

**AN UNUSUAL CACHE OF PAINTED BISON BONE  
FROM EASTERN BOX ELDER COUNTY, UTAH**

by

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My purpose is to document a cache of painted bison bone in the Joseph Pauli; Collection of Ogden, Utah. This rare and unusual discovery was made in the Promontory-Blue Creek area of eastern Box Elder County, Utah.

**Background Information:**

Joseph or "Joe" Pauli was a hobbyist of many interests. He made several large collections with specimens varying from rocks and minerals to historical Mormon and Chinese items and finally to Indian artifacts.

Many of these Indian artifacts were collected during the winter months when snow made agricultural pursuits impossible. During this time, Mr Pauli and several associates would make random excavations in the numerous caves and rockshelters of the Promontory-Blue Creek area at the northeast edge of the Great Salt Lake. These excavations covered a period of time from the 1930's to the early 1950's. After these twenty-odd years of collection, Pauli had accumulated many Indian artifacts ranging from the more common stone, bone and pottery objects to many perishable and unusual items. These artifacts are the material remains of thousands of years of cultural prehistory in the Great Salt Lake region. Some of the more interesting items in the Pauli collection are the enigmatic, painted bison bone artifacts described in this paper.

**General Location:**

The area in which Joe Pauli collected is immediately north and northeast of the Great Salt Lake in southeastern Box Elder County (Figure 1). Included within the area are marsh lands, embayments, salt and mud flats, a portion of the lower Bear River, the Blue Spring Hills, and the Promontory Mountains.

The general location of many of these sites remains obscure due to poor locational data and nonexistent site documentation. As best as Mr. Pauli could recall, he excavated in caves on Little Mountain northwest of Corinne, Boothe Valley on the east side of the Promontory Mountains, and Hansel Valley between the North Promontory and Hansel Mountains. Undoubtedly, many of these sites have been located by archaeological surveys and given state site numbers, while others of the sites remain unknown.

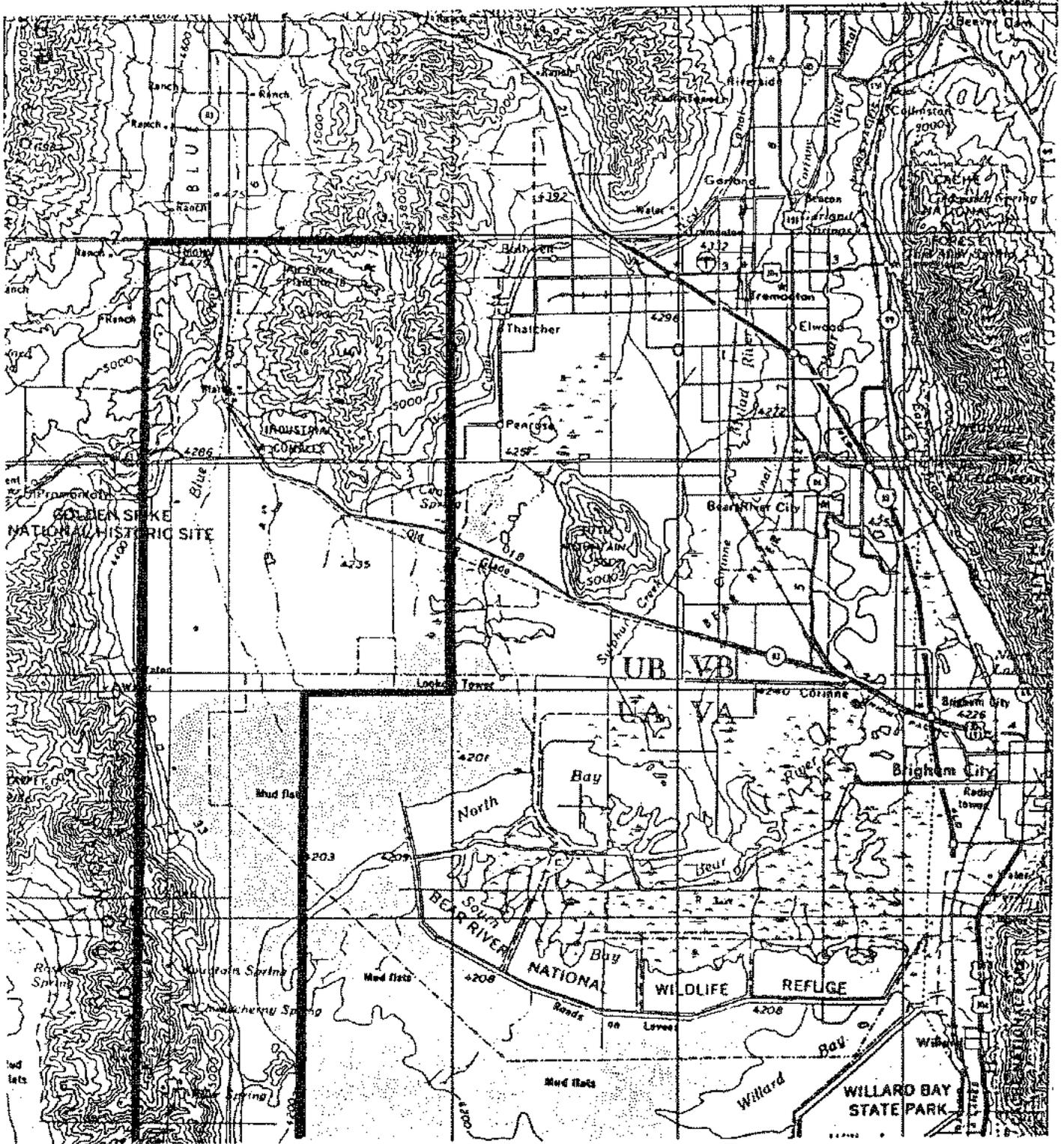
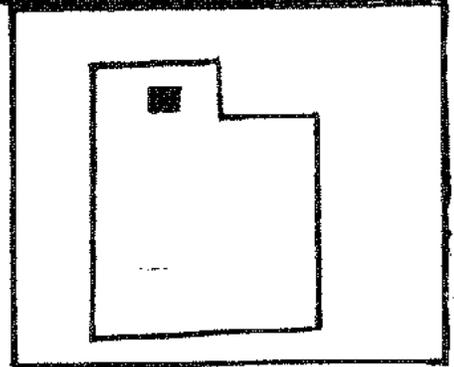


