Southern Illinois University Carbondale OpenSIUC

Theses

Theses and Dissertations

12-1-2011

The Chicago Method of Excavation at Kincaid

Jessica Ruth Howe Southern Illinois University Carbondale, howe@uamont.edu

Follow this and additional works at: http://opensiuc.lib.siu.edu/theses

Recommended Citation

Howe, Jessica Ruth, "The Chicago Method of Excavation at Kincaid" (2011). Theses. Paper 739.

This Open Access Thesis is brought to you for free and open access by the Theses and Dissertations at OpenSIUC. It has been accepted for inclusion in Theses by an authorized administrator of OpenSIUC. For more information, please contact opensiuc@lib.siu.edu.

THE CHICAGO METHOD OF EXCAVATION AT KINCAID

by

Jessica Ruth Howe

B.A., Westminster College, 2005

A Thesis Submitted in Partial Fulfillment of the Requirements for the Master of Arts

> Department of Anthropology in the Graduate School Southern Illinois University Carbondale December 2011

THESIS APPROVAL

THE CHICAGO METHOD OF EXCAVATION AT KINCAID

By

Jessica R. Howe

A Thesis Submitted in Partial

Fulfillment of the Requirements

for the Degree of

Master of Arts

in the field of Anthropology

Approved by:

Dr. Paul D. Welch, Chair

Dr. Brian M. Butler

Dr. David Sutton

Graduate School Southern Illinois University Carbondale July 4, 2011

AN ABSTRACT OF THE THESIS OF

Jessica Ruth Howe, for the Master of Anthropology degree in Archaeology, presented on April 22, 2011, at Southern Illinois University Carbondale.

TITLE: THE CHICAGO METHOD OF EXCAVATION AT KINCAID

MAJOR PROFESSOR: Dr. Paul D. Welch

The creation of the University of Chicago archaeological field schools in 1934 at the Kincaid site in southern Illinois resulted in the dissemination of a standard excavation method, often referred to as the "Chicago Method", across the United States, primarily in the East. Before the field schools, there was no standard practice for excavating Eastern archaeological sites and little was written about the excavation methods that were used. During and after the field schools, archaeologists began to use similar excavation methods and also began to keep better records of their fieldwork. This thesis determines exactly what the "Chicago Method" of excavation was and how it changed over the years of the field schools between 1934 and 1941. This thesis also examines the history and theoretical background of archaeology prior to the formation of the Chicago field schools, the creation and history of the Chicago field schools, the relationship between the field methods and the anthropological goals of the Chicago archaeologists, and the influence of the field schools on archaeologists throughout the eastern United States because of the subsequent spread of methodology by the Chicago field school alumni.

ACKNOWLEDGEMENTS

I would like to thank my thesis committee, which consisted of Dr. Paul Welch, chair, Dr. Brian Butler, and Dr. David Sutton, for their suggestions and support while writing this thesis. Thanks also to Dr. Marvin Jeter of the Arkansas Archeological Survey, for his advice and knowledge of the history of archaeology. A big thank you goes to the Arkansas Archeological Survey for allowing me the time to complete this thesis. Also, thanks to Robert Scott for his help with the excavation diagrams. Finally, I would like to thank the Illinois State Museum for the loan of the University of Chicago photographs.

TABLE OF CONTENTS

| <u>CHAPTER</u> <u>PAGE</u> |
|---|
| ABSTRACTi |
| ACKNOWLEDGEMENTSii |
| LIST OF TABLESvi |
| LIST OF FIGURES |
| LIST OF CHAPTERS |
| CHAPTER 1 – INTRODUCTION1 |
| CHAPTER 2 – METHODS AND MATERIALS |
| CHAPTER 3 – PRE-EXISTING ARCHAEOLOGICAL METHODS15 |
| The Aztalan Site16 |
| The Cahokia Site17 |
| The Lamoka Lake Site |
| The Deasonville Site |
| Conclusion |
| CHAPTER 4 – EVOLUTION OF THE CHICAGO METHOD23 |
| Theoretical Context for the Chicago Method |
| History of the Chicago Field School Technique |
| Description of the Chicago Field School Technique |
| Chronology of Changes in the University of Chicago Field School |
| Excavations |
| 1934 Field Season |
| 1935 Field Season |

TABLE OF CONTENTS (Continued)

| <u>CHAPTER</u> <u>PAGE</u> |
|---|
| 1937 Field Season45 |
| 1938 Field Season48 |
| 1940 Field Season48 |
| 1941-1942 Field Seasons |
| Conclusion |
| CHAPTER 5 – INFLUENCE OF THE CHICAGO METHOD64 |
| The New Deal and the Chicago Method65 |
| Chicago-Related New Deal Excavations |
| Shiloh Indian Mounds |
| Wheeler Basin Survey |
| Ocmulgee Archaeology |
| Chickamauga Basin Survey, Including Excavation at Hiwassee Island71 |
| The Eva Site76 |
| Pickwick Basin Survey77 |
| Excavations in the Carbondale, Illinois Area80 |
| The Crooks Site |
| The Greenhouse Site |
| The Angel Site85 |
| The Bessemer Site |
| Non-Chicago Related Excavations |
| The Brewerton Locality |

TABLE OF CONTENTS (Continued)

| <u>CHAPTER</u> | PAGE |
|------------------------|------|
| Conclusion | 91 |
| CHAPTER 6 – CONCLUSION | 94 |
| REFERENCES | |
| APPENDIX | |
| VITA | 117 |

LIST OF TABLES

| TABLE | PAGE |
|---|-------|
| Table 1: University of Chicago Kincaid field school participants | 62 |
| Table 2: Famous University of Chicago field school alumni with significant ca | reers |
| in archaeology | 92 |

LIST OF FIGURES

| <u>FIGURE</u> <u>PAGE</u> |
|--|
| Figure 1: "Mr. Metzenberg, Dr. Dack, and Dr. Cole" (Mx1004:1939 photo log)7 |
| Figure 2: Map of the Kincaid site (Cole et al. 1951:ii) |
| Figure 3: Grid from Rediscovering Illinois (Cole and Deuel 1937:25) |
| Figure 4: "J. Norman Emerson on Mx ^o 10" (Mx1036:1940 photo log)35 |
| Figure 5: "Washing sherds and artifacts before beginning the afternoon's digging" |
| (Mx297:1935 photo log)36 |
| Figure 6: "Chief cataloguer Neitzel and Assistant Coe cataloguing artifacts" |
| (Mx473:1935 photo log)37 |
| Figure 7: Vertical Slicing Technique |
| Figure 8: "View of the site after excavation had been carried down to approximately |
| the level of the clay floor (Mx190:1934 photo log)42 |
| Figure 9: Horizontal Stripping Technique |
| Figure 10: Horizontal Scraping Technique commonly used today43 |
| Figure 11: "General view of Mx ^v 1A from west showing intersection of the two |
| house structures" (Mx250:1935 photo log)46 |
| Figure 12: "Area of Feature VII cleared down to the charcoal" (Mx294:1935 photo |
| log)47 |
| Figure 13: "Looking west at F VIII (Mx989:1938 photo log)50 |
| Figure 14: "The boys fixing up F VII for a photograph (Mx987:1938 photo log)51 |

LIST OF FIGURES (Continued)

| <u>FIGURE</u> <u>PAGE</u> | • |
|---|---|
| Figure 15: "Field party at the Angel site (near Evansville, Indiana)" (Mx1028:1940 | |
| photo log) | |
| Figure 16: "Completed trench A" (Mx1389:1940 photo log)53 | |
| Figure 17: "Completed trench B as seen from the West" (Mx1391:1940 photo log)54 | |
| Figure 18: "Supervisors' conference at Mx ^o 7" (Mx1093:1941 photo log)56 | |
| Figure 19: "East trench, Mx ^o 7" (Mx1587:1941 photo log) | |
| Figure 20: "Use and construction of high wheel-barrow ramp for carrying dirt from | |
| top of the high conical mound, Mx ^o 7" (Mx1078:1941 photo log)58 | |
| Figure 21: Mound Peeling Technique74 | |
| Figure 22: "Griffin, Morgan and Willey concentrate on the pottery classification" | |
| (Mx670:1938 photo log)83 | |

