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## Archaeological Research in the Glenwood Locality: Changing Perspectives

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The three period scheme used by Anderson (1975) to analyze the development of Iowa archaeology is used in this paper to examine Central Plains tradition research in the Glenwood locality, Mills County, Iowa. Pioneer Investigations were primarily descriptive and indicated that the locality had been the locus of considerable aboriginal activity. The focal point of research in the Keyes-Orr

Duane Anderson (1975b) provided an overview of archaeological research in Iowa. He recognized 3 distinct periods in the history of Iowa archaeology: Pioneer Investigations, 1870-1920, the Keyes-Orr Period, 1921-1950 and the Contemporary Period, 1951-1975. He noted for each period its orientation, problems, and achievements and showed as well how each period laid the foundations for developments in the next. He examined briefly the major archaeological manifestations in the state noting key investigations of each and their intents. His periods correspond roughly with the development of archaeology's major goals: the reconstruction of culture history, the reconstruction of lifeways, and the reconstruction of culture processes (Binford 1968). This dimension will be added to Anderson's period scheme in order to examine in detail one of the archaeological manifestations discussed by him, the Central Plains tradition occupation of the Glenwood locality, Mills County, southwest Iowa. Each of Anderson's periods will be considered here in light of the goals of archaeology with an effort made to show the resulting perspectives and how those perspectives laid the foundations for future research.

### PIONEER INVESTIGATIONS

Early investigations in the Glenwood locality were scanty. Only two individuals actually did work there. Seth Dean (1883) in the *Smithsonian Annual Report* for 1879 reported the presence of circular depressions, 1½-2 feet deep and 20-30 feet in diameter. These depressions, probably collapsed earth lodges, were noted to contain stone tools and ceramics. Dean's descriptions of tools and lodges were vague. He also described mounds which he presumed to be related to the depressions. His work was essentially descriptive, but he did speculate on probable lifeways associated with the manufacture of the tools and ceramics he found. S. V. Proudfit published two papers in the *American Antiquarian* in 1881 and 1886 dealing specifically with locality artifacts, but especially ceramics. These artifacts were described in detail and would now be attributed to Central Plains tradition. Frederick Starr (1897) in his summary of Iowa archaeology later used the materials documented by Dean and Proudfit to write a short summary of Mills County antiquities.

The important events that would later provide direction to the Glenwood studies occurred in Nebraska. Robert Gilder investigated archaeological sites in the area around Omaha. He was the first to intensively excavate an earthlodge in the region, and he commented on the similarity of materials from several lodges recognizing a cultural unit distinct from others known at the time. He later labelled this unit

Period was taxonomic and conclusively linked the Glenwood materials to cultures in Nebraska. Contemporary Period research focused on detailed analyses of artifacts and internal temporal relationships of locality sites. A greatly expanded data base provided foundations for reconstructions of lifeways and cultural processes. Key questions resulting from Contemporary Period research are raised.

INDEX DESCRIPTORS: Iowa Archaeology, History of Iowa Archaeology, Central Plains Tradition.

the "Nebraska Culture" (Gradwohl 1969:20, 23), a term that would later bear significance for the Glenwood locality. As well, F.H. Sterns investigated this "rectangular earth lodge culture" and made several reconnaissances in Pottawattomie County, Iowa (Gradwohl 1969:23). No other researches related to the Nebraska Culture are particularly important for the Glenwood locality for the Pioneer Investigations Period.

The impact of the first examinations of the cultural remains near Glenwood is limited. The early reports were primarily descriptive in tone and provided little useful information. What they did do, however, was to demonstrate that the Glenwood area was the locus of considerable prehistoric activity. The precise genetic relationships of the Glenwood materials to materials in Nebraska were probably suspected but were never really discussed. Such questions of culture history were to become a focus of the Keyes-Orr Period starting in 1921.

### THE KEYES-ORR PERIOD

Charles Keyes began to dominate the scene in Iowa archaeology in 1921 with his appointment to head the Iowa Archaeological Survey for the State Historical Society of Iowa. Keyes began a statewide survey for archaeological materials. The State Planning Board of "Project 3600," sponsored by the Graduate College of the State University of Iowa, made possible along with the survey Works Progress Administration excavations in Mills County (Anderson 1961:2).

