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THE SOUTHERN TEXAS ARCHAEOLOGICAL ASSOCIATION

The Southern Texas Archaeological Association brings together persons interested in the prehistory of south-central and southern Texas. The organization has several major objectives: To further communication among amateur and professional archaeologists working in the region; To develop a coordinated program of site survey and site documentation; To preserve the archaeological record of the region through a concerted effort to reach all persons interested in the prehistory of the region; To initiate problem-oriented research activities which will help us to better understand the prehistoric inhabitants of this area; To conduct emergency surveys or salvage archaeology where it is necessary because of imminent site destruction; To publish a quarterly journal, newsletters, and special publications to meet the needs of the membership; To assist those desiring to learn proper archaeological field and laboratory techniques; and To develop a library for members' use of all the published material dealing with southern Texas.

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EDITORIAL

IN THIS ISSUE...

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In this issue, there are a variety of articles which should be of interest to most STAA members. They span the time range from the Pre-Archaic to the historic, and geographically from the Texas coast to Kerr County, and around much of south central Texas (or, if you prefer, northern South Texas).

After the April issue, a number of people had something to say about Tom Kelly's "*Gower* point?" paper. Tom raised the question, and several people responded. Articles were received from Lee Patterson, Harry Shafer, and Tom Hester (see elsewhere in this issue). They have penned a variety of thoughts about *Gower* and related types (points; knives; whatever!). Hester makes some very good points (no pun intended) about the ambiguity of point classifications and goes on to develop a new provisional type. The *Jetta* point is, like *Gower*, considered as diagnostic of the Pre-Archaic in south central Texas, and Jetta Court in Travis County is considered to be the type site.

Tom Kelly also has a word or two (Comments on the Comments...), where he both agrees and disagrees with those ideas penned by Patterson, Shafer and Hester. I get the distinct impression that Tom Kelly enjoyed stirring up such discussion; it did, after all, result in more information being published about *Gower* artifacts and in the provisional identification of a new type as well. This kind of discussion and interchange is always to be valued in Archaeology (indeed - in all Science!).

In addition to the *Gower* papers, this issue also includes the next segment of S. Alan Skinner's report on the 1971-72 Texas Archeological Society field school in Kerr County, Texas. In this issue, Skinner reports on the Real Site, a burned rock mound located just across the creek from Bushwhack Shelter. (In the October issue, we hope to have a report on the Paris Site from further downstream along Turtle Creek).

Other reports in this issue include a note on some Oliva shell beads or dangles from the Texas coast by Malcom Johnson of Fredericksburg, and a reprint of a classic article by Mr. Calhoun of Port Lavaca of two historic ollas from a site in Karnes County (41 KA 1). These ollas are perhaps the most complete specimens ever reported of native Indian pottery in South Texas, and we are most grateful to the Texas Archeological Research Laboratory in Austin for providing the photographs published here for the first time.

I hope you will enjoy this issue - it was lots of fun to put together!

PLEASE NOTE CHANGE OF ADDRESS FOR MANUSCRIPT SUBMISSION

AN ALTERNATE EXPLANATION OF EDGE DAMAGE ON *GOWER* POINTS

L. W. Patterson

INTRODUCTION

Some time ago, Semenov (1964) published a book that showed the possibility of determining functional use of stone tools by examination of edge damage patterns. Since then, a number of other studies have been published on this subject with limited success. Johnson (1978) lists a number of recent articles on this subject. Some of the problems involved include: reproduction of experimental results, differences with types of materials being worked, large study time requirements for some methodologies and possible multiple uses of functional edges. Also, wear patterns on unmodified flake edges and retouched tool edges tend to be somewhat different. My own limited experiments, including Patterson (1975), give some support to the study by Tringham and others (1974) that shows reproduceable results for edge wear patterns for cutting and scraping functions, when starting with unmodified flake edges. Use of bifacially flaked tool edges instead of unmodified flake edges can give different wear patterns for the same tool function (Patterson 1976).

Kelly (1979) has proposed that edge damage patterns on *Gower* points may be related to functional tool use, and that this artifact type may be a tool for bone and/or wood working, rather than a projectile point. A possible alternate explanation is presented here for edge damage patterns on *Gower* points, related to the manufacturing process.

EXPERIMENTAL RESULTS

Kelly (1979) shows some good photographs of edge damage on actual *Gower* points. He relates the edge damage patterns to experimental results from cutting of bone and hardwood, using a sawing motion. I have been able to reproduce Kelly's experimental results when sawing slots in ebony with a flint flake. The lateral edges of a flake were used, starting with a uniform bifacially pressure flaked condition. After use in sawing ebony, the flake edges became less uniform and developed some deep gouges parallel to the edges, as shown by Kelly.

While it is possible to reproduce Kelly's experimental edge wear patterns in the same manner, by sawing of hardwood, it is also possible to obtain similar edge damage patterns by a completely different experimental method. When using a quartzite hammerstone, percussion flaked edges of dart point preforms have a very similar edge damage pattern, with deep gouges parallel to edges being formed by shallow micro-hinge fractures, and edges becoming generally less uniform. There is some wear on edges here due to hammerstone abrasion, also. In fact, it is normal to do some grinding of edges with the hammerstone to prepare striking platforms.

I would like to propose reasons why edge damage patterns are similar for cutting of hardwood and direct percussion flaking. In percussion flaking, especially with a hard hammerstone, fractures are not always clean, and struck edges tend to have a "chewed up" look when examined with a 10x magnifier. In using bifacially flaked edges for cutting of hardwood, the edges also tend to become worn, with irregular damage patterns and some deep gouges parallel to the edges. Some of this wear may be due to abrasion and edge breakage by contact with the hardwood. There may be another reason for some of the deep gouges, however. When an edge is bifacially flaked by any force application method, fractures are seldom completely clean. Some incomplete micro-fractures are usually present. When the bifacially flaked edge is then used as a cutting tool, some micro-fractures fail and increase edge damage. The micro-fractures are usually parallel to edges, and mechanical failures can produce deep gouges in the same parallel direction.

ANALYSIS OF ARTIFACTS

I have examined the edges of two *Gower* type points from archaeological sites 41 BN 8 and 41 BN 11 (Patterson 1978) with a 10x magnifier. Both points have edge damage patterns similar to those described by Kelly. My general impression is not of functional tool use, but rather of biface manufacture by percussion with a minimum of finishing by pressure flaking. One of these points has a prominent impact flute starting at the tip, which tends to confirm that these points were indeed used as projectile points.

SUMMARY

Experimental results described here confirm that wear patterns described by Kelly for cutting hardwood with bifacially flaked edges can be reproduced. Kelly's conclusion that sinuous edges are more efficient than uniform edges for sawing also seems to be correct, as would be logically expected in a sawing type function. However, the type of edge damage pattern being discussed here might be due to any of the following reasons:

1. functional tool use
2. percussion flaking for biface manufacture
3. use of *Gower* type points *both* as projectile points and as functional tools

Since this type of edge damage may have alternate explanations, it would appear that further study is needed before concluding that *Gower* type points were used primarily as functional tools rather than as projectile points. Further, it would be surprising if projectile point edges didn't get used also as functional tools, at least occasionally.

References

Johnson, L. L.
1978 A History of Flint-Knapping Experimentation, 1838-1976. *Current Anthropology* 19(2):337-372.

Kelly, T. C.
1979 *Gower* Projectile Points?. *La Tierra*, Journal of the Southern Texas Archaeological Association 6(2):13-19.

Patterson, L. W.
1975 Lithic Wear Patterns in Deer Butchering. *Texas Archeology* 19(2):10-11.

1976 Deer Skinning With a Bifacial Tool. *Texas Archeology* 20(2):8-10.

1978 An Archaic Rock Midden Site (41 BN 11), Bandera County, Texas. *La Tierra* 5(1):21-26.

Semenov, S. A.
1964 *Prehistoric Technology*. Adams and Dart, Bath.

Tringham, R., G. Cooper, G. Odell, B. Voytek and A. Whitman
1974 Experiments in the Formation of Edge Damage: a new approach to lithic analysis. *Journal of Field Archaeology* 1:171-196.

NOTES ON *GOWER*, *JETTA*, AND OTHER PROJECTILE POINTS OF THE PRE-ARCHAIC PERIOD IN TEXAS

Thomas R. Hester

The papers by Kelly, Shafer and Patterson in this volume, and the earlier paper by Kelly (1979) have provided diverse viewpoints on typology and function of the *Gower* type. This sort of discussion is highly valuable, as both professtional and avocational archaeologists can become too content in their use of point types, and the resulting complacency can lead to critical errors in both analysis and publication. Or, just when you think you are on top of the situation, people change the dates, period names, or typological parameters that involve types with which you are working! For example, the *Gower* type is, on stratigraphic grounds, clearly earlier in time than *Bulverde*, *Nolan* or other central Texas Early Archaic horizon markers. Indeed, Sollberger and Hester (1972) included it as a key form of their hypothesized Pre-Archaic period, transitional between Late Paleo-Indian and Early Archaic; Weir (1976) does the same, although he uses the term "San Geronimo Phase" to refer to this block of time.* Shafer (in this volume) now puts *Gower* in the "Early Archaic". Pity the poor avocational archaeologist, or professional archaeologist new to the Texas scene, when he/she tries to make sense out of all this!

On the other hand, Shafer has clearly reported what we do know about the *Gower* as it occurs in stratigraphic context at several central Texas sites. It is also found in Pre-Archaic contexts at St. Mary's Hall (41 BX 229) and Granberg II (41 BX 271) in south-central Texas; and comes from near the base of the 16 feet of deposits at 41 VT 16 in Victoria County on the coastal plain (Fox and Hester 1976: Fig. 19, i). Surface finds of *Gower* have been made at sites in Kendall County and at other sites along the margin of the southern Edwards Plateau (see Gerstle, Kelly and Assad 1978: Fig. 17). We know that the type is Pre-Archaic (or San Geronimo Phase, if you desire), and we know that it is widespread. There are still no detailed studies of the typology and distribution of *Gower* (Shafer's paper in this volume is certainly a positive step in this direction), and we still have no radiocarbon dates referable to the type.

In regard to typology, the published examples of *Gower* (following Shafer 1963: Fig. 7) vary somewhat, but this is not surprising, as the stemmed forms within the Pre-Archaic assemblages show considerable diversity. This is the reason why I have preferred to refer to one series of Pre-Archaic stemmed points as "Early Corner Notched" (Hester 1971) as they just do not lend themselves to rigid typological definition. I think the use of the term *Martindale* and/or *Uvalde* (cf. Weir 1976: Gerstle, Kelly and Assad 1978), or even "early *Martindale*" (Greer 1979) is unfortunate, as the typological rubrics tend to obscure the variance within this early series and suggests a linkage to the *Martindale* and *Uvalde* types originally defined by Suhm, Krieger and Jelks (1954).

