

The Champe Site: Excavation of a Prehistoric House in Douglas County, Nebraska

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Article Summary: This article describes the 1935 excavation of one house at the Champe site. Artifacts described include pottery, work in stone, and bone or shell objects.

Note 1: Additional articles on 1935 excavations include "The Leary Site," "The Schrader Site," and "Fremont 1."

Note 2: A few details on the second page of the article have been redacted in accordance with current archeological guidelines.

Cataloging Information:

Photographs / Images: ground plan of House 1; restored pots and House 1 excavation site (3 views); restored pots (2 views); rimsherds and handles; pottery, bone, stone and shell objects (4 views)

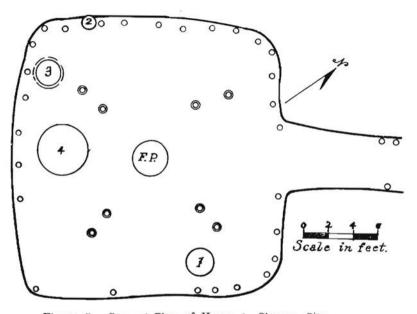


Figure 5. Ground Plan of House 1, Champe Site. _____, edge of house-pit; o, outer post moulds; double circles, center post moulds; 1-3, cache-pits; F. P., fireplace.

THE CHAMPE SITE

Excavation of A Prehistoric House In Douglas County, Nebraska

By A. T. HILL AND PAUL COOPER

INTRODUCTION

Abundant evidences of aboriginal occupation have been known for some time to be present along the Elkhorn River

In the spring of 1931, the University of Nebraska Archeological Survey, under the direction of Dr. W. D. Strong, and with the assistance of a number of interested individuals, trenched a single house-pit and two eminences which had the external appearance of artificial mounds on the Saunders site. Numerous additional indications of habitation extend south along the ridges for some distance into Sarpy County.

The Historical Society operations were carried out at two points in the area, the first of which, designated the Champe site, is on the farm of Mrs. Nettie Reeves about a half mile south of Strong's excavations. The second, Fremont 1, is approximately three-fourths of a mile further south

. Although these two arbitrarily named sites are merely parts of a single inhabited strip of land, for purposes of study they are being considered as two distinct units. We wish to express our gratitude to the landowners and the tenants along the Elkhorn River who readily granted permission to excavate and extended every possible courtesy to the Survey.

The Champe site is situated at the margin of the uplands overlooking the extensive bottom lands through which flow the Elkhorn and Platte rivers. The Elkhorn pursues a tortuous and changing course, but in this vicinity it closely skirts the foot of the bluff. The bluffs here are broken by steep, short draws draining to the west, but only a short distance to the east is the watershed beyond which the drainage is eastward to the Missouri River. This site is separated from the Saunders site by a draw which carries water only in the spring and after rainfall. The uplands are covered here by Knox silt loam, which is a light-brown to pale yellow soil, unfavorable to the growth of corn except on the lower slopes. While the principal soil of the bottoms is Cass fine sandy loam, which is not well adapted to corn, there are small areas of Wabash silt loam, which, if well drained, constitute excellent corn land. Both the uplands and the bottoms were originally forested.

While the vegetation of the bottoms consisted principally of grasses, the streams were lined with cottonwood, elm, oak, willow, box elder, basswood, black walnut, hackberry, honey locust, and cedar. Hickory, elm, box elder, ash, sumac, scrubby burr oak, and some black walnut grew on the higher lands.

The work here consisted of exploratory trenches along the summit of the ridge in search of burials and the complete excavation of one house. The test trenches proved sterile, but the bones of a single burial which had been disturbed by cultivation were found on and just beneath the surface about forty feet east of House 1. This house, as well as others in the vicinity, was apparent on the cultivated surface as a circular area of discolored soil.

