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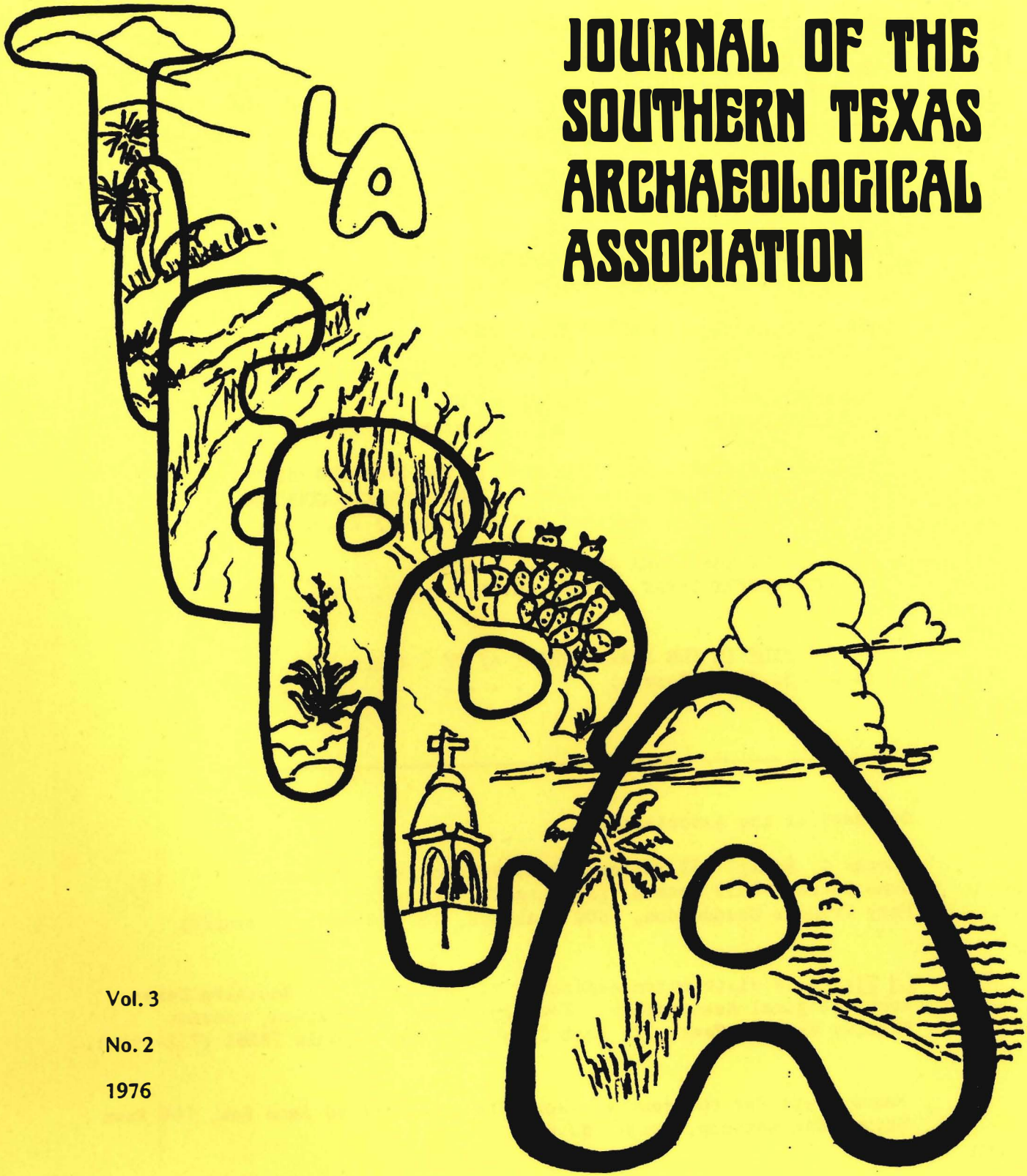

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Anne Fox
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La Tierra is distributed quarterly to members of the Southern Texas Archaeological Association. For membership information, contact Shirley Van der Veer, 123 East Crestline, San Antonio 78201 (732-5970).

Manuscripts for the journal should be submitted to Anne Fox, 106 Fawn Drive, San Antonio, Texas 78216.

WHO JOINS AN ARCHEOLOGICAL SOCIETY?--A TENTATIVE TYPOLOGY*

E. Mott Davis

Archeological societies attract individuals exhibiting a wide variety of personalities and interests, as TAS members scarcely need to be told. Purely in the interest of science we present a preliminary classification here, there being no claim that the treatment is exhaustive or that the order in which the types are presented has any significance in itself.

Type 1. The Surface Hunter. He loves to move over the countryside. His posture is often stooped, and rounded shoulders are a frequent avocational deformity. He takes pride in sharpness of eye, and particular pleasure in finding a good arrow point right beside the footprint of his friend who walked over the same field the day before. He is likely to be revoltingly outdoorsy, a sort of bird-watcher gone wrong, or right. He is the eyes and ears of the local archeological community. He joins an archeological society to find others who will join him in his forays into the boondocks.

Type 2. The Pack Rat. This type is a collector, period. Whereas some people collect stamps and others collect coins, sea shells, or old wine bottles, this fellow collects Indian relics. He isn't sure why; he just loves the feeling of knowing he has a lot of them, and that he has more this week than he had last week. In the more extreme cases (subtype 2a) he will cheat or break the law to get a badly wanted item. He joins an archeological society to show off what he has, and with the hope of getting more. He is often disappointed.

Type 3. The Professional. This type gets paid for his archeological activities and carries them on all week long. He sometimes acts, and is treated, as if this puts him in a very special category. He is likely to tell himself that he is joining an archeological society purely for business reasons, hoping to use the members as "bird dogs" to lead him to evidence. However, he often finds himself working as hard for them as they for him. Sometimes condescending at first, he usually gets taken down a few pegs by the more knowledgeable members of the society and acquires the proper humility. Membership in the society is likely to help him professionally; but if not, he often finds himself hopelessly trapped anyhow by the fun and friendships.

Type 4. The Classifier. This type's aim in life is to get everything sorted into categories that have names. The local archeological handbook is his constant companion (and, in the case of the current Texas handbook, causes him repeated momentary confusion because the description on the page facing the picture is not the one that belongs to the picture). If he finds a dart point that simply won't fit nicely into a category in the book, he may go into a pitiful decline. He joins an archeological society to get help in identifying his artifacts, and to argue about them.

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* From time to time an article appears in print which is timeless. In the sincere belief that such literary gems should not be allowed to fade away, we offer this one from Texas Archeology, Vol. 10, No. 3 (May, 1966).