CHAPTER 1

INTRODUCTION

This thesis seeks to expand our knowledge of the development of the archaeological field methods used by the University of Chicago field school, especially at the Kincaid site in southern Illinois from 1934 to 1941. This project will try to determine what the Chicago Method was and how it was employed or modified during the years of the University of Chicago field school, particularly as it was implemented at Kincaid. Little has been written about the history of the University of Chicago field school and the methods of excavation used, despite the fact that aspects of the "Chicago Method" became common practice in much of the eastern United States from the 1930s to at least the 1960s. Much of what is known was passed along as oral tradition by the field school alumni, and more formally by the field schools that they themselves directed. Unfortunately, these alumni are all now deceased, and the oral history is incomplete and at times misleading. Of particular concern is that the oral history no longer contains an account of the connection between the excavation methods that were developed and the anthropological goals of the Chicago archaeologists. This study will also try to determine the larger role of anthropology in archaeology, particularly in terms of the anthropological questions being asked by the Chicago archaeologists and how these questions influenced the methods being used during excavation. In other words, were

new anthropological views being introduced and did they result in new forms of excavation?

There are the two published works documenting the University of Chicago excavations. The first is *Rediscovering Illinois* (Cole and Deuel 1937), which concentrated on the Illinois Valley in west-central Illinois, and the second is the report on the Kincaid excavations (Cole et al. 1951). It is evident that these published descriptions of the Chicago excavations are incomplete; therefore, it was necessary to examine the extensive field records and the over 1600 field photographs taken of the Kincaid site excavations between 1934 and 1941. These sources, along with others, which are detailed in chapter two of this thesis, provide information about the goals and projects of the University of Chicago archaeologists.

The initial step was to use the University of Chicago field records, final publication on the Kincaid site, and photographs to determine what the "Chicago Method" was and how it changed over the years of the field schools. To do this, a description of the various techniques used by the Chicago field school archaeologists at the Kincaid site is provided in chapter four. As already mentioned, the connection between the excavation techniques and any changing views within the field of anthropology will also be examined. Chapters three and five examine what methods were being used at other sites in eastern North America before, during, and immediately after the Chicago excavations. The examination of publications based on these excavations and of related syntheses will aid in determining how influential the Chicago Method was on the field of archaeology. Research on the Chicago Method and other excavation methods in eastern North America will also reveal the origin of the various excavation techniques being used; in other words, were all of the techniques developed by the Chicago archaeologists or were some developed elsewhere?

Before a description of the Chicago Method can be provided, it is important to understand what was occurring in the field of archaeology before its development. In *A History of American Archaeology* (1974), Gordon Willey and Jeremy Sabloff divide the history of American archaeology into four periods. During the first of these, the Speculative Period, which began with the discovery of the American continent and lasted until approximately 1840, archaeology was not an established vocation. Nevertheless, people wondered about the Native Americans and their origins, and developed an interest in Native American sites and antiquities.

Beginning in the 1840s, this speculation took a more scientific or systematic turn during the Classificatory-Descriptive Period, which the authors define as ending around 1914. Willey and Sabloff (1974:42) state that the focus of this period was "on the description of archaeological materials, especially architecture and monuments, and a rudimentary classification of these." There was also a focus on artifacts, especially lithics and pottery, such as the summaries of pottery in the Eastern United States of William Henry Holmes (1903) as well as his descriptions of lithic technology. It was during this period that figures such as E. G. Squier, E. H. Davis, and Cyrus Thomas conducted their famous mound explorations in Eastern North America. This period also resulted in the professionalization of archaeology, which included the establishment of courses and professors in archaeology at colleges and universities, the creation of archaeological journals, and the founding of important institutions, especially the Smithsonian Institution and the Peabody Museum of Harvard University, which would play a role in the development of the Chicago Method under the direction of Frederic Ward Putnam (Willey and Sabloff 1974:48).

The third period, the Classificatory-Historical Period, spanned the years 1914 to 1960 and is divided by the authors into two sub-periods. It is during this period that the University of Chicago field school would play a major role. During the first sub-period, which is defined as 1914 to 1940, the main concern in archaeology was for chronology (Willey and Sabloff 1974:88). To pursue this, excavations were mainly focused on stratigraphy and archaeologists began to develop wide-scale classificatory systems for the description and chronology of artifacts, such as the Midwestern Taxonomic Method, which will be described later in this thesis. By grouping artifacts with similar traits together and combining this information with the stratigraphic context of these artifacts at archaeological sites, the Midwestern Taxonomic Method would provide a system with which the chronology to explore its connection to social anthropology and ethnology through the introduction of the direct-historical approach, which will also be discussed later (Willey and Sabloff 1974:19, 114).

The second sub-period of the Classificatory-Historical Period described by Willey and Sabloff (1974) constitutes American archaeology between 1940 and 1960. It was during this period that a re-examination of the goals of archaeology along with the development of new methods took place. Chronology was still important to the archaeologists, but they also began to focus on human behavior and how it could be viewed in the archaeological record (Willey and Sabloff 1974:131-132). This thesis will examine the role that the University of Chicago field schools played during this Classificatory-Historical Period, especially since the methods and ideas being implemented by the Chicago archaeologists bridge the two sub-periods.

The Classificatory-Historical Period also saw the beginnings of formal training for archaeologists through colleges and universities in the United States. Prior to the 1900s, there was little in the way of formal archaeological training (Gifford and Morris 1985:396-397). In the United States, there were few trained archaeologists, and those that were trained learned their techniques in Europe. These European-trained archaeologists realized there was a need to develop programs in archaeology in the United States, which led to the development of the first archaeological field schools in the Southwest. One of the innovators was Byron Cummings of the University of Utah. Cummings was teaching southwestern archaeology by 1907 and taking his students to excavate archaeological sites (Gifford and Morris 1985:397). Eventually, the University of Arizona hired Cummings, and he taught the first formal summer archaeological field course that offered credit to students in 1919 (Gifford and Morris 1985:398). More schools in the West, such as the University of Colorado and the University of New Mexico, followed in the footsteps of Cummings (Gifford and Morris 1985:403-404).

In the East, the first archaeological field school was developed by Fay-Cooper Cole and his colleague Thorne Deuel through the University of Chicago (see Fig. 1). Cole was born in 1881 in Michigan and went on to graduate from Northwestern University before attending the University of Chicago for post-graduate work. During his time at the University of Chicago, Cole also worked at the Field Museum where he was introduced to the field of anthropology and received training as a physical anthropologist. In 1924, after conducting anthropological field work in the Philippines, Cole was offered a position at the University of Chicago where he helped establish a program that provided training in all the fields of anthropology (Eggan 1963:642).

Shortly after his arrival at the University of Chicago, Cole and Deuel established the first training program in 1926 as an archaeological survey of Jo Daviess County in northwest Illinois. The field crew for this survey, John Blackburn and Paul Martin, began to train other students, moving the survey to Fulton County in west-central Illinois from 1930 to 1933. Some of the graduate students working in Fulton County, including Georg Neumann, J. C. Harrington, and Jesse D. Jennings, would continue the training program at the Kincaid Mounds site in Pope and Massac counties in southern Illinois in 1934 (Haag 1986:65). It was through the University of Chicago training programs that the Chicago field school technique, often known as the Chicago Method, was developed.

The final period defined by Willey and Sabloff (1974) is the Explanatory Period, beginning in 1960. This period is best known for the introduction of a "New Archaeology" that developed out of the influence of anthropology on archaeology. This "New Archaeology" or "Processual" (a term introduced by Willey and Phillips (2001:5)) movement, spearheaded by Lewis Binford (e.g., 1962), was interested in the idea of culture process and the consideration of evolution on the development of culture (Willey and Sabloff 1974:183). As will be described later, the Chicago archaeologists are excellent examples of anthropology's influence and helped establish the foundation through which this "New Archaeology" movement could form.



