

# Proceedings of the Iowa Academy of Science

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Volume 52 | Annual Issue

Article 27

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1945

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### Recommended Citation

Sanders, W. E. (1945) "Outline of Culture of Prehistoric Indians of Iowa," *Proceedings of the Iowa Academy of Science*, 52(1), 219-234.

Available at: <https://scholarworks.uni.edu/pias/vol52/iss1/27>

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## OUTLINE OF CULTURE OF PREHISTORIC INDIANS OF IOWA

W. E. SANDERS

When groups of people live in considerable isolation, they tend to become physically homogeneous and adopt common ways of life. Their folkways extend into the details of their social customs and into the modes and styles of their material creations as well. Out of these customs and practices develop those institutions which have received the sanction of the group. The mores, customs, and institutions of a society are the particular topics of study of the sociologist. But the material devices of a social organization are equally important criteria of its culture and are, indeed, the only evidence that remains of a civilization after its promoters have passed away.

The student of ancient man frequently calls to his aid the physiographer, the petrographer, the geologist, and the paleontologist to help him unwind the tenuous thread of past civilizations and to find the clue as to when they prevailed. None of these can afford him much assistance in the study of the prehistory of Iowa for the reason that the Indians seem to have reached this area only a thousand or so years ago. (Setzler 1940).

It is the business of the archaeologist to discover, excavate, study and classify all the material elements, left behind by the extinct group and to fit them into a comprehensive scheme of relationships, constituting the culture manifestations of the site. By a comparison of corresponding manifestations, collected from different locations, the latter are grouped together as foci of the culture concerned, regardless of how far they may be separated from each other in time and space. From an integration of the foci into larger units, the inference is justified that the creators of the culture complex were tribally related or had at least experienced previously intimate social relationships. Where the culture implements reveal purposeful designs, their relations to the economic and social welfare of the group may be deduced and something of the daily life and the spiritual yearnings of the people inferred.

Culture objects, although sometimes picked up from the surface of the soil, are usually recovered by the excavation of house plots, camp sites, cemeteries, rubbish heaps, mounds, or earthworks. Occasionally the profile of a culture site reveals various horizons, indicating generally successive human occupancies. Not infrequently they are left by different culture people.

### ARCHAEOLOGICAL CLASSIFICATION OR TAXONOMY

At the risk of seeming somewhat pedantic, one may be justified in defining some of the archaeological terms commonly used.

*Cultural traits* are the primary and distinctive features of cultural objects or implements and when taken collectively constitute their

*complex*. For example all the associated distinctions employed in the disposition of the dead, such as the position of the body, or its cremation, or the ossuaries in which the ashes are finally deposited, burial garments, ceremonies, mourning features, etc., combined, make up the *burial complex*.

The ultimate source place where the culture objects are recovered is known as the *culture site*.

Several source sites, yielding closely related or identical material, are distinguished as *culture foci*.

Where many foci yield implements or evidences, possessing dominant common traits, they are included in the more comprehensive term, *aspects of culture*.

Several aspects, possessing a significant number of common features, constitute a *phase of culture*.

Different phases unite to form *culture patterns or manifestation*, each being differentiated from every other by fundamental unlike-nesses.

Any object or fragment of such, evidencing human workmanship, is spoken of as a *culture implement or artifact*.

All of these terms are used, irrespective of any geographical or chronological significance.

#### CULTURE PATTERNS OF THE UPPER MISSISSIPPI AREA

All of the culture features of the people who have occupied the area of the Upper Mississippi, focusing in Iowa, may be classified under the following six heads:

1. The Folsom
2. The Agriculture-Pottery
3. The Hopewell
4. The Woodland
5. The Mississippi
6. The Plains

None of these is limited to Iowa alone and none is autochthonous here. Each seems to have reached this area, already in full bloom, and there is not much evidence that any one has evolved into another. (Cole and Deuel, 1937).

#### THE FOLSOM COMPLEX

Several years ago there was discovered in an old alluvial stratum of a canyon wall near Folsom, New Mexico, a stone spear point of unique workmanship. It was associated with a few fossils of a prehistoric buffalo, on which evidence its great antiquity was inferred. The possibility that at last glacial man was about to be discovered in America gave to this implement an intriguing chronological interest. Within a short time similar and related points were discovered, rather widely scattered about the foothills and the high plains east of the Rockies.