Type 5. The Romanticist. This type is also known as The Yearner because he yearns for the life of the Indian. Nothing would please this type more than to be transported into the past in a time machine (if he talks about it too much, his friends begin to wish his desire could be fulfilled). The prehistoric past thrills him all to pieces, and at every site he visits, with every artifact he finds, he goes off into a daydream about the romantic events he is sure were connected with it. He joins an archeological society because it is the best available substitute for the time machine. Other members of the society, less given to archeological ecstasy, may find him something of a nuisance but they are likely not to do anything about it because secretly they know that they have, or have had, many of the same feelings.

Type 6. The Wheeler-Dealer. Here we have the born organizer, the appointer of committees, the instigator of group field projects, the Program Chairman. He joins an archeological society because it gives him the chance to enjoy both his interest in archeology and his impulse to get people organized and doing things. In some cases, the society would collapse without him.

Type 7. The Youthful Zealot, also known as The Teen-Age Beaver. This type is likely to keep the other types on the defense. He remembers everything in the Handbook and can cite details at the drop of an expanding-base point; he can work hard all day without any interruption in the flow of speech; and he is likely to insist on the maintenance of high standards of work. He joins an archeological society as one means of channeling an unbounded supply of energy. Adult types are often troubled by Type 7 and can't decide whether to be proud at seeing the red-blooded youth of the country growing up scientifically-minded, or irritated at having their own sloppy work shown up by the better techniques of a junior type. Type 7 has a number of interesting subtypes, but space prevents our detailing them here.

Type 8. The Documenter. His artifacts are covered with little letters and numbers. He has notebook after notebook detailing the circumstances of discovery of every last scrap in his collection. He has a journal of his activities: what the weather was like, who went along, why the lunch wasn't very good, what they found, what it might mean, and which child got car-sick on the way home. He has maps, field records, photographs, and drawings, all indexed and cross-indexed. His house runneth over with paper. To him archeology is, among other things, a personal record of his own activities, and that is a special pleasure he finds in it. He is beloved by people in Type 3, because he preserves information in a form that can be used by others. The world in general doesn't seem to appreciate him, so he naturally joins a society where he is appreciated.

Type 9. The Pot-Hunter. Oooh, what a Bad Type. He digs and digs, merely to find things. He doesn't care about information; in fact he destroys information permanently. Like Type 2, with which this type is often combined, he really isn't interested in archeology at all, but only in relics. Still, he derives the same sort of pleasure from his destructive rooting around as Types 3 and 12 do from their careful searching for information. It gives him a chance to get outside, to do something active, to forget his worries, and to have something in hand to show for it. He joins an archeological society in the hope of learning about new places to dig; but sooner

or later he runs afoul of such types as 8 and 12 who consider his brand of activity nefarious and unethical. Trouble is likely to ensue. It is too bad that Type 9 often includes such fine people; otherwise it would be easier to stay mad at them. In any case it is not hard to dislike their activities.

Subtype 9a. The Commercial Pot-Hunter. Now this one is really bad. He destroys scientific evidence in order to make a quick dollar. One reason he joins an archeological society is to find suckers to whom he can peddle his wares. Great Heavens, let's not even think about this type.

Type 10. The Faithful Spouse. This type joins an archeological society purely out of a spirit of Togetherness. She, or he, is tired of sitting at home while the husband, or wife, is archeologizing; and so, in a spirit of self-sacrifice she, or he, joins up. This type is likely to be transitory and very often suddenly switches to another type such as 1, 4, 8, or 12.

Type 11. The Viewer-from-a-Distance, also known as The Armchair Archeologist. This may be the most sensible type of the lot. He joins a society to hear talks and see films about archeology. He likes to read about it. He is pained by the thought of expending muscle-power in the pursuit of his interest---any more interest, that is, than it takes to buy a book or attend a talk or movie. While Type 12 will be joyfully sweating at the society's Summer Field School, Type 11 will be comfortably seated in an airconditioned room, iced drink ready at hand, reading Gods, Graves, and Scholars. And his conscience won't even hurt him.

Type 12. The Archeological Craftsman. Pure, honest, noble, bearing a halo as well as a shovel, trowel, line level, notebook, and tape measure, this type is often called the Conscientious Excavator, and is not uncommonly combined with other types. True, he is a digger, as Type 9 is, but ah, what a difference. He is looking for the layers of earth, no matter how complex they are; for the relationships between the layers and the features in them; and for ways of recording the whole thing clearly. As the name of the type indicates, he is first and foremost a craftsman, and he joins an archeological society to associate with others who share his interest in this particular craft. He is sometimes a little hard to take, on account of the halo, and his fingernails are apt to be dirty; but not a bad type on the whole. As a matter of fact, we love him and hope his tribe will increase.

Remarks. It must be emphasized that the classification presented here is tentative, being based only on preliminary analysis of the material. Further investigation may lead to the splitting or combination of some of these types, or to the discovery of new types. It will be noted, furthermore, that most of the types defined here grade into other types. This proves that archeologists are like arrow points. Obviously, more research is needed in this important area of study.

NOTES ON AN ALTERED QUARTZITE COBBLE FROM WEBB COUNTY

E. R. Mokry, Jr.

During surface investigations of the Pablo Meyer Site, 41WB5, in Webb County, this author collected a single quartzite cobble with abraded or ground "facets", and this paper is presented to describe and supplement distribution data on such specimens.

Site

The Pablo Meyer Site, 41WB5, is located in the southern region of Webb County, on the northern bank of a dry tributary of Lobo Creek. The site area is partially bare, with thorny shrubs, mesquite and cacti. Small gullies and water runoffs cut through the site.

Surface reconnaissance of the site has yielded materials ranging from the Late Archaic to Late Prehistoric. This material is represented by Abasolo, Tortugas, Frio, Langtry, Lerma, Gary, Scallorn, Perdiz, unifacial lunate scrapers, Clear Fork-like scrapers, core-choppers, hammerstones, and one pottery sherd.

Due to the amount and variety of material collected, it is assumed that this site was favored by the nomadic groups of the area.

Description of Specimen

In outline, the specimen is a truncated oval and in cross section, a narrow ovate. The total length of the cobble is 76 mm, with a width of 75 mm, and a thickness of 37 mm. Color varies from a tan-brown cortex to a light gray quartzite interior.

One surface or face (Fig. 1B), is smooth and cortex-covered. Pecking occurs across this surface. The opposite face (Fig. 1A), exhibits four facets, leaving unground to slightly ground medial ridges. The facets are circular to ovate in outline. Three facets (Fig. 1A:a,b,c), exhibit shallow depressions or troughs, while the fourth (Fig. 1A:d), takes the form of an angled plane, possibly resulting from incomplete use or manufacture. Magnification of facets a, b and c reveal striations, beginning at the outer edge of each facet and ending near the center of the cobble. Uneven smoothing, and some rippling is apparent in all facets. Dimensions of each facet are in Table I.