Figure 1: The Promontory - Blue Creek Area of Southeastern Box Elder County where the Pauli Cache of Painted Bison Bone was found.



# Glossary

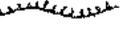
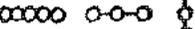
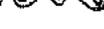
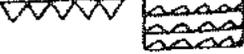
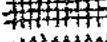
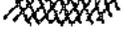
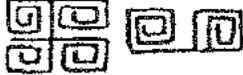
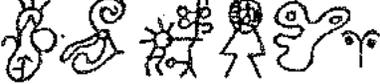
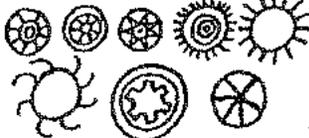
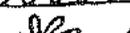
<p><b>Stippling</b> </p> <p><b>Other dot patterns</b> </p> <p><b>Horizontal lines</b> {          single           parallel           licked </p> <p><b>Vertical lines</b> {          single           parallel           suspended </p> <p><b>Rakes</b>  </p> <p><b>Convoluted rake</b> </p> <p><b>Wavy lines</b> {          parallel           enclosed </p> <p><b>Zigzag lines</b> {          single           parallel </p> <p><b>Circles</b> {          single           with dot           joined           concentric           with tail           bisected </p> <p><b>Spirals</b> {          without tail           with tail           double or scroll </p> <p><b>Rectilinear chain</b> </p> <p><b>Sawtooth or sickle</b> </p> <p><b>Maze</b> </p> <p><b>Wandering line</b> </p> <p><b>Rectilinear meander line</b> </p> <p><b>C or U figures</b> </p> <p><b>Rainbow</b> </p>	<p><b>Pole ladder</b> {          single           double </p> <p><b>Scorpion</b>    </p> <p><b>Crosshatching</b> {          horizontal           diagonal </p> <p><b>Rectangular grid</b> </p> <p><b>Rectilinear maze or spiral</b> </p> <p><b>Chevron</b> </p> <p><b>Abstracts</b> </p> <p><b>Blanket or pottery pattern</b> </p> <p><b>Shield</b> </p> <p><b>Wheel types (sun? or moon?)</b> </p> <p><b>Atlatl</b> </p> <p><b>Plant (tree or leaf)</b> </p> <p><b>Lozenge chain</b> </p> <p><b>Triangles</b> {          single           joined </p> <p><b>Hand prints</b> {          positive           negative </p> <p><b>Snake</b> </p> <p><b>Deer track</b> </p> <p><b>Bird track</b> </p> <p><b>Swastika</b> </p> <p><b>Cross or asterisk</b> </p> <p><b>Candlestick</b> </p>
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Figure 2:

