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Published in THE NEBRASKA ANTHROPOLOGIST, Volume 5 (1980). Published by the Anthropology Student Group,
Department of Anthropology, University of Nebraska, Lincoln, Nebraska 68588

A REVIEW
OF
THE INITIAL COALESCENT VARIANT

by
Greg Fox

The Initial Coalescent Variant of the Middle Missouri Sub-area (Lehmer 1971) poses many problems for archeologists working with the culture history of the Central/Northern Plains Areas. The Initial Coalescent should not, however, be considered as strictly confined to the localities of the Big Bend Dam and Pierre, South Dakota, as Lehmer (1971) suggests. Manifestations of this cultural complex can be found as far away as the Niobrara River valley in Boyd County, Nebraska at the Lynch Site (25BD1) (Caldwell 1966). This site has been grouped with the prototype Initial Coalescent site, the Arzberger Site (39HU6), into a taxonomic unit known as the Anoka Focus (Witty 1962), based on the similarities of ceramic vessel forms.

Foremost among the problems concerning the Initial Coalescent sites are questions concerning the origin of this culture complex. These problems arise from the identification of cultural elements from the Central Plains Tradition and the Middle Missouri Tradition. Another problem apparent in the literature concerning the Initial Coalescent is the question of causation for the rise of this cultural entity. The most prevalent theory accounting for the rise of this culture is some type of environmental shift to drier conditions and the subsequent associated consequences of this phenomena. This paper, however, will not focus on the causal reasons of the rise of this culture due to what is perceived as the absence of reliable information in the literature. Instead, this paper is intended primarily as a review of the taxonomic identifications applied to the Initial Coalescent, a review of origin explanations, and a review of the four major village sites. In addition, the trait contributions of the Central Plains and Middle Missouri Tradition to the Initial Coalescent will be partially examined.

TAXONOMIC IDENTIFICATIONS

Initially, the Coalescent Tradition was defined by Lehmer (1954), with the then undefined early sites (Initial Coalescent) being described as various foci. Rather than go into a lengthy description of each of these foci, this review will center on the major taxonomic definitions.

Lehmer (1954) described the Coalescent Tradition based upon Kroeber's (1939) idea of culture climaxes, then in use in the Southwest:

the development of a sequence of cultural configurations which, in Kroeber's (1939) terms, might be called "culture climaxes". Within the Northern Plains, the several climaxes seem to have differed in intensity, to have centered in different parts of the area, and to have been characterized by a particular adaptation of culture to its environment. Each climax appears to have lasted over a definable period of time, usually with a minimum of overlap on its predecessor or successor. Because of this, it seems possible to divide the prehistory of the area into a series of 'time horizons', each horizon being a period distinguished by the dominance of a particular culture climax. (Lehmer 1954:139)

It should be noted that earlier citations (Strong 1935; 1940) make reference to sites in the Middle Missouri Sub-area which differ from all other sites in this Sub-area. The former sites contain artifacts common to the Upper Republican and St. Helena sites in Nebraska, intermingled with artifacts from what was then known as the Middle Mandan Culture. This idea of intermingled culture traits is probably the seed for the idea of a coalescent.

The taxonomic concept of a tradition in the Initial Coalescent remained in favorable usage well into the 1960's. Smith (1963) uses this taxonomic identification when discussing the temporal sequence of the Coalescent Tradition.

Lehmer and Caldwell (1966) perceived a need to revise the idea of tradition and re-defined the Coalescent Tradition as a series of horizons based on Willey and Phillips' taxonomic scheme (Willey & Phillips 1962).

horizons are a cultural stratum which includes two or more phases, or putative phases, which were approximately coeval and which are characterized by enough common traits, or variants of the same trait, to appear as manifestations of the same basic culture complex. (Lehmer & Caldwell 1966:514).

The horizons which they defined for the Coalescent culture complex are: The Initial Coalescent Horizon (based on the Anoka and Campbell Creek Phases), the Extended Coalescent Horizon (based on the conglomeration of phases commonly known as La Roche), and the Post-Contact Horizon (based on the talking Crow, Stanley, Snakebutte, La Beau, and Late Heart River Phases).