The cobble also exhibits battering and pecking along one edge, possibly the result from use as a hammerstone. The opposite or truncated end has been altered by the removal of a number of large flakes in such a manner as to form a sinuous cutting edge. Some smoothing occurs along the altered edge.

Comparative Material

In a recent issue of La Tierra, Mary Frances Chadderdon described numerous quartzite cobbles from Victoria County, Texas, with abraded or ground areas suggesting alteration by man. The specimens described by Chadderdon exhibited the following characteristics: (a) abraded areas take the form of

angled planes, resulting in two or four "facets", which leave an unground center ridge on each side; (b) a center trough on one or both sides; (c) pecking/battering along the edges and ends of cobble (Chadderdon 1976).

Specimens of similar configuration have been collected from various parts of Texas, and Chadderdon gives reference to many such occurrences.

Discussion and Conclusion

The purpose of this specimen is unknown, perhaps it was some sort of polishing stone, or was used in the preparation of striking platforms on cores. This could possibly result in the striations encountered in three of the facets. Pecking and battering along the cobble edge suggests use as a hammerstone. Quartzite, in natural and water worn shapes, appears to have been favored for this purpose (Hester 1975). Close examination of the altered end reveals that the removal of flakes occurred after facets a and b had been ground, suggesting that the cobble was ovate in outline and both ends had been used in battering and pecking. Extensive use in such a manner could possibly remove flakes and later the object may have been bifacially reshaped into a cutting edge. Lastly, when the specimen is held, the thumb side of the hand sits squarely into facets a and c. Is it possible that the ground facets provided a better hold when the cobble was in use as a hammerstone? This assumption is tenuous, but the trait of having depressed or ground-out areas on the lateral edges as though to make the stones more comfortable to the fingers occurs on artifacts from the Archaic sites of northern Louisiana (Webb, et al 1969).

Undoubtedly, a number of tenuous reasons could be formulated as to the age, manufacture and use of such specimens, but since the archaeology of South Texas is poorly known, there is little basis for further speculation. In conclusion, I recall a statement by a long time friend, and his description reveals:

> ...I attempt to conjure up, from a deep ancestral bred-in subconcious cell, a "hunch" of how it may have been...and draw a complete blank! (Hill 1973)

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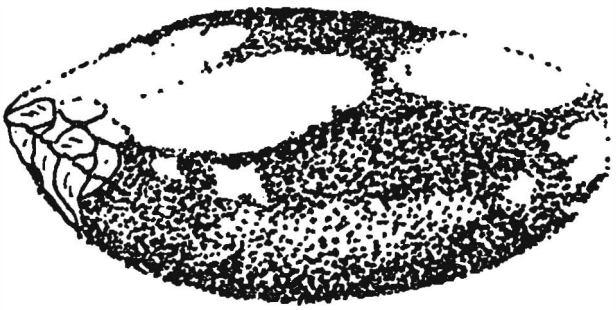
Facet	Length	Width	Depth	Pecking	Striations	Rippling
a	40mm	28mm	3mm	X	X	X
b	35	30	2	X	X	X
c	30	27	4	X	X	X
d	35	24	1	X	-	-

TABLE 1. Dimensions of Facets

A

B



C

Figure I. Quartzite Cobble from Webb County, Texas.

THE CONSIDERATION OF LITHIC REFUSE AT ARCHEOLOGICAL SITES*

Harry J. Shafer

"No material relict of a former population can be discarded as irrelevant" (Heizer and Cook 1956:230). Prehistoric archeological sites in the interior of Texas are most often marked by the presence of stone residue. Some of you are obviously aware of this at Choke Canyon. If we are going to discover the cultural history and discern the lifeway of past populations in any given area (and in most instances these are nearly impossible, but are nonetheless among our goals as archeologists) then would it not be to our advantage to seek every bit of evidence that might help us to attain our goals? All that is left of these prehistoric people's existence on earth are concentrations of altered stone, discarded bone, shell and rarely ceramic residue of their behavior practices. We first must assume then that whatever their life was like, it was reflected in these artifacts and other residue they left behind. Such cultural items as housing, group size, settlement size, duration of settlement, type of settlement, type of social group (matrilineal, patrilineal, etc.), the subsistence technology system (i.e., kinds of foods and how they were prepared, hunting and trapping techniques), clothing, religious characteristics, language, are all things we would like to know. So you can see that the lack of preservation has already created a tremendous bias for us. It has taken away all traces of dwelling, the entire industries of wood, leather, fiber, and in some instances bone and shell are gone. All we have to go on are those activities in which stone or ceramic tools were involved, and even then we are limited because if we are lucky enough to have wear evident on a stone tool, that wear does not tell us what was being cut nor for what purpose.

Many archeologists in the past consistently limited themselves even more by discarding or otherwise not analyzing up to 80% of the chipped stone residue, by selecting only the obvious tools from the lithic sample and disregarding the remainder. It is usually impossible to determine all steps in the manufacture of certain stone tools such as projectile points and other thoroughly chipped objects. It is important to know how a stone implement was made if you are going to find out where it was made. Knowing where a particular stone tool was manufactured could give you certain kinds of leads toward determining the duration of occupation or a function which was carried out at a particular site. You can begin to see how interpretations began to build on a foundation of a few facts. It is perhaps analogous to mathematics. The more knowns you have, the more unknowns you can solve for, although our science is not nearly as exact. Our knowns are rarely really knowns or facts which can be proven, they are merely probabilities.

The main point of this presentation is devoted to demonstrating what can be learned through an analysis of the lithic residue so often ignored by professional archeologists. You are of course interested in what you as amateurs can do toward preserving and perhaps analyzing these materials. I am not going to discuss methods of sorting and classifying flakes; the basic attributes of working silicious stone can be found in several excellent

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* Paper presented to the Coastal Bend Archeological Society, Corpus Christi; 1971. Slightly revised.

publications (e.g. Crabtree 1972; also see Hester and Heizer 1973 for an excellent bibliography). The classification of any collection of flakes hinges on the nature of the raw materials and classification in one area may not be suitable for another area. What I am going to do is to give you some hints as to how you might look for certain kinds of technological procedures that could be an important clue toward recognizing a particular type of stone assemblage or industry.