If a type definition does not fit the needs of the present, why perpetuate it? In my own experience, I cannot take a set of "early corner notched" points from a Pre-Archaic site (or from a series of such sites), and neatly sort them into *Martindale*, *Uvalde* or other previously defined types. To me, they grade from one extreme to the other. I envy the typological sorting refinements that others appear to be able to make with these points.

As to the dating of *Gower*, there are no directly associated radiocarbon dates that I know of from central or south central Texas. Sorrow, Shafer and Ross (1967: Fig. 72) guess-dated them at 4500-6000 B.C.; this was for the Stillhouse Hollow sites, where they were associated with "early corner notched" series points (called *Martindale*

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*Weir (1976: Fig. 9) places *Angostura* in his San Geronimo Phase; Sollberger and Hester, in their definition of the Pre-Archaic, do not. I have seen no stratigraphic evidence for Weir's attribution of the type to this period.

and Untyped I by the authors). Later in the Pre-Archaic at Stillhouse Hollow, guessdated at 4500-3500 B.C., came *Bell* points and triangular points [the authors' Untyped III; similar to the "Early Triangular" series I have elsewhere described for the Pre-Archaic, and which others, notably Weir (1976), have called *Tortugas*, thereby raising typological problems that are simply mind-boggling]. The "early corner notched" series is also not dated directly in central or south central Texas. Fortunately, specimens which seem to me to be related to this series are found in dry caves and terrace sites in the lower Pecos [where they are variously known as "Early Barbed" (a few of these are somewhat similar to *Bell*), *Baker*, *Bandy*; my apologies to the reader for introducing these additional typological perplexities]. Weir (1976:Table 1) lists a series of applicable dates, bracketing these points and the lower Pecos Pre-Archaic between 6800 and 3400 B.C. This roughly equates with the guessdates from central Texas. At Baker Cave (Hester 1978, 1979, ms.) "early corner notched" and "early triangular" forms are bracketed by dates of 6130 ± 80 B.C. (Tx-2931) and 3350-3370 B.C. (calibrated; 4690 ± 140 B.P., RL-829). Our early date is more in line with a date from Hinds Cave reported by Weir (1976:Table 1). I suspect the two earlier dates listed by Weir (ca. 6800 B.C., as noted above and ca. 6500 B.C.), both from Eagle Cave, are too early and should not be attributed to the Pre-Archaic. However, despite the temporal bracket established for the Pre-Archaic in the lower Pecos (ca. 6000-3400 B.C.), we are still lacking dates for specific forms or types within this period in central Texas.

As additional collections become available from Pre-Archaic contexts, it is likely that additional types will have to be defined. Maybe someone can even sort out, in a statistical or computer-assisted fashion, the vagaries of the "early corner notched" form. Beware of the "early triangular" form; some of these specimens, especially the ones found at Granberg II in the 1974 and 1979 excavations, are probably preforms for corner-notched and/or *Bell* points!

At the risk of adding further to the confusion noted above, I would like to tentatively propose here a new type diagnostic of the Pre-Archaic. It first caught my attention in a recent study of the Byron Barber collection from sites in Gillespie County (paper presented by the author at 1978 Texas Archeological Society meeting, Corpus Christi). These are very distinctive specimens, carefully flaked with widely flared barbs, rectangular stems, and very deep basal notches. Three specimens of the proposed new type are present in the Barber collection, all from site 41 GL 53 (see Fig. 1). Crawford (1965:Fig. 4,A) illustrates an example (and some rather similar specimens; Fig. 3, G,J) from the Granite Beach site (41 LL 2), and relates them, albeit indirectly, to *Gower* (something which Shafer disputes; see his article elsewhere in this volume). Specimens from both sites are from the surface, although other Pre-Archaic and Late Paleo-Indian forms are dominant in the collections.

Fortunately, a typical specimen of the proposed new type was found at Jetta Court (41 TV 151; Wesolowsky, Hester and Brown 1976:Fig. 15,e) which came from the deeply buried Lower Midden. Also in the Lower Midden were Pre-Archaic horizon markers, such as *Bell*, "early corner notched," "early triangular," (the latter two rather innocuously called "Miscellaneous I" and "Miscellaneous II"--although their affinities to "early corner notched" and "early triangular" were duly noted) and what we then called *Gower* (although as I write this paper and compare them to Shafer's *Gower* points from Youngsport, I fail to see why we placed them in this type; undoubtedly, Shafer must have classified them for us during the analysis at Balcones Research Center!).

This group of points is distinctive enough to warrant provisional type status, which I propose to call *Jetta*. Given the stratigraphic occurrence of the type at Jetta Court, it should be considered the type site. As the Barber Collection is prepared for publication, more comparative and typological work will be done with *Jetta* points and a full type definition will be published, if it still seems warranted at that time. Persons having additional information on possible *Jetta* specimens are urged to contact the author.

References

Crawford, D. D.
1965 The Granite Beach Site, Llano County, Texas. *Bulletin of the Texas Archeological Society* 36:71-97.

Fox, A. A. and T. R. Hester
1976 An Archaeological Survey of Coleto Creek, Victoria and Goliad Counties, Texas. Center for Archaeological Research, The University of Texas at San Antonio, Archaeological Survey Report 18.

Gerstle, A., T. C. Kelly and C. Assad
1978 The Fort Sam Houston Project: An Archaeological and Historical Assessment. Center for Archaeological Research, The University of Texas at San Antonio, Archaeological Survey Report 40.

Greer, J. W.
1979 An Archaeological Reconnaissance of the Enchanted Rock Area of Llano and Gillespie Counties, Central Texas. *Enchanted Rock, A Natural Area Survey* 14:117-166. Lyndon B. Johnson School of Public Affairs, The University of Texas at Austin.

Hester, T. R.
1971 Archeological Investigations at the La Jita Site, Uvalde County, Texas. *Bulletin of the Texas Archeological Society* 42:51-148.

1978 *Early Human Occupations in South Central and Southwestern Texas: Preliminary Papers on the Baker Cave and St. Mary's Hall Sites.* Center for Archaeological Research, The University of Texas at San Antonio.

1979 Early Human Populations in Texas. *Archaeology*, November/December. In press.

ms. Paleo-Indian Occupations at Baker Cave, Southwestern Texas. Manuscript submitted for publication.

Kelly, T. C.
1979 *Gower* Projectile Points? *La Tierra*, Journal of the Southern Texas Archaeological Association, 6(2):13-19.

Shafer, H. J.
1963 Test Excavations at the Youngsport Site: A Stratified Terrace Site in Bell County, Texas. *Bulletin of the Texas Archeological Society* 34:57-81.

Sollberger, J. B. and T. R. Hester
1972 The Strohacker Site: A Review of Pre-Archaic Manifestations in Texas *Plains Anthropologist* 17(58):326-344.

Sorrow, W. M., H. J. Shafer and R. E. Ross
1967 Excavations at the Stillhouse Reservoir. *Papers of the Texas Archeological Salvage Project* 11.

Suhm, D. A., A. D. Krieger and E. B. Jelks
1954 An Introductory Handbook of Texas Archeology. *Bulletin of the Texas Archeological Society* 25.

Weir, F. A.
1976 The Central Texas Archaic. Unpublished Ph.D. dissertation, Washington State University, Pullman.

Wesolowsky, A. B., T. R. Hester and D. Brown
1976 Archeological Investigations at the Jetta Court Site (41 TV 151), Travis County, Texas. *Bulletin of the Texas Archeological Society* 47:25-88.

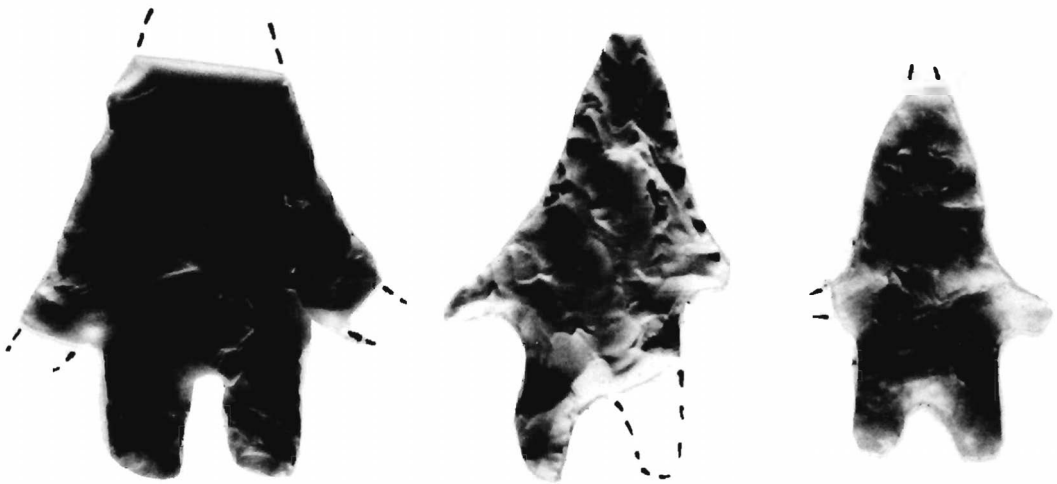

Figure 1. Projectile Points of the Proposed *Jetta* Type. All specimens are illustrated actual size. 41 GL 53: Barber Collection.

COMMENTS ON KELLY'S "*GOWER* PROJECTILE POINT?" ARTICLE

Harry J. Shafer

The comments in this paper were generated by Kelly's (1979) paper reporting wear patterns on certain projectile points classified as the *Gower* type. Kelly has described abrasive wear on several specimens from the Thunderbird Site in Bastrop County. The edge damage patterns observed by Kelly include "deep spalling," abrasion and striations along the lateral edges. The focus of my comments will be on an alternate interpretation of the wear observed by Kelly as well as updating my own ideas about the *Gower* type.

I first proposed the tentative projectile point type *Gower* on the basis of five type specimens and nine variants recovered from the lowest cultural stratum at the Youngsport Site in western Bell County (Shafer 1963). Subsequent finds at the nearby Landslide Site (Sorrow, Shafer and Ross 1967) and similarities to projectile points recovered from a comparable stratigraphic context at the Merrell (Campbell 1948) and Jetta Court Sites (Wesolowsky, Hester and Brown 1976) lends credence to *Gower* as being a legitimate diagnostic temporal and cultural indicator.

The original description of the Youngsport Site specimens reads as follows:

> The name *Gower* is suggested for a group of crudely made, indented base points, all of which were found in Stratum 8. Represented by five specimens, these points have very short, parallel-edged stems, and markedly concave bases. The basal indentation of the *Gower points*--as well as those termed *Gower* variants--has been produced by the removal of a single flake which left remnants of a scar around the edges of the basal concavity. This scar usually appears on only one side of the point, and is sometimes lightly retouched. The blade is generally short, has convex edges, and weak, rudimentary shoulders (Shafer 1963:64).