Figure 1: "Mr. Metzenberg, Dr. Dack, and Dr. Cole" (Mx1004:1939 photo log). Courtesy, Illinois State Museum.

CHAPTER 2

METHODS AND MATERIALS

This chapter documents the methods and sources used to determine what the Chicago Method was, how it changed, and whether it was implemented at other sites in the United States. A very brief early summary of the method was presented by Cole (1932) at a "Conference on Southern Pre-history." This meeting was very important, but its proceedings only had a very limited distribution, and they were not published until much later, by the Southeastern Archaeological Conference in 1976 and again in the book *Setting the Agenda for American Archaeology* (O'Brien and Lyman 2001).

The main source of information on the early Chicago Method is *Rediscovering Illinois* (Cole and Deuel 1937). This book provides a description of the basic excavation methods used during the early training programs beginning in 1926. These basic methods were also used at the Kincaid site between 1934 and 1941. The participants in the Kincaid training program, including supervisors and students, kept excellent notes of the excavation methods used there, along with over 1600 photographs. These materials would later be summarized in a publication titled *Kincaid: A Prehistoric Illinois Metropolis* (Cole et al. 1951).

For this thesis, the analysis of the Chicago Method began with an examination of the excavation methods for mounds and village sites described in *Rediscovering Illinois*.

These became the basis for the excavations at Kincaid and could be considered the foundation of the Chicago Method. An understanding of these basic methods is necessary to determine whether any changes or modifications in excavation techniques occurred during the University of Chicago field school seasons at Kincaid.

Following an examination of the methods laid out in *Rediscovering Illinois*, the next stage of research was to analyze the 1951 Kincaid publication, along with the field notes from the Chicago field school excavations. The 1951 publication was put together by Cole with contributions from Robert Bell, John Bennett, Joseph Caldwell, Norman Emerson, Richard MacNeish, Kenneth Orr, and Roger Willis. Cole was in charge of the publication due to his involvement throughout the entirety of the Chicago field school and it is often considered to be the culminating work of his career (Cole et al. 1951:vii). It provides a description of the Kincaid excavations from all the years of the field school and is organized by the areas excavated, beginning with the village areas, rather than chronologically. This publication is only a summarized account of more than eight years of excavations at Kincaid, and therefore only provides a portion of the information necessary for this thesis. It does not include a listing of all the artifacts found or the photographs taken, so it is important to examine the field notes and photographs to obtain more information. These materials reveal how the excavations at Kincaid were actually carried out and also indicate any modifications made to the methods described earlier in *Rediscovering Illinois*. The field notes were recorded by the various supervisors for the field school excavations and are designated by site area. For example, the notes from the excavations of Mx^v1A in 1934 were recorded by J. C. Harrington and Georg Neumann, who acted as supervisors for the excavation.

For this project, only the photocopies of the field notes were examined. They were already organized and easy to read, so there was no need to use and disturb the originals. In terms of the information gathered from these sources, not only are any changes in method noted, but also the reasons behind the changes. The original field notes, along with most of the Kincaid collection, were first transferred from the University of Chicago to the Indiana Historical Society in July 1954, where they were kept at the Angel Mounds Site (Glenn Black's acknowledgement of receipt of collection in letter to Robert McC. Adams, July 16, 1954). Some time after the opening of the Glenn Black Laboratory in 1971, the Kincaid collection was eventually transferred from the Angel Site to the lab for storage. In 1973, James Kellar of the Glenn Black Lab contacted Jon Muller at Southern Illinois University in Carbondale about taking the Kincaid materials. Muller agreed and the materials were transferred to Southern Illinois University sometime in the fall of 1973, although the exact date is unrecorded (Brian Butler, personal communication). They are now at the Southern Illinois University Center for Archaeological Investigations curation facility in Carbondale.

Finally, the University of Chicago field photographs, along with the captions for the photographs, were examined. These photographs are curated by the Illinois State Museum in Springfield and document the field methods implemented at the Kincaid site. There are over 1600 photographs for the entire span of the University of Chicago field school at Kincaid. As noted in the 1951 publication, there were several photographers throughout the years of the field school (Cole *et al.* 1951:vi). Official photographers include William Bascom in 1934, Paul Cooper in 1935, Frank H. Blackburn in 1937, Conrad Bentzen in 1938 and 1939, and Gordon Gibson in 1941. The number of

photographs per year also varies, with the final years of 1940 and 1941 having the fewest. The photographs examined for this study were prints about seven by four inches in size. Each was glued to a cardboard backing and the captions were glued to the opposite side of the cardboard. The condition of the negatives is bad, and many of them are unusable, but the condition of the prints used was good despite their having been sitting in boxes in a museum storage room for years. All of the photographs had captions that were typed onto a slip of paper and identify the excavation year, site area, any individuals in the photograph, what was being done or what methods were being used in the photograph, and often why these methods were being used. It is unclear who actually wrote the captions for the photographs. One set of captions was prepared by the University of Chicago archaeologists, who each year put together an annotated album of field photographs. Another set of captions may have been prepared by Illinois State Museum staff.

Courtesy of the Illinois State Museum, the photographs were loaned to Paul Welch and Jessica Howe. The prints were then scanned at SIU three at a time with a Microtek ScanMaker 9800XL scanner at 600 dpi using the default settings for brightness, contrast, and other variables. Each image was then cropped to the original edges using Adobe Photoshop and saved as tagged image format (.tif) files, without any other manipulation or adjustment of image. The .tif format was chosen because it allows for image compression (reduction of file size) without loss of image quality. Each print was also saved as a compressed .jpg thumb file. When all three of the original scanned images had been cropped and saved, the original scan of the three prints was saved as a .jpg file. The captions for the photographs were copied and eventually the information will be entered into a database that can be used by other archaeologists for their own research.

Currently, Paul Welch, Brian Butler, Jessica Howe, and the Illinois State Museum have copies of the scanned images and they are also stored at the Southern Illinois University curation facility in Carbondale. For this research project, the photographs were used primarily as additional information in cases where the field records or the published descriptions indicate a change or modification in excavation methods. Occasionally, the written descriptions of the field methods are vague or confusing and the photographs aid in understanding what was being done at specific areas of the site. The photographs ultimately provide visual evidence of the various excavation methods being used over the years at Kincaid.

In the process of examining the excavation methods used by the University of Chicago field schools, this thesis also determined what the anthropological mindsets or goals of the Chicago archaeologists were. To do this, sources such as Julian Steward and Frank Setzler's 1938 *American Antiquity* article "Function and Configuration in Archaeology" and Bennett's 1943 *American Antiquity* article "Recent Developments in the Functional Interpretation of Archaeological Data" were researched. Setzler would go on to become the Kincaid field director in 1940 and Bennett was a crew member in 1939 and an area supervisor in 1941. These and other sources help determine what questions the Chicago archaeologists were asking and whether these questions influenced the field methods being used.

Not only did this project research the excavation methods used at Kincaid, but it also examined several other excavations undertaken in the eastern United States in the 1930s and 1940s in order to determine the influence of the Chicago field school excavations on projects elsewhere in the United States or vice versa. During the Depression, the government created a source of employment through programs such as the Works Progress Administration and the Tennessee Valley Authority. A number of archaeological excavations in the eastern United States were funded by these government programs and University of Chicago field school alumni were often workers and supervisors for the excavations. Also, because the Chicago field school was the first training program in the eastern United States, the majority of archaeologists working in the East knew about it and possibly about the field methods being implemented at the Kincaid site.

To determine the effect the University of Chicago excavations had on other excavations being done in the eastern United States, this project examined site reports from other excavations that were undertaken around the same time. Particular attention was paid to the excavations involving previous University of Chicago field school students, whether they were laborers or supervisors. These site reports provide the information necessary for a comparison of the methods used with those of the Chicago archaeologists. This information also documents the kind of influence the Chicago Method had on archaeological investigations in North America. Methods used by archaeologists at other sites being excavated at the same time as the Kincaid site provide useful information on changes in the methods used by the University of Chicago field schools. These other site reports also assist in determining the anthropological mindsets of archaeologists in eastern North America. The goals of the archaeologists and the questions being asked did have an influence on the field methods being used, and ultimately a comparison can be made between the goals of the Chicago archaeologists and those elsewhere.