One of the first things one has to do is to determine what the local raw material resources were. In this way, one can see immediately some of the limits or advantages imposed on the flint knappers. Also, one can determine with some degree of certainty which objects were imported. The techniques of production are partly dependent on the nature of the raw material such as size. You can't make a 3-inch dart point out of a 2-inch pebble. And you can't work a pebble with all of the techniques you work a nodule with, but you can work a nodule by the same techniques you work a pebble. Another variable affecting the manufacture of chipped stone tools is texture. This can be improved for some materials by heat treating the stone. Therefore, choices have to be made by the flint knapper with regard to the limits imposed on him by the nature of his raw material. By recognizing certain of these limits, and how they were sometimes overcome, the archeologist can be alerted to the presence of certain technological processes.

Let me explain an example. In Choke Canyon, along the Nueces River, cobble flint is very common and large dart points and other bifaces occur in collections from that area. To make a large, thinned dart point, certain manufacturing steps are essential. First, one selects a nodule or a large flake.

Step I: roughly shaping and initial thinning the blank by hard-hammer percussion (primary flaking);

Step II: thinning the preform by soft-hammer percussion;

Step III: final trimming by soft-hammer percussion pressure.

Hard-hammer and soft-hammer percussion each produce flakes indicative of the techniques. In step I for example, roughly shaping the nodule by hard-hammer percussion might be referred to as primary flaking. While primary flaking is often used to make flakes which are in turn directly used without further modification as cutting tools, we are interested here in the technique of hard-hammer percussion and where it occurs in our manufacturing sequence.

Soft-hammer percussion flakes are diagnostic and can usually be separated from hard-hammer percussion flakes without difficulty. It is difficult for me to recognize pressure flakes, but pressure flaking can easily be recognized on the finished specimens. It should be emphasized here that a flint knapper will usually use both hard-hammer percussion and soft-hammer percussion interchangeably as the need occurs during biface manufacture and thinning.

If all of these steps are evident at a site then you can make inferences about some activities which were carried out at that site, or perhaps at an

area within a site. Primary flaking can be directed toward several goals, but soft-hammer flaking is most often directed toward preform thinning; in Texas, preform thinning is characteristic of dart point manufacture.

If these manufacturing steps are present at site A for example, along with ruined preforms, you can pretty well assume that biface manufacture was one cultural activity performed at that site. From this you might also infer with other supporting evidence that the occupation was more than just a brief stopping point since tool manufacture and tool repair were carried out there. The activities might be in conjunction with other general camp-site tasks which may account for your burned rocks and identifiable hearths (assuming they are present at site A).

It is my impression that, along the immediate coast, flint raw materials are not common and the nearest resources which are available occur in the form of pebbles. You have, then, obvious limits of size and there are also limited techniques with which you can work a pebble. One efficient technique for working pebbles is the bipolar method.

This technique allows the worker to get the most out of each pebble. A slight variation of this technique will produce thin flake blades if certain procedures are followed. Both of these techniques, the direct bipolar method and the technique of removing flake blades from pebbles have been noted in coastal collections (Hester and Shafer 1975). It is my opinion that whenever you have the only useful raw material occurring in small pebble form you can begin to look for the bipolar technique. How do you recognize bipolar flaking? It would be useless for me to explain this without examples. All I can say to you now is that if you are interested, experiment and take particular note of the striking platform and the various recurring attributes. The adage that a bipolar flake has a bulb of percussion at both ends is very rarely true. A bipolar manufacturing kit consists of a hammerstone and an anvil and tools made from the bipolar flaked pebbles are necessarily small. The size of tools along the coast and barrier islands may not be a cultural preference; they may be a cultural necessity.

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41MC185 - A HISTORIC BUILDING SITE IN THE PROPOSED CHOKE CANYON RESERVOIR AREA, LIVE OAK AND MCMULLEN COUNTIES, TEXAS *

Daniel E. Fox and Warren M. Lynn

Introduction

In the spring of 1974, an archeological survey of the proposed Choke Canyon Reservoir in Live Oak and McMullen Counties, Texas, was performed by the Texas Historical Commission. After a budgetary interruption, the survey was completed in the spring of 1976. Of the 170 sites recorded, five are historic cemeteries and eleven are historic house sites or refuse accumulations. One historic building site of particular interest, 41MC185, is located on an elevated terrace slope on the north side of the Frio River and east of its confluence with Elm Creek in the vicinity of that section of the river known as Yarbrough Bend. A prehistoric site, 41MC184, also is located on the terrace.

Surface collections from the historic site recovered a number of diagnostic artifact types which provide new data for our understanding of early Anglo-American settlement and cultural influences on trade and commerce in South Texas. The purpose of this paper is to present the data and interpretations of the significance of the artifact associations discovered at 41MC185.

Historical Background

Although there were numerous Spanish travelers through the Choke Canyon region possibly beginning with Cabeza de Vaca and most assuredly Massanet in 1689, no account has been located of any permanent occupation in the Choke Canyon area during the Spanish Colonial period, even after the establishment of the road from Laredo to San Antonio, about six miles west of Tilden, and the road from Laredo to La Bahia, passing to the east near Oakville. Empressarios James McGloin and John McMullen received permission to establish a colony in South Texas in 1828, and in 1835 the property on which 41MC185 is located was granted to an Irishman, John Fadden (1889 map of McMullen County).

Probably because of the Texas War for Independence and subsequent political unrest, settlement in the reservoir area was delayed until 1858, when the Yarbrough Bend community was established on the south side of the Frio River about 25 miles northwest of Oakville. The Yarbrough Bend community consisted of 8-10 houses, initially, and had a population of about 30 people (Smyer nd: 47a). That same year, another community, Rio Frio (later known as Dog Town and, now, Tilden), was established approximately 10 miles west of Yarbrough Bend (Smyer nd:48).

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* Paper distributed at a meeting concerning Spanish Colonial archeology, history and architecture sponsored by the Office of the State Archeologist, Texas Historical Commission, Austin, Texas.

Yarbrough Bend reached its maximum growth shortly after the Civil War, although neither a post office nor a general store ever was established there (Smyer nd:57-58). By 1876 only three or four families still lived at Yarbrough Bend, the others having moved to Dog Town or up San Miguel Creek (Smyer nd:58). Most of the population of McMullen County was concentrated in Dog Town until the late 1860's and early 1870's, when the northern and eastern parts of the county became settled (Smyer nd:68). During that time there are accounts of two homesteads being established in the general vicinity of site 41MC185. T. N. McCoy established a ranch and built a house on Elm Creek and I. A. Pierce had a ranch on Opossum Creek (Smyer nd: 69-70).