The whole geological and paleontological evidences, associated with these sites, immediately became of great interest. The most important focus of this culture was found on the Lindermier ranch in the eastern foothills of northern Colorado. It was excavated by The Smithsonian Institution and The Colorado Museum of Natural History from 1934 to 1938. (Roberts, 1935 and 1938) (Coffin 1937). Besides the Folsom points this site yielded a few artifacts of stone and bone and many fossilized bones of mammals. Some of these were probably prehistoric. Among the latter are the bones of presumably prehistoric buffalo and a single bone, said to be from the foot of an ancient camel.

Scattered examples of these stone points have been found from the Atlantic seaboard to Lake county, California. They have usually been surface finds, almost a dozen of which have been picked up in Iowa. (Toulouse, 1938).

Voluminous literature has developed concerning this hypothetical Folsom man and his culture complex. (Frank H. H. Roberts, jr., 1935-1937, 1940; Barbour and Schultz, 1936; H. M. Worthington, 1939; R. G. Coffin, 1937; W. E. Sanders, 1938; Joe H. Toulouse, jr., 1938).

From all the evidence available it seems most probable that these points were the special implements of some skillful Indian craftsmen which were traded widely over the United States. Apparently they were frequently lost upon the surface of the soil, from which the first discovered examples were swept down with ancient mammalian fossils from the highlands and deposited in the erosive strata of alluvial fans about the mouths of streams and canyons leading out of the foothills. It would seem that they are not sufficiently important here to be classed as a phase of Iowa culture.

#### AGRICULTURE-POTTERY CULTURE (?)

Except for the few points mentioned in the discussion of the Folsom complex, there is no evidence yet available, that any culture people lived in Iowa before the promoters of the Hopewellian civilization arrived. In the neighboring state of Illinois at least three different manifestations, revealing increasing complexity leading up to the Hopewell, have been recorded. The earliest of these is the Black Sand which shows a few simple stone implements with evidences of fire and a few bits of pottery and several skeletons possessing long and narrow skulls, quite different from later Indians.

In horizons a little later the culture of the Red Ochre people appears. Their beautiful stone work and use of copper suggest a considerable advance over the Black Sand people. Their pottery was crude but its presence suggests a settled population, probably of agricultural pursuits. Long stone lances indicate that the hunting was done with spears and that the bow and arrow had not yet appeared.

A Central Basin culture is much more advanced and indicates a more settled population. Their pottery and projectile points are more abundant and varied. They constructed semi-subterranean

lodges and placed grave offering for their dead. They seemed to have domesticated the dog and of course possessed the bow and arrow complex. The refinement and variation of their implements showed advancement over their predecessors, but they had not reached the full-bloom stage of the Hopewellian. (Cole and Deuel, 1937).

In eastern Nebraska an ancient culture along Stearns Creek, and elsewhere suggestive of an agricultural people, (Bell 1936) has long been known. (Strong, 1935). Below Omaha and farther to the south near Kansas City Hopewellian culture sites occur. As yet no pre-Hopewellian culture has been found in Iowa.

#### HOPEWELL MANIFESTATIONS

This culture in Iowa is confined to the Mississippi valley near Davenport with a minor focus in Alamakee county in the northeast corner of the state. Its promoters probably reached Iowa five or six hundred A. D.

They possessed a civilization more advanced than any other prehistoric people who may ever have occupied the state. They probably came from the South, for closely related culture has been found in Louisiana. (Setzler, 1940). The fact that they did not leave evidences of house and village sites suggests that they probably lived in temporary surface structures as did the historic Algonquian. They apparently did not build earth covered lodges and dugouts as did the prehistoric Sioux and Pawnee. The Hopewellian culture material shows many traits of the Woodland pattern and may be its earlier phase (Lilly, 1937).

The Davenport Museum has the best collection of this material in Iowa from which the photographs in Figures 1 and 2 were secured through the courtesy of the museum director there. The general traits of this culture appear in *Outline A*.

#### WOODLAND PATTERN

Perhaps nine-tenths of the prehistoric culture material in Iowa belongs to this group. If we adhere to its generally accepted manifestations, it probably appeared about twelve hundred, A. D., before the Hopewellian disappeared. It survived for about four or five hundred years. The last two hundred years of this period it was probably contemporaneous in Iowa with the Upper Mississippi Pattern.

It is the predominant pattern of the eastern half of the United States, extending from considerably north of the Great Lakes to the Gulf of Mexico and as far west as the Missouri river. Evidence of this culture has been found in the northwest corner of Nebraska. A single sherd, possibly belonging to the Woodland, was discovered a few years ago north of Great Salt Lake. Pottery with somewhat similar surface traits has been found in European Russia.