One of the *Gower* type specimens (Shafer 1963:Figure 7,B) was reworked from a direct impact fracture. The Gower variant shown in Figure 7, I also exhibits a direct impact fracture. Wesolowsky, Hester and Brown (1976:Figure 11,E) illustrate a *Gower* point that was evidently broken by a direct impact blow. Direct impact fractures are wear patterns which convincingly demonstrate the use of bifaces as projectile points. This is not to say that certain specimens may not have been used to accomplish such tasks as cutting or sawing as the need arose, but in view of the fact that with one exception *Gower* and Gower variants constituted the only stemmed point forms from Stratum 8 at the Youngsport Site would suggest that if projectile points were present in this assemblage, then the *Gower* specimens most likely served that function. In view of these observations, the assumption that *Gower* points served as projectile points is, I believe, quite secure.

Chronologically, *Gower* has been securely placed in the Early Archaic sequence in Bell, Williamson and Travis Counties. I am, however, bothered by the assumed contemporary chronological relationship implied by Kelly between the Youngsport Site *Gower* forms and Crawford's (1965) Group 1 projectile points from the Granite Beach Site in Llano County which were compared to, but not classified by Crawford as *Gower*. These two point forms, *Gower* and Crawford's Group 1, could be contemporaneous and could be variants of the same regional style. It should be pointed out that many of the Granite Beach specimens have beveled blades, an attribute which is absent on the type sample from the Youngsport Site. Stratigraphic control was non-existent for the Granite Beach specimens as they were part of a large surface collection that included several recognizable early lanceolate forms. I do not question the early chronological placement of Crawford's Group 1 specimens, and, on the basis of their association with lanceolate forms at Granite Beach and other sites in central Texas, my feeling is that the indented base forms of Group 1 may be earlier than the Youngsport Site specimens. Although I feel that *Gower* is a valid type, I would suggest using the type designation with caution unless stratigraphic control is relatively secure

for the samples being typed because of their similarity in form to certain *Pedernales* and *Darl* specimens.

Several recent studies have focused on alternate uses of projectile points such as Ahler's (1971) analysis of data from the Rogers Shelter from Missouri and Sally Grieser's recent analysis of the Jurgens Site specimens from Colorado (personal communication). Experimental studies being carried out by Milton Bell (personal communication) of the Texas Department of Highways and Public Transportation Archeology Division with replicated projectile points hafted on atlatl-thrown spears is especially pertinent to this discussion. Bell has observed that both lanceolate and Archaic style projectile point forms survived numerous impacts in several types of outdoor conditions; indeed, the survival rate was surprisingly high. The impacts were sufficient to manifest edge damage patterns despite the fact that the points did not usually break. These edge damage patterns, according to Bell, could easily be misinterpreted as being the result of their use as cutting or sawing tools. As Bell's study progresses, it may be possible to separate abrasive impact wear from that produced when stemmed bifaces are actually used as knives, etc.

In conclusion, Kelly has brought attention to damage on the lateral edges of tools assumed to be projectile points. He questions this assumption and argues that the specimens he analyzed were used to cut bone and wood since the wear was similar to that experimentally produced. While I do not argue the possibility that such wear was produced as he suggests, I personally favor the interpretation that the wear could just as well be the product of their use as projectile points. The short, stubby form generally characteristic of *Gower* points would reduce the incidence of breakage unless solid objects were struck. Survival rates and use wear of projectile points is a subject which has not been adequately researched, and Bell's exciting experiments are producing important results which are most pertinent to the issue of projectile point function.

References

Ahler, Stanley
1971 *Projectile Point Form and Function at Rodgers Shelter, Missouri.* Published jointly by College of Arts and Sciences, University of Missouri, Columbia and Missouri Archeological Society. Columbia.

Campbell, T. N.
1948 The Merrell Site: Archaeological Remains Associated with Alluvial Terrace Deposits. *Bulletin of the Texas Archeological and Paleontological Society* 19:7-35.

Crawford, Daymond D.
1965 The Granite Beach Site, Llano County, Texas. *Bulletin of the Texas Archeological Society* 36:71-97.

Kelly, Thomas C.
1979 *Gower* Projectile Points? *La Tierra*, Quarterly Journal of the Southern Texas Archaeological Association 6(2):13-19.

Shafer, Harry J.
1963 Test Excavations at the Youngsport Site: A Stratified Terrace Site in Bell County, Texas. *Bulletin of the Texas Archeological Society* 34:57-81.

Sorrow, W. M., H. J. Shafer and R. E. Ross
1967 Excavations at Stillhouse Hollow Reservoir. *Papers of the Texas Archeological Salvage Project* No. 11. Austin.

Wesolowsky, A. B., T. R. Hester and D. Brown
1976 Archeological Investigations at the Jetta Court Site (41 TV 151), Travis County, Texas. *Bulletin of the Texas Archeological Society* 47:25-88.

COMMENTS ON PATTERSON'S, HESTER'S AND SHAFER'S COMMENTS

Thomas C. Kelly

I am delighted that my "*Gower* Projectile Point?" paper evoked comments from Patterson, Hester, and Shafer (see articles elsewhere in this issue). Hopefully, the attention it has drawn will result in more research into the typological and temporal placement of *Gower*, and more specimens will come forward for micro-wear analysis and type study.

I have only a few comments on the comments. First, it is my feeling after over 300 hours of studying wear patterns that wear pattern analysis is more of an art than a science. Two observers examining the same pattern will sometimes come up with different conclusions. It would seem to me that it is only fair that where there is disagreement on wear patterns, there should be micro-wear photographs to compare, or at least an exchange of specimens.

I may not have been clear enough in describing the angle at which the photomicrographs in my report were taken. The specimen had one edge embedded in modelling clay so that the opposite edge was photographed looking down upon it in the plane of the edge. The specific gouged out wear pattern cannot be seen looking at a specimen lying flat. Under higher magnification than it is possible to photograph with my equipment (the higher the magnification, the shallower the depth of focus), the pressure ridges show the spalling to be from the distal to the proximal end. This would fit in with Shafer's comments of possibly being impact spalling. However, it could just as easily be the by-product of butchering. If impact is in fact the cause of these distinctive spalls in the edge, then it seems logical that any or all point types would display this same pattern regardless of time period. I have not observed this to be true, but neither have I looked at a great number of different projectile point types for this pattern. We had better get back to the drawing board and examine more point types on a statistical basis.

Patterson's comments may be valid, but so far I have been unable to replicate the pattern by bifacing with hammerstones. Artifacts or photographs, please?

A SMALL CAMPSITE NEAR KENEDY, TEXAS*

C. A. Calhoun

In April of 1959, a small campsite was found on the Terry Scarbrough farm, ten miles southeast of Kenedy. The site lies on the south bank of a diminutive tributary of Hord Creek, approximately two miles west from the confluence of these two intermittent streams, and is bisected by the Karnes-Goliad county line.

The Scarbrough Site (41 KA 1) was located through the discovery of several pottery sherds which were originating from a faintly discernible plano-convex lens of ashes and charcoal 9 inches below the present day surface of the stream's flood plain, and approximately 48 inches above the stream bed.

Heavy rains had fallen over the general area and the small creek was swollen with run-off which was actively eroding its black, sandy-clay bank at this point. For this reason, an immediate excavation of the threatened hearth was conducted by the writer and Mr. E. J. McCauley, of Kenedy, to investigate the feature and to recover as many of the sherds as possible. The excavation revealed that the remainder of the ash deposit occupied a semi-circular area which extended 18 inches south, away from the creek. The maximum measurement of its diameter was found to be 24 inches, along the cross section exposed in the nearly vertical stream bank. Its maximum thickness of 5 inches was reached here, also, at the center of the eroded profile.

A total of 119 sherds was recovered. Of these, 113 were found abundantly scattered throughout the ashy fill of the fire pit and 6 more were lying near the water's edge immediately below it. The sherds are readily identifiable as Goliad Plain, and have been fitted together to form two relatively complete short-necked ollas (Figure 1), a fairly common vessel shape of this pottery type but primarily known only by large neck and rim sherds.

Other material found associated with the sherds included three splinters of large mammal long bones, a bovine terminal phalanx, a fragment of tortoise carapace, a number of whole and fragmentary shells of Bulimulus land snails, an angular fragment of fire-cracked quartzite, and two small flake scrapers made from flint. No potsherds were found other than those composing the two ollas.

The phalanx was submitted to the University of Texas at Austin Department of Zoology for possible positive identification as to whether it represents bison or domestic cattle, but this could not be determined.

Nor do the two scrapers prove very helpful. They are both simply long, thin, utilized blades which were apparently struck from the same core. The material is a brown, fine-grained local flint, and each artifact retains a small remnant of black cortex. The larger (3.8 cm x 1.8 cm) is triangular in cross section, and has been used briefly along one side and at one end. The other (3.1 cm x 1.3 cm) is concavo-convex in cross section, and has a series of small flakes worn steeply away unifacially along a portion of one edge.

The sherds, and the two vessels subsequently reconstructed from them, provide the best source of diagnostic information found at the site. Except for overall sizes and minor variation of form, the two ollas are essentially alike. Therefore, the characteristics tabulated below, except for measurements, apply to both vessels.

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* This article was originally published in the *Newsletter of the Houston Archeological Society*, Number 18, 1966, and is republished here with their permission and that of the author. Previously unpublished photographs, provided by the Texas Archeological Research Laboratory in Austin, have been substituted for the line drawings used in the original article.

A.

B.

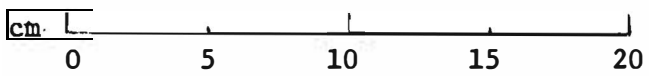

Figure 1. Reconstructed ollas from 41 KA 1.

Height:	Vessel A, 25.5 cm. Vessel B, 20 cm.
Maximum diameter of body:	Vessel A, 24 cm. Vessel B, 21 cm.
Diameter of oral aperture:	Vessel A, 5 cm. Vessel B, 4.8 cm.
Average wall thickness:	Vessel A, 7 mm. Vessel B, 6.5 mm.
Thickness at rim:	Vessel A, 5 mm. Vessel B, 5 mm.
Basal thickness:	Vessel A, extreme base missing. Vessel B, 1.1 cm.

Temper: Abundant particles of crushed bone, ranging from tiny flecks to angular fragments measuring 9 mm long and 5 mm wide.

Texture: Coarse.

Finish: Moderately smooth but uneven on exteriors. Poorly smoothed interiors, with prominent tool marks and some fingerprints of potter displayed.

Color: Dull orange to bright orange on both exterior and interior surfaces. Some fire clouding over exteriors. Dark grey cores.

Shape: Globular-bodied ollas with short constricted necks.

Lip: Rounded.

Basal form: Smoothly rounded and thicker than walls.