Glossary of Type Descriptions taken from Dr. Ken Castleden's book *Petroglyphs and Pictographs of Utah*, vol. 2: xxiii

## **Cultural Prehistory of the Great Salt Lake Region:**

The Great Salt Lake region was occupied about 10,000 years ago by Paleo-Indians subsisting on pleistocene megafauna and lake periphery resources. By about 8,500 years ago, relatively sedentary Archaic peoples occupied caves and rockshelters near the Great Salt Lake. The Fremont, a hunting-gathering horticultural group, occupied the lake margin and nearby marsh resources between about 1,500 and 600 years ago. By 500 years ago, these people had been replaced by the Numic-speaking Shoshonians believed to have come from the southwestern Great Basin (Jennings, 1978; Madsen 1980).

Several sites surveyed or excavated in the region have yielded a few specimens of painted bone, although nothing on the order of the specimens from the Pauli collection. Professionally excavated sites include: Hogup Cave (Aikens 1970) and Swallow Shelter (Dalley 1976). These sites contained archaic Fremont and Numic cultural material.

### **Painted Bison Bone from the Pauli Collection:**

The most unusual of the hundreds of artifacts contained in the Pauli Collection are the painted bone artifacts. The decorated bone includes six elaborately painted bone pieces and a painted, etched, and incised bone.

The painted bones from the Pauli Collection were recovered from a cave or rockshelter in Boothe Valley on the east side of the Promontory Mountains. Unfortunately, the exact location of this cave or rockshelter is unknown at present. About all that can be said is that caves and shelters which show signs of human occupation abound in the Promontory-Blue Creek area.

Joe Pauli reported that the painted bone artifacts were excavated under 16 inches of surface and occupational detritus near the side wall of a well-protected cave. At the time of discovery the seven artifacts were cradled in what Pauli described as a nest of grass, and had the appearance of being intentionally cached or hidden in what was probably a subsurface pit covered by a large black rock. Seven painted bone artifacts were discovered, two of which were still encased in sheath of leather. Because of the uniqueness of this cache, each of the seven specimens is described below, using design elements and descriptions from Castleton's 1979 *Petroglyphs and Pictographs of Utah* (Figure 2).

### **Specimen 1:**

Specimen 1 (Figure 3a) is a stylized triangular anthropomorph drawn with black pigment on the flat outer side of a bison scapula. The bison scapula is 15.2 cm long, 6.5 cm wide, and .7 cm thick. The anthropomorph essentially conforms to the configuration of the worked bone. The figure's head is represented by a checkerboard pattern with vertical lines down from the pattern. Two leaf- or feather-like figures protrude from the head. It is possible that these figures represent a mask or headdress of some kind, or both. At the lower end of the figure, two appendages or legs are formed by a deep basal concavity in the figure.