The Glenwood Aspect of this western Woodland extends along the

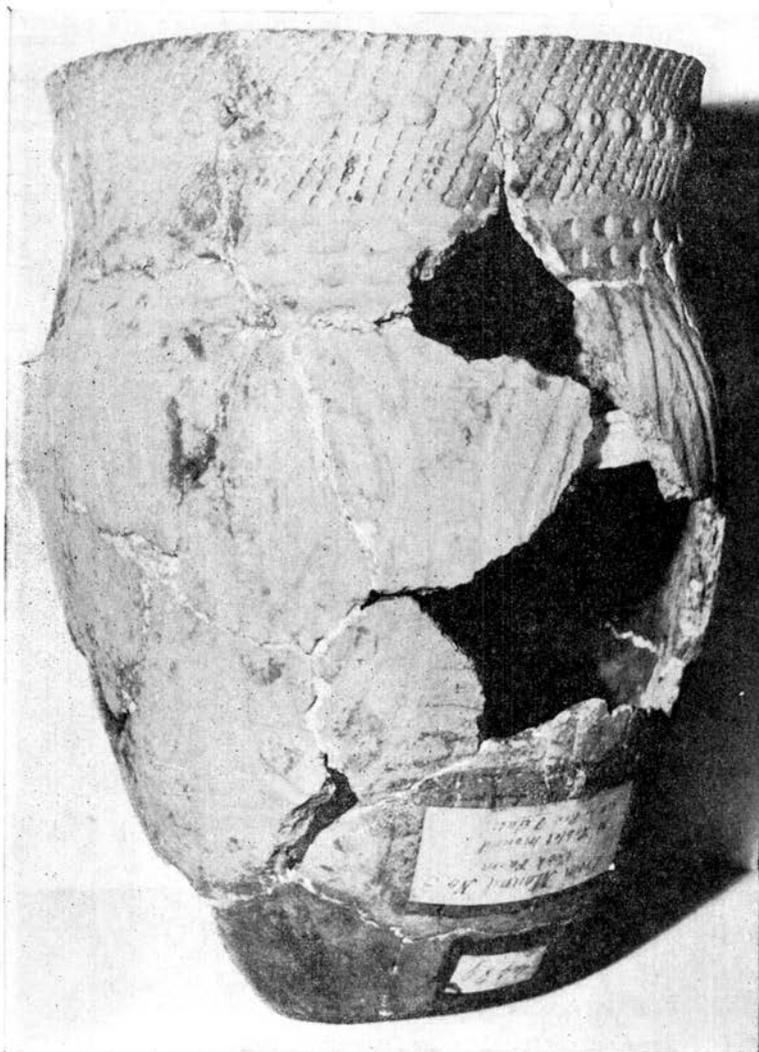


Fig. 1. Hopewell Material in the Davenport Public Museum

Restored ceremonial pot, Cook farm, just west of Davenport. Height 11", Diameter of mouth 6".

eastern bank of the Missouri river in Iowa. It is identical with that found in a few sites in eastern Nebraska. (Setzler, 1940). The features of the Woodland Pattern appear in *Outline B*.

A focus of the Glenwood was excavated by Ellison Orr and the University of Nebraska. Its artifacts are identical with the upper