Method of manufacture: Uncertain, but somewhat spiraling continuity of horizontal fractures suggest that the coiling technique was employed, and that successive coils were applied in a clockwise manner of progress.

General: Both vessels are undecorated. Particles of the bone tempering material appear as white and blue specks on the exterior surfaces. Sherds are fairly hard but surfaces tend to crumble more readily than do the cores. Rims are not very evenly smoothed, and at one point the lip of vessel B is flattened and slightly flanged where excess paste was pressed downward rather than removed.

A return visit to the site in December of 1959 with Mr. E. E. Studer, of Victoria, revealed another thin lens of ash and snail shells approximately 20 feet downstream from the locus of the first, and likewise exposed by erosion along the south side of the small stream. The second ash lens was not investigated other than a superficial examination of its eroded cross section. It is presently protected by vegetation and the stream bank here appears more stabilized than did the section containing the first ash layer and is not likely to be lost to flood waters in the immediate future. We found no indication whatsoever of occupational material on the level surface of the stream valley in the vicinity of the hearths.

Although the exact size of the Scarbrough Site is unknown, it appears to be a small one which was used only briefly as a camping place. The stream channel extends into the impervious basal clay of the local Goliad Formation in the immediate area of the site, and pools of water remain standing for several weeks after flow in the drainage stream has ceased. Therefore, a convenient source of water may have influenced the selection of this site as a camping place. The people utilizing the campsite had somehow obtained a young cow or a bison, which they butchered and/or consumed at the site. Additional foodstuff was probably gathered nearby, such as the land snails and the gopher tortoise. Shallow, saucer-shaped depressions were dug adjacent to the stream, and large fires, or several small fires, were built in them. The campers possessed pottery vessels, at least two of which were broken and subsequently discarded into a fire pit along with other refuse. Tools required for some minor cutting or scraping endeavor were furnished by thin blades struck from a core of nodular flint.

As mentioned above, the two vessels appear to be identical in all respects except their relative dimensions, and could reasonable have been produced by the same potter. This assumption seems strengthened by their close association within the abandoned hearth and the isolated nature of the site in its entirety.

The orange-colored ollas represent a distinctive variant of Goliad ware which was produced by the Coahuiltecan neophytes of Mission Espiritu Santo after 1749, at

its third location near present day Goliad. The same pottery was also made by the Indians of Rosario Mission, about four miles north of Goliad, sometime after 1754. Both of these Spanish missions were less than 25 miles east of the Scarbrough Site. Refugio Mission, where Goliad ware was manufactured after 1795, was 47 miles southeast of it; however, very few sherds of the orange surfaced ware are found in collections made at this particular mission site, within the city limits of Refugio. The short-necked olla form was shared with the neighboring littoral Rockport Focus (assumed to be tribes broadly referred to as "Karankawan" in historic times) pottery types, from whence it was probably derived.

Sherds of Goliad ware are occasionally found at other sites in northern Goliad County and southern Karnes and De Witt counties. The nearest one to the Scarbrough Site known to this writer is located on the west bank of the San Antonio River 8 miles northeast of the Scarbrough farm. Here, 34 sherds (including part of a loop handle and 15 sherds of the orange variant of this pottery type) were recovered from a low, sandy knoll in a cultivated field, along with 2 sherds of glazed bocarro ware, of Spanish or Mexican manufacture, and a fragment of dark green bottle glass.

Numerous sherds of Goliad Plain have recently been collected by Mr. D. E. Fox, of San Antonio, at two Spanish mission sites in Bexar County. Frequent contacts between the Coahuiltecans of these missions and their contemporaries at Goliad are well documented.

The most remote location at which the orange-colored Goliad Plain sub type has been recognized is the Vinson Site, in Limestone County. Recent excavations at this large village site, 220 miles distant from the Goliad missions, have disclosed a number of sherds associated with Indian and European artifacts dating at circa 1820 or slightly earlier.

THE COMANCHE SPRING SITE

James E. Ivey

INTRODUCTION

During an archaeological survey of the Camp Bullis Military Reservation, located about twenty miles northwest of San Antonio on the East side of Interstate Highway 10, the Center for Archaeological Research of the University of Texas at San Antonio found sixty-nine sites, of which nine were historical (Gerstle, Kelly and Assad 1978). A careful examination of these nine sites showed that eight of them were simply farmhouse remains, some of them quite recent. The ninth site, called the Comanche Spring site (41 BX 420), was not so easily classified.

The initial inspection of the site told us only that it had been a large structure built on two levels on a hillside near the west central edge of the Camp Bullis reservation. It was constructed of fairly massive, roughly squared limestone blocks and smaller chunks of rubble, and was largely concealed under the debris of its own fallen walls. A number of fragments of ceramics and glassware were picked up during this initial look, to be used as an aid for dating the site, and perhaps to give us some idea of its purpose.

The majority of the artifacts were white undecorated pearlware sherds. This variety of china was predominant in Texas in the period 1870-1910 (Lynn, Fox and O'Malley 1977:187). A few of the artifacts, however, were of a different sort. These fell into two groups: 1) a small collection of brightly-colored sherds, and 2) several large brick fragments. The first group had as its most distinctive members three fragments of white ceramic with a clear glaze over raised parallel bands of blue, black, and yellow slip. These were sherds of a "banded slipware" cup, and dated, in Texas, from the first half of the nineteenth century (Ibid:191). The remainder of the material in this group was consistent with such an approximate date.

The second group, of brick fragments, on examination turned out to be pieces of a commercially-made high-temperature fire brick with slag melted onto one surface. The slag was of an unidentified metallic material, probably iron.

In addition to these artifacts, it was noted that two small staircases on the site were constructed of stone and waterproof cement, and a section of concrete sidewalk was found at the southeast corner of the foundation traces. The large squared stones of the foundation itself, however, were mortared with a soft, porous, sandy-lime mortar. Waterproof, or Portland, cement and concrete began to replace lime mortar in Texas in the early 1880's (Anne Fox, personal communication, 1977). These facts imply that the Comanche Spring site foundations and the building that stood on them had been constructed before 1880, and was still in use and being modified after that date.

Based on the available information, the site was originally identified as a nineteenth century industrial complex of some sort, perhaps a gunpowder mill or iron smelting plant. I personally favored calling it an early cement plant.

The site was later measured and mapped, and the areas immediately around it surveyed more exactingly (see Figure 1). This survey found additional features of some interest. The most important of these were the remnants of old fence posts and marks on trees where wire had been fastened. These permitted the location of several old fence lines which were marked on a map of Camp Bullis (Dept. of the Army 1949). The fence lines showed beyond a doubt that the ruins were located at the position of a structure standing in 1949 labelled "Schasse Ranch". This identification of the site as a ranch considerably lessened the chances that it had been an industrial site, and reopened the question of what it was and who built it.

HISTORICAL BACKGROUND

Comanche Spring had been a dependable source of water since Spanish Colonial times, when it was called "Ojo de Comanches" (Rullman 1912). Nathaniel Lewis, a rather notorious land speculator and merchant of San Antonio, acquired the springs

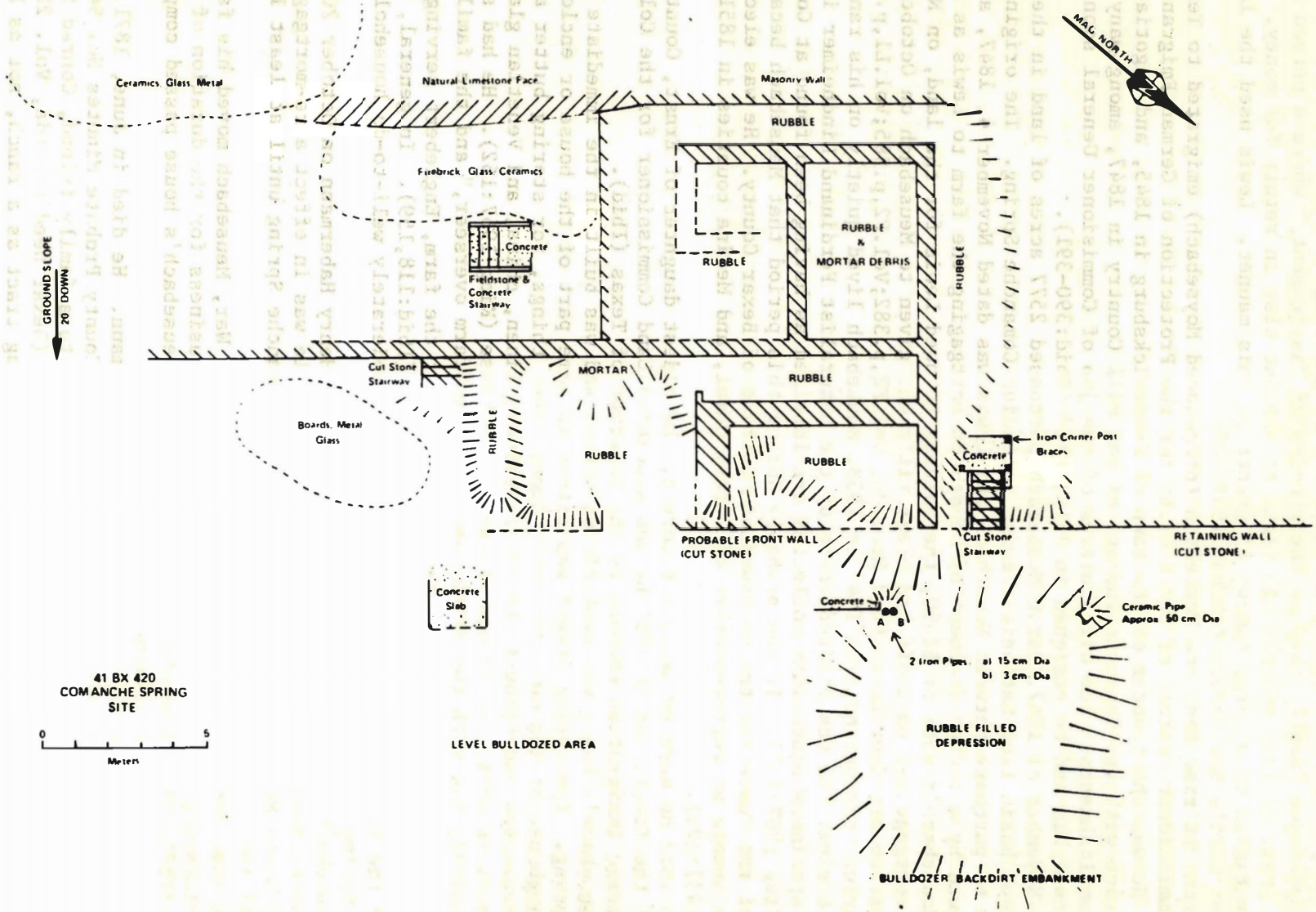

Figure 1. A plan of the Comanche Spring Site as it appears in 1978. (Adapted from Gerstle, Kelly, and Assad 1978, Figure 63.)

and much of the surrounding land between 1838 and 1847. Lewis acquired this and a large quantity of other property in Bexar and neighboring counties in the years after Texas Independence largely through the process of "assignment," where a person eligible for a grant of land assigns his right to someone else in return for money. Lewis bought the rights to a large number of grants in this manner. Lewis used the land for grazing cattle and horses (Chabot 1937:329).