Subsequent to the taxonomic definition of the Initial Coalescent by Lehmer and Caldwell in 1966, Lehmer (1971) refuted the concept of horizon and replaced it with the concept of the variant. A variant was defined by Lehmer as:

a unique and reasonably uniform expression of a cultural tradition which has a greater order of magnitude than a phase, and which is distinguished from other variants of the same tradition by its geographic distribution, age, and/or cultural content. (Lehmer 1971:32).

Lehmer's Initial Coalescent Variant is the most recent taxonomic identity of the culture complex with which this paper is concerned, therefore it is this taxonomic identity that will be used. However, since the terms tradition and horizon are firmly ensconced in the literature, these terms can be considered interchangeable.

THE SITES

There have been four major published site reports for the Initial Coalescent Variant: the Arzberger Site (39HU6) (Spaulding 1956), the Black Partizan Site (39LM218) (Caldwell 1966), the Crow Creek Site (39BF11)

(Kivett 1976), and the Talking Crow Site (39BF3) (Smith 1977). In addition to these major village sites, five other sites have been identified by Lehmer (1971) as having Initial Coalescent Variant components: Useful Heart (39ML6), Denney (39HU224), Medicine Creek (39LM2), Farm School (39BF220), and in Nebraska the Lynch Site (25BD1).

In the interest of expediency, only the four major village sites will be reviewed. The following synopses are intended as descriptions of the site locations, the number of excavated houses, and the fortification systems. Only superficial mention will be made concerning the village populations and the subsistence bases when such information is available in the literature.

The Initial Coalescent villages follow the Central Plains Village Tradition pattern in that they have random house arrangement and facings. The houses closely resemble Central Plains houses rather than the geographically closer Middle Missouri Tradition houses.

THE ARZBERGER SITE (39HU6)

The Arzberger Site is a fortified earth lodge village situated on a high terrace overlooking the Missouri River flood plain. Located on the east bank of the river approximately 7.5 miles southeast of Pierre, South Dakota, it is bordered on the west by the valley of a small perennial stream known as Mush Creek.

Forty-four randomly arranged house depressions are located on the site along the inner edge of the fortification ditch and along a naturally formed drainage. Four of the 44 houses were excavated by Spaulding (1956). In addition, six burials were excavated, several small test pits dug, the fortification ditch and one bastion identified and described on the basis of test trenches.

The fortification ditch encloses approximately 44 acres (approximately one house/acre). The ditch has 24 U-shaped bastions placed at intervals of 150 to 300 ft. Spaulding (1956) states that the average depth of the fortification ditch is about 3.8 ft., with the width averaging ten to twelve ft. A vertical palisade of logs on the inner side of the ditch is indicated by the postmold arrangement. The ditch fill is a mixture of cultural debris and wind blown loess.

The Arzberger Site differs from the other major Initial Coalescent villages because the fortification ditch completely encircles the village. Other villages from this variant employ the steep edge of the terrace overlooking the floodplain as one side of their fortification system.

Another inconsistency with other Initial Coalescent sites is the multi-component nature of all sites with the exception of Arzberger, which is a

single component site. Spaulding has made a strong case for the cultural relationship of this single component site with the peoples of the Central Plains Tradition and Mississippian Oneota peoples, based on the shared ceramics attributes.

The exact subsistence base of the Arzberger inhabitants is unclear in the site report because much of the faunal material was discarded during the excavation. We may conclude that the inhabitants had a mixed hunting and horticultural subsistence strategy from the faunal and floral specimens which are mentioned in the site report.

The Arzberger site has long been considered the proto-type village when comparison with other Initial Coalescent sites is necessitated. The use of this site as a basis for the Initial Coalescent may be due to the single component nature of the site, its distinctive features, and the relative age of the site report.