In sum, this research project used a variety of written sources and photographs to answer questions about the Chicago Method, particularly what it was, how it changed, and what influence it had on archaeological excavations elsewhere in the eastern United States. These sources also show how influential the University of Chicago field school excavations were on the archaeological methods used today.

CHAPTER 3

PRE-EXISTING ARCHAEOLOGICAL METHODS

This chapter examines some earlier excavations conducted in eastern North America prior to the establishment of the Chicago field school at Kincaid. A review of these excavations will provide a context for the status of the field of archaeology prior to the establishment and spread of the Chicago Method. In other words, it will examine what archaeological methods were being used during the early stages of archaeology in the United States. These excavations were chosen because they were conducted by prominent archaeologists who worked for well-known institutions, such as the Milwaukee Public Museum, the R. S. Peabody Museum, the U. S. National Museum, and the Rochester Museum. The excavations represent a sample of the archaeology that was being conducted in the East prior to the University of Chicago excavations.

These excavations are divided by the date when they took place and have no direct or known connection to the University of Chicago. First, the excavations at the Aztalan site, which took place more than a decade before the Chicago excavations, will be reviewed. Next, the 1920s excavations at the Cahokia site in Illinois, followed by the 1920s Lamoka Lake site excavations in south central New York. Finally, this chapter will examine the 1929 excavations at the Deasonville site in Mississippi.

The Aztalan Site

Aztalan is a large Mississippian site in Wisconsin that is believed to be directly connected to the Cahokia site in Illinois (Price et al. 2007:524). Under the direction of Samuel Barrett, the curator of Anthropology at the Milwaukee Public Museum, survey and excavation of the site were conducted in the summer of 1919 (Barrett 1970:19). At the end of the first field season, there was much work left to be done, so excavations were conducted again in the summer of 1920 (Barrett 1970:19).

Trenches appear to have been the most common form of excavation technique being used. Very detailed records were kept as features, such as postholes and pits, were encountered, indicating at what depth they were encountered along with the contents or artifacts associated with the features. Features were also mapped and sectioned so profile drawings could be made. Excavations using test pits were also implemented, and again the record-keeping was just as detailed.

The exact methods of trenching and the use of test units is not explained, but it is apparent that the excavation methods were, for the time, well executed. There is at least one possible connection between the Aztalan excavations and the Chicago excavations. W. C. McKern was employed at the Milwaukee Public Museum in the 1930s (Lyman and O'Brien 2003:6) and may have spread his knowledge of the Aztalan excavation methods to the Chicago archaeologists. Whether there was a connection to the Chicago archaeologists, it is apparent that the work being done at Aztalan was definitely ahead of its time.

16

The Cahokia Site

The first controlled excavations to take place at the Cahokia site in Illinois began in 1921 and were conducted by Warren King Moorehead. Moorehead began his archaeological career when he was a student at Denison College in Ohio in the 1880s. During this time he excavated a number of sites on his own, including the Fort Ancient site in 1889 (Kelly 2000:3). Between 1888 and 1890 Moorehead was an assistant under the direction of Dr. Thomas Wilson, Curator in the National Museum of the Smithsonian Institution (Kelly 2000:4). It was at the Smithsonian that Moorehead would meet Frederic Ward Putnam, who selected him as a field assistant to lead excavations in southwestern Ohio and eventually in the Southwest. When the Department of Archaeology at Phillips Academy in Massachusetts was created, Moorehead was appointed curator and later director of the department (Kelly 2000:5). During his stint at Phillips Academy, Moorehead conducted excavations all over the eastern United States, including Maine, Connecticut, Kentucky, Georgia, Missouri, and at Cahokia (Kelly 2000:5).

Unfortunately, Moorehead's excavation methods were not well documented. Moorehead can be considered an archaeologist of the Classificatory-Descriptive Period as described by Willey and Sabloff (1974:42). His main concern was the collection and description of archaeological materials, especially artifacts and mounds. It appears that Moorehead did not develop any new methods of excavation, but relied on those he already knew despite the knowledge that there were more controlled methods being used elsewhere, including those that had been established by Putnam (Kelly 2000:47). The first mound to be excavated at Cahokia in 1921 was the Kunneman mound. Moorehead's method consisted of digging a trench sixty feet long and approximately thirty feet deep into the mound (Moorehead 2000:86). From the vertical profile of this trench, Moorehead was able to determine that the mounds at Cahokia were manmade and not natural hills as had previously been thought. During the first season of excavation, Moorehead would go on to excavate seven more mounds using the same trenching method and also attempted to locate a cemetery northeast of Monks Mound (Kelly 2000:22).

Moorehead would also conduct fieldwork at Cahokia in 1922 and 1927 and at outlying sites in 1922 and 1923 (Kelly 2000:29). Despite his lack of good field methods, Moorehead's work had a huge impact on the fate of Cahokia. His work not only proved that the site was man-made, but that it was worth preserving. In 1921 Moorehead also began his attempt to raise awareness and money to save Cahokia. This attempt and his fieldwork at the site would eventually lead to the 1925 purchase of part of the site as a state park.

The Lamoka Lake Village Site

Excavations at the Lamoka Lake village site in New York first began in October 1925, directed by William A. Ritchie, but were interrupted by bad weather in late November. The following year there were three weeks of excavations beginning in October and the remainder of the site was excavated in 1927 and 1928 (Ritchie 1932:83). The excavations were begun at the south end of the site with a test pit. On the north and south sides of this test pit, a series of parallel trenches were dug across the entire site. The trenches varied in width and were dug to subsoil. As the trenches were dug, crosssections were drawn and photographs were taken (Ritchie 1932:84-85).

It is clear that Ritchie placed trenches across the length of the site in order to find the area with the densest concentration of artifacts and therefore occupation. Based on what was found in Trench 3, he determined that the highest point or level of the occupied area "might have been the point of maximum concentration," so excavations were expanded and became more focused on trenches 5, 6, and 7 within this area (Ritchie 1932:6). Ritchie's goal was to develop a list of culture traits, which he did, and finding the densest concentration of artifacts would allow him to do so. Trenching across the entire site would also provide a full stratigraphic sequence. In other words, it would allow for a chronology of site occupation. Ritchie did state that the trenches allowed the archaeologists to determine all the types of features that might be present. A total of four different types of structures or features were discovered: refuse pits, fire-beds, hearths, and lodge site deposits (Ritchie 1932:85). Ritchie noted that the deposits were highly complex and "no regularity of order of stratification could be discerned" due to, he believed, the unevenness of the original surface which resulted in "layers and heaps of accumulating debris" that grew up "side by side, and as lodge sites and fire-beds were shifted, and new pits opened interrupting old deposits, a highly disorganized condition developed" (Ritchie 1932:85).

The Deasonville Site

In 1929, Dunbar Rowland, Director of the Mississippi Department of Archives and History, contacted Henry B. Collins about a site in Yazoo County Mississippi. The site had been located by two of Rowland's representatives, Moreau B. Chambers, a future Chicago field school alumnus, and James A. Ford. After having worked in the Southwest, Mississippi, and Alaska, Collins agreed to return to Mississippi to excavate the site with the help of Chambers and Ford, with whom he had communicated while in Alaska about excavation methods and the field of archaeology (Blitz 1988:6).