Baron Ottfried Hans von Meusebach (pronounced Moysebach) emigrated to Texas as the Commissioner General of the Society for the Protection of German Emigrants in 1845. He was the founder of the town of Fredericksburg in 1845, and negotiated a lasting peace with the Comanche Indians of the Hill Country in 1847, among many other accomplishments. The difficulties of the job of Commisioner General soon disillusioned him and he resigned in July, 1847 (Ibid:390-391).

In November of 1847, Baron Meusebach purchased 2577 acres of land in the Salado Creek basin from Nathaniel Lewis, including Comanche Spring. The original agreement to purchase between Meusebach and Lewis was dated November 4, 1847, and was followed by a second document by Meusebach mortgaging the farm to Lewis as security for Meusebach's note of $1600, the balance he owed Lewis for the land, on November 5. This mortgage was paid off and clear title was given to Meusebach on October 14, 1853 (Bexar County Courthouse Deed Records, Vol.F2,p.382;Vol.F2,p.385;Vol.L1,p.488).

During this period from 1847 to 1853, Meusebach lived quietly on his ranch at Comanche Spring. He was visited there by the naturalist Ferdinand Lindheimer in 1849, and many specimens Lindheimer collected are labelled as having been found at Comanche Spring (King 1967:141). It was probably during this period that Meusebach became the Justice of the Peace for the northwestern portion of Bexar County. He was elected to the State Senate as representative of Bexar, Comal, and Medina counties in 1851 (Chabot 1937:393).

In 1852 he married Agnes von Coreth, the oldest daughter of Ernst, Count von Coreth of the Tirol, and in 1854 he was appointed Land Commissioner for the Colony of the German Immigration Company by the Governor of Texas (Ibid).

Meusebach's house was probably of stone, and was built in the immediate area of the spring. The spring itself was either in some part of the house or enclosed in a springhouse of its own, and used, among other things, for storing butter and cream. Meusebach had brought the family silver, linen, china, and Venetian glass from Germany in 1851, and it was in use in the house (King 1967:152). He had several persons helping him with the ranch, among them a "farm overseer," and the family of Englebert Krauscopf and his wife Rosa also lived at the farm, Englebert serving as Meusebach's hunter, and Rosa helping in the house (Ibid:118,159). In general, we are given the impression of a large and at least moderately well-to-do household at Comanche Spring.

Meusebach sold the Comanche Spring Farm to Henry Habermann on October 20, 1853 (Bexar County Deed Records, Vol. LI:490). This sale was in effect a re-mortgage of the land, since Meusebach continued to live at Comanche Spring until at least 1858 (King 1967:154).

At some date near the beginning of the Civil War, Meusebach moved his family to Fredericksburg, where he operated a mercantile business for the duration of the war (Ibid:157). The Comanche Spring property and Meusebach's house passed completely into the hands of Henry Habermann.

Nothing is known of the activities of Habermann. He died in June, 1871, leaving his property to his wife Ernestine (Bexar County Probate Minutes No. 947, June 29, 1871). She sold the Comanche Spring land to a family friend, Conrad Schasse, a prominent San Antonio druggist, on March 8, 1881 (Bexar Deed Records, Vol. 22:114).

Schasse probably operated the Comanche Spring tract as a ranch, not as his residence and farm. It is this period of ownership that gave the name "Schasse Ranch" to the structure whose foundations we are investigating.

Schasse sold Meusebach's land along with other property to the U. S. Army in December 1906 (Bexar Deed Records, Vol. 258:152, Dec. 1, 1906). The property was part of a large tract called Leon Springs Military Reservation, more popularly known as the "Leon Springs Target Range," and was used extensively as a training area. It eventually became Camp Bullis. (For a more complete history of Camp Bullis, see Gerstle, Kelly and Assad 1978.)

WHAT WAS THE COMANCHE SPRING SITE?

In 1949, Charles Ramsdell briefly described the career of John O. Meusebach, as the Baron preferred to be called, in a Sunday Supplement article in the *San Antonio Express*. In this article, Ramsdell included two photographs of a large stone house, which he said had been standing at Comanche Spring until it was demolished by the U. S. Army some years prior to 1949.

The larger of the two photographs is a general view of the "Meusebach" house and its surroundings (Figure 2). There can be no doubt that this is a view of the Comanche Spring site with the structure still reasonably intact. A number of the features seen in the photograph still exist on the site. One of the two staircases built of waterproof cement is visible to the left of and behind the house, and a stone staircase which can be seen running down the slope of the hill against the side wall of the structure is still in place (see Figure 1). In fact, even the tree which is in the foreground with some sort of feed trough attached is readily identifiable on the site today.

Ramsdell presented two opposing views about this house. One tradition, he said, was that this was the house of Meusebach. This was countered by the statement of Mrs. Max Toepperwein, who claimed to have been born there, and who stated that "the Baron lived in another house, which has long since disappeared." (Ramsdell 1970). Mrs. Max Toepperwein was born Clara Hausmann, and married Mr. Toepperwein on May 31, 1904 (Bexar County Marriage Records, Index). She was probably the daughter of the family living at Comanche Spring and running the ranch for Conrad Schasse, after 1881.

Was this the house of the Baron Ottfried Hans von Meusebach? Let us review the evidence available to us from historical records and archaeology. First of all, the house is built of large, squared stones, which is characteristic of German architecture in Texas and is generally found only after circa 1845. This in itself tells us little since Meusebach, Habermann, and Schasse were all of German origin and could have built such a house. Of greater utility is the observation on the site that the main structure is built with soft lime mortar, and therefore very likely predates 1880.

It is probable, then, that either Meusebach or Habermann built the house. Considering the origins, means, and expectations of John O. Meusebach, and the general characteristics of his household, it is reasonable to attribute the house to him. If Meusebach built the house, a date of about 1851 for its construction is most likely, since he had brought most of his family's fine household goods to Comanche Spring in that year, and had built a house by September of 1852, when he was married (King 1967: 152). It is likely that Meusebach had two houses at Comanche Spring, one a small bachelor's home in which he lived from 1847 to about 1851, and the larger house built when he knew he was soon to be married. In connection with this, traces of the foundation of a second structure have been found at Comanche Spring, apparently of a smaller, less ostentatious building than that pictured in Figure 2.

In support of this is an article in the Sunday, May 19, 1907 *San Antonio Daily Express*: "General Myer Pleased With Target Range;" "About Improvements: Permanent improvements on the tract will be easily acquired and especially so in the way of public buildings. The headquarters of camp probably will be located in the old Meusebach house, built in 185_ by Baron Meusebach, the walls of which are still in splendid condition." (*San Antonio Daily Express*, May 19, 1907:4.) The last digit of the date of construction is not legible on the microfilm because of the age of the paper and the smallness of the print. The number could be any of the round numerals (0, 3, 6, 8, or 9), and looks most like a 6.

It is very unlikely that the article is speaking of a structure other than that pictured in the Ramsdell article. This is not, of course, definitive proof that Meusebach built the house, but it does indicate that in 1907, less than six months after Schasse had sold the site to the Army, it was *believed* that Meusebach had built the house at Comanche Spring. Schasse had been a friend of the Habermanns. He would almost certainly have known whether or not Habermann had built the house. Certainly the Army, as part of the process of deed confirmation necessary before it purchased land for the Federal Government, would have found out the name of the

Figure 2. The Comanche Spring site as it appeared in about 1949 in a newspaper article.

builder. Meusebach himself had died only fourteen years previously (May 27, 1897. See King 1967:174), and surely any number of people still lived in San Antonio in 1907 who knew where he had lived at Comanche Spring. In other words, when the *Express* made such a statement as "built by Baron Meusebach in 185_", it was stating reasonably current, common knowledge, and can, within limits, be believed.

We can be reasonably sure, then, that the rather imposing stone structure in Figure 2 was the primary home of John O. Meusebach in Texas, and that the Comanche Spring site is therefore the last trace of Meusebach's house. It is also quite possible, based on the 1907 article, that the house was also the first headquarters building on Camp Bullis, and would therefore be of historical interest to the U. S. Army. I consider it likely that the two staircases of stone and cement, one behind and one on the north end of the building, were constructions of the Army, since they strongly resemble other staircases still in use in the present Headquarters complex some miles to the south.

This house, and John O. Meusebach, the man who built it, were of some significance to the history of Texas. Certainly the Comanche Spring site, damaged though it is, is still worthy of greater note than being an anonymous ruin on the side of a hill.

References

Bexar County Courthouse Deed Records, San Antonio, Texas

Bexar County Courthouse Marriage Records, San Antonio, Texas

Bexar County Courthouse Probate Minutes, San Antonio, Texas

Chabot, Frederick C.
1937 *With the Makers of San Antonio.* Privately printed by Frederick C. Chabot. San Antonio.

Department of the Army.
1943 "Leon Springs Military Reservation, Texas." AMSV8825, scale 1:25,000. Chief of Engineers, U. S. Army. Partial revision by Fourth Army Engineer Map Plant, Fort Sam Houston, Texas, 1949.

Gerstle, Andrea, Thomas C. Kelly and Cristi Assad.
1978 The Fort Sam Houston Project: An Archaeological and Historical Assessment. Center for Archaeological Research, The University of Texas at San Antonio, Archaeological Survey Report 40.

King, Irene Marschall
1967 *John O. Meusebach, German Colonizer in Texas.* University of Texas Press, Austin.

Lynn, Warren M., Daniel E. Fox, and Nancy O'Malley
1977 Cultural Resource Survey of Choke Canyon Reservoir, Live Oak and McMullen Counties, Texas. *Office of the State Archeologist, Texas Historical Commission Archeological Survey Report* 20, Austin.

Ramsdell, Charles
1970 "El Sol Colorado." *San Antonio Express*, January 30.

Rullman, John D.
1912 *Historical Map of Old San Antonio de Bexar.* Barker Archives, Barker Texas History Center, University of Texas at Austin.

San Antonio Daily Express
1907 May 19.

OLIVA SHELL BEADS OR DANGLES, SAN PATRICIO COUNTY, TEXAS

Malcom L. Johnson

Several years ago, while doing a surface reconnaissance on a site on the shore of Redfish Bay, a scattering of small oliva shell beads was observed.

There were nine oliva shell beads in the group, which were scattered about, in an area approximately 18 to 24 inches in diameter.