House 1

The Survey had been preceded in this house by diggers whose pits had apparently destroyed a few post moulds and obliterated the floor line at a few points, but fortunately the main features were not obscured. Complete excavation of a house here was considered important in the light of the results obtained by Strong in his excavation of House 1 of the Saunders site. Owing to the limited amount of time available, that house was tested by a series of trenches. The floor is described as being bowl-shaped and having an oval outline; no post moulds were observed.1 The situation encountered in House 1 of the Champe site would seem to elucidate these rather puzzling features. As has already been mentioned, the surface discoloration revealing the presence of the lodge site was circular. As the fill within the pit was removed the floor appeared to be circular in outline and to slope up to the surface, rather than terminating at well defined walls. The usual outer row of post moulds did not appear, and the floor appeared to be underlain throughout by undis'urbed yellow clay. Removal of this apparently undisturbed clay near the margins of the house to a depth equal to that of the floor at the center revealed, however, that the outer posts were actually present and that the level floor could be traced to a point slightly beyond them. Complete excavation to the actual floor level, which averaged about 35 inches deep, proved that this was a square house with rounded corners and with dimensions of approximately 21 feet. Sometime subsequent to its abandonment the presumably vertical or nearly vertical walls of the pit had slumped in, covering the periphery of the floor with a deposit of unmixed yellow soil which created the deceptive appearance of a round bowl-shaped pit. It seems more than probable that complete excavation of the Saunders site house would have indicated a similar situation.

¹Strong, 1935, pp. 172, 173.

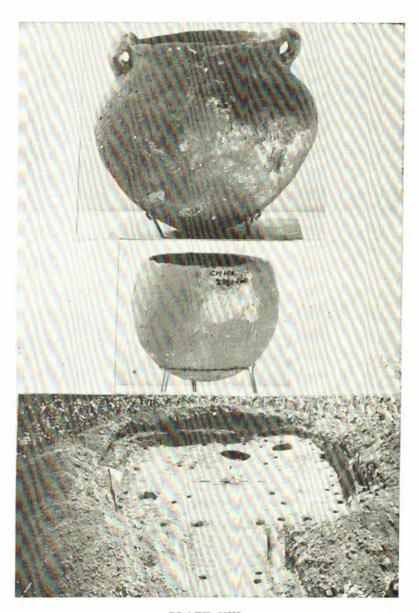


PLATE VIII

1. Restored pot from House 1, Champe site; height, 185 mm. (7 $\frac{1}{4}$ inches); greatest diameter, 206 mm. (8 $\frac{1}{8}$ inches).

2. Restored bowl from House 1, Champe site; height, about 98 mm. (3% inches); greatest diameter, 117 mm. (4% inches).

3. House 1, Champe site; entrance to the northeast.

The posts in the outer row, except where they had been obliterated by the spades of previous diggers, were spaced at intervals of from 12 to 30 inches, and in three cases they had been supplemented by an additional post set slightly to the interior of the house. Between the fireplace, which was 30 inches in diameter, and each corner of the house two moulds (eight altogether) presumably marked the locations of roof support posts. The innermost posts were approximately 5.5 feet from the center of the fireplace, the others about 2 feet farther toward the corners of the house: they were uniformly about 7 inches in diameter and about 18 inches deep. The entrance passage departed from the usual pattern of extending in one of the more sheltered directions and was in the northeast. Although only three posts of the passage walls could be detected, the mixed soil indicated a length of 9.5 feet. All four sub-floor cache-pits were relatively small, and all were excavated near the side walls. Only one, Cache 3, was bellshaped: it measured 22 inches across the top, 28 inches across the bottom and was 12 inches deep. The remainder had vertical sides. Cache 1 had a diameter of 22 inches and was 7 inches deep. Cache 4 was 50 inches across and 37 inches deep, while Cache 2, merely a pocket between two of the outer posts, was 12 inches across and 10 inches deep. None showed any evidence of special preparation of floor or walls, but the soil in the top of Cache 4 had been subjected to considerable heat.

Charcoal and burned earth were comparatively rare in this house, from which we may infer that its destruction resulted not from fire, but from the more gradual process of decay. The fact that the material in the pits was apparently refuse and that only fragmentary material occurred on the floor suggests that the house was abandoned in a leisurely manner.

Pottery

Although artifacts of stone, shell and bone were rather rare in this house and more perishable objects were absent, fragmentary pottery was relatively abundant. It is represented in our collection by four restored vessels, 135 rim sherds, and 2397 body sherds. The typical pottery, as revealed by the larger fragments, consists of gravel tempered globular pots of medium size with constricted necks, simple, direct, moderately flaring rims, and fairly common handles. Decoration, when present, is extremely simple. While variation is not lacking, it is usually confined to qualities other than these.