THE BLACK PARTIZAN SITE (39LM218)

The Black Partizan Site is a large multi-component earth lodge village located in Lyman County, South Dakota. It is situated on a high terrace overlooking the flood plain on the west bank of the Missouri River five miles north of the present town of Lower Brule. The area encompassed by the fortification ditch is approximately 22 acres.

Two known house depressions are located outside of the fortification system. A total of four houses inside of the ditch were excavated completely and the total number of excavation units was fifteen. The fortification ditch and one bastion were identified on the basis of test trenches. Observations based on the surface features and the results of testing operations indicates the house arrangement inside the ditch is random.

The fortification system consists of a shallow (3 ft. deep) ditch approximately fifteen feet wide with a vertical log palisade on the inner side of the ditch. The ditch has twelve U-shaped bastions located approximately 150 ft. apart. The ditch, exclusive of the bastions, is about 2,200 ft. in length. The east side of the site is protected by a steep terrace edge overlooking the floodplain. Two components have been identified at this site, Component A is attributed the Shannon Focus of the Chouteau Aspect (Coalescent) and Component B is assigned to the Initial Coalescent Variant (Caldwell 1966).

Based upon information obtained from the cultural debitage, the inhabitants of the village appear to have been dependent upon bison and horticultural activities for their subsistence. Bison elements outnumbered all other faunal debris at a ratio of 10:1 (Caldwell 1966). It is unclear from the literature whether sampling techniques may have biased this ration, as it did in other sites.

THE CROW CREEK SITE (39BF1)

The Crow Creek Site is a multi-component fortified earth lodge village

located on the east bank of the Missouri River. It is situated on a high terrace approximately 10.5 miles north of the present day town of Chamberlain, South Dakota. The terrace is located at the confluence of Crow and Wolf Creeks. The fortification system at this site encloses approximately eighteen acres.

There are 48 randomly arranged visible house depressions inside of the fortification system. Seven of these depressions were excavated completely. Six of these houses are assigned to the Wolf Creek Component (Initial Coalescent) and the remaining house is assigned to the Crow Creek Component (Initial Middle Missouri Variant) (Kivett 1976).

The fortification system at the Crow Creek Site is much more complex than the systems at other Initial Coalescent sites. There is an outer ditch, an inner ditch, and a third amorphous ditch which is located lower on the terrace close to the flood plain. The inner and outer ditches are located on the flat of the terrace and are assigned to the Initial Coalescent occupation. The lower ditch is tentatively assigned to the Initial Middle Missouri Variant occupation (Kivett 1976).

The outer fortification ditch varies from 15 to 50 ft. in width with a total length of about 1,250 ft. There are ten U-shaped defensive bastions associated with this ditch, located at intervals ranging from 125 to 150 ft. The approximate depth of the ditch during the occupation has been determined to average about six ft. No postmolds were located bordering this ditch. This indicates the lack of a log palisade. Very little cultural debris was recovered during the initial testing. (NOTE: It is from this feature that the remains of 468 individuals were recovered during recent excavations at this site. It has been suggested that the village was in the process of expanding and this fortification was incomplete at the time of the massacre). (Jeff Buechler: personal communication).

The inner fortification ditch is approximately six feet deep and 20 ft. wide. This ditch has only two identifiable bastions but probably had bastions along its entire length during the occupation (Kivett 1976). The estimated distance between these bastions is 150 ft. This ditch, in contrast to the outer ditch does have postmolds indicating a vertical log palisade. The ditch is practically filled with cultural refuse. This material has been identified as belonging to the Initial Coalescent occupation.

The third ditch, located lower on the terrace, will not be fully described, since it has been assigned to the earlier occupation of the site. The ditch is amorphous in outline and contains only a small amount of cultural debris.

The subsistence base of the occupants of the Initial Coalescent component at the Crow Creek Site is postulated as a mixed hunting and horticultural strategy. Of the excavated features assigned to the Wolf Creek Component, sixty-nine percent contain bison remains, suggesting that this meat resource was by far the most important of the faunal resources exploited.