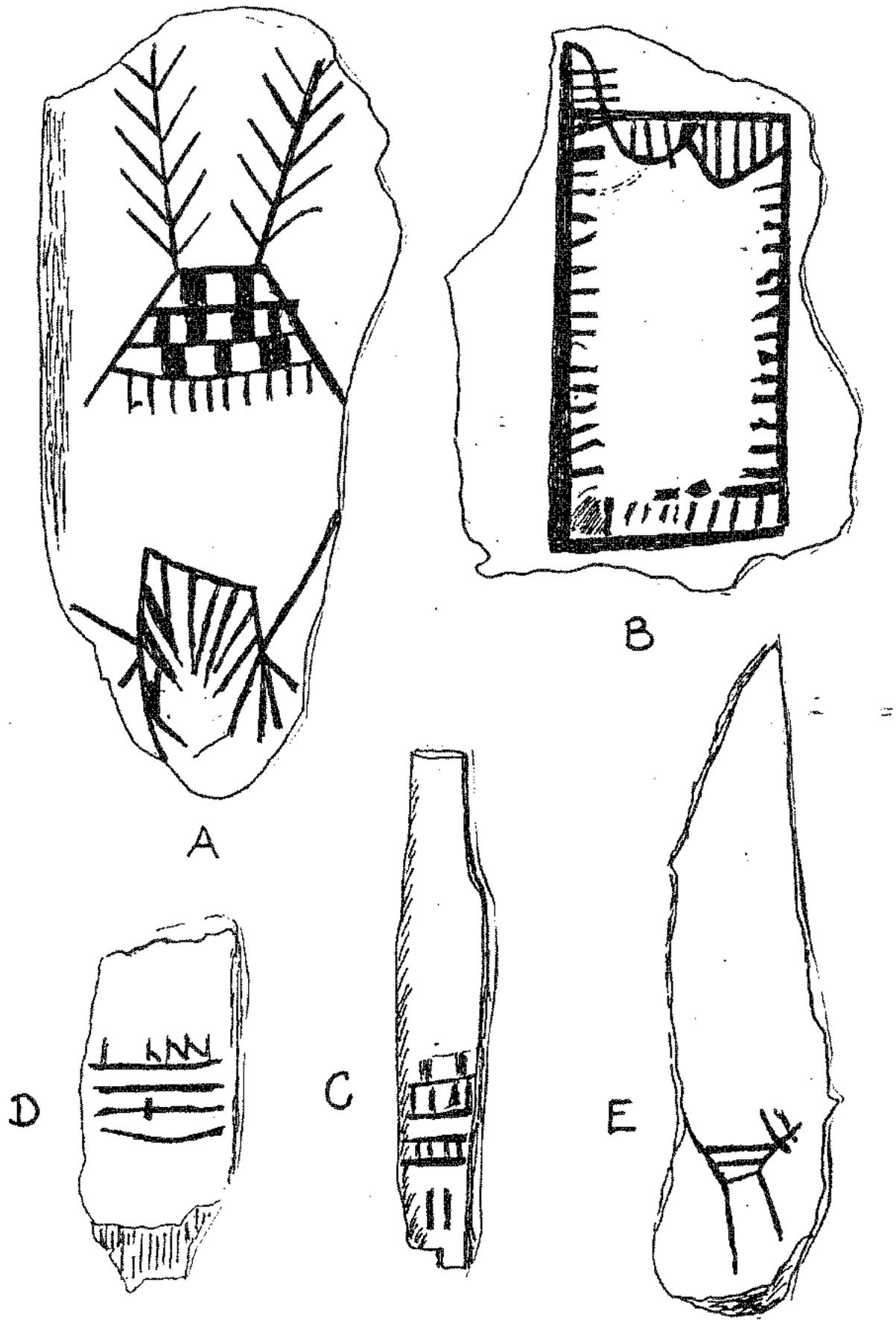
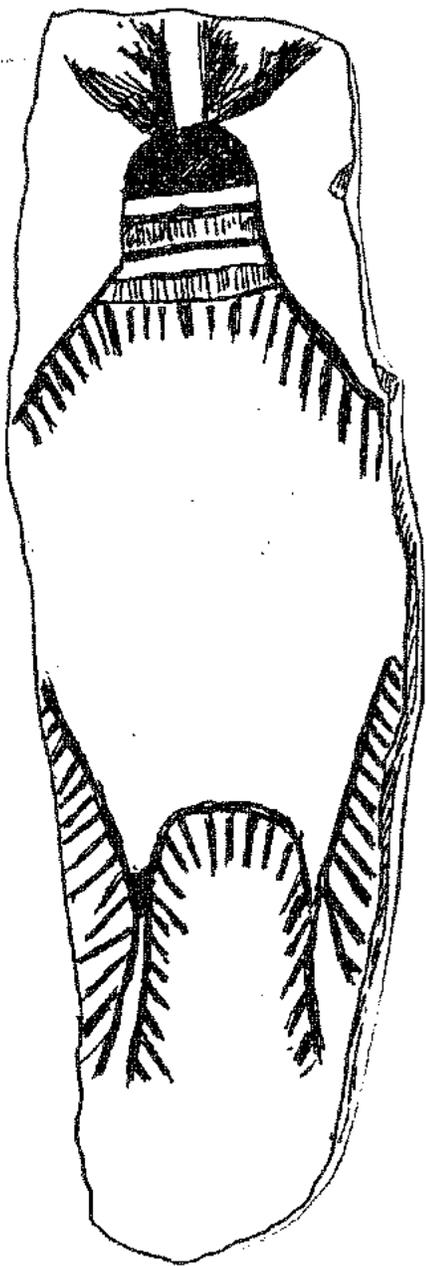
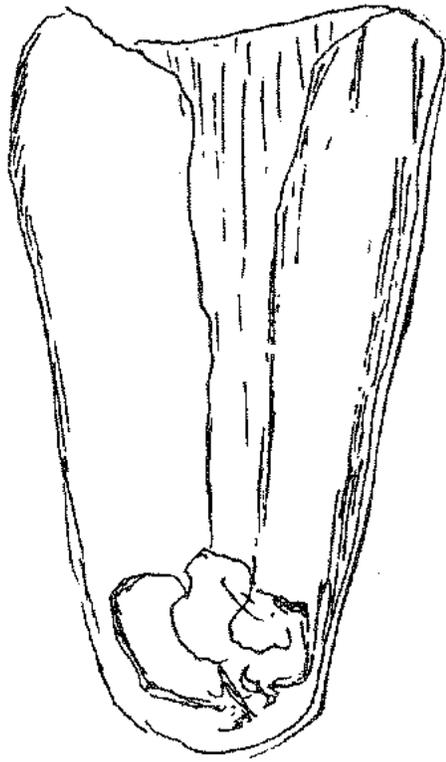