A variety of tempering material was employed in the manufacture of this pottery, but most types occur rarely. Sand or gravel is an almost constant feature, but crushed rock, shell, and pottery sherds are sometimes found in conjunction with it. Ap-

proximately 96% of all sherds are tempered exclusively with stone, mainly gravel; in very slightly less than 4%, shell is found with gravel: pottery sherds are noted in less than a half dozen otherwise gravel-tempered fragments; and three sherds contain shell alone. Both the amount and coarseness of the tempering material varies widely. Discernible tempering material is occasionally almost absent, while on the other hand it sometimes comprises a large proportion of the paste; in general the gravel is moderately abundant. The range in size of the tempering fragments is very marked, varying from minute sand grains to pebbles as much as 7 mm. (9/32 inch) in diameter, which outcrop on both surfaces of the vessel. The extremes in size frequently appear in a single specimen. As a rule, however, the sand or gravel is of medium size. The paste is on the whole rather fine and compact, with a slight tendency toward a flaky structure, but, especially where coarse gravel is abundantly present, crumbly sherds are not lacking. The variation in hardness is limited; no specimens softer than 2 or harder than 3 were noted, and the large majority are very slightly softer than 3 (calcite).

A considerable lack of uniformity in the firing and probably in the clay used is indicated by the unusually great variation in color. The surfaces are various shades of gray or brown or occasionally bright brick-red, with a predominance of medium gray and gravish-brown colors. The paste between surfaces is brown. red, or light gray to black, and frequently two colors appear in the cross-section of a single sherd. Even in instances in which the paste is gray throughout, the effect of more intense heat outside the vessel is evident in a lighter color near the exterior surface. Where both gray and brown or red appear together the relative proportion of each varies widely. The surfaces, especially those of the vessel exteriors, have commonly been blackened by smoke, seemingly by use near fire for varying lengths of time. The interior surfaces of a number of specimens contain a heavy deposit of carbonized organic material, which is occasionally as much as 2 mm. (3/32 inch) in thickness.

The application of a cord-wrapped paddle to the exterior surface of vessels was a common technique, for slightly more than 50% of the sherds still bear the vestiges of cord impressions. A considerably larger proportion may originally have been so treated, for subsequent smoothing often nearly obliterated the evidence over large areas of the pot, and many of the sherds tabulated were very small. The manner of application is notably lacking in uniformity. The cord used ranged from very fine to very heavy, and it was lightly to deeply impressed. Occasionally the impressions are uniformly parallel and vertical, but



PLATE IX 1. Restored pot from House 1, Champe site; height, about 215 mm. (8½ inches); greatest diameter, 240 mm. (9½ inches).
2. Restored pot from House 1, Champe site; height 228 mm. (9 inches); greatest diameter, 244 mm. (95% inches).

more often no attempt has been made at uniformity and the impressions lie in all directions. Although in a few instances the surfaces appear not to have been touched subsequent to the application of the paddle, the major proportion have been smoothed to some extent, and usually this smoothing has been rather thorough. While an actual polish was never achieved, the surface in many cases is very well smoothed. The use of an instrument, in some cases, for the final manipulation before firing is indicated by the presence of striations on some of the more carelessly finished specimens. The vessel interiors, while sometimes finished with care, are frequently very rough, and the irregularities indicate that sometimes an implement was used and at other times the final shaping was done with the fingers alone. The nature of the interiors of the cruder pots strongly suggests that the ceramic forms here were molded rather than coiled. The presence of what appears to be a grayish brown slip was noted on a very limited number of sherds. This stratum exhibits a tendency to scale off, and where this has occurred the tempering material outcrops on the underlving surface.

