NOTES FROM THE EDITOR’S DESK

October is TEXAS ACHAEOLOGY MONTH.

NPS held a Flint Fest at Alibates Flint Quarries National Monument on the Third and Fourth. On the 17th we’ll pack up our manos and metates and atlatls for the annual Fannin History Fair. We’ll really miss Dick Carter, who will be unable to help us out this year.

Later in this issue, we have a paper by Chris Lintz, describing a fake projectile point that had apparently been glued into a vertebra, then brought to a Texas Memorial Museum Identification Day. Details start on page five.

This brings us once again to the subject of the Phantom Phlint Phakers. Now let me say at the outset: I don’t care if any man, woman or child, wants to learn and practice the art of flintknapping. It is an art as old as mankind itself, or older, and its practitioners deserve all the respect given any other form of art or craftsmanship.

BUT—–! (there’s always one of those, isn’t there?) I do have a BOLO. Reproductions of genuine antique lithics should be marked “Reproduction” or “Copy”. They may be made for experimentation or teaching, or used in a hands-on exhibit where the original is too precious to allow touching. The public in general cannot tell Real from Copy from Fake, and even sophisticated collectors may be sold fakes at exorbitant prices. (Google it).

Aside from persons being bilked, there is a real danger of fakes being used to salt a site, or create the semblance of one. Owners who have no use for a bucket of “arrowheads” may discard them in a way that, with no intention of fraud, creates a problem for researchers and collectors.
The meeting was called to order by President Donna Otto at approximately 7:00 p.m. at the Downtown Amarillo Library second floor Board Room.

Guests and members were greeted. There were 18 in attendance, and two visitors were introduced and became members. In addition to the upcoming meetings and events that were printed in the Newsletter, the following announcements were made.

Oct 17 - Fannin Middle School History Fair - Alvin Lynn shared information
Dec. 12 - Studer Banquet, Youngblood's Cafe
Kansas Fall Field Seminar, Ft. Larned, KS, Kansas State Historical Soc. Oct. 29-30-31
$30 for the weekend on use of metal detectors in archaeology

PROGRAM: Arlene Wimer, Chief of Resource Management from Lake Meredith National Recreational Area showed 1969 films from the TAS Field School at Blue Creek. She is requesting help identifying those shown in the films that were recently digitized 16 mm films shot by Martha Hughes.

MINUTES: Minutes from the previous meeting were published in the PAS Newsletter. A motion was made and seconded to accept the minutes as published.

TREASURER REPORT: Balance as of 8/31/15 was $3,835.24. Treasurer provided a Profit and Loss statement Jan 1 - Aug 2015 and a Profit & Loss Detail May 1 - Sept 16, 2015. These reports were filed.

It was asked that a current membership list be provided members and the Treasurer reported she would do so.

PUBLICATIONS COMMITTEE REPORT: Rolla Shaller provided a report. Copy not provided for details.

OLD BUSINESS:
TAS Lithics Academy. Harry Schaeffer will be teaching. Scheduled for April 30-May 1, 2016 at Palo Duro Canyon. Details will be available in the near future. Cost $100 for TAS members.

NEW BUSINESS:
Fannin Middle School History Fair - scheduled Oct. 17 from 9-3. Help is needed for corn grinding and atlatl throwing demonstrations and to offer students a chance to do this activity. Everyone's help is encouraged, even if you cannot help all day.

ANNOUNCEMENTS:
Next meeting Oct. 21 at Library.

MEETING ADJOURNED: There being no further business or announcements, meeting was adjourned at 8:30 p.m.

Respectfully Submitted,
Donna Otto
Salvage Excavations at the Mott Creek site (41MY19)

Rick Day

Abstract

In 2004 a multi-component prehistoric site on the Mott Creek Ranch was discovered along an actively eroding cut bank on the north side of Quitaque Creek in Motley County, Texas. The site was in danger of being completely destroyed by natural erosional processes; indeed, much of the site had already disappeared. With the permission and help of the landowner it was decided to conduct salvage excavations at the site. Science students from Andrews Middle School became the primary work force involved in this project, which was carried out from 2005 to 2013. The goals of this project were two-fold in nature. First, was the recovery of important local archeological information and the second was to provide real world science experience for the students involved in this project. This presentation summarizes the investigations conducted at the Mott Creek site.