Keyes' assistant Ellison Orr surveyed the area and supervised the excavation of 12 house sites in 1938. Orr was initially handicapped by a lack of familiarity with house type and some of his excavations exposed "circular" house floors. The circular form was probably the result of the circular shape of the house depressions and the likelihood that Orr assumed the house floors to be like those of historic lodges. He had probably seen the lodge excavations done by Hill and others in Nebraska and was confused. At any rate more careful excavation demonstrated the lodges to be consistently of the familiar square form.

Orr never published a report on the Mills Company survey and excavations but did prepare an extensive manuscript that has since been published in microform (Orr 1963). In his manuscript Orr gave detailed accounts of the excavations and frequencies of recovered artifacts. A map locating some 68 sites was included. The overall tone of the document is descriptive but Orr did speculate as to lifeways, noting that he was perplexed by the location of lodges on ridgelines in locations that would be exposed to the full force of winter winds and at some distance from water sources. He also asked questions about the history of occupation in the locality focusing on whether the house distribution resulted from a large community and short term occupation or from a small community and long term occupation. In the latter case

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he anticipated considerable evidence of cultural change.

Orr used a number of local people in his excavations who later conducted excavations of their own. Two individuals associated with the Glenwood State Hospital, Schwerington and McDowell, excavated in 1941, several sites on the hospital grounds. The disposition of their excavated materials is not entirely clear; they may have been incorporated into the Paul Rowe collection or other private collections. No publication resulted from their work with the exception of Anderson's (1954) analysis of stone tools from their "Dig 7."

Keyes (1949; 1951) utilized the materials from Orr's excavations to classify the Glenwood artifacts as part of a distinct cultural tradition represented by a large number of house sites in the Missouri Bluffs in Fremont, Mills, Pottawattamie, Harrison and Monona Counties. By 1951, he had used Midwestern Taxonomic System terms to label the manifestation the Glenwood focus of the Nebraska aspect recognizing commonalities with cultural remains in other states.

It is during this period that a lay archaeologist, Paul Rowe, began to make a number of valuable contributions. Rowe collected materials from the locality and published an article in 1922 on ceramics. Most of the ceramics discussed were Woodland, but some Central Plains tradition pottery was mentioned. Most significantly, Rowe began a long career of cooperating with both lay and professional archaeologists with an interest in the Glenwood cultures.

Notable achievements of the Keyes-Orr Period were the survey of the area in some detail and the first conscientiously conducted excavation of house sites. Culture history was the primary focus establishing the position of the Glenwood Culture in relation to similar materials in eastern Nebraska. As well, Orr asked a few intriguing questions oriented toward reconstruction of lifeways and processes. These efforts, though relatively meager, provided a firm foundation for problems that would be addressed in the Contemporary Period.

### THE CONTEMPORARY PERIOD

The most immediate problem to be addressed during the Contemporary Period was the organization of a jumbled artifact assemblage from the locality. Gunnerson (1952) published a generalized ceramic typology for Nebraska Culture, and though not dealing specifically with the Glenwood ceramics, he established the familiar wares McVey, Swoboda, Beckman, and Debilka. Wood (1952) examined Central Plains earthlodges and considered some Southwest Iowa sites in his establishment of 3 earthlodge types. In 1953, Ruppe included Glenwood in a brief overview of Iowa archaeology.

Reports relating directly to the Glenwood artifact assemblage appeared first in two consecutive issues of the *Journal of the Iowa Archaeological Society*. Adrian Anderson (1954) analyzed stone tools from McDowell's Dig 7 on the Glenwood State Hospital grounds as part of a laboratory methods class at the State University of Iowa. In his summary he made specific efforts to link the Glenwood artifacts to other Central Plains groups. In the process of doing so he made a statement that would indicate the direction of locality research for the next 15 years. He said:

"Stone tools are of little value in determining relationships . . . for the simple reason that stone tool traditions are very long lived and not really as sensitive a medium as is needed. The medium most sensitive to cultural change is pottery and it remains the task of pottery analysis to ascertain the degree and direction of the relationship between the "Glenwood Culture" and the cultures represented in Nebraska, Kansas and South Dakota" (Anderson 1954: 11).