With very rare exceptions the ceramic remains here represent globular pot-shaped containers, which seem invariably to possess rounded bottoms and indistinct shoulders. If the restored specimens are typical, the greatest diameter occurs rather high on the vessel and a rounded shoulder area rises to the constricted neck. The rim is usually moderately flaring, although there is a certain amount of variation in this respect, and while the range in height is from 7 to 40 mm. (9/32 to 1 19/32 inches), few specimens fall near the extremes and a large proportion do not differ greatly from the mean height of 18 mm. (23/32 inch). Of the 135 specimens, direct unmodified rims constitute approximately 93%, while collared rims are represented by about 3.5% and bowls occur with the same frequency. The rim profiles are identical to those from the Schrader site, which are illustrated in Figure 4. The modified rims from this house are from relatively small vessels and are characterized by unusually narrow collars. The bowls are straight-sided or have slightly contracting upper walls (Plate XI a, b); the one restorable specimen is of the latter type. bowl fragments are all grit-tempered and in some cases are cordpaddled; they differ from the other pottery in no respect other than form. One fragment in the collection probably represents a portion of the neck of a bottle-shaped vessel (Plate XI, c).

Loop handles, which appear to have been paired on the vessels, number twenty-two, while only two horizontal lugs occur. The loop handles, which vary from elliptical to strap-like in crosssection, are attached to the lip and to the body immediately below the neck. The lugs, one of which is vertically perforated, seem to have been attached to the rim immediately below the lip.

Decoration is a minor feature of the pottery under consider-With the exception of a very few sherds, it is confined entirely to the rim, and is present on only 24% of the specimens. Collared rims are undecorated except for a series of notches encircling the vessel on the lower margin of the collar, but this treatment is constant. Decoration on the direct, unmodified rims consists chiefly of a scalloping of the rim exterior immediately adjacent to the lip, an effect achieved usually by notching with the nail and sometimes shaping the resultant nodules between the fingers. While on the undecorated rims the lip is rounded or narrowed and rounded, it is frequently slightly thickened for the application of this type of decoration. Other techniques, appearing only rarely, consist of incised or impressed lines or punctations on the lip. A total of thirteen body sherds, belonging to a maximum of six vessels, bear incised designs (Plate XI, d, e). They are too fragmentary to reveal much information concerning the area of the pot decorated and the designs, but incised rectilinear designs, usually diagonal, are indicated. These sherds are invariably grit-tempered, are sometimes cord-marked, and appear to be atypical in no respect other than the decoration of the body. The depth and width of the incisions vary, but crudity of execution is a constant feature.

Pipes were represented by only two fragments, both of them composed of pottery clay and of the same curved tubular type. The more nearly complete specimen, which includes the bowl, contracts slightly and then flares slightly to the rounded lip (Plate XII, x). The exterior diameter at the orifice of the bowl is 23 mm. (29/32 inch), while the bowl interior is 15 mm. (19/32 inch) in diameter and 15 mm. (19/32 inch) deep. The other fragment, which is 22 mm. (7/8 inch) in diameter, includes none of the bowl, but is obviously part of a similar specimen. In both pipes the perforations, rectangular in the more nearly complete fragment and round in the other, lie very close to the inside curve of the stem.

Work in Stone

Chipped stone artifacts, with the exception of rather numerous rough flakes retouched on one or more edges, are rare in the collection from this house. The types are few, and each type is represented by very few examples.

The sole contribution to our knowledge of the missile weapons of the Champe site inhabitants consists of one unnotched triangular point 35 mm. (1 3/8 inches) long and 20 mm. (13/16 inch) across the straight base. While all the edges have been retouched,

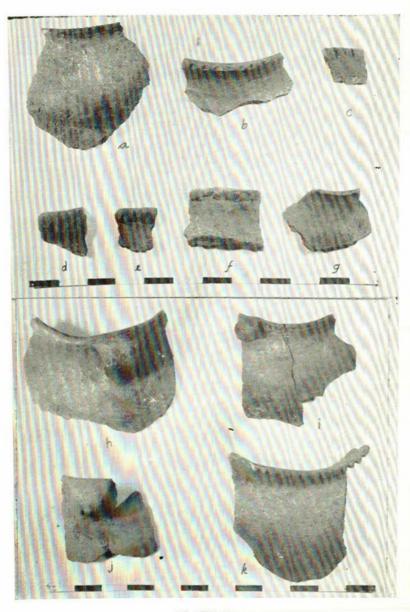


PLATE X
Rimsherds and handles from House 1, Champe site.