When first found, it was questioned if they actually were beads or not. They were considerably smaller than any oliva shell beads that were familiar to me at the time. They averaged only about 20 mm in length, and the aperture that had been made in the ends to facilitate stringing was quite small, less than one mm in diameter.

It is my present opinion that these small oliva shells are actually beads, or perhaps, dangles.

The raised portions of the shells have a polish that could possibly have been produced by wave action, but which is probably attributable to having been used or worn.

They would be ideally suited for use as dangles. A strand of sinew or other fiber about the size of a small fish line or heavy carpet thread, could be passed through the tiny aperture and then simply knotted on the end, to keep the shell from sliding off. They could then be attached to a skirt, basket, pouch, etc. in rows, or whatever arrangement the owner desired.

Since they were all located in such a small area, it is probably reasonable to assume that they represent a set, or part of a set. As a matter of fact, if they hadn't been grouped in a relatively small area, they probably would have gone completely unnoticed, since, as already stated, their size is considerably less than expected for oliva shell beads. And it just may be possible that others have also overlooked similar beads because of their small size.

The site was later partially excavated by the Coastal Bend Archeological Society, and was assigned the site number of 41 SP 72 by the Texas Archeological Research Laboratory.

Shards of Rockport Ware were located on the surface and in the excavations. This would indicate a relatively late occupation at the site (Late Prehistoric or perhaps even within the Historic period).

A number of Late Prehistoric and Historic sites are known in the Corpus Christi Bay area where Rockport pottery and shell ornaments and tools have been recovered (Corbin 1963). Hester and Corbin (1975) reported Rockport ware, *Perdiz* and stemmed arrowpoints, a dart point, and shell objects from burial Sites 41 SP 64 and 41 SP 78 on Redfish Bay. Shell ornaments, including oliva shell beads and shell discs which may have been used as dangles, are more common on the lower Texas coast, particularly in the Rio Grande delta area (Prewitt 1975). Glass beads of the Historic period have been recovered from sites which also yielded Rockport pottery (Corbin 1975).

Thus there are quite adequate indications in the literature that the Prehistoric and Historic Indians used a variety of beads or dangles to adorn themselves. The oliva shell beads reported here are unusual due to their small size and the limited amount of alteration.

References

Corbin, James E.

1963 Archeological Materials from the Northern Shore of Corpus Christi Bay, Texas. *Bulletin of the Texas Archeological Society* 34:5-30.

1975 A Model for Cultural Succession for the Coastal Bend Area of Texas, *Bulletin of the Texas Archeological Society* 45:29-54.

Hester, T. R. and James E. Corbin
1975 Two Burial Sites on the Central Texas Coast. *The Texas Journal of Science* 26, Nos. 3 & 4:519-528.

Prewitt, Elton R.
1975 Preliminary Archeological Investigations in the Rio Grande Delta of Texas. *Bulletin of the Texas Archeological Society* 45:55-66.

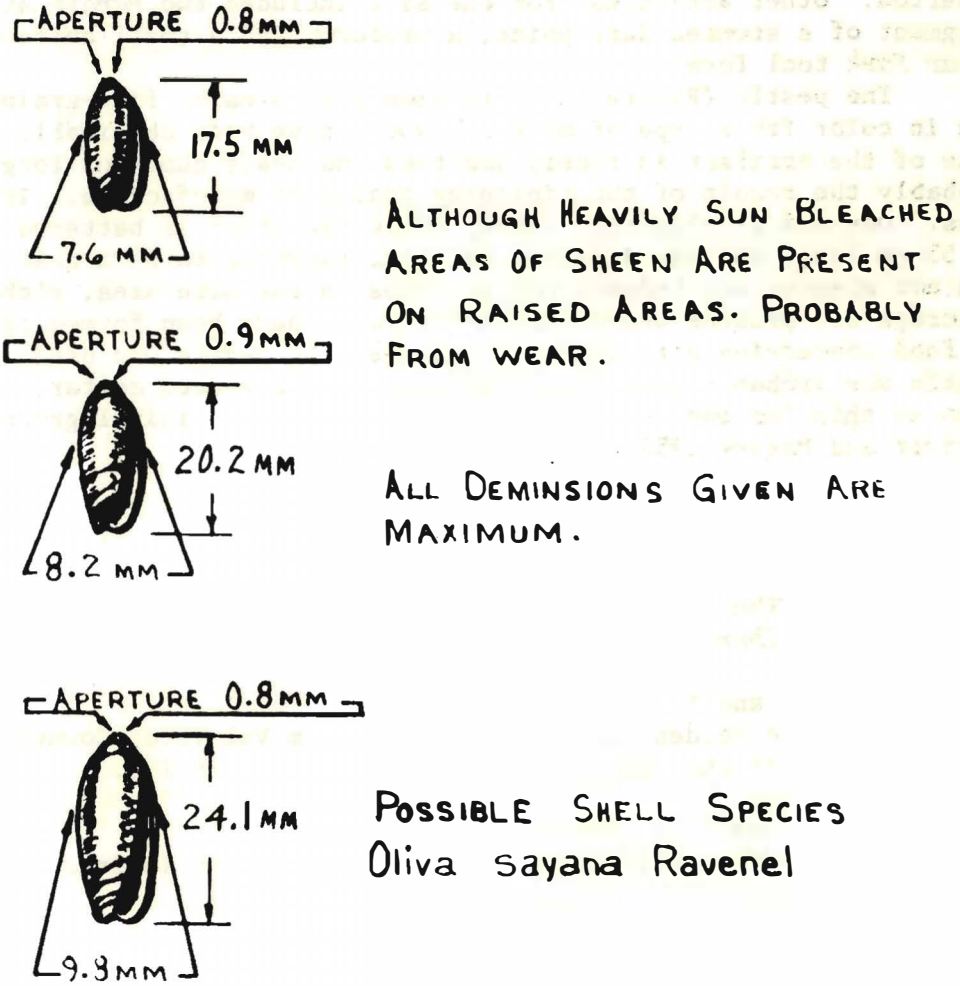

Figure 1. Oliva Shell Beads found at a site on the shore of Redfish Bay. Shown approximately actual size.

A STONE PESTLE FROM DIMMIT COUNTY, SOUTHERN TEXAS

Thomas R. Hester

Little is recorded in the ethnohistoric records about the food processing techniques or implements of the early historic peoples of southern Texas. Newcomb (1962:42) notes the use of a wooden pestle or club to pound mesquite beans that had been placed in a hole dug in the ground. Beals (1932:105, Map 7) notes the presence of wooden mortars in Nuevo Leon, northern Mexico, and among the Hasinai in eastern Texas. Archaeologically, manos and metates have been documented from a number of south Texas sites (cf. Hester 1978), but there have been no reports, to the author's knowledge, of stone pestles or stone mortars. We would not expect, of course, for wooden utensils of these forms to survive in the open occupation sites of the region. However, Collins and Hester (1968) have reported a wooden mortar and pestle found in a shelter near Pandale in Val Verde County, southwest Texas.

In 1974, I was shown a large stone pestle that had been found at a site in Dimmit County. Mr. Roy Alley of Carrizo Springs had collected the specimen from the surface of an open occupation site along a small creek west of the town of Asherton. Other artifacts from the site included two *Perdiz* arrow points, the fragment of a stemmed dart point, a preform, and a small uniface similar to the *Clear Fork* tool form.

The pestle (Figure 1) is fashioned of a hard, fine-grained sandstone, light tan in color (this type of material would have been obtainable locally). The surface of the artifact is finely smoothed and bears numerous longitudinal striations, probably the result of the finishing phases of manufacture. It is tapered at both ends. One end is slightly convex, while the other is battered from use. The pestle is 55 cm long; maximum diameter is 7 cm, tapering to 6 cm near the ends. Mr. Alley did not observe any bedrock mortar holes in the site area, although sandstone ledge outcrops are present where such holes could have been formed if they had been part of food processing activities in which such a pestle was used. I feel that the pestle was probably used in conjunction with a wooden mortar; the use of such specimens in this fashion is documented among other aboriginal groups in North America (Driver and Massey 1957:239-241).

References

Beals, R. L.
1932 The Comparative Ethnology of Northern Mexico Before 1750. *Ibero-americana* 2. Berkeley.

Collins, M. B. and T. R. Hester
1968 A Wooden Mortar and Pestle from Val Verde County, Texas. *Bulletin of the Texas Archeological Society* 39:1-8.

Driver, H. E. and W. C. Massey
1957 Comparative Studies of North American Indians. *Transactions of the American Philosophical Society* 47(2).

Hester, T. R.
1978 An Interim Statement on Archaeological Research at Chaparrosa Ranch, Texas. In: Background to the Archaeology of Chaparrosa Ranch (T. R. Hester, ed.):1-23. Volume 1, Studies in the Archaeology of Chaparrosa Ranch. Center for Archaeological Research, The University of Texas at San Antonio, Special Report 6.

Newcomb, W. W., Jr.
1961 *The Indians of Texas*. University of Texas Press, Austin.

ADDENDUM

After this manuscript was completed, Mr. Tom A. Fort, Exhibits Curator of the Hidalgo County Historical Museum (Edinburg) sent the author a photograph of a stone mortar and stone pestle reportedly found in the Hidalgo County area. If the provenience of these specimens can be confirmed, this would be an important addition to our information on food processing technology in the region.

[*Editor's Note* - Stone mortars, including possible bedrock mortars, were observed at 41 BX 226, the Bly Site, in southern Bexar County during a visit there by Dr. Hester and me in 1973 or 1974. This was briefly noted in the October 1978 issue of *La Tierra* in my article on the Turtle Creek Phase. A cylinder-shaped stone pestle one-and-a-half inches in diameter and five inches long was reported from a site in Zapata County (see Parker in the July 1978 issue of *La Tierra*). Thus, although quite rare, stone pestles and mortars do occur in South Texas.]