Deasonville proved to be an important excavation because it was a village site. At the time, the majority of excavations in the Southeast had been focused on mounds. In 1929, the Deasonville site was located in a cotton field and excavations were focused on areas in the field that contained the most artifacts on the surface (Collins 1932:2). It is unclear exactly what methods of excavation were used other than that the areas in the field with plentiful artifacts were somehow tested and the plow zone removed to look for visible features. When features such as postholes were located, the excavations followed "them along by shoveling off the plowed surface soil" (Collins 1932:2). This method of excavation resulted in the location of prehistoric structures, both circular and rectangular. This method of excavation can be compared to the horizontal stripping method that was used at Kincaid. Collins was also ahead of his time with regard to the careful recovery of floral and faunal remains and their later analysis and description (Blitz 1988:6 and 7). Collins also placed great importance on pottery description, instilling this importance in

Ford who would use this method to do a widespread survey of pottery along the Mississippi Valley.

In 1933, Chambers would attend the University of Chicago field school in Fulton County, Illinois. When Ford told Collins of Chambers plans to attend the field school, Collins replied, "It may be alright, but I can't see his paying his way back and forth to Illinois to see demonstrated something that you and he have already put into practice in Mississippi" (Blitz 1988:9). Although there is no evidence, it is possible that Chambers did pass on some of his knowledge to the Chicago archaeologists during the 1933 summer field school.

Conclusion

It is evident that there was no standard method of excavation in the field of archaeology prior to the establishment of the Chicago field schools and ultimately the Chicago Method. Some of the excavation techniques employed by archaeologists at the time, such as those used by Barrett, Ritchie, and Collins, however different, were well executed and provided decent archaeological information. Other techniques, such as Moorehead's at Cahokia, were not well executed and much information was lost in the process. Clearly, the creation of a standard excavation method would make it more likely that the information being retrieved from sites would be more consistent and of better quality. It is worth noting that excavation methods were rarely described in detail in archaeology reports at the time of these excavations and none of the descriptions of excavation methods used when researching this chapter were as detailed as those of the Chicago excavation methods in *Rediscovering Illinois* (1937) and the 1951 Kincaid volume.

CHAPTER 4

EVOLUTION OF THE CHICAGO METHOD

The Chicago Method is often considered to be a fixed procedure, based on its description in *Rediscovering Illinois* (Cole and Deuel 1937), but there never was just one explicitly defined excavation technique. Instead, the Chicago Method grew or matured out of methods that already existed, none of which were "truly unique or novel" (Muller 2002:103). The Chicago excavators employed multiple methods, some borrowed from other archaeologists, adapting and modifying older excavation techniques to fit particular field settings or situations.

This chapter provides a brief history of the development of excavation methods taught by the University of Chicago field schools. A description of the Chicago field school technique as it is typically viewed is presented, followed by a description of how the Chicago field school was actually put into practice at one particular site – Kincaid.

Theoretical Context for the Chicago Method

As noted in the introduction, one of the goals of this research is to determine what the anthropological mindsets of the Chicago archaeologists were during the Kincaid site excavations. When the Chicago training programs were getting started in the late 1920s,

the archaeologists realized that some artifacts shared similar traits or characteristics and could potentially be grouped together, but there was no system in place to classify the large quantities of archaeological materials into cultural or chronological order. The Chicago archaeologists believed that "Chronology, or time sequence, is the first step in recovering the story of the past, but this can be accomplished, over a wide area, only when a specific terminology makes it possible to class similar materials together" (Cole and Deuel 1937:33). So, in 1932, W. C. McKern and a group of archaeologists met in Chicago to devise a classification system for the Midwest, which became known as the Midwestern Taxonomic Method (Lyman and O'Brien 2003:64). The main purpose of this classification system was to provide a terminology for the description of cultural materials that could then be used by archaeologists working in different areas. Once this terminology was in place, the archaeologists could compare their findings and ultimately reconstruct culture history over a larger area (Lyman and O'Brien 2003:11). Two problems prepared the way for the Midwestern Taxonomic Method: the apparent lack of known deep refuse sites that would be suitable for stratigraphic excavation, and the lack of provenience for a large number of archaeological collections in museums and private collections (Willey and Sabloff 1974:112). The Midwestern Taxonomic Method was a solution to how to deal with these sites and collections; however, as important as chronology was at the time, the Midwestern Taxonomic Method deliberately ignored the dimensions of time and space in the archaeological record (O'Brien and Lyman 2001:53). Nevertheless, the cultural units defined by this method could potentially be ordered in time and space. In A History of American Archaeology (1974), Willey and Sabloff stated their belief that the Midwestern Taxonomic Method "would not have been devised except in a general climate of archaeological opinion where great stress was being laid on chronology" (Willey and Sabloff 1974:112).

Not only did the Midwestern Taxonomic Method ignore the roles of time and space in archaeology, the method also ignored the aspect of human behavior and the role it played in the development of material culture. In *A Study of Archaeology* (1948), Walter Taylor agreed, stating that:

It is impossible to get at the cultural significance of any artifact merely by classifying it with certain more or less similar artifacts and noting its presence within an archaeological site. There is, I believe, more to the study of culture than this (Taylor 1948:77).

Ultimately, McKern did not think classification of artifact traits was the main goal of archaeology, but until science had advanced enough to allow for chronological dating of archaeological sites, the Midwest Taxonomic Method would have to be used. As the Chicago training programs progressed through the years, there is evidence that a number of the archaeologists began to question what role human behavior played in the creation of the material culture and archaeological sites they were encountering.

One very intriguing possibility, based on circumstantial evidence, is that British "structural-functionalist" anthropologist A. R. Radcliffe-Brown, who was teaching at the University of Chicago between 1931 and 1937, influenced this change in perspective (Stocking 1984:166, 170). Radcliffe-Brown was interested in the interrelation of social structures, or the main beliefs that organize people within a society (Trigger 1989:245; McGee and Warms 2004:155). Radcliffe-Brown's ideas might have had an impact on some of the Chicago archaeologists, who began to question how the archaeological
record could provide information about a past society's social structure. Radcliffe-Brown was not the only functionalist anthropologist who might have had an influence on the Chicago archaeologists. Robert Redfield was also teaching at the University of Chicago during the field schools and thus likely contributed to the shift from a strict chronological interpretation to a more humanitarian understanding of the archaeological record.

Two articles published in American Antiquity show how the Chicago archaeologists began to adapt these functionalist anthropological questions to archaeological methods. In 1938, Julian H. Steward and Frank M. Setzler, who received his undergraduate degree from Chicago and went on to direct the 1940 Kincaid field school, published an article in American Antiquity titled "Function and Configuration in Archaeology." The authors advocated a new approach to archaeology that was not entirely focused on establishing a chronology of past cultures. Steward and Setzler (1938:6) stated that although chronology is important material objects should also be treated functionally or as "devices employed by human beings in important daily activities." Similarly, John Bennett, a Chicago 1940 field school student who became one of the authors for the 1951 Kincaid publication, published an article in 1943 titled "Recent Developments in the Functional Interpretation of Archaeological Data." In this article he also advocated a functionalist approach to archaeological methods, defining functional as "indicating interpretations of artifacts as part of a total cultural scene, integrated within the social, political, and economic organizations, and not merely as unique material objects" (Bennett 1943:208).

Not all of the Chicago archaeologists were influenced by Radcliffe-Brown. In an interview for *Current Anthropology* in 2001, Richard S. MacNeish described Radcliffe-

Brown's courses and theories as useless and as having "nothing to do with archaeology" (Ferrie 2001:719). As will be described later, it is apparent that MacNeish unwillingly adopted new excavation methods at Kincaid, especially those that might have developed due to the influence of Radcliffe-Brown. Jesse D. Jennings was also not very impressed by Radcliffe-Brown. In his memoirs, he described Radcliffe-Brown as "attracting many students for reasons never clear to me, although I took all his classes (despite their dull repetitiveness) because he was so highly touted" (Jennings 1994:43).