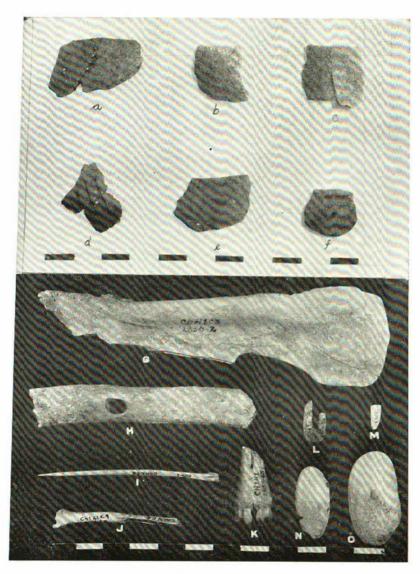


PLATE XI

Pottery, bone and shell artifacts from House 1, Champe site. a, b, bowl fragments; c, fragment of bottle; d, e, incised body sherds; f, perforated lug; g, bison scapula knife; h, shaft straightener; i, awl; j, k, cut bone; l, fishhook; m, cut shell fragment; n, shell pendant; o, shell scraper or spoon.

vestiges of the original flake surface remain on one face. The three end scrapers found are rather carelessly worked, except for the cutting edge. All are roughly triangular, with a keel formed by the removal of relatively large flakes; the two complete specimens are 40 mm. (19/16 inches) in length, and the broken one probably was similar in size. Two four-edged beveled knives are both roughly diamond-shaped. These also were shaped with a minimum of chipping, but the coarse chipping was well controlled to create a very satisfactory implement. They are both made from a brown flint, and both have been broken. Keeled side scrapers are represented by two specimens, both of which are fragmentary. In each instance the dorsal surface has been well shaped and all edges are retouched. Of the five leaf-shaped knives or scrapers, three are pointed at both ends and two have straight bases. They range in length from 66 mm. to 128 mm. (2 5/8 to 5 1/16 inches) and in width from 23 mm, to 36 mm, (29/32 to 1 7/16 inches). In every case all faces and edges have been worked. Only two other forms of chipped stone occur. A well-worked scraper in the form of an isosceles triangle with rounded corners has sides 40 and 32 mm. (19/16 and 1 1/4 inches) long, and a roughly lunate specimen (Plate XII, m) with dimensions of 52 mm, and 37 mm. (2 1/16 and 1 15/32 inches) has been worked on but one face and the edges; the other face consists of the original flake surface.

Objects of ground stone are equally limited in range of forms and numbers of specimens occurring. A single fragment belonged to a pecked celt which was oval in cross-section and was ground to a fairly high polish, particularly in the region of the bit. Dakota sandstone was commonly used for abrading purposes. While only three specimens possess grooves, twelve irregular fragments have surfaces worn flat, slightly concave or convex, probably as the result of use in burnishing or grinding. Of the grooved specimens only one still retains evidence of its use in smoothing arrow shafts; it possesses four much worn grooves. The two others, of the usual boat shape, have irregular grooves possibly formed by the sharpening of pointed objects, but are probably re-used shaft smoothers. A slab of fine-grained sandstone with three square sides has a shallow groove on one face and is slightly concave on the other (Plate XII, u); both features are obviously the results of abrading. Water-worn pebbles with battered ends suggestive of use as pecking stones are rather numerous, and three have been further modified to give them flattened and slightly pitted surfaces. Vestiges of powdered hematite remain in two of these shallow depressions. Several fragments of hematite were recovered which are grooved as though material had been removed for paint. and another piece with a worn surface appears to have been used

in smoothing, while the use of a thin, well-polished tablet with parallel sides and rounded ends is problematical (Plate XII, v).

Work in Bone

Extensive utilization of bone for implements is not indicated by the material recovered from this house, for very few artifacts of this material are included. That this scarcity is the result of disintegration is improbable in view of the similar lack of stone objects and the relatively sound condition of what bone was recovered. It is not justifiable, however, to assume on the basis of the excavation of a single house that the artifacts recovered represent an accurate list even of the imperishable materials employed, for any number of factors might explain their absence after the abandonment of the dwelling.