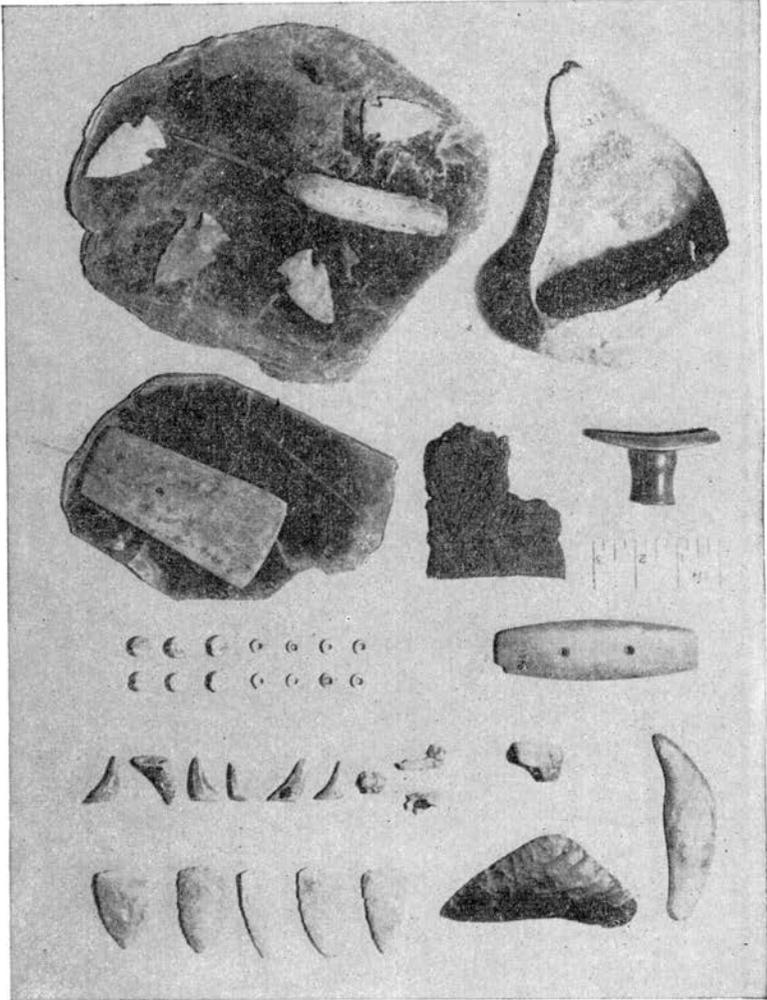


Fig. 2. Hopewell material in the Davenport Public Museum: (1) Piece of bone cut and drilled; (2) Triangular knife blade; (3) Worked lump of galena; (4) Five blades from a cache; (5) Cut and ground bear teeth; (6) Two holed gorget; (7) Shell beads; (8) Pipe of gray pipestone; (9) Rimsherd of pottery; (10) Piece of cut mica with copper awl and one-holed pendant; (11) Ocean shell cup; (12) Piece of mica with four arrowpoints, copper awl in antler handle and meteoric iron fragment.

level of the Walter Gilmore site across the river in Nebraska. The Glenwood material appears in *Outline C*.

#### THE UPPER MISSISSIPPI PHASE

The Upper Mississippi Phase of the great Mississippi Pattern probably reached the Iowa area about sixteen hundred. It developed out of the Middle Mississippi Phase which began about the time of the discovery of the continent.

A striking feature of the general Mississippi is its small and large mounds; a few of the latter are of colossal dimensions. Some of these are the greatest earthworks produced by prehistoric man. Some students surmise that these are variants of the ancient mound structures of Mexico. If an axis of this culture, based upon a complex of these larger mound traits, be extended northward from the lower Mississippi, it may be traced up the Ohio, the Missouri, and the Illinois rivers.

The most northerly focus of the Middle Mississippi is the Azetlan mound in Wisconsin. It is closely related to the Cahokin mound opposite St. Louis and the great Ewatan mound in Georgia. The latter is the eastern terminus of a secondary axis extending eastward from Louisiana and paralleling the gulf coast. The mounds on this line were the first encountered by DeSoto as he trekked northward from

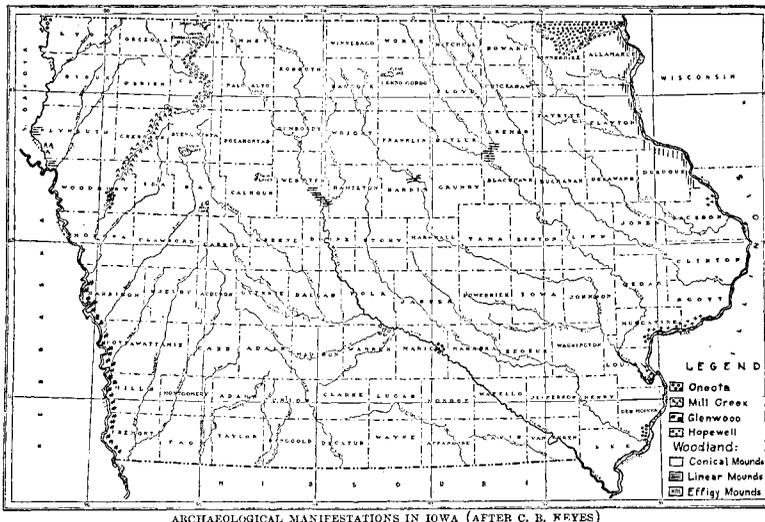


Fig. 3

Florida. He followed a chain of similar mounds along the west bank of the Mississippi above the mouth of the Arkansas river.