Archaeologists also began to address the disregard of time and space by the Midwestern Taxonomic Method. Although an "absolute" dating method was not available at the time, there were solutions to the time and space issue, such as the use of the direct historical approach which used the chronology and traits of the recent past as a fixed datum point from which to work backwards in time (Steward 1942:337). Later, Fred Eggan, a Radcliffe-Brown student who became a Professor of Anthropology at the University of Chicago, suggested the blending of anthropology and archaeology by the combination of the direct historical approach in archaeology and the ethnohistorical research provided by social anthropologists as a way to interpret past cultures (Eggan 1952:37). This idea would later be reinforced by Gordon Willey and Philip Phillips with their suggestions that "American archaeology is anthropology or it is nothing," and that cultural anthropology and archaeology can be used together through the use of "culturehistorical integration", which the authors define as "both the spatial and temporal scales and the content and relationships which they measure" (Willey and Phillips 2001:2, 12). Archaeology would provide the space and time information and cultural anthropology would provide information on cultural changes and relationships through the use of

ethnography and ethnographic analogy. The incorporation of cultural anthropology also reinforced the importance of human behavior as the cause of culture change (Willey and Phillips 2001:6). In one of the first statements on the "New Archaeology," Lewis Binford would also address this issue of "archaeology as anthropology," stating that "Archaeology has certainly made major contributions as far as explication is concerned" but it had "made essentially no contribution in the realm of explanation" (Binford 1962:217). In other words, he believed that archaeology was so concerned with the classification of artifact traits and their role in specific historical events that it neglected their role in the "entire spatial-temporal span of man's existence" (Binford 1962:217). Binford taught at the University of Chicago in the early 1960s, and his continuing influence can be seen in later works involving Chicago-trained "new archaeologists," including Howard Winters (1969), James A. Brown (1971), and Christopher Peebles (1971) in the East, and James N. Hill (1970), William Longacre (1970), Fred Plog (1974) and Charles Redman, lead editor of Social Archaeology: Beyond Subsistence and Dating (Redman et al. 1978) in the Southwest.

The 1951 Kincaid volume shows that the Chicago archaeologists did use the Midwest Taxonomic Method, which was also described in *Rediscovering Illinois* (1937), to classify features and artifacts that were encountered at Kincaid (Cole et al. 1951:3). Nevertheless, the introduction of new excavation techniques, primarily the horizontal stripping method, which focused more on features and the layout of houses and villages, indicates that the anthropological questions of the Chicago archaeologists were changing (Trigger 1989:272). They were becoming more interested in how past societies were organized at any given time, and why changes occurred within these societies.

History of the Chicago Field School Technique

As stated in earlier chapters, the basic excavation method known as the Chicago Method was developed during the early surveys in Illinois beginning in 1926. At a National Research Council conference in Birmingham, Alabama in 1932, Cole stated that the goal of archaeology was to:

know the total culture of each group we study – not isolated facts. When we know our cultures and plot them on the map we see that they tend to take on geography. As we excavate we can learn the sequence of cultures and thus can view our subject in time and space (Cole 1976:75).

To do this, Cole described a method, which included surveys to locate sites and excavations of mound, villages, burials, and caves. First, he talked about surveys, which consisted of an examination of local collections followed by surface collecting and minor excavations to "determine cultural manifestations, density of population, evidences of stratification, and the like" (Cole and Deuel 1937:22). Once the survey was completed, the archaeologists would determine which sites were ideal for further investigation and these would be excavated. The method used to excavate the chosen sites would later become known as the Chicago Method and was used at Kincaid. Yet, there is some question about whether the method was actually developed by the University of Chicago or whether it came from someone else.

In "Origins of Stratigraphic Excavation in North America" (2002), David Browman (2002:242) acknowledges that the University of Chicago field schools "revolutionized mound excavation in the United States in the 1930s and 1940s." But, Browman claims

that the excavation technique taught in the Chicago field school was actually developed by Frederic Ward Putnam in the 1880s and that William Baker Nickerson, a little-known amateur archaeologist in Illinois, learned these techniques as a student assistant of Putnam's at the Peabody Museum. At the Madisonville site in Ohio, Putnam sponsored excavations on a mound in 1891, 1897, 1907, 1908, and 1911. For these excavations, trenching was used and a grid was established, but it is not clear what kind of excavation methods were used to trench the mound nor what kind of grid system (Drooker 1997:112). John Bennett noted in a 1942 obituary of Nickerson in American Antiquity that Putnam did have an influence on Nickerson's work but that "a study of the correspondence between the two men displays nothing more than a role of 'encourager' for Putnam" (Bennett 1942:124). Nickerson had surveyed and excavated extensively in Jo Daviess County between 1895 and 1901 and it is possible that he may have based some of his excavation methods on those being used at Madisonville by Putnam (Bennett 1942:122). When the University of Chicago training program began in 1926 in that county, Martin, Blackburn, and Wilton Krogman heard about Nickerson's work, contacted his widow, and were able to study his excavation notes and drawings (Muller 2002:102). Martin noted in his journal that "A cursory examination of his notes, plans, and final report were enough to convince us that he was a *most* careful worker – almost too careful – and very scientific" (Bennett 1942:122). Martin and Blackburn went on to use Nickerson's methods during their survey and testing work and the methods were eventually implemented at the Kincaid site.

There is no doubt that the University of Chicago excavation methods were copied or borrowed from Nickerson, and based on Bennett's article, it appears that Nickerson, not Putnam, developed the archaeological techniques. It is also important to note that the methods borrowed from Nickerson were for mound excavations. When excavating nonmound sites, the Chicago archaeologists employed different methods and in later years, different mound excavation techniques were also adopted. Regardless of who originally developed the techniques that became known as the Chicago Method, the Chicago archaeologists changed their methods considerably over time and did not rely on just one specific technique.

Description of the Chicago Field School Technique

Unless otherwise noted, the details of the Chicago Method have been drawn from Cole and Deuel's (1937:24-28) description of excavation methods used by the Chicago field school in *Rediscovering Illinois*. There and in the 1951 Kincaid volume, symbolic designations are made for mound (°) or village sites (°). Also, the Kincaid site extends into two counties, so the Massac County side is referred to as Mx and the Pope County side as Pp (see Fig. 2).

The first step of excavation was to dig test pits on all sides of the site in order to "determine the condition of the undisturbed soil and thus form a basis of comparison with the site or feature itself" (Cole and Deuel 1937:24). Once the test pits had been dug, the area to be excavated was staked in five-foot squares using lines of stakes set five feet apart along the north-south and east-west axes of the mound or village area. When recording the location of an excavation area, the east-west axis was designated using the terms left or right (L or R) depending on which side of the north-south axis it was

located. After the whole area was staked, the stakes were assigned grid designations for horizontal control and then a datum plane was established for vertical (elevation) control (see Fig. 3). The datum plane was most commonly set above the highest point or elevation of the area to be excavated.

When excavating mounds, the Chicago archaeologists implemented Nickerson's method. The excavation began outside the mound with a trench dug to sterile soil along the zero line. Then the trench's vertical wall was cut back toward the five-foot line at six-inch intervals and the wall was kept as straight as possible (see Fig. 4). When the five-foot line was reached, the horizontal excavation surface and vertical wall were smoothed in order to measure the depth and look for possible features. When artifacts or features were encountered, they were numbered, sometimes individually and sometimes by bag, according to the level or depth encountered and the unit and artifact type. In the lab, the artifacts would be washed and catalogued (see Figs. 5 and 6). This detail would later be useful in reconstructing the chronology of site occupation at Kincaid. After features and artifacts were exposed, photographs were taken and diagrams were drawn. Once the profile was drawn along the five-foot line, the vertical face was carried another five feet into the mound, and profiles drawn again. Screens were not used. The goal of this horizontal and vertical cutting method—or vertical slicing method—appears to have been to find information in the vertical profiles from the surface of the mound down to the undisturbed soil (see Fig. 7).

The same methods could be employed when excavating village sites, though isolated trenches and test squares were often used. When trenches were dug, they were typically five feet wide and laid along either a north-south or east-west direction. Five-



Figure 2: Map of the Kincaid site (Cole et al. 1951:ii).



Figure 3: Grid from Rediscovering Illinois (Cole and Deuel 1937:25).



Figure 4: "J. Norman Emerson on Mx^o10" (Mx1036:1940 photo log). Courtesy, Illinois State Museum.



Figure 5: "Washing sherds and artifacts before beginning the afternoon's digging" (Mx297:1935 photo log). Courtesy, Illinois State Museum.