The following issue of the *Journal* was devoted to the Glenwood ceramics with a detailed analysis by John Ives (1955). He described pottery from 3 lodges excavated by D. D. Davis using Gunnerson's

earlier framework as a base. He used the presence of shell-tempered ceramics and a high frequency of Beckman ware to relate Glenwood to Table Rock and Minneapolis I suggesting that Glenwood had distinct characteristics that set it apart from most other Nebraska Culture localities. He asked questions regarding the relationship of the ceramic complex to the size and duration of the Glenwood populations, a question considered earlier by Orr. Further, he noted the dispersed, isolated nature of the lodge distribution and raised questions about social structure. Following the work of Anderson and Ives a brief statement of a synthetic nature was published by Ruppe in 1956.

1960 saw more effort generated in terms of new site excavation in the locality, detailed analysis of ceramics and the use of the ceramics to consider culture history of the locality. D. D. Davis and Paul Rowe (1960) briefly reported on the excavations of the Stille Site which had been tested earlier by Orr. Anderson later focused on the bone tools from that site in a paper published in 1970. The most useable key for Glenwood ceramics was published by Adrian and Barbara Anderson in 1960 in which they presented detailed line drawings of each major pottery type.

In 1961, Adrian Anderson's masters thesis was published as an issue of the *Journal of the Iowa Archaeological Society*. His work had as its primary intent an interpretation of the culture history of the Glenwood locality employing the Willey and Phillips taxonomic system. He was the first to specifically define the locality to an area nine miles long and four miles wide in Mills County, far more limited an area than Keyes' (1959:340) five county area. Given this more narrow definition Anderson set out to establish a local sequence of 16 sites. He used the Robinson seriation technique on ceramics from 12 houses excavated by Orr and 4 houses excavated by amateurs and students from SUI. Lacking corroborative dates to orient his sequence in time he used the presence of Oneota-like sherds and Upper Republican-like materials to develop a 3 phase sequence of locality settlement spanning 400 years.

During 1962-63 Lionel Brown (1967) surveyed and excavated a number of sites endangered by construction of Pony Creek watershed projects. Besides the detailed excavation reports he challenged Anderson's local sequence. He did not do a seriation but did look at a number of specific ceramic traits and new carbon-14 dates. He proposed two sub-phases and in essence reversed the order of Anderson's proposed sequence.

In 1964, McKusick's summary of Iowa archaeology devoted a number of pages to the Glenwood locality. He summarized Anderson's and other works. The most notable segment of the work was an effort to reconstruct lifeways in his brief discussion of subsistence practices and technology, particularly earthlodge construction.

During the first 15 years of the Contemporary Period virtually every work was oriented toward the establishment of the taxonomic placement of the Glenwood Culture. Beyond the descriptions of artifacts the chief concerns were toward external cultural relationships. Only rare statements dealt with the internal structure of the culture; many of these were seen as means of ultimately linking Glenwood to the outside. After 1969, the Glenwood data base continued to build but the focus of research shifted from the external relationships of culture history to the internal relationships of Glenwood locality lifeways and processes.

1969 saw a resurgence of activity in the locality as a result of the relocation of U.S. Highway 34. Under the direction of Adrian Anderson originally, salvage operations have continued until present. These operations have provided immense quantities of data, generating 3 masters theses and 2 dissertations as well as a number of shorter papers. In all, these works have changed perspectives on the Glenwood materials markedly.

In 1971, Zimmerman reexamined the local sequence established by Anderson and challenged by Brown. The results of a new seriation and new corroborative dates were inconclusive causing a number of questions related to the ceramic complex to be raised. Primary among

them was the impact of residence patterns on the ceramic complex, important because of the use of ceramics in seriation. This question and others related to subsistence strategies led Anderson and Zimmerman (1976) to examine subsistence/settlement variability in the locality in a systematic way. They offered a loosely structured model to explain the appearance of what seemed to be both a dispersed and nucleated pattern of settlement, linking the patterns directly with subsistence practices and climatic change.