An outline of the important features of the Upper Mississippi phase, which includes Iowa, is shown in *Pattern D*.

Other manifestations of the Upper Mississippi in Iowa include the Mill Creek and the Oneota. The Mill Creek outline is based mainly upon recent excavations of foci in the northern part of Buena Vista county made by the Rev. Frank Van Vouris of Alta, Iowa. A detailed report of his findings is soon to be made for The Iowa Historical Society. The material of Mill Creek appears in *Outline E*.

The Oneota aspect is the latest prehistoric culture to appear in Iowa. It was active during the early historic period and some of its foci contain European goods. It has been well studied by Ellison Orr. (Orr 1913, 1917). In one focus he found it overlying a more ancient culture horizon. Mildred Mott has attempted to identify this culture with the Ioway tribe of the Chiwere branch of the Sioux. In her study she includes a map of the different cultures of Iowa. (Keyes, 1934). It appears in *Figure 3*. The Oneota aspect appears under *Outline F*.

#### THE PLAINS PATTERN

The most striking features of the cultural material found in museum collections from the plains are the stone mauls and heavy bows and arrows used in war and the chase and the colorful feather, bead, bone, and leather work which contributes so much to the artistic materials of the buffalo hunter's culture.

After the Plains Indian acquired the horse about the close of the seventeenth century, and the Chippewa had driven the Dakota westward at the close of the French period, Indian life on the plains assumed a Dionysian fierceness, scarcely equalled by any other historic people. The pell mell stampede of frightened animals, pursued by hundreds of yelling mounted savages, the blood curdling guttural cries of the war song, with their accompanying rattles and tom toms, the terrifying war whoops, and the weird wailings for the dead give us a picture of social savagery which probably did not exist until long after the cultural manifestations, grouped under *Outline G* were fully developed.

The people who perfected this pattern were not the horse-buffalo hunters of historic times but were probably more settled agricultural groups who lived along the waterways or in the eastern margin of the arid plains. They were probably tribes of the Caddoan stock such as the historic Wichita, Arikara, or Pawnee and the Chiwera and Dhegiha groups of the Sioux, later recognized as the Ioway, Oto, Missouri; and the Ponca and Omaha.

The Dakota-Assinoboin Sioux were probably in the deep woods of the upper Mississippi and Lake Winnepeg region, devoted to a woodland rather than to a plain way of life, until after the middle of the eighteenth century. It seems doubtful if they participated in the development of the cultural practices of the plains. (Wedel, 1940).

This culture seems to have spread westward along the tributaries of the Missouri, and its manifestations in northwestern Iowa were probably carried in by migratory bands of the Dakotas who season-

ally hunted over this area in early historic times. The Plains culture material is shown in *Outline G*.

#### SUMMARY AND COMMENTS

The author lays no claim to any original contribution to the subject here discussed.

He has endeavored to set forth in outline form the generally accepted groupings of the archaeological material of the upper Mississippi region in their bearings on the Iowa area.

It is believed that important connecting links between the manifestations east and west of the two great rivers that border our state remain to be discovered in Iowa.

It is hoped that when the urgent problems of the present period of strife is over our educational institutions will establish courses and stimulate and sponsor research in this interesting field.

#### LONG BEACH, CALIFORNIA

##### A. GENERAL HOPEWELLIAN CULTURE, TRAITS AND COMPLEXES

- I. Houses (?) Habitation sites (?).
- II. Burial customs and ornaments.
  1. Burials usually in mounds.
  2. Usually extended, sometimes flexed.
  3. Bundle burials.
  4. Sometimes cremated.
  5. Stone and log tombs with stone floor or burned clay areas or on elevated platforms or sub-floor tombs and graves; use of mattings common.
  6. Grave goods abundant in mounds in some areas.
- III. Industry and art forms.
  1. Stone work of chipped workmanship, highly elaborated.
  2. Stone projectile points and blades, stemmed and notched type; flint flat knives; obsidian blades, cores, chips and points, large polished stone celts, and other polished stones of ceremonial or of unknown use; rock crystal objects.
  3. Copper objects, ear spoons, beads, bracelets, celts, and breast plates.
  4. Wood objects, some overlaid with copper.
  5. Conk shell containers, most usually carved; pearl beads plentiful.
  6. Bone gorgets, amulets, and spatulas of split deer bone, cut human and animal jaws and perforated bears teeth.
  7. Mica sheets of effigy and geometric forms.
  8. Textiles indicated by impressions left in copper implements.
  9. Pipes predominately stone; plain tubular, and platform types; in Iowa curved base monitor pipes common; some with carved effigies.
  10. Pottery, heavy, grit or sometimes hole tempered, conoidal or flatbased ampheras incised cord, stamp or punch mark-

ings; some forms with bosses with feet on the base and incised or geometric or conventionalized markings over the outer surfaces.