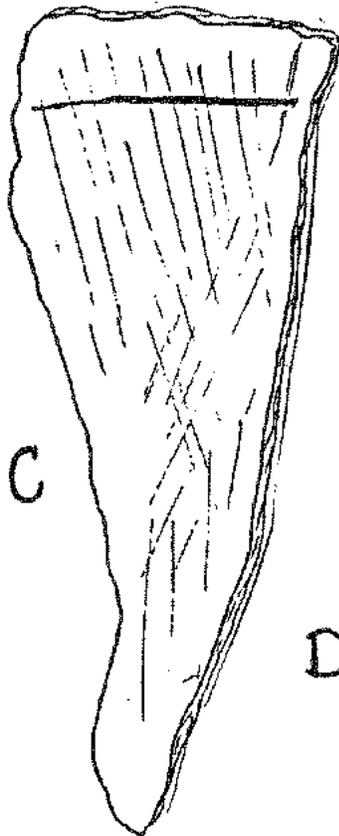
Figure 3:  
 Painted Bison Bone from the Paoli Collection: Specimen 1 (3a), Specimen 2 (3b), Specimen 3 (3c), Specimen 4 (3d), and Specimen 5 (3e). All are actual size



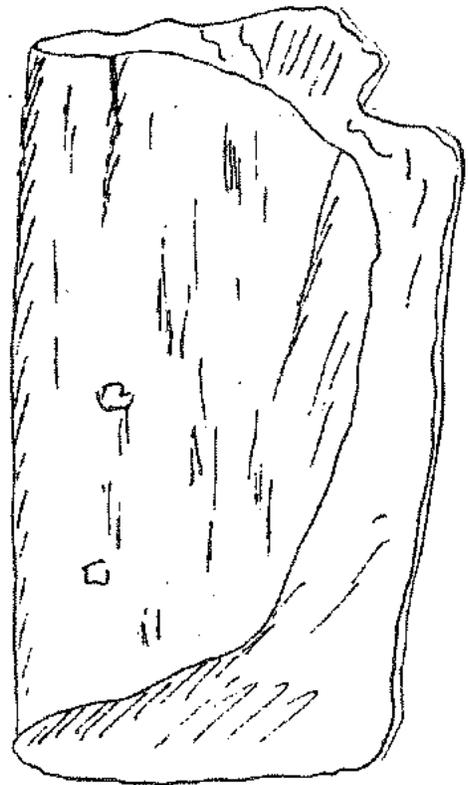
A



B



C



D

Figure 4: Painted Bison Bone from the Pauli Collection; specimen 6 (4a). With Leather Sheath (4b). Specimen 7 (4c) With Leather Sheath (4d). All specimens are actual size.

