linking prehistoric archaeological manifestations with historic tribes. It has been shown that, of the Eastern Sioux the Tutelo are linguistically more closely related to the Western branch of the Siouan family than to the other Eastern group, and the ethnohistoric evidence available strongly points to an Ohio Valley origin for the Eastern Sioux. The archaeological evidence demonstrates the similarity between the Badin Focus of the Carolina Piedmont, which appears directly ancestral to the historic Eastern Siouan groups, and the Indian Knoll culture of Kentucky, of which the Iswanid physical type is representative. Finally, the physical evidence presented demonstrates the varietal relationship between the Tutelo Eastern Siouan series and the Iswanid series of Indian Knoll. Therefore, from the evidence available from linguistics, archaeology, and physical anthropology, the conclusion is reached that the origin of the Eastern Siouan peoples can now be connected more strongly to the Ohio Valley area than was previously possible.

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