B. WOODLAND PATTERN

Traits and Complexes

I. Houses.

1. Round, temporary; rectangular may occur.
2. Mounds not used as substructures.

II. Burial customs and ceremonials.

1. Burials predominantly in flexed position.
2. Burials often in or under mounds constructed in the course of prolonged and successive burials, or solely for burial purpose.
3. Grave goods usually lacking or few in number.
4. Grave goods chiefly of stone, when present; pottery very rarely.

III. Industries and art forms.

1. Stonework most highly elaborated.
2. Stone.
  - (a) Notched projectile points, and stemmed types, medium to large in size from core or thick course flake.
  - (b) Discoidals seldom or rarely found.
  - (c) Grooved axes.
  - (d) Whetstones and ? or grooved abrading stones generally lacking or very rare.
  - (e) Problematical stone objects more common than in Mississippi basic culture.
3. Articles of bone.
  - (a) Fishhooks generally lacking.
  - (b) Splint-bone awls, most common form, frequently from metapodial of deer and wapiti.
4. Textiles—evidence of cord common of other fabrics generally scarce.
5. Pipes—vary according to phases but are generally unlike Mississippi forms.
6. Pottery traits.

GENERALIZED WOODLAND POTTERY TRAITS

Tempering—Grit—i.e., crushed stone, or sand.

Shapes—The body is elongated globular; the shoulder is poorly defined; there may be a slight constriction, or none, above shoulder; the neck is straight (vertical slightly flaring or slightly contracting; the basal portion is conoidal or truncated conoidal.

Paste—Color—uneven coloration probably due to poorly controlled firing. Texture—Generally coarse granular, with a tendency to crumble when wet.

Surface—Color—Same as noted above of paste. Finish: Carelessly smoothed, tempering material usually projects through outer surface. Absence of slip and paint.

Wall thickness—Medium to thick.

Area of decoration—Ornamentation when present; generally occurs

or neck in lines or bands near and paralleling lip. Body decoration, when present, is usually separated from that on neck and is in a different style or arrangement or elements. Effigy pottery vessels were not used.

Secondary features—Handles, flanges, etc., are generally lacking.

C. GLENWOOD FOCUS OF WESTERN WOODLAND

Traits and Complexes

I. Houses.

1. Semisubterranean, rectangular with covered entrance-way, about 3 feet, 6 inches deep. Posts 18 to 30 inches from center to center, close together.

II. Burial Customs and Ceremonials.

1. No burials found. (One skeleton found on floor—possibly trapped in burning building).

III. Industries and Art Forms.

1. Chipped Stone.
  - (a) Arrowheads predominantly of Nebraska flint.
  - (b) Triangular, unnotched except very rarely. The latter always with one and rarely two notches on each side.
2. Ground and Polished Stone work.
  - (a) Celts, ungrooved. Generally polished. A few chipped or pecked ones occur but both types polished.
  - (b) Sandstone; smooth, concave-surfaced blocks. None Found in houses. Quartzite models found in a deep canyon-like ditch. Three others, one of granite, found in similar ditches, are probably Woodland. These ditches are tributaries of the Missouri.
3. Bone and Antler Articles.
  - (a) Scapula hoes unmodified except sharpening.
4. Hammer stones of irregular shape.
5. Pipes: clay elbow type—tubular, elbow, trumpet (horn)-shaped; and effigy.

GENERALIZED POTTERY TRAITS

Abundant Pottery: 7246 sherds—of which 6000 were of the body—Tempering grit predominating; shell or cell infrequently. Fewer than two dozen were shell tempered.

Shapes: Body generally squat and globular. Maximum diameter greater than height for the Nebraska types but other forms were present.

Bottom subrounding; Rims when restored are vertical, or shouldered. Sometimes recurved or flaring.

Secondary Features: Handles plentiful, paired and never more than two.

Surface: Outer surface finish predominantly smoothed or imperfectly polished. Cord marking occurs infrequently; usually mostly obliterated by subsequent smoothing. Inner surface finish usually smoothed like exterior; probably with rubbing stone or buckskin.