THE TALKING CROW SITE (39BF3)

The Talking Crow Site is a multi-component fortified earth lodge village located on the west bank of the Missouri River near the confluence of Campbell Creek and the Missouri. It is situated on a high terrace overlooking the river located approximately six miles north of old Fort Thompson. This site has seventeen visible house depressions which are randomly arranged inside the fortification ditch. In addition, there are five visible house depressions located outside of the fortification ditch.

The fortification ditch at the Talking Crow Site ranges in width from ten to twenty feet. No mention of the total length of the ditch can be found in the site report. In addition to the ditch, postmolds along the inner side of the ditch indicate the presence of a bastioned stockade of vertical log posts on the north and west sides of the site during the Initial Coalescent occupation. On the east side of the site there is no evidence of a log stockade, however, there is an elongated earthen mound on the inner side of the ditch. The presence of this mound as a part of the fortification is unclear.

A total of twelve houses were completely excavated and fifteen additional house floors were identified by testing. This number obviously conflicts with the number of visible house depressions previously stated, indicating the presence of numerous buried features at the site. In addition to the aforementioned excavated features, numerous cache and refuse pits were excavated or identified by testing. All of the houses of the Initial Coalescent component, with the exception of House 10, had been disturbed by subsequent occupations of the site. House 10 is irregular in form and is reminiscent of Central Plains Tradition houses found to the south (Smith 1977).

The estimated population of the village during the Initial Coalescent occupation is 200 individuals (Smith 1977). A year-round occupation is suggested by Smith, with bison hunting and horticultural activities forming the subsistence base.

The components identified at the Talking Crow Site range from a Woodland occupation to a historic Dakota occupation. These components are summarized as follows: Component I - Plains Woodland ca. 600 A.D., Component II - Campbell Creek Phase ca. 1425-1500 A.D. (Initial Coalescent Variant), Component III - Talking Crow Phase ca. 1725-1750 A.D. (Extended Coalescent Variant), and Component IV - Historic Dakota occupation ca. 1865-1950.

The locations of all the major Initial Coalescent villages appear to have been selected for their defensive potential. They are located on projecting high terraces above the flood plain, i.e., natural defensive positions. Exactly what group they were defending against is not stated in the literature. The presence of a socketed bone projectile point, an Initial Coalescent diagnostic point, among the skeletal remains at the Crow Creek Site may indicate that the conflict was among the various Initial Coalescent groups. Another possible foe may have been the Oneota groups living along the James River to the east during the same time period.

Fortification systems are very similar at all of the major village sites. A combination of a bastioned ditch with a vertical log palisade is the main defensive plan, though there are some minor variations such as the earthen mound at the Talking Crow site. Only one site report, Arzberger, makes any mention of gaps in the defensive system, which might be interpreted as access points to the village proper. This may be due to the fact that the Arzberger Site is the only site to be completely encircled by its fortification system.

All of the Initial Coalescent villages are adjacent to the fertile Missouri River flood plain allowing easy access to garden areas. (Ethnographic sources generally agree that the Plains Village Tradition peoples maintained their gardens on the flood plains of rivers (Catlin 1965; Lowie 1954).

The botanical specimens recovered during the various excavations at the main village sites indicate a wide range of horticultural and gathering activities. The remains of cultigens indicate that corn, beans, gourds, and small field pumpkins (squash?) were grown by the Initial Coalescent peoples. Wild plants are less prevalent among the archeological remains, though the seeds of wild sunflowers and plums have been recovered. The relatively small number of botanical specimens recovered may be a result of the excavation and sampling techniques of the 1950's.

The faunal procurement of these people was based primarily on bison hunting, though there is evidence of a wider range of meat procurement activities indicated by canid, deer, wapiti, and other mammals, fish, avifauna, and molluskan remains.