During the 1860's the inhabitants of the area had to make long journeys once or twice a year to San Antonio, Goliad, Indianola, Rockport, or Corpus Christi for supplies (Smyer nd:54). In 1862 a cattle drive to Laredo was organized in order to obtain much needed supplies such as flour, sugar, coffee, and among other things, Mexican jackets and hats which were considered "real finery". The goods were transported back to Dog Town in ox carts (Smyer nd:80). Subsequent drives to Laredo were not so successful and by the middle 1860's the cattle were driven to the hide and tallow factories on the coast (Smyer nd:80).

The subsistence of the historic population focused primarily on cattle production with an increase in farming activities after 1877 (Smyer nd:142). After the turn of the century oil production became important throughout the region, although cattle ranching has remained the principle industry. The Choke Canyon area is now earmarked for inundation in order to meet the water needs of the Corpus Christi area.

The Site

Initially, historic site 41MC185 was discovered and investigated as a routine operation of the intensive Choke Canyon archeological survey. Historic artifacts were found during a surface sampling of an extensive prehistoric site (41MC184) which is situated on a broad, gradual upland slope overlooking a sharp bend of the Frio River valley.

Site 41MC185 includes an area of approximately 50,000 square meters (about 10 acres), located less than 100 meters from the Frio River channel, and situated at an elevation of about 6 meters above the river floodplain (Figure 1). Extensive floodplain areas suitable for cultivation and pasture are located south of the site. Similar lands are across the river to the west and near the mouth of Elm Creek to the northwest. North and east of the site are eroded uplands with thin, gravelly soils that support a dense cover of thorn brush. The historic site and the surrounding area appear to have been badly disturbed by clearing and erosion during the historic period.

Two possible structural features were noted at 41MC185: a large concentration of sandstone rocks (possibly a chimney foundation) on the north end of the site, and a smaller rock concentration (possibly an outbuilding foundation) on the south edge of the site. As a sampling procedure, the areas around these features were designated areas B and A, respectively, and the intermediate area was called Area C. (See Figures 2 and 3.)

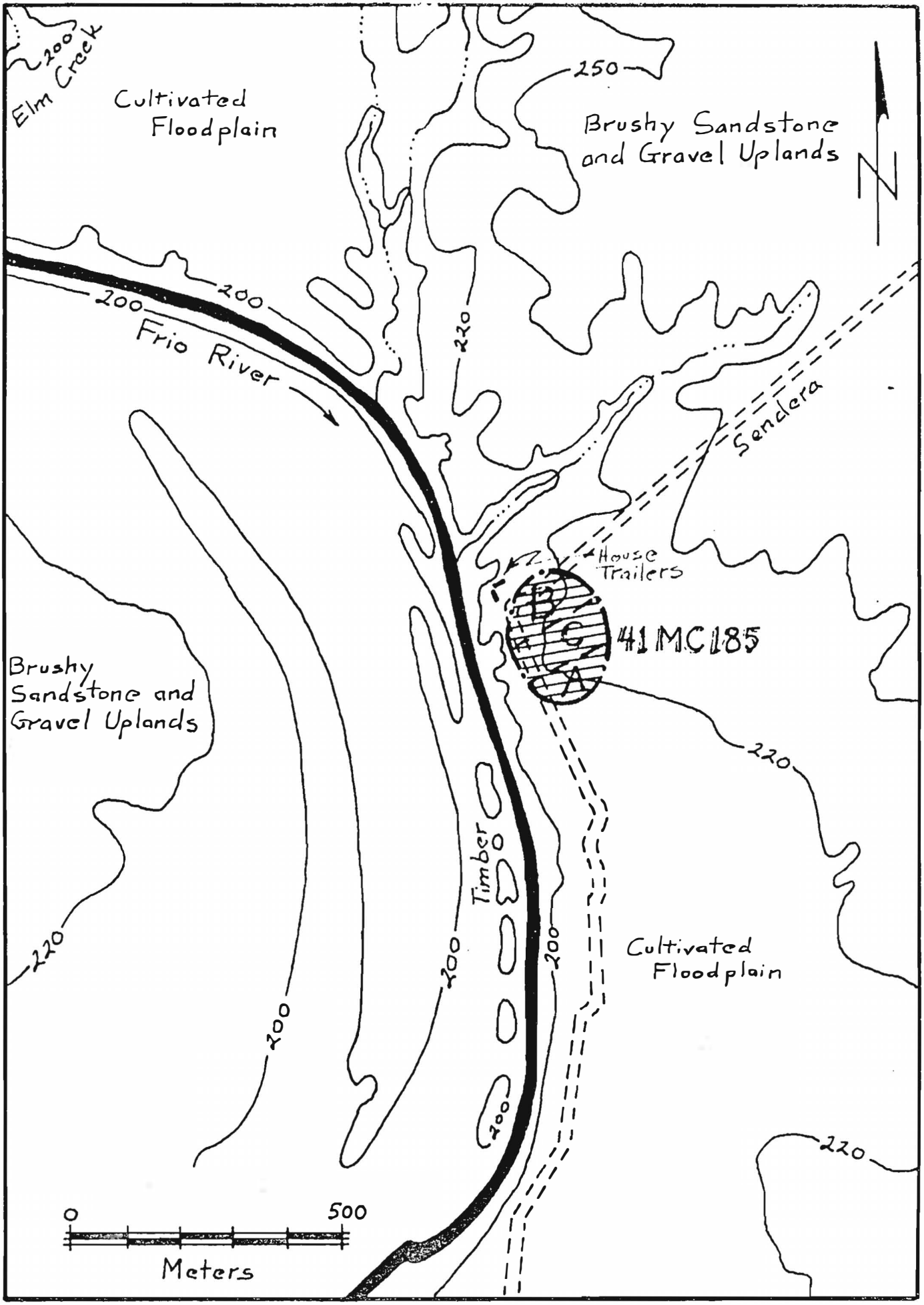

Figure 1. Sketch Map of Site 41MC185

A sample of approximately 100 artifacts was collected during the initial surface inspection. Later, the archeologists revisited 41MC185 and made an intensive surface collection, especially from Area B where most of the artifacts seemed to be associated with the large sandstone feature. Fewer artifacts were found in areas A and C.

Material Culture

A total of 352 historic artifacts was collected from site 41MC185 in the proposed Choke Canyon reservoir area. For descriptive purposes, this material cultural evidence was sorted into five major categories: ceramics (121 specimens), glass (163 specimens), metal (64 specimens), stone (1 specimen), and mussel shell (3 specimens).

Ceramics

The sample of 121 ceramic artifacts is divided into three categories based on the past hardness and porosity. Further classification is by decoration and form.

Earthenware

Transfer-Printed (1 specimen: Area B) A small light blue printed sherd, probably from the body of a cup. Made in England, transfer-printed earthenware is found commonly at historic sites of the first half of the nineteenth century. Another light blue printed sherd was collected earlier during the Choke Canyon survey at site 41 MC74, a site in the area of the Yarbrough Bend settlement which was established in 1858 (Smyer nd:47a).