D. UPPER MISSISSIPPI PHASE

Traits and Complexes

I. Houses.

1. Square or rectangular, for Middle and Lower Mississippi; usually round for Upper Mississippi, semipermanent.
2. Mounds primarily substructures, pyramidal (truncated).

II. Burial customs and ceremonials.

1. Burials predominantly in the extended position.
2. Simple interment or inhumation in cemeteries.
3. Grave goods abundant.
4. Grave goods, usually pottery, bone, shell and copper.

III. Industries and art forms.

1. Pottery, bone, shell and/or copper work most highly developed.
2. Stone.
  - (a) Projectile points—usually small, simple isosceles triangles from thin, flat flakes.
  - (b) Discoidals common.
  - (c) Grooved axes seldom if ever occur.
  - (d) Whetstones and grooved abrading stones common.
  - (e) Problematical forms in polished stone rare.
3. Articles of bone most commonly occurring.
  - (a) Fishhooks.
  - (b) Awls from ulnae of deer, wapite, and other animals, and from the tarsal bones of turkey.
4. Textiles—evidence of woven materials frequently found.
5. Equal-armed pipes, general—i.e. stem short and approximately the length of bowl.
6. Pottery traits.

GENERALIZED UPPER MISSISSIPPI POTTERY TRAITS

Tempering—Generally crushed shell, or without tempering. Apparently bone is sometimes used in the Lower Mississippi.

Shapes—The body is the flattened globular shape, generally. Besides the widemouthed olla type, bowls, plates, water bottles, beakers, and other specialized forms are often present. The basal portions are usually rounded, flattened, flat, concave, or may have modified basal rests, such as tripods, ring bases, etc.

Paste—Color varies according to wares, and method of surface finish, but is generally more even than Woodland, probably indicating a better controlled firing method and more careful preparation of clay.

Texture—Generally finely textured; may have a soft greasy "feel"; tendency to flake rather than crumble. Tougher and more elastic than Woodland ware.

Surface—Surface is usually carefully smoothed, polished, slipped and polished, or painted.

Wall thickness—Very thin to medium in general.

Area of decoration—Chiefly on the body, anywhere from base of neck to shoulder and below. Necks very rarely decorated.

Secondary features—Handles are present in practically all phases

and aspects. Flanges, lugs, and feet occur more or less commonly in all phases.

Effigy vessels—Effigy pottery vessels of common occurrence in some phases.

#### E. MILL CREEK ASPECT

Traits and Complexes (including those of the Chenya-ta focus of Buena Vista County).

##### I. Houses and Mounds.

1. A few local elevations, likely representing collapsed dirt covered huts.
2. Two large house plots of rectangular form about 40 by 50 feet by 3 in dimensions; roofs were post supported; many cyst pits in the floors; entered by a ramp; size and structure suggest ceremonial chambers rather than dwelling.

##### II. Burials.

Few fragments of skeletons in floor pits; two pieces of jaw bone, considered as ceremonial objects; bodies probably first cremated.

##### III. Industries.

1. Stone work flaked and polished.
2. Implements—flaked stone knives and saws of varying length.
3. Stone points generally notched; sometimes corner tanged; dimensions one by two to six inches.
4. Grooved mauls and axes; rather rare; celts frequent, varying from two to six by one to three inches; blades generally thin.
5. Questionable stone implements; some plummet shaped.
6. Bone, horn and antler implements; diggers, flakers, and scapular hoes; not found in Chen-ya-ta focus.
7. Textiles, none.
8. Milling stones, heavy and shallow metates; one small black argillite found in Chan-ya-ta.
9. Ceremonial pipes of clay.

#### POTTERY TRAITS

Shapes, large and small ollas from ounces to gallons capacity, deep dishes and low bowls with flaring or vertical lips; sometimes punctuated; walls thick to medium; surface finish sometimes glazed; sand or granite tempered.

Decorations, ears, notches, or holes on the rim; body and neck marked by parallel horizontal lines; sometimes crosshatched; some show cord markings; pot sherds and bone fragments found in refuse heaps near house sites.

#### F. ONEOTA ASPECT

Traits and Complexes

##### I. Mounds and Houses.

1. *Mounds*: Small, round, medium-sized, often arranged in

linear form, along river terraces.

2. *Houses*: No evidence of house structures found.