ARCHEOLOGICAL ORIGIN MYTHS

This review section is designated "Archeological Origin Myths" due to the somewhat speculative nature of the literature concerning the population origins of the Initial Coalescent Variant. There are two basic suppositions concerning the origin of the Initial Coalescent: population influx and trait diffusion. By far the most popular of the two suppositions is the idea of a population influx from an area outside of the Middle Missouri Sub-area. Contained in this general supposition are four component reasons for this influx of people: an invasion, the Upper Republican migration or drift, the unnamed refugees, and the filling of a population vacuum.

All of the aforementioned suppositions maintain that this influx of people occurred sometime around A.D. 1450, and that the influx of people derived from the Central Plains Tradition. There is presently insufficient interpretation of the skeletal data and insufficient dates to support these ideas. Although at the 1979 Plains Conference, a paper presented by Pat Willey showed, through the use of multi-variant analysis, that much of the skeletal material from the Crow Creek Site (39BF1) is closely related to the skeletal materials from 25DK9 and 25DK15, two St. Helena Phase sites in northeastern Nebraska. The forthcoming Crow Creek report should supply archeologists a baseline of skeletal traits for the Initial Coalescent peoples. This will enable archeologists and physical anthropologists to determine

whether this population derived from the Central Plains Tradition, the Middle Missouri Tradition, or perhaps elsewhere.

The invasion theory, or supposition, of population influx has only one champion in the literature. Smith (1963) presents the idea of an invasion by Central Plains Tradition peoples in an offhand manner. He does not attempt to explain his rationale for calling it an invasion, nor does he attempt to back up this statement with any archeological data:

At about the beginning of the 15th century A.D. the Missouri valley was invaded by peoples from the Central Plains (Nebraska and Kansas) who brought with them a similar horticulturally oriented economy but different forms of houses and pottery...Following the invasion of the region by Central Plains peoples, a cultural blending with the Middle Missouri Tradition seems to have taken place (Smith 1963:489).

Smith's imagery would have us believe that a vast horde of people from Kansas and Nebraska poured into the Middle Missouri area and set up house-keeping. If we assume this invasion supposition for the origin of the Initial Coalescent, what happened to the indigenous population? Would not somewhere in the archeological record be the remains of attempts to push out these indigenous peoples? At this time, to this author's knowledge, there are no sites which have been interpreted in this manner.

The Upper Republican migration or drift supposition is the most prevalent and probably the most accurate of all the population influx ideas. The earliest mention of Upper Republican type ceramics in the Middle Missouri area appears to have been made by W.D. Strong in 1932:

On the brief reconnaissance trip through the Dakotas in September 1931 the writer was struck by the general resemblance between Upper Republican ceramics (especially the Sweetwater type) and those from one historic and several presumably prehistoric Arikara villages in South Dakota. (Strong 1932). ...I believe that the future determination of the actual prehistoric Arikara culture in South Dakota will reveal a horizon closely similar to the Upper Republican Culture in Nebraska (Strong 1936:291).

The Sweetwater type ceramics to which Strong refers and the culture which this ceramic type represents has long been considered to be a transitional stage occurring after Classic Upper Republican times. This ceramic affinity appears to support the supposition concerning the Upper Republican migration into the Middle Missouri. Strong's statement above is also the first mention of the Initial Coalescent Variant being the forerunner of the Arikara.

Other archeologists have indicated an Upper Republican relationship with the Initial Coalescent Variant. However, the following two quotes indicate

that there was some type of Oneota influence associated with the Upper Republican influence:

a comparison of the cultural assemblage with other material from the Plains area has led to the conclusion that the Arzberger Culture was basically Central Plains Upper Republican type but that it had been subjected to strong Oneota influences and to a less intensive but nevertheless important influence from the Middle Mandan Culture (Spaulding 1956:110).

Willey (1966) states in a review of the Middle Missouri Sub-area that the idea of Oneota influence on the Initial Coalescent is correct. It is important to note that, though Willey had no direct dealings with the archeology of the Middle Missouri, his review of the area is favorably viewed by archeologists who have a long and intimate knowledge of the area:

The protohistoric period here was also a time of convergence or coalescence of traditions with Mississippian Oneota influences with resident Plains Village patterns. Also, there is some indication that the Upper Republican culture of the earlier Plains Village Horizon may have contributed to the protohistoric cultures of the Middle Missouri (Willey 1966: 327).