Biography

Rick Day received a degree in geology from Stephen F. Austin State University. He has taught science for 27 years. Rick has been a member of Texas Archeological Society and the Midland Archeological Society for many years. Recently, he helped start a new archeological society in the Briscoe/Motley County area, the Caprock Canyons Archeological Society. For several years he has been an archeological steward for the Texas Historical Commission.
A Probable Fraudulent Example of a Dart Point Embedded in Bison Bone

Christopher Lintz

Introduction

Two years ago, I reported that a visitor brought to the Texas Memorial Museum’s Material Identification Day an example of a bison thoracic vertebra with a Palmillas point embedded in the top side of a neural arch (Lintz 2013). That example was obtained from an antique store in Fredericksburg, many years before, and lacked archaeological context. I felt that the specimen could be an authentic prehistoric specimen based on 1) the size of the Palmillas dart point in the bone, 2) identification of the stone as being Central Texas Edwards Plateau chert, 3) the absence of fresh knapping characteristics (ghost fractures in the stone along step fractures), 4) the downward orientation of the specimen in contact with an attached bison bone splinter adjacent to the point inside the neural arch, and 5) the bone discoloration. I suggested that the specimen might be comparable to the kinds of points from a series of a dozen or so reported arroyo drive bison kill sites found in and around Hall, Donley, and Motley Counties in the Rolling Plains between Childress and Plainview that date between 380 ± 100 B.C. to A.D. 970 ± 100 (Hughes 1977, 1989; Lintz et al. 1991; Tunnell and Hughes 1955). The point type and downward impact angle of the projectile tip into the vertebrae was also consistent with the kinds of specimens found at the kill sites and the position of the hunter throwing an atlatl dart from a higher bank above the prey.

Due to budgetary issues at the Museum, the Identification Day events were cancelled for a year or so. On September 20th, 2015, the Museum participated in the Austin city-wide museum day events which opened some 40 museums to free public admission. To mark the event, Texas Memorial Museum reactivated the Identification Day service for the community. Imagine my surprise when one of the first items coming through the door was another thoracic vertebra with a large dart point embedded into the vertebral foramen which holds the spinal cord. The person who brought the specimen to the event acquired it at a garage sale, so it too lacks provenience and contextual information. However, differences were evident with this second specimen which made it less likely to be authentic. This paper discusses the evidence used to judge the specimen as being probably fraudulent.

The Projectile Point Specimen

The specimen is a large dart point made of medium gray Edwards Plateau chert on a tear-drop-shaped flake preform with a plano-convex cross-section. The broad-bladed specimen has an acute tip, straight blade edges, rather broad and almost squared and moderately deep side notches placed relatively close to the convex base. The point has short, steeply-angled bifacial lateral retouch edges, which are especially prominent on the base; the distal tip is thinner with longer flake scars at a lower angle. Few flake scars exist on the planar (original ventral) flake surface, suggesting that this is an expediently-made tool requiring very little effort to make the bifacial blank. Apparently the final point shape was made on a large flake without much thinning. The dorsal surface shows some light gray UV sun patination except where the steep lateral edge retouch has removed the patination along the edges. None of the visible flake scars are hinged or show ghost fractures that sometime indicate recent knapping. The steep marginal retouch and lack of big scars on the faces suggest that the knapper was not very skilled in making bifacial points. The dimensions of the specimen are provided in Figure 1.

The existence of a convex base and side notches makes this broad-bladed point form a bit unusual. It bears some general similarities to the Palmillas, Trinity, Big Sandy, and St. Charles projectile point types (Figure 2: Turner et al. 2011). Palmillas points, which have been previously associated with the Late Archaic and Transitional Archaic period arroyo bison kills in the lower Texas panhandle, are typically stemmed points, some with broad, shallow side notches with weak shoulders and bulb bar bases (ibid:145); however, the present specimen has deep, well-defined side notches close to the base, so that the convex base has a rather marked change in orientation. The Trinity point is a Late Archaic point form from north-central and northeast Texas that is characterized by weak shoulders and extremely broad side notches, that form a gently expanding stem and a slightly convex base (ibid:166); clearly the deep narrow side notches differentiate the present specimen from the Trinity type. Big Sandy points, a late Paleo-Indian to early Archaic type, are typically large points with deep side notches, short stems, and straight to weakly concave or rarely convex basal forms; the present specimen however, has a more prominent convex base form (ibid:66). Perhaps importantly, the point is stuck into a vertebra of modern-size bison and not the larger-size bison antiquus present when Big Sandy points were being made before 5,000 years ago. The St. Charles point, another Early Archaic point from far east Texas and Louisiana, bares the closest outline resemblance of the specimen in the bison vertebra (ibid:155). The St. Charles point type is broad-bladed with a rounded to acute distal tip, convex blade edges, non- or weakly barbed shoulders, narrow and deep side notches that are either perpendicular to or slightly diagonal to the blade edge, and short bases that are convex, sometimes with a marked change in the stem/base juncture. Even though the St. Charles point outline is closest to that of the present specimen, most St. Charles points are made from carefully thinned bifaces, not minimally shaped or expediently-made tools on a plano-convex flake. As with the Big Sandy type, the St. Charles points should be associated with large, extinct forms of bison and not the rather small mature bison bone of the present example.
Figure 1. Dimensions of the point embedded in the bison vertebra.