II. Burial Customs. Extended burials in cemeteries and secondarily inhumed in older mounds. Mortuary offerings common and diversified, consisting of points, knives, awls and pipes; the latter invariably of the stone type, not clay.

II. Industrial Arts.

1. (a) Stone: points usually well chipped, thin and sharp, and of the triangular form.
- (b) Knives: some long, others elliptoid, generally flat with well chipped points.
- (c) Awls and Scrapers: The former of pointed stone used as drills or awls; the scrapers of the stub-nosed or irregular shape.
- (d) Whetstones and Arrow Shaft Smoothers are common.
- (e) Axes and Celts are absent but well ground clubbed and grooved stone mauls are found.
- (f) Milling stones are variable forms and well ground or smooth.
2. Bone, Awls and Scapular hoes are common.
3. Decorations, tubular bone and rolled copper heads. Shell spoons occasionally are found.
4. Manufactured Glass, copper and iron objects (historic).
5. Pottery Traits.

IV. GENERALIZED ONEOTA POTTERY

Tempering is with pulverized shell commonly or sometimes hole tempering.

Shapes. Flaring rim, medium mouth, elliptical base, medium-sized ollas. Neck and body angle obtuse, generally with two handles extending from the outer lip or rim to the shoulder of the body. Walls. Thin and buff-colored, bases often blackened by use. Fractured surface showed shell tempering.

Surface Featuring:

Lip: pinched or notched, necks often show puncture and decorated with insized, parallel, trailing lines on the outside of the neck and body shoulder. There is no glaze or slip.

V. Pipes.

Always of stone, sometimes catlanite. They are discoid in form, simple or equal-armed stem, also prevail. The Oneota material has been chiefly secured from graves.

G. PLAINS PATTERN

Traits and Complexes

1. Houses or Lodges.
  1. Winter or sedentary—some with pit depression; some at ground level, or slightly elevated. Often only occupied during winter and the summer agricultural periods. Center floor fire pit and summit smoke hole.
  2. Open canopied seasonal shelters.
  3. Summer or migratory—tepee, with tripod or quadripod

support made of skins, flap door opening, center fire pit and summit smoke hole. Dog or horse travois transportation when on the seasonal hunt. Tepee and lodge owned by female spouse.

## II. Burials.

1. Primary—elevated bundle exposure.
2. Secondary burial of bones common especially on elevations or older mounds. Mortuary offerings and ceremonial decorations common.
3. Cave burials of important personages common.
4. Personal belongings interred and also grave offerings of favorite horse. Mutilations or neglect of mourners common.

## III. Industries.

1. Bow and arrow—forms variable, usual Siouan arrow release.
2. Stone.
  - (a) Grooved ground axes and mauls. Gigantic ceremonial axes.
  - (b) Projectile points generally small, flaked or chipped—not stemmed.
  - (c) Knives often hafted on side but commonly on end. Large and small leaf shaped lance points, scrapers, drills common, also as garden tools. Stone catlinite pipes universal.
  - (d) Milling stones rather common.
  - (e) Occasional ceremonial stone disks.
3. Bone antler and horn implements common as tools, hafters, scrapers, and especially scapular hoes.

## IV. Textiles.

1. Rather rare.
2. Fiber or reed mats, baskets, or bags common.
3. Some buffalo hair fabrics.

## V. Clothing.

1. Predominantly skins, furs, and feathers.
2. Moccasin universal.
3. Much design and color decorations.
  - (a) Teeth, bone, claw, quill decorations.
  - (b) Rather heavy bone breast plate, necklace ware, and bracelets.
  - (c) Thong or sinew sewing very good.
4. Feather headdress—animal masks and ceremonials common.

## VI. War Dance.

1. Tomtom, buffalo skin rattle.
2. War song harsh, shrill, and terrifying.

## VII. Pottery.

1. Meager, utilitarian.
2. Produced locally, grit tempered, usually not decorated.

## VIII. Pictographs.

1. Idealistic and realistic forms common.

IX. Culture.

1. Predominantly leather with thong suture.
2. Buffalo and maize dominate economic and social culture.  
The Plains culture shows much European intrusions especially metal objects concerned with the household and the house and the extensive use of glass beads.

Seasonal migrations of the buffalo herd profoundly influenced the economic practice and sacred ceremonies of the Plains Indians.

In the museum collections throughout the highlands and the plains west of the Missouri River, the Plains culture pattern is the most colorful and intriguing. It encompasses the striking features of Indian life as experienced and recorded by the explorers, the adventurers, the traders, and the pioneers.

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