A less definite statement concerning the Upper Republican influence on the Initial Coalescent is offered by Caldwell:

I believe that we can say they were part of what is emerging as a drift of Upper Republican peoples from central Kansas toward the North and East (Steinacher & Ludwickson: n.d.). Perhaps this was coupled with an upriver shift of Nebraska Phase communities along the Missouri River (Blakeslee & Caldwell: n.d.). Whatever the cause some of the Central Plains peoples became 'Coalescent' and moved into South Dakota (or vice versa) but the mechanics of transformation, the time, and the place are still unknown (Caldwell, n.d.).

It is apparent from this review of the literature that the Upper Republican migration or drift is by far the most accepted explanation for the rise of the Initial Coalescent Variant. The close affinity and the resemblance of the artifacts from the Sweetwater and the St. Helena cultures, both of which have had Upper Republican elements attributed to them, is apparent from the ceramic types of the Initial Coalescent Variant, as well as similar skeletal characteristics as stated earlier.

The idea of a refugee population giving rise to the Initial Coalescent Variant is found in only one source, Lehmer and Caldwell's 1966 re-evaluation of the taxonomic identity of the Initial Coalescent. Although they state that it was a refugee population inhabiting the area, they do not go into detail concerning the mechanisms which made them refugees:

It seems to have originated around A.D. 1450 as a hybrid product of cultural interchange between the Middle Missourians and a refugee population from the Central Plains (Lehmer & Caldwell 1966: 514).

It is important to note that Lehmer & Caldwell did not say that only the peoples from the Central Plains Tradition populated the Initial Coalescent, but rather there was a blending of populations to create a new and hybrid product. Caldwell has added strength to this idea of a blending of cultures by postulating that perhaps the Central Plains peoples arrived as a natural response to a population vacuum created by the demise of the Middle Missouri Tradition:

It might be that the Initial Coalescent villages were frontier communities (Caldwell and Jensen: 1969) established after the demise of the Middle Missouri Tradition in the Big Bend country, and in effect, filling a population vacuum resulting from the deleterious effects of a climatic shift (e.g. the onset of Pacific I) or other causes (Caldwell n.d.).

Of all the origin explanations offered none of the explanations have been thoroughly researched. Examination of the known Initial Coalescent Variant sites and the attributes of the ceramics indicate some Central Plains influence. Conversely, Oneota and Middle Missouri Tradition attributes are also found in the sites and ceramics. The supposition that possibly the Central Plains Tradition did not supply the people but rather just some of the traits is questioned by Lehmer (1971):

It seems possible that the Initial Coalescent resulted from a diffusion of Central Plains traits to some group in the Missouri valley with a consequent displacement of their preexisting culture. (Lehmer 1971:115).

Lehmer, however, qualifies the above statement:

It seems much more likely, however, that the Initial Coalescent Variant represents an actual population influx from the Central Plains area (Lehmer 1971:115).

Of all the statements presented, Caldwell's (n.d.) statement that "the mechanics of transformation, the time, and the place are still unknown," is probably the best possible statement on the origin of the Initial Coalescent that archeologists can make at this time. Based on my review of the literature concerning these origins, the following statement appears to sum up the ideas about the Initial Coalescent Variant.

It seems apparent to me that the relationship between the Central Plains and the Middle Missouri Traditions were both intimate and of long duration. Thus the Arzberger, Black Partizan, and

similar villages can be viewed as the end product. As such, they constitute something new and distinctive rather than merely the transplantation of Central Plains peoples (Caldwell 1966:84).

While the above statement is not a definitive statement on the origins of the Initial Coalescent Variant, it can be considered to characterize the feelings concerning the interpretations of Coalescent origins.