<table>
<thead>
<tr>
<th>Projectile point dimensions</th>
<th>Locations</th>
<th>Centimeter</th>
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</thead>
<tbody>
<tr>
<td>Maximum point length</td>
<td>A</td>
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<tr>
<td>Basal point width</td>
<td>B</td>
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</tr>
<tr>
<td>Width at proximal edge of side notch</td>
<td>C</td>
<td>3.17</td>
</tr>
<tr>
<td>Minimum width inside side notches</td>
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</tr>
<tr>
<td>Width at distal edge of side notch</td>
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<tr>
<td>Side notch 1 depth</td>
<td>F-1</td>
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<tr>
<td>Side notch 1 width</td>
<td>G-1</td>
<td>0.60</td>
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<tr>
<td>Side notch 2 depth</td>
<td>F-2</td>
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</tr>
<tr>
<td>Side notch 2 width</td>
<td>G-2</td>
<td>0.59</td>
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<tr>
<td>Stemmed length</td>
<td>H</td>
<td>0.90</td>
</tr>
<tr>
<td>Thickness between side notches</td>
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<td>0.82</td>
</tr>
</tbody>
</table>

Figure 2. Comparative side-notched dart point types found in Texas.
The Thoracic Vertebrae

The bone is a fragmentary thoracic vertebra that has a uniform light yellow color. The complete fusion of the end caps of the vertebral body indicates that the animal was a small mature individual of recent age and not an immature or juvenile individual representing the much larger bison that existed during the Paleo-Indian and Early Archaic periods. The bone specimen shows minor abrasion or loss of exterior cortical surface from the ends of both transverse processes and from the ventral side of the vertebral body at both the anterior and posterior ends. The dorsal process which supports the hump is broken and only 7.5 cm long; the break on the spine is jagged and not rounded or abraded. The bone is perhaps remarkable for what it does not show. It does not show any cleaver marks or slicing striations from prehistoric butchering activities. Nor does it show any puncture or gnawing marks from canines or rodents. The bone also does not show any pitting from acid root etching or insect burrow holes. The specimen also does not have any calcium carbonate accumulation that sometimes developed as a soil formation process on buried objects. The light yellowish bone does not show any differential sun bleaching or whitening, and the element does not show any spiral or green bone breakage fractures. Due to the uniform surface color, the element was gathered shortly after the flesh deteriorated from the bone, or it was obtained from contexts that were buried shortly after the animal died, but it clearly did not lie exposed to the sun for very long. The minor erosion of the cortical surface of the vertebral body perhaps reflects some aeolian or alluvial abrasion to the specimen.

The Relationship of the Point to the Bone

The stone point is firmly embedded in the left side of the thoracic vertebrae near the top of the vertebrate body and base of the left neural arch (Figure 3). The projectile point is not oriented parallel to the spinal axis alignment, but rather extends upward from the front side and is set diagonally into the bone. The point is oriented at an approximate 120-degree angle measured from the vertical dorsal spine and extends about 0.9 cm into the spinal cord hole. The left edge of the point passes between the thoracic process and the costal pit, and it would have passed completely through the length of the neck of the left articulated rib. This orientation indicates that the dart entered the underside of the animal if standing, or hit the bison after the animal was down. The placement of the point was a lucky shot, for although the dart point must have passed through the curving neck of the attached rib, the rib bone did not deflect the point away from the spinal cord.

Inside the vertebral foramen, the top side of the bone has been splintered next to the point and those splinters are missing. A dark yellowish-brown smear appears on both exterior sides and on the lower interior side of the point. This substance is interpreted to be a mastic adhesive of some sort holding the point tight in the bone and concealing any irregularities of the fit between the edge of the point and the bone.

Discussion and Conclusions

The acquisition of the bone from a garage sale precludes any information about where the specimen was found or made. The point style most closely matches the St. Charles type, which dates to a period most commonly associated with large, extinct forms of bison from extreme eastern Texas and Louisiana. However, the manufacturing crudeness and minimal edge chipping present in shaping the specimen does not resemble the bifacial thinning technology common to the St. Charles knapping style. Several lines of evidence were used to reach the conclusion that this specimen is probably not an authentic prehistoric artifact. These lines of evidence include:

1) the crude technological style involving minimal edge marginal knapping on a simple plano-convex flake;
2) the different degree of patination of the dorsal flake surface related to the steep marginal edge retouch;
3) the incongruity of a generalized Early Archaic point style embedded in a small, modern bison bone;
4) the unusual upward angle of penetration of the point through the length of the rib neck and into the neural arch of the bone; and,
5) the presence of a possible mastic adhesive at the contact of the point with the bone.

It is unclear whether the earlier publication of an article two years before might have prompted unethical people to fabricate artifacts in order to mislead uninformed collectors to purchase such items at inflated prices. When people purchase artifacts, they should be cautious about what they are buying. Despite inflated prices commonly advertised in various internet websites, antiquities are often not good investments. Simply put: Caveat emptor, Let the buyer beware.
Acknowledgements:

I would like to thank Dr. Pamela Owen for allowing me to participate in the Texas Memorial Museum event. The individual bringing the specimen to the museum asked to remain anonymous. I also thank Dr. Paul Katz for his suggestions on improving the paper.

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