The single awl is made from a split metapodial bone, a portion of the proximal joint of which forms the butt. This implement, 170 mm. (6% inches) long, is square in crosssection but has a slender sharp point. A shaft straightener made from a bison rib has a single well-worn perforation with a diameter of 15 mm. (19/32 inch), and a long bone which includes the distal joint is broken at a similar per-No complete scapula hoes were encountered, but several fragments point to their use. A broken joint, although rather badly battered, appears to be beveled on the glenoid border, and four fragments which have most recently been used as scrapers or knives exhibit worn notches on the scapula margins. Both these features are characteristic of certain of the hoes found in this region, and it is probable that the last four fragments were parts of broken hoes sharpened and re-used for other purposes, for no other explanation is apparent for the presence of the notches. cleaver-shaped knife, made by cutting a scapula longitudinally between the processes, is sharpened on the end and one edge (Plate XI, g). A large shallow notch on the cutting edge was probably the result of breakage, but the edges of it have been re-sharpened. A somewhat similar specimen, but with a smooth and rounded rather than a sharpened edge, is indicated by a broken piece. Four small fragments of scapula whose original form cannot be determined, have polished edges and were presumably used as knives or scrapers. The one remaining recognizable artifact is a fish hook in the process of manufacture. Its intended final form is uncertain, but it is a nearly flat section of some large bone. purpose of two other worked bone objects is problematical. triangular section of a long bone has been cut but not polished on all edges, and is otherwise unmodified except that the cancellous bone has been largely removed. It is 41 mm. (1% inches) long and 13 mm. (1/2 inch) in greatest width. A fragment of scapular

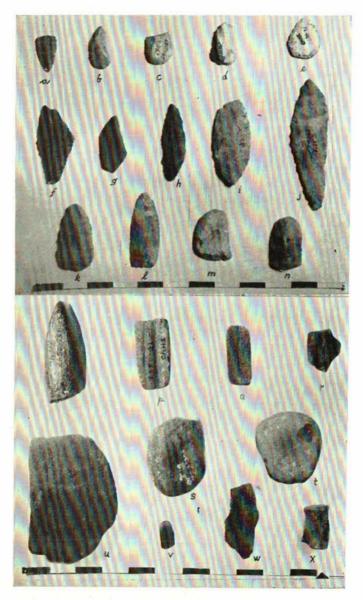


PLATE XII

Stone and pottery artifacts from House 1, Champe site. a-n, chipped flint artifacts; o, ground celt; p-r, u, Dakota sandstone abraders; s, t, hammerstones; v, hematite tablet; w, hematite fragment; x, pottery pipe.

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process, broken at one end, has been cut to give it straight sides and a straight end, and one face has been worked down so that but a small amount of cancellous bone remains. A few bone fragments evidently represent the raw material from which implements were made. These consist of the distal joints of metapodial bones exhibiting the marks made in cutting the bone both transversely and longitudinally, and a large bird bone with a section cut from it.

Work in Shell

River mussel shells occurred in large quantities on the floor of House 1 but in general they are unworked. Three specimens only show any evidence of man's activities other than the gathering and opening of them. These are a small broken piece which has been cut (Plate XI, m), a complete shell with a worn edge and a worn area near the hinge which propably served as a scraper, and a pendant. This latter specimen is a small bivalve shell with two perforations, 4 mm. (5/32 inch) and 5 mm. (3/16 inch) in diameter, bored near the hinge 20 mm. (13/16 inch) apart (Plate XI, n). Aside from some polishing on the exterior surface, it is otherwise unmodified. While the remainder of the shells were unworked, the fact that many of them were carefully piled together near the wall of the house suggests that they may have been intended as raw material for artifacts or were used unmodified as spoons or some similar implement.

SUMMARY AND CONCLUSIONS

Despite the relative paucity of certain phases of the artifact complex, the data recovered in the Champe site excavation present a fairly clear picture of the cultural relationships involved. The remains other than pottery are of little assistance in the classification of this manifestation, for they are equally characteristic of at least two of the major cultural divisions of the region. jects of stone and bone from Nebraska Culture and Upper Republican Culture sites are on the whole not radically different, and few such artifacts have diagnostic value. The situation here is even less satisfactory than usual in this respect, for, perhaps owing to the very small number of specimens, traits peculiar to either of these cultures are lacking. The ceramic complex, however, is rather well represented and its relationships seem clear. parently identical in all respects to that encountered at the Saunders site, as described by Strong,2 and corresponds to that of the more homogeneous of the sites which have been assigned to the Nebraska aspect. It is distinctly set apart from Upper Republican pottery by its almost complete lack of collared rims, smaller