That there is some relationship between the Central Plains and Middle Missouri Traditions, with perhaps a possible Oneota influence, is evident from the artifact assemblages of the four major village sites. What this relationship actually is will remain unanswered until further investigation has taken place downstream from the Big Bend area. The area between the Lynch Site and the Big Bend area has very little reported Coalescent materials or sites. While it is true that this area is mostly inundated, it is still possible to search for early manifestations of the Initial Coalescent Variant or its forerunner cultures in northeastern Nebraska. Initial Coalescent Arzberger type ceramics do occur in this area. The occurrence of these ceramic types may indicate Coalescent Variant sites which are slightly different or proto-type Initial Coalescent settlements.

DATING THE INITIAL COALESCENT VARIANT

The accepted dates for the occupations of the major Initial Coalescent sites is generally fixed at around A.D. 1450. The scarcity of dates for this time period has led to some scepticism concerning the accuracy of this date (Caldwell 1966; Roper 1976). This date, A.D. 1450, appears to fall in line with the demise of the Middle Missouri Tradition and slightly later than the dates of the St. Helena and other possible proto-historic cultures of the Initial Coalescent Variant.

There are only a few Carbon-14 and dendrochronological dates for the major village sites. Carbon-14 dates place Arzberger at A.D. 1450 \pm 150 to A.D. 1520 \pm 200 radiocarbon years. The dates for the Arzberger site are fairly wide, but not unreasonably so. The Crow Creek Site has yielded a single Carbon-14 date of A.D. 1390 \pm 150 radiocarbon years. On the basis of these two dates, Lehmer (1971) has estimated the beginning of the Initial Coalescent at A.D. 1400.

Dendrochronological dating of the Initial Coalescent is somewhat less certain. Apparently there are problems with Weakly's (1971) base line sample (Caldwell 1966). Weakly dates the Wolf Creek Component of the Crow Creek Site at somewhere between A.D. 1440 and A.D. 1520. Caldwell (1966) feels that the disparity of the radiocarbon date and the dendrochronological date lend no assurance to the accurate dating of this site. The Black Partizan Site has only one questionable tree-ring date of A.D. 1468 (Missouri Basin Chronology Program). The Talking Crow Site has been dated somewhere between A.D. 1425 and A.D. 1500 (Weakly 1971).

Lehmer (1971) reviewed the radiocarbon dates for the Arzberger and Crow Creek Sties and stated:

...on the basis of presently available evidence I would estimate a beginning date of roughly A.D. 1400 for the Initial Coalescent Variant. The terminal date would be marked by the transition from Initial to Extended Coalescent. Dates from sites representing each variant indicate that it could not have taken place later than A.D. 1550 (Lehmer 1971:114).

CENTRAL PLAINS AND MIDDLE MISSOURI TRADITION TRAITS

To fully understand the Initial Coalescent Variant it is necessary to include some discussion of the traits possessed by this culture complex. In the discussion of "Archeological Origin Myths", the idea of a blending of Central Plains and Middle Missouri Traditions traits is well documented. Even though there is a blending of cultural traits, many of the traits can still be traced to one or the other parent Tradition. The idea of a blending of traits is central to the very idea of a coalescing population. This author will attempt to list the cultural traits found in the Initial Coalescent Variant with their Tradition.

As both Traditions are considered to be of the Plains Village Pattern, it is necessary to discuss the common elements that these traditions share. Lehmer (1954) has listed the diagnostic traits of the Plains Village Pattern as follows:

1. Subsistence based about equally on hunting and agriculture.
2. Semipermanent villages.
3. Villages located adjunct to the larger flood plains.
4. Semisubterranean earth lodges with entryways.
5. Undercut and straight-sided cache pits in and between the houses.
6. Grit-tempered pottery with paddle-marked and cord-impressed or tool-impressed decorations.
7. Small, light projectile points.
8. Chipped end scrapers.
9. Scapula hoes.
10. Bone hide-dressing tools

(Lehmer 1954:139-140)

The Initial Coalescent Variant sites have all of the above cultural traits, although the subsistence ratios of the cultures are difficult to determine from the literature.