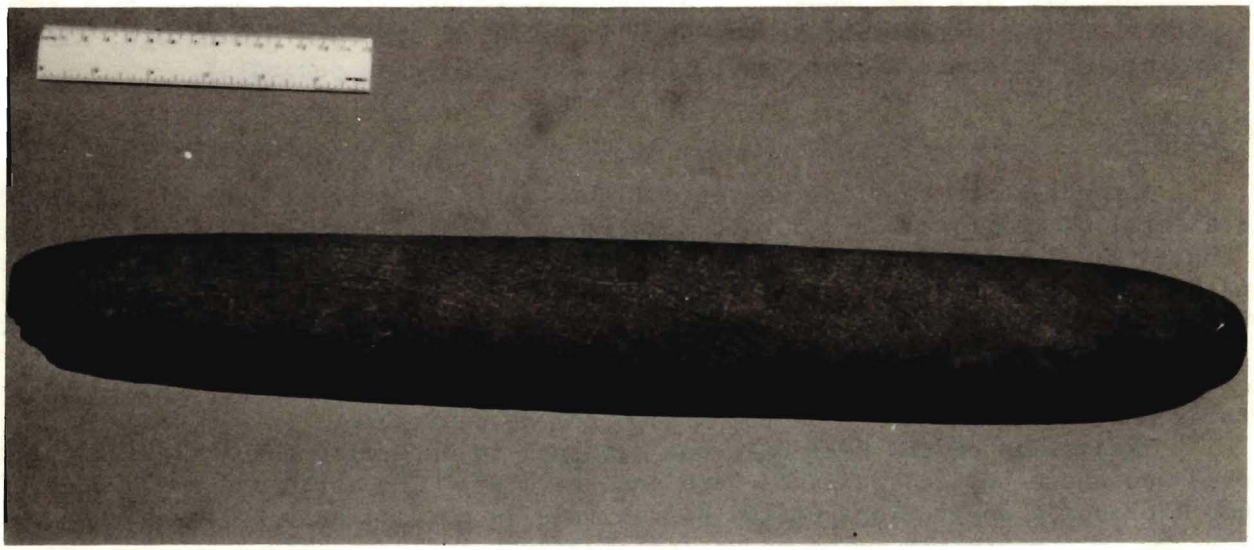

Figure 1. Stone Pestle from Dimmit County. Scale in upper left is 15 cm (6 in.) in length.

THE REAL SITE (X41 KR 166), KERR COUNTY, TEXAS *

S. Alan Skinner

ABSTRACT

The Real Site was selected for excavation during the 1972 Field School of the Texas Archeological Society. It appeared to be a typical South Texas burned rock midden and was excavated to provide data for comparison with the Paris Site (41 KR 1) in terms of activity area arrangement and site assemblages. The Real Site was found to be unusual in that the burned rock mound was apparently built during the early Late Prehistoric Period over an Archaic living surface.

INTRODUCTION

The Real site is located adjacent to Bushwhack Creek in the southwestern part of the Turtle Creek watershed (Figure 1), Kerr County, Texas. The site is located on the surface of the southward dipping limestone terrace on the north side of the creek directly across from the Bushwhack Shelter (Figure 2). Springs issue forth from the bedrock less than 150 feet upstream from the site and the creek valley is filled with numerous trees including black walnut, basswood, hackberry, oak, juniper, elm, and others. The natural vegetation in the site area has been cleared to improve pasture but the soil is thin and patchy over the surface of the underlying limestone bedrock. Flint cobbles have eroded out of the limestone and lie on the present ground surface. From the surface evidence it appeared that the low burned rock mound had been partially covered by sediment that washed over and around the mound. Few artifacts were noted on the site surface and these concentrated in the area of the mound rather than around it as had been the case at other mound sites. We expected that the mound was similar to the Paris Site which had been excavated the previous season (1971 TAS Field School) and is located in the eastern survey area of the Turtle Creek watershed. Surface artifacts did not occur in the area around the mound and controlled collection of surface artifacts was not done over the entire surface of the site.

The Real Site was chosen for excavation because it was expected that comparison with the Paris Site would be possible in terms of artifact assemblage, site patterning, mound construction, activities, and occupation period(s).

EXCAVATION

A north-south baseline was established near the eastern edge of the mound and a total of thirty-six 3 x 3 foot squares were ultimately placed over the surface of the site. A major north-south trench bisected the mound and other squares were laid out in order to define the limits of the mound and the nature of culture-bearing zones adjacent to the mound (See Figure 2). The deposit was excavated in six inch levels and soil was screened through one-quarter inch hardware cloth. Due to the inclement weather and the tight consistency of the mound, it was impossible to excavate as many squares outside of the midden as was desirable.

Excavation of the Real Site was designed to determine the limits of the mound and to see where buried artifacts were concentrated. The north and south ends of the mound are buried under slope washed soil. This is particularly noticeable on the north end of the profile. The mound fill averages twelve inches thick and overlays a reddish brown soil which has an irregular surface. The mound is as much as twenty-one inches thick as it fills into natural depressions in the reddish brown soil. It is possible that these depressions, especially the one at the north end of the mound, were man-made; however, no positive evidence of this was unearthed.

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* This is the second of a series of reports of Dr. Skinner's doctoral research and is published here with the permission of the author.

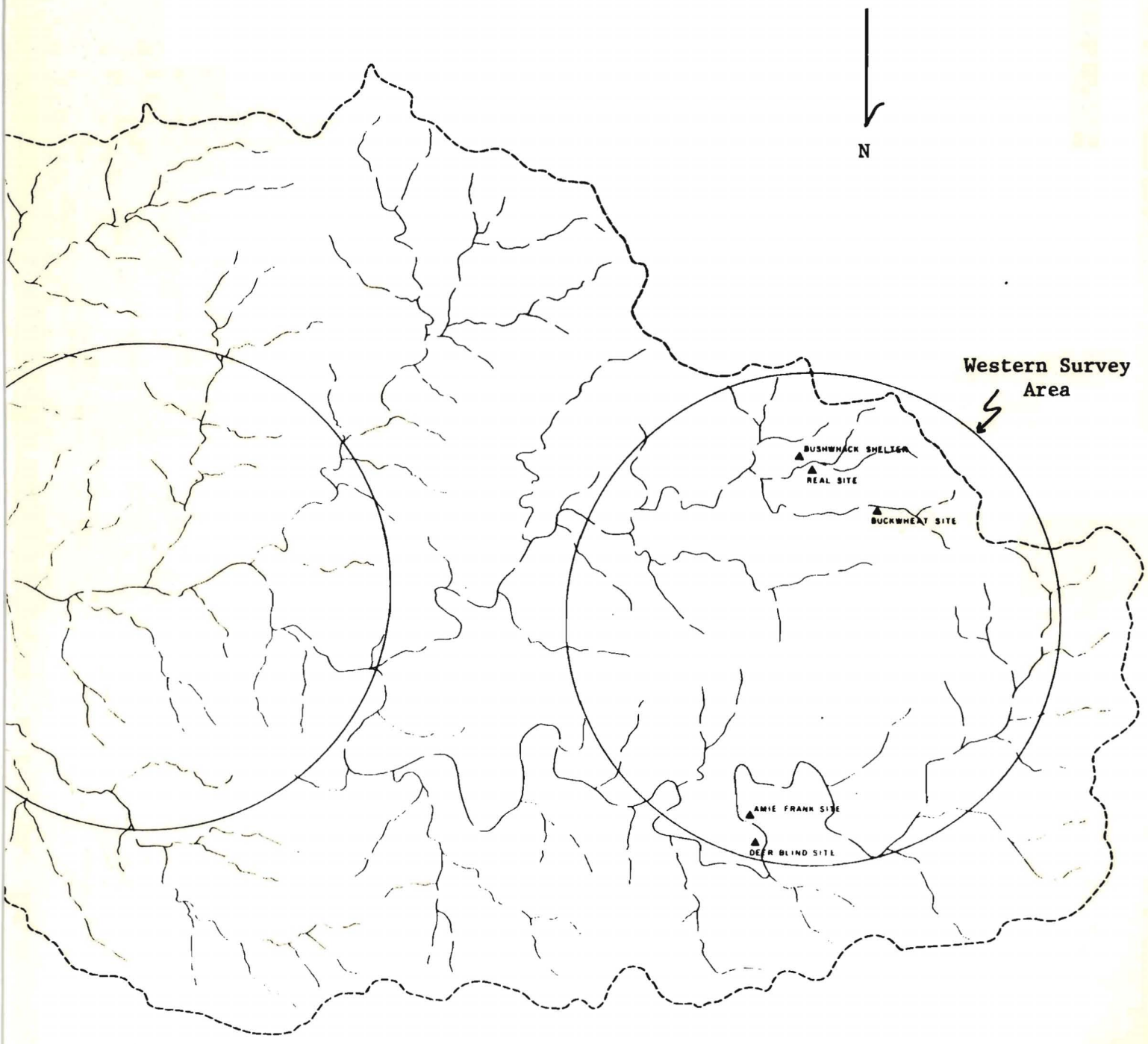

Figure 1. Relationship of Sites in the Western Survey Area of the Turtle Creek Watershed (Adapted from Skinner 1974:Fig. 8, p. 76).

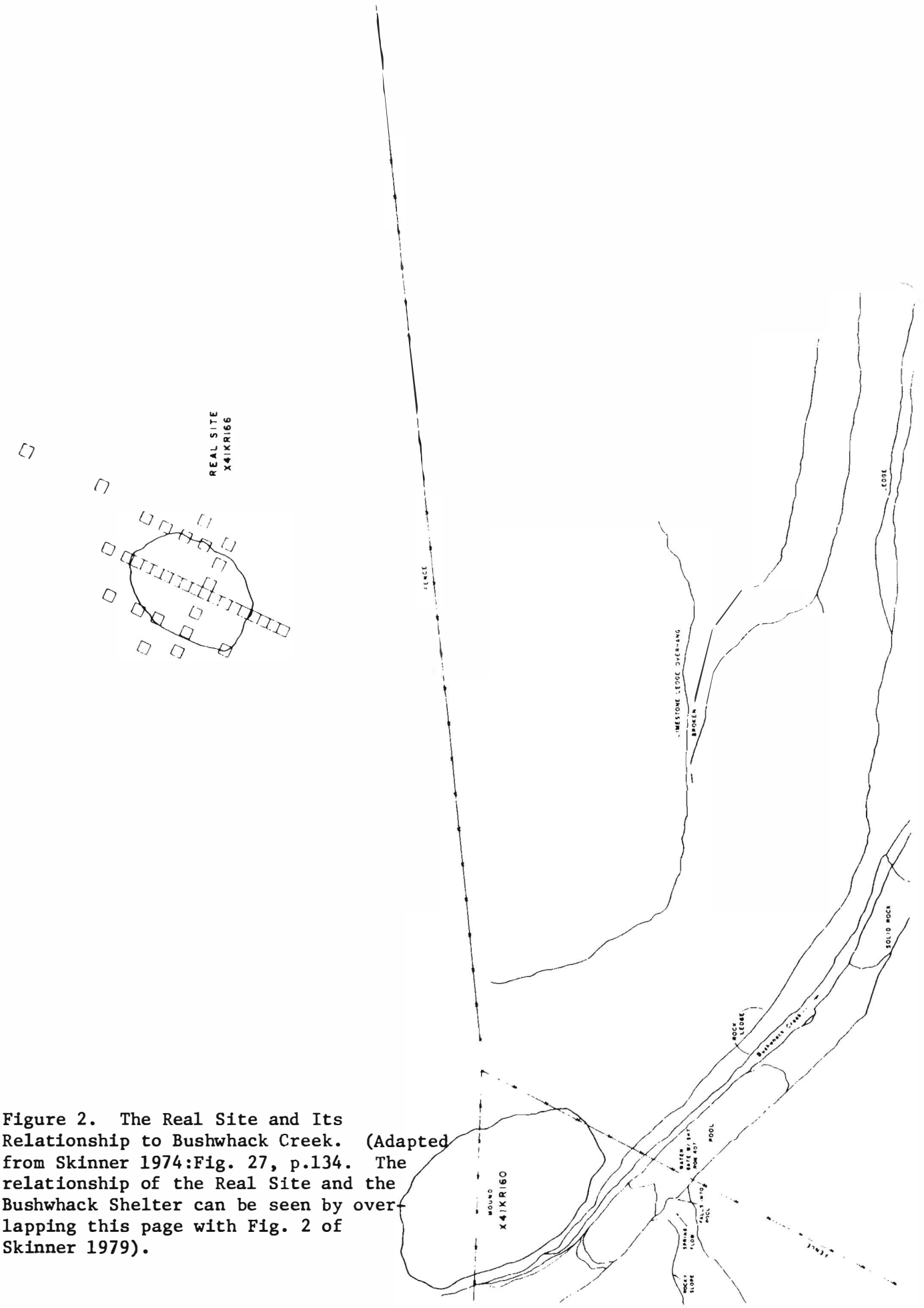

Figure 2. The Real Site and Its Relationship to Bushwhack Creek. (Adapted from Skinner 1974:Fig. 27, p.134. The relationship of the Real Site and the Bushwhack Shelter can be seen by overlapping this page with Fig. 2 of Skinner 1979).