Plain White Paste Earthenware (104 specimens: Area A = 20; Area B = 79; Area C = 5) A group of 45 rim sherds, 34 body sherds, 21 basal sherds, and 4 handles from clear glazed vessels with ring feet, including bowls, cups, plates, saucers, and a possible chamber pot. Four basal sherds bear small unidentifiable portions of black printed maker's marks. While a few plain clear glazed sherds may be from the undecorated parts of decorated vessels, most sherds probably represent the influx of plain ware into the United States from England after 1860 (Davis and Corbin 1967:26).

Tin Enameled (9 specimens: Area B) Five decorated and four undecorated majolica sherds from plates, bowls, and possibly a cup. Paste is uniform and fine-grained, ranging in color from light pink (8 sherds) to light yellow (1 sherd). All nine are coated with an opaque, white to very light buff enamel. Decorated sherds include a rim sherd from a plate with a light blue banded rim; a body sherd from a bowl decorated with dark blue dots below parallel light blue bands; a sherd from the bottom of a plate with dark blue dots and a dark blue plumage design accentuated with black lines; and two body sherds with tiny spots of light blue. These decorated sherds are similar to types described as Huejotzingo, possibly San Elizario Polychrome, and others classified generally as Puebla Blue-on-white (Rex Gerald 1975: personal communication; Barnes and May 1972:7 and 10). The assignment of terminal dates for these late majolica styles is uncertain. For example, suggested dates for the Huejotzingo style range from 1700 to the present (Barnes and May 1972:10). However, both Curtis Tunnell and Rex Gerald (personal communication) have observed that the sherds in question seem to be 18th century wares.

Stoneware

Vessel Sherds (5 specimens: Area A = 2; Area B = 3) Three body sherds, one rim sherd, and one handle fragment from different crockery vessels. The handle and two body sherds are coated with an "Albany slip". Another sherd is coated on the interior surface with an "Albany slip" and on the exterior surface with a gray bubbly, vitreous glaze. The rim sherd has a green alkaline glaze.

Pipe Bowl Fragment (1 specimen: Area C) A gray mold-made pipe fragment with diagonal line decoration similar in form to Pamplin Pipes produced in Virginia during the second half of the nineteenth century and the first part of the twentieth century (Hamilton and Hamilton 1972:17; Plate 15G). The artifact appears to have been burned.

Porcelain

Doll Part (1 specimen: Area B) A leg from a glazed porcelain doll of the type with movable arms and legs which probably dates after 1870 (Hume 1970: 317-318).

Glass

A total of 163 glass artifacts was recovered from the surface of the site. They have been divided into two categories - "containers" and "window pane". The "containers" category has been subdivided on the basis of color.

Containers

Brown (53 specimens: Area A = 3; Area B = 48; Area C = 2)

Body: 41 specimens

The sherds are representative of cylindrical and paneled bottles. Most of the latter are probably snuff bottles. One specimen has been burned.

Base: 4 specimens

All are fragments of snuff bottle bases made in a cup bottom mold. Munsey notes that from the turn of the century, snuff bottles had a series of raised dots on their bottoms (1970:77). None of the bases in the sample exhibit these dots.

Rim: 8 specimens

Five specimens are fragments of snuff bottles. Four of these are mold made with raised seams on two opposite corners and hand finished rims indicating their manufacturing ca. 1880-1913. One snuff bottle rim is machine finished indicating post-1913 manufacture. Of the remaining specimens two with broad straight rims have molded necks with hand finished lips dating 1880-1913 (Newman 1970:72). One specimen has a free blown neck with an applied rim, probably dating from 1840-1860 (Lorrain 1968:40).

Aquamarine (86 specimens: Area A = 5; Area B = 81)

Body: 70 specimens

The sherds are generally representative of paneled and cylindrical bottles. Part of one cathedral pepper sauce bottle ca. 1880-1920

(Munsey 1970:152) was recovered. Four fragments reveal the embossed marks: "SIMMONS", "LIVER", "JH ZEILIN...", and "...HIA."

Base: 12 specimens
Eight specimens are of unmarked post bottom mold manufacture which was popular during the 19th Century (Munsey 1970:39). The other four specimens have marks. One has what appears to be a cup bottom mold base with the mark ("F H $_2$ G W") across an indented circle, the mark of Frederick Hampson Glass Works, Salford 5, Lanc., England, 1880-1900 (Toulouse 1972:202). The Mark "I G Co" on a post bottom mold has two possible makers: (1) Ihmsen Glass Co., Pittsburgh, Pa. ca. 1870-1895; Toulouse reports "the use of the 'I G Co' trademark is rare and found on some unmistakably Pittsburg bottles. It may date from 1879..(or)..from 1885." (1972:261-263). (2) Illinois Glass Co., Alton, Illinois, ca. 1880-1900 (Toulouse 1972:264). Two bases have a large raised cross or "X" in the center; one on a cup bottom mold and the other on a post bottom mold. Toulouse references a large cross of an unknown maker on a jar labeled "Yorkshire Relish" and "Goodall Backhouse and Co." (1972:557).

Rim: 4 specimens
Two have free blown necks and crudely finished rims (1840-1860); one has an oil finish and one a champagne finish. Two have molded necks with hand finished rims (1860-1880); one has an oil finish and the other a bead finish (see Putnam 1965:20).

Olive Green (6 specimens: Area A = 4; Area B = 1; Area C ■ 1)
Body: 6 specimens

Pink (11 specimens: Area A = 4; Area B = 7)
Body: 9 specimens
Three are decorated. Two sherds exhibit alternating vertical bands of concave flutes and a pressed cross-hatch design; one of the sherds is burned. The remaining specimen exhibits two raised ridges and a raised pattern of undetermined design.

Base: 2 specimens
One specimen is a tiny fragment and the other exhibits a slightly raised circle in the base and on a side panel the embossed letters "...TARY PI..."
SAN ANTONIO
TEXAS

Clear (2 specimens: Area C)
Body: 1 specimen

Rim: 1 specimen
Molded neck and rim from a post-1913 liquor bottle.

Window Pane

Five specimens were recovered from Area B.

Metal

Metal artifacts, a total of 64 specimens, include harness trappings, household items, firearm related items, building hardware, personal items, and a few unidentifiable metal objects.