When examining the Initial Coalescent Variant traits it may not be desirable to view them as elements of separate cultural traditions. However, by looking at the traits in this manner it enables us to see the exact contributions of each culture, though there are certainly elements which overlap and

cannot be assigned to any particular cultural tradition. The following list of traits could be considered to be in the Boasian tradition of viewing cultures. It is not, however, meant to serve the same function as a Boasian trait list, but rather, it is meant to establish a general background concerning the trait contributions of each cultural tradition. This list is not a complete list as it does not cover any of the finer details of ceramic attributes.

CENTRAL PLAINS TRADITION TRAIT CONTRIBUTIONS

Architecture

houses are roughly square or sub-circular
 variation in the orientation of entryways
 central firepit
 four primary roof supports

Village Pattern

unfortified
 random arrangement of houses

Burial Customs

ossuaries (many of the burial customs of the Central Plains Tradition are unknown, but the Upper Republican Culture has been associated with ossuary type burials)

Ceramics

Cord-roughened body sherds
 high/flat shoulders
 lip incising
 punctates
 horizontal line motifs
 opposed diagonal motifs
 coarse cross-hatching motifs

Non-ceramic Artifacts

diamond beveled knives
 coarse percussion flaked end-scrapers
 arrow-shaft wrenches (single hole)
 equal-arm elbow pipes
 L-shaped antler scraper hafts (no definite origin)
 tenoned/socketed bone points (no definite origin)

(Lehmer 1954)

MIDDLE MISSOURI TRADITION CULTURAL TRAITS

Architecture

long rectangular houses
 more than one firepit
 east-west orientation of entry ways

Village Pattern

structured arrangement (classic example: the Huff Site)
 may or may not be fortified

Burial Customs

individual graves

Ceramics

simple-stamping
 grooved paddle-stamping
 high straight rims with beveled lip
 low everted rims
 horizontal lugs
 curvilinear cord-impressed rainbow motif
 upward pointing chevron motif

Non-ceramic Artifacts

chalcedony plate knives
 long, narrow, asymmetrical, leaf-shaped knives
 grooved mauls
 metapodial fleshers

(Lehmer 1954)

The Initial Coalescent Variant peoples opted for the architectural style and village pattern of the Central Plains Tradition. The burial customs of the Initial Coalescent are unknown (Lehmer 1971). The Ceramics and non-ceramic artifacts are found in varying degrees in all of the sites. This paper does not attempt an extensive review or analysis of the ceramic types associated with the Initial Coalescent Variant due to the complex nature of ceramic attributes and analysis. However, a listing of the commonly found ceramic types is in order: Arzberger Group, Campbell Creek Ware, Campbell Creek Cord-marked, Campbell Creek Pinched Diagnostic, Talking Crow Straight Rim, and Grey Cloud Horizontal Incised. For further discussion of the ceramic types and attributes of the Initial Coalescent Variant refer to the specific site reports.

It is possible that all of the traits listed earlier have had levels of significance attributed to them that are not really present. It is also possible that archeologists have alluded to significant traits which are evident to the archeologist but have no real ethnic meaning. Rather than attempting some explanation for the selection of artifacts and traits by the Initial Coalescent peoples, this paper has attempted to expose the reader to these traits and possible variations.

SUMMARY

The idea of a coalescing population in the Missouri River valley in the area of the Big Bend appears to be well documented. That these sites represent some new and different cultural complex in the area is evident, but the causal reasons and the exact mechanisms for change are not sufficiently explained at this time. The discovery of additional Initial Coalescent sites and the re-examination of St. Helena and Upper Republican material and the Lynch Site materials will perhaps enlighten our understanding of the processes that were occurring around A.D. 1400.

Many aspects of the Initial Coalescent Variant have been overlooked in this paper, however, it was stated that the paper was intended as no more than a review of the existing literature. It is unfortunate that much of the area where archeologists would expect to find manifestations of the Initial Coalescent Variant is inundated, but extensive work in the peripheral area of the Missouri River valley may aid us in understanding this culture.

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