The appendages also have vertical lines underneath which may represent a fringed robe or other clothing.

### **Specimen 3:**

Specimen 3 (Figure 3c) is a painted rectangular figure drawn with black pigment on the under (inner) side of a piece of bison scapula. This piece of bone is 10 cm long, 7.5 cm wide, and .7 cm thick. The design located on the lower half of the rib consists of five parallel lines with vertical connections forming a checkerboard-like pattern. At the bottom of the design are two parallel, vertical lines.

### **Specimen 4:**

Specimen 4 (Figure 3d) is another zoomorphic design, also drawn in black pigment on a piece of cut bison rib. The rib piece is 7.4 cm long, 3 cm wide, and 1.3 cm thick. The design consists of four long parallel, horizontal lines and five short parallel, vertical lines above the uppermost horizontal line. Of the five vertical lines, the last four are connected by three diagonal lines. A short vertical line also bisects the second-lowest horizontal line near its center.

### **Specimen 6:**

Specimen 6 (Figure 4a) is a stylized triangular anthropomorph drawn with black pigment on the flat outer side of a piece of bison bone scapula. The figure is well-executed as to detail and form and is one of the finest examples of prehistoric art ever seen by this author. The bison scapula is 18 cm long, 5.6 cm wide and .8 cm thick. The anthropomorphic figure, which covers about the upper quarter of the piece of bone, is 15.5 cm long and 5.6 cm wide. The figure appears to be wearing a mask or feathered headdress of some kind. The headdress is decorated by parallel bands of either filled-in solid area or bands with vertical lines. Like specimen 1, two appendages or legs are formed by a deep basal concavity in the lower end of the figure. The body portion of the figure is decorated by suspended vertical lines which may represent fringed clothing or a robe.

At the time of its discovery by Mr. Pauli, specimen 6 was found inside of a folded leather sheath (Figure 4b) made of intestine or bladder of some unidentified animal. The sheath is 10.8 cm long, 6.3 cm wide, and is similar to a modern-day knife sheath.

### **Specimen 7:**

Specimen 7 (Figure 4c) is a triangular-shaped piece of bison bone scapula which has been covered on both its outer and inner surfaces with diagonal crosshatching lines. A black pigmented line has been drawn across the upper portion of the scapula piece on both sides.

Like specimen 6, specimen 7 was also found in a tanned leather sheath, 11 cm long and 6.3 cm wide (Figure 4d).

## Conclusion:

Painted bone artifacts have a wide but limited distribution over the Great Basin and have been reported from several sites in Utah. Unfortunately, published reports contain very little discussion concerning painted bone objects, undoubtedly due to the difficulty or impossibility of discovering the meaning or purpose of these unusual objects. However, these objects have not been subjected to rigorous analysis, which may reveal the meaning of the paintings.

It is apparent that much valuable information has been lost concerning the Pauli cache of painted bone because it lacks both locational and stratigraphic data. Due to the rarity and uniqueness of the collection, however, insights may still be forthcoming.

Two of the anthropomorphs (Specimens 1 and 6) are similar in form and detail to the red painted pictographs and incised stone figures commonly found in the Promontory-Blue Creek area and generally attributable to the Fremont culture. These two specimens also resemble unfired clay anthropomorphic figurines found in Fremont sites. Based on artifact comparisons, it is probable that the Pauli cache on painted bison bone is of Fremont origin, dating from about 1,500 to 600 B.P.

It is also probable that since all of the painted bison bone were cached together in a grass-lined storage pit, whoever deposited them there took great effort and care to preserve and protect these objects. The fact that two of these artifacts (Specimens 6 and 7) were also protected by leather sheaths strengthens this possibility. We can also speculate that all of the painted bone objects belonged to a single owner, who may have been a shaman.

As to the purpose of the painted bison bone objects, we can only speculate. Thomas (1983:349) suggests "the symbol system on portable art objects [from Gatecliff Shelter] referred, at least to communal hunting and gathering activities." In short, the painted bison bone may have been used for encoding ceremonial information dealing with the availability of food resource.

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