Area A

No. of Specimens	Description
1	iron harness buckle; 1.9 cm. x 2.8 cm.
2	fragments of cast iron
1	tin shaker lid, possibly for a cardboard container; 5.3 cm. in diameter

Area B

1	.40 lead ball; or 000 buck shot
1	.44 (44-40) brass Winchester center fire cartridge without headstamp
1	iron spur fragment
1	iron rivet; probably a clothing fastener
1	brass grommet; interior diameter, 1.4 cm.; outside diameter 2.7 cm.
1	iron harness buckle, with center bar; 4.8 cm. x 3.4 cm.
1	iron plate from a flat lock, possibly for a chest, drawer or trunk
1	iron singletree center clip; broken from wear; originally mold-made and later repaired by blacksmith
1	heavy iron loop, stretched into elongated shape, 14.2 cm. x 11.3 cm. repaired by blacksmith
2	fragments of cast iron stove parts, one with embossed letters which read "WORK..."
1	cast iron dutch oven fragment
8	fragments of cast iron
14	machine cut square nails; all approximately the same size, 8d
14	tin can fragments, one with a lead seam along one side and around the rims, probably dates prior to 1880's - sides not locked prior to soldering (Fontana & Greenleaf 1962: 70).
1	tin can lid with embossed letters that read "TOMSON'S"
2	strips of tin
2	thin pieces of strap iron
1	twisted length of iron wire
1	fragment of stamped sheet copper

Area C

1	harmonica reed fragment
1	cast iron knife handle
1	iron buckle with roller: 3.5 cm. x 5.4 cm.
1	iron horse (or mule?) shoe
1	cast iron tractor or wagon part?

Stone and Shell

Grindstone Fragment (1 specimen: Area B) A fragment of a hard, grey uniform grained grindstone which was about 9 inches in diameter.

Mussel Shells (3 specimens: Area A = 1; Area B = 2) Fragments of very large fresh water mussel shells, similar to shells found at other historic sites and cemeteries in the proposed Choke Canyon Reservoir area.

Interpretations

For the purposes of this presentation, interpretations will be limited to statements pertaining to the cultural-chronological affiliation of the material cultural evidence recovered during the preliminary investigation of site 41MC185. Considering, first, the nature of the artifact sample, glass artifacts include window pane fragments and sherds from containers for alcoholic beverages, medicine, tobacco, and some food items. Ceramic sherds are primarily from utilitarian wares, and metal artifacts include basic forms of building hardware, household items, harness trappings, firearm related items, and other essentials. Taken together, the sample seems to be indicative of a basic, simple frontier subsistence.

Some specific forms and styles of historic artifacts from 41MC185 can be associated archeologically with time spans ranging from the late eighteenth century to the present. These ranges of dates seem to overlap generally during the period from the 1850's to about 1910, and all chronologically diagnostic artifact types, except perhaps the majolica specimens, have been reported from historic contexts dating after 1860 in Texas.

Preliminary historical research indicates that there was no permanent settlement in the Choke Canyon area prior to 1858, when the Yarbrough Bend community was established. The residential occupation of areas outside of organized communities did not occur until the late 1860's and the early 1870's. During this period, supplies were imported from San Antonio and the coastal ports of Texas.

Except for the nine majolica sherds, the artifacts from site 41MC185 represent an assortment of articles imported from Britain and the United States. This certainly reflects a strong Anglo-American material cultural influence, if not the site of an Anglo-American occupation.

In Area B of the site, most of the artifact sample, including the nine majolica sherds, seemed to be associated with the large concentration of sandstone rocks. This association, and the notable lack of any artifact diagnostic only of the period before 1850, suggests that the majolica can be affiliated chronologically with the rest of the artifact sample. The clear glass twentieth century liquor bottle neck, collected from a bulldozed strip through Area C, seems to be the only late contamination, possibly related to recent use of the site area by campers, hunters, and others.

The nature of the artifact assemblage from the site, the historic documentary evidence, and the apparent association of most of the cultural material with possible structural remains indicates that 41MC185 is the site of a

late nineteenth century farm and ranch residence, related to, if not part of, the Yarbrough Bend community. Therefore, site 41MC185 is an important cultural resource, not only as an isolated context of past human activity, but as an archeological site which is representative, at least in part, of a more widespread cultural adaptation.

In addition to the interpretation of the data assembled during the preliminary investigation of this site, three important questions can be presented which should be considered in future archeological and historical research in South Texas:

1). If it can be assumed that 41MC185 is a late nineteenth century context, whether it be the site of an Anglo-American or a Mexican-American occupation, does the occurrence in this context of Mexican-made ceramics reflect trade between the Choke Canyon area and Mexico?

2). Does the majolica at 41MC185 represent an isolated or unusual occurrence, or was there intermittent, periodic or even continuous socio-economic interaction between Mexico and Yarbrough Bend, and/or other parts of South Texas during the late nineteenth century?

3). How can archeological sites and settlement data and material culture evidence be used to supplement historical documentary evidence in order to explain the processes of cultural development in South Texas?

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ROCK ART OF THE LOWER PECOS RIVER AREA, SOUTHWESTERN TEXAS

Thomas R. Hester[1]

The canyons of the dissected limestone tableland of the lower Pecos River region contain many rockshelters and caves. The protection afforded by these sheltered areas, coupled with the semi-arid climate, has occasioned the preservation of a wide range of cultural remains, including rock art. Man has been present in this region for at least 11,000 years and several major sites containing artifacts diagnostic of the early occupations (termed the "Paleo-Indian" period) have been excavated (cf. Johnson 1964; Dibble and Lorraine 1968). However, the bulk of the archaeological remains of the last nine millenia reflect a hunting and gathering culture of the "Archaic" period (the Archaic in this area has been called the "Pecos River Focus" by Suhm et al., 1954). The Archaic hunters and gatherers lived both in open campsites and in rockshelters, but it is from the latter that archaeologists have extracted a wealth of perishable materials, including basketry, wooden artifacts, sandals, netting, clothing and so forth. The hunting and gathering lifeway persisted almost unchanged up to the time of Historic contact, although in the late part of the prehistoric era, certain new cultural traits, such as the bow-and-arrow, were introduced. While a rather low technological level prevailed in the lower Pecos area during the prehistoric era, a most extraordinary art was produced, usually in the form of paintings on the walls and ceilings of rockshelters.[2] These pictographs have been the subject of numerous studies over the past several decades. Reports of Witte Museum and University of Texas expeditions to the Pecos region in the early 1930's mention the rock paintings, but no extensive program of documentation was carried out (Martin 1933; Pearce and Jackson 1933). However, during the late 1930's, Forrest Kirkland and A. T. Jackson devoted considerable energy to copying pictographs at a number of sites. Kirkland's work was published in several short articles (see a bibliography in Kirkland and Newcomb 1967), while Jackson produced his monumental Picture-Writing of Texas Indians (1938) in which much space was devoted to the lower Pecos area. Subsequent studies of the area's rock art have been done by Kelley (1950), Taylor (1951), Gebhard (1960), Grieder (1966), and most recently, the copies made by Kirkland have been assembled into a definitive work, accompanied by a text written by W. W. Newcomb (Kirkland and Newcomb 1967).

