

Draft

CUTTING AND SCRAPING MARKS ON A HUMAN SKULL FROM NORTHWEST
MISSOURI: PROBABLE EVIDENCE OF PREHISTORIC BURIAL PREPARATION

by Jim D. Feagins

The purpose of this Brief article is to draw attention to the presence of cutting and scraping marks on prehistoric human remains in northwest Missouri. Evidence of this practice is found occasionally over a wide region. To this writer's knowledge, the occurrence of this practice in the Kansas City area has not been described before in print. However, approximately 125 miles away, in north central Kansas, several burial sites contain considerable evidence of the cutting of human bone (Phenice 1969:24-25, 31-33, 55-56, 58-59).

Quite a few years ago Michael Fisher, a well known amateur archaeologist from St. Joseph, Missouri, found a fragment of a human skull containing many cut-marks (fig. 1). This item was discovered on the surface of a quite large habitation site (23PL44) in northern Platte County, Missouri. This site, located northwest of Kansas City, is on the National Register of Historic Places. Site 23PL44 contains a small historic component (where a former barn stood), and several prehistoric components: Middle and Late Archaic (including a Nebo Hill phase), Early and Middle Woodland (including a Kansas City Hopewell complex), and a Mississippian period occupation (Nebraska and possibly Steed-Kisker variants). Cultural material from the Mississippian period occupation is by far the most abundant and occupies adjoining loci of concentrations

strung out along the valley for a distance of approximately one kilometer. These adjoining areas of artifact concentration, probably represent the former locations of late prehistoric (AD 1,000 - 1,300) house structures on the site.

The artifacts found in local collections from the site include: pecked and/or groundstone (celts, three-quarter and full-grooved axes, hammerstones, polished hematite, grooved abrading stones, manos, and a bannerstone), chippedstone (drills, stemmed and unstemmed bifaces of various sizes, scrapers, flake blades, and hammerstones), and ceramics (pottery sherds and a clay pipe). The pottery is both shell tempered and grit tempered. Outside of some Kansas City Hopewell sherds and one probable Early Woodland sherd, the pottery sherds are similar to those from Debilka bowls, McVey plain, McVey tool decorated, Beckman plain (collared), Beckman pinched or tool impressed or incised (collared), and Swaboda ware jars of the Nebraska variant (see Anderson and Anderson 1960; Brown 1967; Gradwohl 1970) and the Platte Valley ware and Steed-Kisker incised ware of the Steed-Kisker variant (see Calabrese 1969; Chapman 1980; 297). Most of the site's sherds are from plain or cordmarked, globular-shaped jars. A number of the vessels had handles, and at least two effigies from vessels have been recovered from the site.

The human skull fragment found by Fisher is not the only human remains observed on the surface of the site. A number of years ago, another amateur archaeologist, R. B. Aker (personal communication) observed, on several occasions, a small area in

the southern part of the site where human bones and chert debris had been uncovered by farming activities. Since none of the chert items from this loci were considered diagnostic, they along with the human remains were not collected by Aker. It is not known from which part of the site, Fisher found the skull fragment.

This skull fragment represents the central portion of the frontal bone (forehead area). In spite of the lack of any suture lines remaining, this bone could be easily identified by comparing its interior surface with the interiors of other human skulls in the laboratory. The frontal crest (Bass 1971:34) was especially useful in this regard (fig. 2).

This skull fragment is approximately 63 mm. long by 45 mm. wide and varies in thickness from 3.1 to 7.6 mm. Its mass is 13.7 grams. The exterior surface contains over 70 fine, non-random, cut-marks (fig. 3). Observation through a 40 power binocular microscope shows the same amount of weathering and discoloration within the cut-marks as on the surface of the skull between the cut-marks. These marks are clearly not fresh. Also the marks are not like those which could be made from farming activities or from some type of abrasion. Many of the cut-marks continue off the bone fragment without any increase in depth at the edges. The cuts were obviously made prior to the fragmenting of the frontal bone. There are slight variations in the depth and shape of the cut-marks. Under magnification, small striations were noted within the cut-marks. This is not the pattern which would be left by a steel blade. This slight

nonuniformity of the marks is rather typical of the marks left by the irregular edge of chert tools (see Marshack 1988:479). The cuts are almost certainly prehistoric in origin. The skull fragment contained no cut-marks on the interior surface, the part which rested next to the brain.

What kind of activity might account for the type of cutting pattern found on this human skull fragment? Several possibilities could be generally considered: butchering for food, scalping, or burial preparation.

First, let's consider--butchering. While difficult to disprove on this small fragment, butchering for food seems to be highly unlikely. No evidence of burning is present on the specimen. Also this external area of the skull would have very little food value. There would be little to gain from the skin and connective tissue on the forehead. Also it seems doubtful that a valid food processing procedure would account for the over 70 cut-marks (figs. 1 & 3), each spaced a few millimeters apart. Cannibalism is not suggested by the evidence.

Second, let's consider the possibility that the cut-marks were left when an individual was scalped. Skin from this portion of the skull contains no hair and thus, would make an extremely poor scalplock! Also the pattern of closely spaced, multiple cut-marks seems highly unnecessary if the purpose is simply to remove a patch of skin from this area. The multiple slicing of the skin would completely render it unfit for a scalplock, even if hair had been present.

Burial preparation will be the third possibility that is considered to account for the multiple cut-marks on the skull. It is not the purpose of this brief paper to discuss all the various ways different cultures choose to dispose of their dead. The burial practices of a group of people is a reflection of their culture--their beliefs and customs.