Figure 6: "Chief cataloguer Neitzel and Assistant Coe cataloguing artifacts" (Mx473:1935 photo log). Courtesy, Illinois State Museum.



Figure 7: Vertical Slicing Technique

foot squares could then be added along the sides of the trench in order to allow for expansion of the excavation. The soil was removed in six-inch arbitrary levels until no features or artifacts were encountered, or until there was no longer any evidence of occupation. Once again, all artifacts and features were recorded based on the depth encountered, unit and classification.

Based on the Cole *et al.* 1951 publication on Kincaid and the Chicago field notes, this basic method of mound and village site excavations comprised the excavation techniques employed by the University of Chicago field school. As is pointed out in that report, however, "certain unusual or unique procedures" (Cole *et al.* 1951:3) were used at some excavation locations.

Chronology of Changes in the University of Chicago Field School Excavations

A chronology of the Chicago excavations at Kincaid from 1934 to 1941 will provide evidence of how the excavation methods used changed over time. The chronology has been developed by Pursell (2006) based on the 1951 Kincaid publication and the University of Chicago field notes. The chronology will focus only on years and areas in which excavation methods other than those described by Cole and Deuel (1937) were implemented. Not only are different excavation techniques recorded, but there were also changes in artifact treatment over the years.

1934 Field Season

The first summer field school at the Kincaid site began on June 18, 1934 and continued to August 31 (1934 photo logs), with J. C. Harrington as the field supervisor. After becoming interested in archaeology in New Mexico, Harrington enrolled in the University of Chicago's graduate school in 1932 where he studied under Fay-Cooper Cole and Robert Redfield (Jelks 1998:np). The excavations for the summer of 1934 focused on Mx^o4, Mx^v1A , and Mx^v1B. The field notes used for this research are cited as excavation areas, year, notebook, and page number.

The village site Mx^v1A is a section of the village site Mx^v1 that was chosen for excavation. It is situated about 600 feet west of Mx^o8 (Cole *et al.* 1951:43). It was originally decided to excavate two trenches, A and B, that were ten by twenty feet and staked in five-foot squares (Cole *et al.* 1951:44). The field notes indicate that initially trench A was to be excavated by working "forward as in mounds" and trench B was to be excavated by "working down on the entire area" (Mx^v1A 1934:Notebook V:3). In other words, trench A was to be excavated using the vertical slicing technique and trench B was to be excavated in horizontal levels. MacNeish's final report on the excavations at $Mx^{v}1A$ and the field notes state that trench A was excavated using the vertical slicing technique until Feature 1, a burned clay floor, was encountered (MacNeish n.d:Final Report of Mx^v1A) (see Fig. 8). At this point, the excavation of trench A was expanded in order to expose the floor of Feature 1-a large building-to an area of 40 x 40 feet (Cole et al. 1951:44). The exposure of the floor in Trench A is essentially horizontal stripping, which appears to be a technique that used a combination of vertical and horizontal slicing in 6-inch arbitrary levels, which resulted in the horizontal layers being "peeled off to

expose the layer below" so that "entire houses and features were fully exposed" (Cole et al. 1951:59) (see Fig. 9). The common method of horizontal excavation used today in the Southeast United States is similar and involves fine horizontal scraping across an entire level with no vertical slicing (see Fig. 10). It is possible that this method was used by the Chicago archaeologists, but based on the photographs, it appears that Chicago used the horizontal/vertical slicing technique. Previous excavation methods were concerned with vertical profiles and not horizontal plans showing floor or structure patterns. Unfortunately, in the field notes it is not clear who made the decision to use this new horizontal stripping method. The most likely decision maker was Harrington, who was assigned to Trench A, along with Robert S. "Stu" Neitzel and Fred Carder. The excavation at trench A was expanded even more because "only two sides of the structure are at all clearly defined, even with the excavation expanded to a 40' square. For this reason, a 45' x 5' trench was put down at the south end of the excavation" (Mx^v1A 1934:Notebook V:24). This is just one example of the expansion of excavation areas in order to uncover more of the features encountered. This new excavation method is also evidence that the Chicago archaeologists were becoming more interested in the functional interpretation of cultures and features rather than just focusing on the sequential typology of material culture. Although excavations of trench B did begin, nothing more is mentioned about the trench in the 1951 publication or the field notes.

Changes were made by the Chicago archaeologists not only in excavation techniques, but also with regard to the handling of artifacts. The artifacts were catalogued and kept in the same sacks by the level and square in which they were found $(Mx^{v}1A 1934:Notebook V)$. At first, a number of representative sherds were separated



Figure 8: "View of the site after excavation had been carried down to approximately the level of the clay floor...Just below this level walls of a rectangular structure were encountered, similar to the structures in the habitation zone beneath the mound" (Mx190:1934 photo log). Courtesy, Illinois State Museum.



Figure 9: Horizontal Stripping Technique



Figure 10: Horizontal Scraping Technique commonly used today.

and given independent numbers and catalogued ($Mx^{v}1A$ 1934:Notebook V), but later in the excavation all of the materials from a given provenience unit were "kept together" ($Mx^{o}4$ 1934:Notebook I).

1935 Field Season

The 1935 field season began on June 23 and ended on August 28, and was directed by Deuel and Jesse Jennings (Cole et al. 1951). The excavations focused on continuations of Mx^o4 and Mx^v1A and the start of work at Mx^o9 and Mx^o8. In his final report on Mx^v1A, MacNeish wrote, "The method of excavation of this mound [*sic*] underwent considerable change during the two years of excavations and unfortunately some changes were not of the best" (MacNeish n.d:Final Report of Mx^v1A). He describes the horizontal stripping method used to uncover the burned clay floor of Feature 1 after the vertical slicing technique was stopped, referring to the "walls of the house structures left undug" when the horizontal stripping technique was implemented (MacNeish n.d:Final Report of Mx^v1A) (see Fig. 11). MacNeish also complained that the horizontal stripping technique failed to yield chronological information, which indicates that he was more in favor of classifying artifacts and arranging them chronologically rather than investigating the role that human behavior played in the creation of the material culture. This is consistent with his dislike of Radcliffe-Brown's approach, as noted above.

Excavation of $Mx^{\circ}4$ was also continued in 1935. The east section of the mound was excavated as it was in 1934 using the vertical and horizontal slicing technique (Cole *et al.* 1951:59), but when a burned house was encountered, excavation of that section

changed (see Fig. 12). From this point the archaeologists used the horizontal stripping method.

1937 Field Season

The 1937 field season saw no new innovations in excavation techniques, but the archaeologists began to experiment with different types of films and filters to determine what worked best when photographing features. For example, they tested at least three types of film: panchromatic, orthochromatic, and plenachrome along with different filters to see which film in combination with which filter produced the best image. Ultimately, panchromatic film, a black and white film, was the best film for field purposes because it is sensitive to all light wavelengths and can produce good images with or without filters. Orthochromatic film is only sensitive to certain wavelengths of light and therefore is not as suited to use at archaeological sites, although in some cases it was deemed better than panchromatic film. For example, the photographer Frank Blackburn states, "Panchromatic film, however, often fails to give the severe contrasts which lead to eye striking detail in otherwise flat subjects. This detail, if the subject lacks reds or deep oranges, may be gotten easier on Orthochromatic films" (Pp135: 1937 photo log). Overall, this experimentation with different films and filters was important and contributed to good documentation of the archaeological record that no longer exists except through documentation and photographs.



Figure 11: "General view of $Mx^{\nu}1A$ from west showing intersection of the two house structures" (Mx250:1935 photo log). Courtesy, Illinois State Museum.



Figure 12: "Area of Feature VII cleared down to the charcoal" (Mx294:1935 photo log). Feature VII was a large burned structure. Courtesy, Illinois State Museum.