At the same time the Glenwood data base was being rapidly expanded. Plant remains from two lodges, 13ML119 and 13ML121, were examined and reported (Culter and Blake 1973) indicating reliance on both wild plants and cultigens. Faunal remains were intensively studied and reported for the first time by Eshelman (n.d.). Implications of the fauna for reconstructing the prehistoric environment were considered by Johnson (1972) based on material recovered from several lodges. Fulmer completed a masters thesis on cultural remains from one lodge, 13ML124, in which he considered lodge activity areas briefly.

Zimmerman (1976) completed a doctoral dissertation which was a computer simulation of the settlement/subsistence model generated by Anderson and Zimmerman. Although a simulation did not constitute proof, it did demonstrate that a number of earlier conceptions about the locality were not feasible. Primarily these ideas concerned the duration of occupation in the locality, the level of population, the supposed impact of climatic change, and the nature of the nucleated settlements. Some of these ideas await independent testing but others, notably the time span of occupation, have been substantiated. Recently Duane Anderson's (1975) *Western Iowa Prehistory* summarized the Glenwood materials primarily dealing with reconstructed lifeways including social organization.

To date the best set of data recovered from the locality is being analyzed by John Hotopp for a doctoral dissertation at the University of Iowa. It included precise provenience information on all excavated materials. He has reported to date a functional analysis of shaft abraders (Hotopp 1975). His work and those of others using his data should provide answers to a number of pressing questions.

In all, work done during the Contemporary Period has been oriented toward accomplishing all the general goals of archaeology. The first 20 years were related to establishing the position of the Glenwood materials taxonomically; the last five have been focused on lifeways and processes. As is usually the case, the work of the last five years has succeeded in raising as many questions as it answered.

#### FUTURE PROSPECTS AND REMAINING QUESTIONS

With the completion of construction in the locality excavations have virtually ceased, but a number of key questions remain. A few of the most pressing are listed here and not necessarily in their order of importance. They are:

1. What is the origin of the Glenwood Central Plains tradition occupation? Does it perhaps represent a budding off of an eastern Nebraska community?
2. What are the relationships of the Central Plains peoples in the locality to the antecedent Woodland populations?
3. What is the eventual outcome of the habitation? Where did the people go or what did they become?

These questions are historical in nature but have never been properly addressed; to handle them would require detailed analysis of both the Glenwood materials and materials from other localities.

4. What was the relationship of the Glenwood peoples to other Central Plains peoples in other Iowa localities? Some sites have been reported in the Waubonsie drainage in Fremont County to the South (Hotopp, *et al* 1975). As well, similar manifestations were reported by Keyes and Orr to the North but these have never been substantiated. Answers to these

questions might well answer questions 1-3 above.

5. What was the relationship of the Glenwood peoples to non-Central Plains peoples? Aberrant ceramic materials from Great Oasis, Oneota and more distant Caddoan peoples are not uncommon.
  6. What was the structure of the Glenwood population? More demographic information is necessary related to size and composition of locality populations. This would entail recovering skeletal materials if they are in fact available.
  7. What was the structure of internal lodge activity? To reconstruct activity areas requires well provenienced data much like that recovered by Hotopp.
- These questions are primarily in the realm of reconstructing lifeways and will no doubt depend heavily on the use of ethnographic analogy. Testing hypothesized systemic contexts of artifacts may well depend on the use of high-powered inferential statistical techniques and/or computer simulation.
8. What precisely was the relationship of the people to their natural environment? Estimates need to be made of the contribution of natural and cultivated foodstuffs to diet. This has not yet been done and requires detailed analyses of all plant and animal remains recovered. Particularly important is the reaction of these peoples to stress placed on them by environmental fluctuation.
  9. What precisely is the relationship between environment and settlement? This may simply entail further independent corroboration of Zimmerman's simulation model.

The two questions listed here are more general in their implications and are related to reconstruction of cultural processes.

On the whole these questions are not dissimilar to questions asked by any of the individuals from the pioneer investigators to the contemporary archaeologists. The questions are perhaps today more focused and the methods developed to answer them more reliable, but the intent is the same, to discover more about one aspect of Iowa's prehistory.

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