Most of the pictographs in the lower Pecos area can be divided into two styles: the Pecos River style and the Red Monochrome style. The Pecos River style is the earlier, executed by Archaic period artists (it may have its origins in Paleo-Indian times; Grieder 1966:719 considers the Pecos River style to be "the earliest painting style presently known in the Western Hemisphere"). The Pecos River style exhibits great diversity in its motifs, utilizes a variety of colors, and, as indicated later, is subject to a wide range of interpretations. Vivid polychrome panels are sometimes

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[1] Prepared for the Witte Museum, San Antonio, Texas, in conjunction with their exhibition "Indian Art of the Americas", 1974.

[2] Another form of artistic expression is the painted pebble, commonly found in midden deposits in the area (Davenport and Chelf 1941; Parsons 1965).

found, with the paintings executed in red, black, yellow, orange, and white; the paints appear to have been applied most commonly in a liquid state (with brushes of sotol leaves), although some applications may have been made in dry form using "crayons" of pigment. The paints were derived from hematite (red ochre), carbon, and limonite, with grease and fats used as binders.

Newcomb (in Kirkland and Newcomb 1967) has carefully analyzed the Pecos River style. The dominant motif is that of an anthropomorphic, elaborately costumed figure, usually in the center of a panel. The figures have outstretched arms, wear what appear to be fringed garments, and range in height from less than a foot to over fifteen feet. These striking representations are usually called "shamans". Among the other elements usually associated with shamans are spearthrowers (atlatls) and darts, "prickly pouches" (thought to be containers made from prickly pear pads), and headdresses (sometimes of feathers, or, as at Fate Bell shelter, of deer antlers). Flanking the shamans on many of the panels are smaller anthropomorphic figures, deer (sometimes in groups, with individuals often pierced by darts), and on occasion, cougars or panthers. A very large panther executed in red, is found in Panther Cave, near the confluence of the Rio Grande and Seminole Canyon. By examining the variations in the depictions of shamans, Newcomb has been able to discern four distinct periods, and has provided the following commentary regarding the development of the style:

> "The Pecos River style pictographs...show an internal development from what appears to be crude beginnings to a realistic, usually monochrome style, to a polychrome, somewhat stylized form, to final conventionalization and abstraction" (Kirkland and Newcomb 1967:58).

It appears that the Pecos River style had run its course by A.D. 1000. It is replaced by a second distinct style, the Red Monochrome tradition. This style is found in far fewer sites, and consists largely of stylized human figures (painted in red), with the head shown as a circle, the arms outstretched and bent at the elbows, and with the male sexual organs often depicted. Other motifs include positive and negative handprints, and various animals, particularly deer. Deer are often shown as being pursued by human figures using the bow-and-arrow, indicative of the late temporal placement of the Red Monochrome style. Newcomb contends that the Red Monochrome style evinces more of a concern with showing people (men, women and children) and suggests that it may be at least partly "commemorative" in nature. It seems likely that hunting magic or a "hunting cult" may have played some role, since scenes of hunters chasing deer (and sometimes herds of deer) are not uncommon. In this regard, I would like to note what clearly appears to be a "game fence", with deer behind it and a hunter with a drawn bow pursuing them, in a shelter in Seminole Canyon (cf. Kirkland and Newcomb 1967:85; Heizer and Hester 1974, have noted strikingly similar petroglyphic motifs in southern Nevada).

Several rockshelters in the lower Pecos area contain Historic period rock art, identifiable through the various European traits incorporated in them: the horse, a church, bearded figures with hats or pipes, and cattle-roping scenes. These pictographs were probably not done by the indigenous population, but rather by the peoples who replaced them in the early eighteenth

century. These include the Lipan Apache, Comanches, Kiowa and a variety of displaced tribes from the southeastern United States who passed through on their way to Mexico.

Although many of the lower Pecos rock art sites are now inundated by Lake Amistad, most of the pictographs have been documented in one fashion or another. There are many problems surrounding the preservation of the remaining paintings, suffering not only from motorboat-vandals but also from the vagaries of the new and artificial environment brought about by the existence of the new lake. Action has already been taken on certain of these problems, and more extensive preservation programs will hopefully be taken up in the future. The most controversial aspect of the rock art, however, (and here I am speaking of the Pecos River style) is its interpretation. Let me very briefly note several of the major explanatory hypotheses: (1) they are a form of "picture writing" (Jackson 1938), or "maps", or "conventionalized forms conveying messages" (Smith 1931); these interpretations are no longer considered to be serious ones; (2) the pictographs are the work of "hunting cults" (Kelley 1950), and their function was that of "sympathetic magic...to facilitate the killing of deer...and the propitiation and/or disarming of the carnivore" (i.e., the cougar), as argued by Taylor (1951:71); (3) the paintings are the manifestations of "medicine or dance societies" or "shamanistic societies" (this hypothesis is propounded in convincing terms by Newcomb, in Kirkland and Newcomb 1967); included in this explanation would be the suggestion of Campbell (1958) that a "mescal bean cult" is involved. The bean of the Texas mountain laurel has narcotic qualities and has been found in rock-shelter deposits, often in circumstances suggesting ritual importance. The "shamanistic societies" hypothesis would account for the shamans, the cougar (perhaps the totem of the societies), and the overpainting of many of the pictographs which suggests that rituals were conducted in traditional locations.

Hypotheses (2) and (3) seem the most plausible given present evidence, and one might suspect that some combination of the two provided the reasons for making the paintings. However, the Pecos River style is subject to a variety of interpretations and different approaches to its analysis. As an example, the art historian Grieder (1966), divides the Pecos River style into three periods: "Fisherman, Deer Hunter, and Miniature". He believes that this sequence reflects "a change from a riverine economy, to an economy based on deer hunting..." and further "a shift from large-scale communal expressions in art toward small scale individual expression...As the climate became more arid and the economic basis of the society changed, the cult declined and with it the art" (Grieder 1966:719). Grieder's interpretation hinges on his identification of certain motifs; what he considers to be a "Catfish", Newcomb believes to be a "prickly pouch", perhaps containing mescal beans. Suffice it to say that there is room for, and there is a great need for, many additional interpretative studies of the Pecos River style. If this rock art is examined from various perspectives, it should be possible to derive a great deal of information on the social and ceremonial activities, the material culture, and other aspects of the lifeway of the Pecos River Archaic.

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Edwin S. (Ned) Harris

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