^{21935,} pp. 170-173.

proportion of cord-paddling and more frequent subsequent smoothing, less frequent occurrence of lip decoration, presence of handles and lugs, and brown color. The pipes found constitute supporting evidence, for in components of the Nebraska aspect they are predominantly of pottery, while stone pipes are more common in Upper Republican sites. While the characteristics of the house determinable by excavations are equally typical of either aspect, the fact that exterior cache-pits were not observed may be significant, for these are present in Upper Republican villages.

It would seem to be premature, in view of the rather general descriptions of previously excavated Nebraska aspect sites thus far available, to attempt a closer correlation with specific components.³ It is certainly true that detailed trait-for-trait comparisons cannot be made at this time. Moreover, the determination of closer relationships will require a larger series of data from this site. At the present time it must suffice to point out the fact that this component conforms in all respects to the Nebraska aspect and to indicate that the apparently exotic elements found in certain other components are almost absent here.

Concerning the life of the people who left these traces of occupation little can be said further than that they obviously conformed to the general pattern of existence of the more or less sedentary groups of this marginal plains area. Although no vegetal remains had survived in this house, some sort of crops were certainly grown, and probably constituted an important element in the diet. presence of fish bones and numerous mussel shells is evidence that the streams were intensively exploited, and small mammals, both rodents and carnivores, were hunted for their flesh, but the bones of the black tailed deer are most abundant.4 Although the bones of bison are remarkably rare, it is difficult to believe that this abundant source of food was not utilized. This scarcity of bison remains is characteristic of most of the prehistoric villages thus far investigated, and it probably points, not to neglect of this resource, but to the practice of removing the edible portions of the kill for transportation to camp. Judging from the large number of houses widely scattered over the bluffs and the apparent lack of fortification, the occupation here was peaceful and probably of considerable duration.

The identity of the people who occupied this village and the time of their occupancy are problems whose solution is not yet possible. That at least the portion of the site excavated was aban-

³A paper by E. H. Bell describing several Nebraska Culture sites is soon to be published by the University of Nebraska.

⁴Identifications by T. M. Stout, Nebraska State Museum, University of Nebraska, Lincoln.

doned prior to contact with Europeans seems unquestionable, for articles of white manufacture are completely absent, but by how many years or centuries it antedated the historic period is a question the answer to which cannot be attempted on the basis of our present knowledge. It can only be suggested that there probably is no question of an extremely late prehistoric date. The site is presumably contemporaneous with other Nebraska Culture sites, for which there is in turn evidence of contemporaneity with Upper Republican manifestations,5 and no component of either of these aspects has yielded any evidence of contact with Europeans. Even less can be said concerning the authorship of this pattern. Strong has suggested the possibility that an earlier Siouan occupation may have been responsible for it, and pointed out the necessity of delineating the culture traits of the protohistoric and historic Siouan tribes as an aid in clarifying the problem.6 Up to the present time, however, this problem has been neglected. The possibility that this knowledge might illuminate many puzzling questions concerning the prehistory of the region makes it important that documented Siouan sites be located and excavated before the evidence is entirely destroyed.

LIST OF TRAITS

Pottery

- 1. Grit or gravel tempering alone—96.1%. Gravel tempering predominates.
- 2. Wide variation in size of tempering, but in general it is medium.
- 3. Tempering material usually fairly abundant.
- 4. Shell occurs in 3.9%, usually with gravel also present.
- 5. Potsherd fragments occur very rarely.
- Hardness between 2 and 3. A large proportion falls at or near 3. No difference correlated with tempering material.
- 7. Paste usually rather fine and compact with a tendency to flakiness; a small proportion with coarse abundant temper tend toward a crumbly structure.
- 8. Exterior surface color gray, buff, or orange-red, but gray and brownish-buff most common.
- 9. Interior surface usually gray.
- 10. Color of material between surfaces varies widely.
- Surface of 50% of sherds roughened with cord-wrapped paddle, remainder smooth.
- Paddle marks usually more or less obliterated by subsequent smoothing.