RESULTS

The mound fill is composed of pieces of burned, fire-cracked limestone chunks, a dark black soil, charcoal, and lithic artifacts. The limestone chunks have a density that ranges about 200 pieces to about 100 pieces per cubic foot. Chunks were densely packed and artifacts were infrequent throughout the deposit. There was no evidence of hearths, pits, or other features within the mound fill or in the area around the mound. Arrow points (2) and one dart point were found in the fill of the mound. Several arrow point preforms (listed as bifaces) were also found within the mound. The dart points in level two and several large bifaces were found on top of the reddish brown soil which underlies the mound. On the basis of this pattern which was observed in several squares, it is proposed that there was an older living surface situated under the mound and that this surface can be dated to the Late Archaic period. The arrow points in the mound suggest that the mound was built by the arrow-making people rather than dart-making people. This situation has not been described for mound sites in the past. The apparent continuation of the cultural tradition of mound building suggests that there may have been other continuities in the subsistence/settlement patterns of the prehistoric occupants of the hill country.

The artifact assemblage (Table 1) from the Real Site consists of 2,177 pieces. Lithic debris/cores/bifaces make up 97.73 per cent of the assemblage. Tools include retouched pieces, scrapers, gravers, a notch, and projectiles. All three arrow points are represented by bases but none are identifiable to type. Each of the dart points is fragmentary and only two were typable. The base to a *Frio* and a *Pedernales* occur in level one. All of the dart points are represented by bases and two of the unidentified points have burins on the snaps.

The flake:chip ratio is 1:2.5 (Table 2) and this pattern is interpreted as evidence that flint-knapping was being done at the site. In fact, based on this pattern it is suggested that flint-knapping was being done on the mound as it accumulated or that the limestone chunks and lithic debris were being discarded in the same place. Cores are present in limited numbers (Table 3) and there are more than twice as many bifaces. Three of the stage E bifaces are triangular shaped arrow point preforms which were made on flakes. More than seventy-five per cent of the bifaces are broken and stages D and E comprise almost eighty-five per cent of the biface categories. The prominence of interior and biface thinning flakes/chips (84.09%) and the stage D and E bifaces suggest that final roughing out and thinning of bifaces was an important activity at the site. The small number of projectiles indicates that rehafting was less important than at other sites although it did occur at the site.

CONCLUSIONS

The distribution of artifacts throughout the site fill does not show any pronounced clustering either on or off of the mound. Artifacts were recorded on the bedrock surface to the north of the test squares, but very few artifacts were noted to the south or to the east or west. It is possible that a cluster may be present south of the mound, but this has not been determined and is doubted based on the shallow depth of fill just south of the test squares. Therefore, it is suggested that the mound at the Real Site is the central feature of the site and that there are no major activity areas adjacent to the mound. As mentioned before, it is also proposed that the mound was built during the Neo-American Period and that there is an Archaic living surface under the mound.

[EDITOR'S NOTE: Burned rock middens in Central and Southern Texas have typically been considered to be an Archaic phenomenon (cf. Kelly 1961, or Hester 1971). However, work at the Bammel Site (41 KR 10) revealed a mixture of Late Archaic and early Late Prehistoric projectiles in the upper layers of the midden (Beadles 1971 a & b). Recent work in Bandera County by Tom Beasley involved a midden which

Level	1	2	3	4	TOTAL
Lithic Debris	1239	685	133	7	2064
Cores	12	7	-	-	19
Bifaces	30	12	3	-	45
					2128
Ret. Pcs.	25	5	-	-	30
Scrapers	-	2	-	-	2
Gravers	5	-	-	-	5
Notches	-	1	-	-	1
Dart Points	4	3	1	-	8
Arrow Points	3	-	-	-	3
TOTAL	1318	715	137	7	2177
No. of Excavated Squares	35	25	6	2	

Table 1. Artifact assemblage by level from the Real Site.

Level	1	2	3	4	TOTAL	%
Primary	-	-	-	-	-	-
Secondary I	5	-	-	-	5	.24
Secondary II	84	59	6	1	150	7.26
Interior	225	142	22	1	390	18.89
Biface Thinning Flakes	13	21	5	1	40	1.93
					585	28.32
Primary	-	-	-	-	-	-
Secondary I	2	2	2	-	6	.29
Secondary II	103	56	8	-	167	8.09
Interior	807	405	90	4	1307	63.27
					1479	71.65
TOTAL	1239	685	133	7	2064	99.97

Table 2. Lithic debris from the Real Site.

Cores		Bifaces			
			Whole	Broken	%
Single Platform	5	A	-	-	-
Opp. End	2	B	-	1	2.22
Mult. Unpatt.	9	C	3	2	11.11
Fragments	3	D	4	21	55.55
	19	E	2	11	28.88
		F	1	-	2.22
			10	35	99.98

Table 3. Cores/bifaces from the Real Site.

contained primarily early Late Prehistoric artifacts with a very few Late Archaic points (Beasley 1978). These reports lend considerable credence to Dr. Skinner's findings of cultural continuity from the Late Archaic into the early Late Prehistoric at the Real Site.]

References

Beadles, Murray

1971a Interim Report on the Bammel Site (41 KR 10); Analysis of Vertical Distribution of Projectile Points. *The Arti-facts*, Journal of the Hill Country Archeological Society, 2(2):3-6.

1971b The Bammel Site (41 KR 10). *The Arti-facts*, 3(1):5-7.

Beasley, Tom S.

1978 A Site with *Edwards* Points in Bandera County, Texas. *La Tierra*, quarterly Journal of the Southern Texas Archaeological Association, 5(4):23-31.

Hester, Thomas R.

1971 Archeological Investigations at the La Jita Site, Uvalde County, Texas. *Bulletin of the Texas Archeological Society* 42:51-138.

Kelly, Tom C.

1961 The Crumley Site: A Stratified Burned Rock Midden, Travis County, Texas. *Bulletin of the Texas Archeological Society* 31:239-272.

S. Alan Skinner

1974 Prehistoric Settlement of a "Natural Area." Unpublished Ph.D. Dissertation, Department of Anthropology, Southern Methodist University, Dallas, Texas.

1979 The Bushwhack Shelter (X41 KR 116), Kerr County, Texas. *La Tierra* 6 (2):3-12.

COMANCHE AND KIOWA IN BLANCO CANYON

Wayne Parker, an STAA member who lives near Ralls, Texas, has recently authored a report on Mackenzie's supply camp in Blanco Canyon. The recently relocated site contains V-shaped fortifications built in 1872 for the defense of Army troops quartered in the area to control the Comanche and Kiowa who raided from the high plains into Central and South Texas and even into Mexico. Wayne Parker's fourth cousin was Quanah Parker, war chief of the Quohada band of Comanches. This relationship has fostered Wayne's life-long interest in Indian artifacts, history, and archaeology.

The Mackenzie supply camp study is a popular report of the identification, study, and documentation of a very significant archaeological site. Working with a number of local historians and with Texas Tech University, Wayne Parker has recovered a variety of artifacts, (including 300 hand-forged horseshoes, shell casings, a pistol, knife, and a variety of camp equipment). They have also reconstructed the history of the camp and related battles. The site has been documented with the Texas Archeological Research Laboratory and has now been designated a State Historic Site.

This very interesting report was published in the July 1979 issue of *Grain Producers News* (Vol. 30, No. 7), a trade journal published in the Panhandle (Box 32366, Amarilly, TX 79120). If you are interested in the history or archaeology of the great plains, this is one worth reading.

THE AUTHORS

C. A. CALHOUN of Port Lavaca has been observing the archaeology of the Texas coastal plain for many years. His article on the two ollas from Karnes County is a classic and appears just as timely and well written today as when it was originally published in the *Houston Archeological Society Newsletter* in 1966.

THOMAS R. HESTER is, as most of you know, the Director of the Center for Archaeological Research, The University of Texas at San Antonio, and among other things also a prolific writer. In addition to the two articles in this issue, Dr. Hester has been very busy this summer with the UTSA field school (call it Granberg III) plus simultaneously working on two books.

MALCOM L. JOHNSON of Fredericksburg is an avocational archaeologist whose interest spans much of South Texas. In addition to the article on Oliva shell beads or dangles published in this issue, Mr. Johnson has authored a paper on historic B/W Indian pottery found in Gillespie County during the last century (which will be published in the October issue of this journal).

THOMAS C. KELLY is a research associate involved in a variety of archaeological projects with the Center for Archaeological Research of UTSA. Colonel Tom is more recently renowned as a Barbeque Chef (sharing that honor with Steve Black at the July STAA meeting). His brief response in this issue is a gem worth treasuring.

HARRY SHAFER is with Texas A & M University, was coeditor for five years of the *Bulletin of the Texas Archeological Society*, and is considered an authority on the archaeology of Central Texas. This summer he is hard at work in New Mexico but took the time before he headed west to pen a commentary on Kelly's April "*Gower* point?" article.

S. ALAN SKINNER is well known to *La Tierra* readers and Texas Archeological Society members. Dr. Skinner is also hard at work this summer on the Worth Ranch at Palo Pinto. His report on the Real Site in this issue is installment two of a three part report on the Turtle Creek area of Kerr County, Texas. The final report in this series will be published in the October issue of this journal.

LEE PATTERSON of Houston needs no introduction to *La Tierra* readers since Lee is one of our most dependable contributors. In the last couple of years, Lee has focused on lithic technology and has been accomplishing replication experiments with various types of flint and chert. In this issue, Patterson brings that experience to bear on the issue of wear pattern analysis of Pre-Archaic artifacts.