It is of interest to digress for a moment, to note that the nearby Sugar Creek Ossuary (23PL58) contained 120 burials accompanied by many Nebraska variant and Steed-Kisker variant artifacts (Feagins, in press). This burial ossuary (excavated by R. B. Aker) is located less than 500 meters from the nearest edge of site 23PL44. Most of the burials were secondary burials and not in complete articulation. It appears that many of the bones had been exposed to the elements sometime prior to their final interment. Probably the soft tissues had mostly decayed before the "last rights were said" and the individual's bones were stacked (bundle burials) or scattered in the ossuary. One can speculate that if an individual's soft tissues were not decayed when it became time for burial, then to follow certain cultural practices it might be desirable to either cut and scrape away the soft tissue or to simply bury the individual in partial or complete articulation. However, Nickels (1971) conducted a general analysis of the skeletal remains from the ossuary, and he makes no mention of cut-marks on the remains. However, this trait may not have been looked for, and the condition of many of the bones may have obscured any evidence of cutting even if it existed. Apparently (because of their poor

condition) Aker did not collect most of the bones. Nickels (1971:2) indicates that he studied at least 25 adult individuals based on a count of crania and mandibles. He indicates that the skeletal remains appear to represent Nebraska variant burials. It is unfortunate that the skull fragment that Fisher found from 23PL44 cannot be assigned with any certainty to a particular cultural group.

The closely spaced cut-marks are not randomly oriented, as many of the cut strokes were made parallel to each other. Also on one small area fine striations were clearly observed. This area appears to have been scraped prehistorically, perhaps by the sideward movement of the same tool used for cutting.

If it was important to have the soft tissue removed from the bones for certain types of burials or for certain burial ceremonies, then it could very well be necessary to cut and scrape the skin and connective tissue away from the bones. If the bodies were exposed to the elements for a sufficient length of time (such as on a scaffold or in a tree), the soft tissue would readily decay leaving the bones exposed. They then could be gathered and buried (as in bundles or scattered in an ossuary). However, if there was not sufficient time for all the flesh to decay away, then cutting and scraping might be necessary in order for the remains to be "presentable" at the time of individual or group interments. Douglas W. Owsley (personal communication), of the Smithsonian Institution, indicates that the defleshing of bones for burial preparation will often result in patterns of multiple cut-marks. This seems to be the most

likely explanation for the marks on the human skull from 23PL44.

Since the specific cultural group represented by the skull fragment cannot be identified, there is no incentive here to present a literature search of comparable cases of pre-historic evidence and ethnographic descriptions of similar treatment of the dead. Such data does exist. Rather it will be sufficient for now to simply document the presence of cut human bone in the Kansas City area and to point out the need of being observant for the presence of similar features on human skeletal remains. Also these marks, when observed from investigations which are more controlled, have a great potential for providing clues with which to better interpret cultural beliefs and burial practices.

ACKNOWLEDGEMENTS

I especially would like to thank Mr. and Mrs. Michael R. Fisher and Edward V. Barlow of St. Joseph and R. B. Aker of Parkville, Missouri, for allowing me to photograph their collections from site 23PL44. This article would not have been written without the gracious consent of the Fishers and their willingness to loan the skull fragment for microscopic examination.

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Nov. 29, 1988

Dear Mike and Marge,

I am enclosing a draft of the article I wrote on the human bone fragment that you found on the Sugar Creek site - 23 PL44. Please let me know if I have left out any facts or did not state them correctly. If you have suggestions for improvements, I would like to hear them. If you think Ed Barlow would like a copy then please pass the second copy on to him.

We have been busy. Laurie had all four of her wisdom teeth taken out last Wed. prior to Thanksgiving. Also we had one of her college friends stay with us over the vacation. Peggy has a lot of pottery orders to get done before Christmas. My camera is still not fixed, hope it will be soon!

School has been keeping me busy, more so than ever. We sure have a lot of problems at our Jr. High. A lot of inter-city kids have moved to Grandview in recent years. Oh the stories I could tell! Once upon a time I enjoyed teaching but not any more.

I enjoyed the Plains Conference. R. B. and Allen went with me. We did not see hardly anyone from Columbia there this year. There were some good papers but as a whole the conference was not as well organized as usual. There will be a Flint Hills archaeological Conference at KU this winter (I think in Feb. or March).

I hope you are all doing well. Hope you have a fine Christmas!

Best wishes,

Jim, Peggy, Bobby, and Laurie



Nebreska phase pithay - 23PL44 photo - Tim Fearing's
(Feb. 1989)

projectile points from 23PL44, Platte Co., MO; photo - Tim
Fearing (Feb. 1989)



End scorpions — Sugar Creek Site — 23 PL 44 (Fisher collection)
photo — Jim Faegins 1988

Bifaces — Sugar Creek Site — 23 PL 44 (Fisher collection)
photo — Jim Faegins 1988



Incised Human Skull fragment (frontal) Sugar Creek Site -
23PL44 (Fisher collection) photo - Jim Feagins 1988

Neko Hill, lan celote, contracting - stemmed, & side-notched points -
Sugar Creek Site - 23PL44 (Fisher collection) photo - Jim Feagins
1988



Pottery - Sugar Creek site

photo - Tim Feagins 1988

Pottery - Sugar Creek site Photo - Jim Faegius 1988



Pottery - Sugar Creek site

photo - Tim Feagins 1988