⁵Cf. Wedel, 1935, p. 207.

⁶Strong, 1935, pp. 274-275.

- Both interior and exterior surfaces commonly roughly finished, either with tool or hand.
- 14. Mouth and horizontal section of body invariably round.
- 15. Constricted neck.
- 16. Shoulder rounded.
- 17. Base rounded.
- 18. Simple straight or flaring rim (Form A)-92.5+%.
- Form A: Rims usually curving, and of variable height; very high rims lacking.
- Form A: Lip usually rounded and often narrowed, with some thickening frequent when decoration is present.
- 21. Form A: Decoration on this type of rim-24.2%.
- Form A: Scalloping of the juncture of lip and rim exterior, usually with fingers and nail, most common.
- Form A: Notched lip, diagonally or transversely incised lip, and punctations or parallel diagonal incisions on rim exterior adjacent to lip, rare.
- 24. Modified collared type of rim (Form B)-3.7+%
- Form B: Rims undecorated except for scalloping at lower margin of collar, which is always present.
- 26. Bowls with straight or slightly contracting rims-3.7+%.
- Loop handles fairly numerous, probably 2 on a vessel. On Form A rims only.
- Handles most commonly strap-like and attached to lip and shoulder area below the neck.
- 29. Lugs, perforated or unperforated, rare. On Form A rims only.
- 30. Incised body decoration extremely rare.
- 31. Slip (?) rare.
- Thickness of walls varies from very thin to very thick, but 4-8 mm, most common.
- 33. Curved tubular pipes.
- Pot exterior frequently smoke-blackened, and interiors covered with carbonized material.

Work in Stone

- 1. Triangular unnotched arrowpoint-NBa.
- 2. Diamond-shaped beveled knives.
- 3. Leaf-shaped knives, pointed at both ends.
- 4. Leaf-shaped knives, pointed at one end, straight base.
- 5. End scrapers, keeled, roughly triangular, medium size.
- 6. Side scrapers of keeled type.
- 7. Triangular scraper with rounded corners.
- 8. Roughly lunate scraper.
- Knives and scrapers of irregular flakes, retouched on one or more edges.
- 10. Ground celt, oval cross-section.

- Grooved sandstone abraders, some probably originally arrowshaft smoothers.
- Ungrooved sandstone abraders with plane or slightly concave or convex surfaces, irregular shapes.
- 13. Pitted hammerstones.
- 14. Pebble hammerstones.
- 15. Hematite used for paint.

Work in Bone

- 1. Awl of split metapodial.
- 2. Shaft straighteners of long bone and rib.
- 3. Scapula hoes.
- Scapula hoes—inferior articulation present, and glenoid border beveled.
- 5. Scapula hoes-notched edges.
- 6. Scapula hoes-spines removed.
- 7. Scapula knives and scrapers abundant.
- 8. Scapula knife of cleaver shape.
- 9. Knives and scrapers made from broken hoes.
- 10. Fish hook blank, flat in cross-section.
- 11. Cut sections of bone, use unknown.

Work in Shell

- 1. Worked shell rare.
- 2. Double-perforated pendant.
- 3. Cut section.
- 4. Shell scraper (?).

House

- 1. Semi-subterranean.
- 2. Square with rounded corners.
- 3. Outer posts placed just within vertical walls of pit.
- 4. Four pairs of central roof supports.
- 5. Central fireplace.
- 6. Cylindrical cache-pits, situated near walls.
- 7. Entrance passage.

LITERATURE CITED

Meyers, A. H., Smies, E. H., Bushnell, T. M., Spafford, R. R., Burns, R. R., and Smith, C. W. 1916. "Soil Survey of Douglas County, Nebraska." Field

1916. "Soil Survey of Douglas County, Nebraska." Field Operations of the Bureau of Soils, 1913. U. S. Dept. of Agriculture.

Strong, W. D.

 An Introduction to Nebraska Archeology. Smithsonian Miscellaneous Collections, v. 93, no. 10.

Wedel, W. R.

1935. "Contributions to the Archeology of the Upper Republican Valley, Nebraska." Nebraska History Magazine, v. XV, no. 3.