1938 Field Season

The total excavation time for the 1938 field season was from June 18 to August 28, with Horace Miner acting as field supervisor. Cole *et al.* (1951:92) describe the work conducted at $Mx^{o}10$ as surface excavations to determine if any structures had existed on the truncate or conical portions of the mound, but do not provide a clear description of these excavations. Based on the 1951 publication, there is no evidence to suggest that excavation methods used at $Mx^{o}10$ were other than those described by Cole and Deuel (1937). However, an examination of the photographs taken at $Mx^{o}10$ suggests otherwise, indicating extensive horizontal clearing of large areas to expose structures (1938 photo logs; see Figs. 13 and 14). For example, the caption for photograph Mx989, taken of Feature VIII at $Mx^{o}10$, states that the excavation spread out from where the original excavation started, indicating horizontal stripping (Mx989:1938 photo log). Therefore, it is possible that surface excavations suggest the use of horizontal stripping.

1940 Field Season

The 1939 field season saw no innovations in excavation technique. The 1940 field season consisted of excavations of $Mx^{v}1D$, $Mx^{o}7$, and $Mx^{o}10$ with Frank Setzler as the field supervisor (Cole *et al.* 1951). $Mx^{o}10$ excavations were continued by digging at the junction of the conical and truncate portions of the mound in order to determine "their relationship and to seek evidence of building stages or stratification" (Cole *et al.* 1951:92).

As mentioned in the introduction, excavation methods were borrowed from other sites. One such instance occurred at $Mx^{v}1D$ during the 1940 excavation. Here, the use of

ten-foot squares was borrowed from Glenn Black's work at the Angel Site ($Mx^{v}1D$ -East 1940:Field Notes:14). The Kincaid students visited Black's excavation at Angel early in the summer of 1940 and were impressed by the use of ten-foot squares separated by balks (see Fig. 15). Black's method (see Black 1967) allowed for horizontal exposure while also preserving vertical profile information.

It is apparent in the field notes of the Mx^o7 that the visit to the Angel site did influence the excavation methods being use at Kincaid. In his August 13 note on the excavations, Robert Ritzenthaler described the use of the "horizontal stripping technique going down in shovel depths (as Black does at Angle [*sic*] site) and planing each level in the attempt to locate structure" (Mx^o7 1940:Weekly Summary No. III).

As mentioned above, the excavation method also relied on the number of workers available. In a draft report of the $Mx^{0}7$ excavations in 1940, Cole stated "limited funds, a small labor group, and a desire to restore and preserve the site led to the method outlined" ($Mx^{0}7$ 1940:Notes and Reports). The technique used at $Mx^{0}7$ appears to have involved two cross trenches at the top of the mound with step-trenches extending down the mound slopes ($Mx^{0}7$ 1940:Notes and Reports) (see Figs. 16 and 17). Although Cole *et al.* stated that more information would have been gained if the mound had been leveled, "the evidence gained by this method justifies its use where it is desired to preserve the mound, or when limited funds or shortage of labor makes total removal and reconstruction impossible" (Cole *et al.* 1951:78).



Figure 13: "Looking west at F VIII. Left side of picture shows relationship of north trench to north bench, also the relationship of the bench to floor shows up in the cross section thru the bench. The pit in the lower right was where the original excavation started and where a small part of the corner of F VIII was removed before hard floor was encountered and spreading out started. The pit proved that there are other structures under the one exposed in the picture" (Mx989:1938 photo log). Courtesy, Illinois State Museum.



Figure 14: "The boys fixing up F VII for a photograph. Top left, Willis, trying out the north bench. Top, Armstrong, cleaning up a section of fallen roof. Right, H. Sims, cleaning the floor as is Alden, lower left" (Mx987:1938 photo log). Courtesy, Illinois State Museum.



Figure 15: "Field party at the Angel site (near Evansville, Indiana). Upper row, left to right: E. L. MacQuiddy, Robert Roberts, Robert Yampolsky, Phil Yampolsky, Norman Emerson, Mr. Frank Setzler, Mr. Glenn Black, John Bennett, and Robert Armstrong. Lower row, left to right: Ernest Young, Mrs. Young, Richard MacNeish, Mr. W.C. MacKern, George Fathauer, Robert Ritzenthaler, Al Harris, John Murra, and Melvyn Baer" (Mx1028:1940 photo log). Courtesy, Illinois State Museum.



Figure 16: "Completed trench A" (Mx1389:1940 photo log). Courtesy, Illinois State Museum.



Figure 17: "Completed trench B as seen from the West" (Mx1391:1940 photo log). In the bottom left hand corner of the photo the beginning of the step trench is visible. Courtesy, Illinois State Museum.

1941-1942 Field Season

The very long 1941 field season began in June and was continued to January 27, 1942 (Cole *et al.* 1951). There were numerous field supervisors, including Kenneth Orr, Roger Willis, MacNeish, Bennett, and Gordon Gibson. Excavations were conducted at $Pp^{v}1A$, $Mx^{o}10$, $Mx^{o}4$, $Mx^{o}7$, and $Mx^{v}1A$ -41. The excavation at the junction of the truncate and conical portions of $Mx^{o}10$ was expanded, and "a cut 75 feet in extent was made at the point of union, from top to basic soil" (Cole *et al.* 1951:93). At $Mx^{o}4$, squares were excavated in 6-inch layers using the vertical slicing technique, but when evidence of structures appeared the horizontal stripping technique was used (Cole *et al.* 1951:59).

At Mx^o7, MacNeish took over the step trenches started by Robert Ritzenthaler the previous year. MacNeish's notes state that the excavation began by "taking off six inch levels" in order to find the white ash layer that was encountered in 1940 (Mx^o7 1941:Weekly Summary). In other words, it appears that MacNeish was using horizontal stripping, a technique that he disliked. This was not the only time MacNeish would use horizontal stripping at Mx^o7. In his notes for January 9, 1941, he describes the methods to be used on four large squares, which he refers to as areas. He says, "Area 1 and the west trench shall be excavated by us for the vertical slicing technique" and the "other three areas to be excavated will be sliced off horizontal on top of each cultural level" (Mx^o7 1941:Weekly Summary). These stepped-cross trenches were dug from the "peripheries to the center and from the top to basic soil" (Cole *et al.* 1951:74-75) (see Figs. 18 and 19). Difficulty in moving excavated soil from atop the mound was solved by an elevated wheelbarrow ramp (1941 photo logs) (see Fig. 20).



Figure 18: "Supervisors' conference at Mx^o7. Left to right, G. Gibson (photographer and Pp^v1a), M. Maxwell (regional W.P.A. director), R. Willis (dig supervisor), R. Benton, R. MacNeish (Mx^o7), J. Griffin. W.P.A. workers in the trench" (Mx1093:1941 photo log). Courtesy, Illinois State Museum.



Figure 19: "East trench, Mx^o7" (Mx1587:1941 photo log). Courtesy, Illinois State Museum.



Figure 20: "Use and construction of high wheel-barrow ramp for carrying dirt from top of the high conical mound, Mx^o7" (Mx1078:1941 photo log). Courtesy, Illinois State Museum.

In 1941, there is evidence of another change in excavation technique at $Mx^{v}1A-41$. The Field notes for July 25 and 28-31 say that the previous method used was an entirely horizontal technique, which had limited results. This horizontal technique was replaced with a "combination of vertical and horizontal excavation," in six-inch layers by squares, with a "single square being completed before another is attempted" ($Mx^{v}1A-41$ 1941: Notes). This new technique resulted in posts and trenches being easily determined in the horizontal plans, and the only problem noted was the lack of anything to photograph after the completion of the excavation ($Mx^{v}1A-41$ 1941: Notes). This method also provided profiles of two sidewalls along with the horizontal plan, providing what Cole *et al.* described as "a three-dimensional cross-section of all features" (Cole *et al.* 1951:50).

In 1941 there were also more changes in the treatment of artifacts. At $Mx^{v}1A-41$, material was apparently being more carefully selected. In the field catalogue and daily notes from 1941 Orr stated, "Only artifacts, identifiable bones, and unusual 'natural' specimen [*sic*] are being taken." Based on this statement there appears to have been little analysis of animal bones being performed. This is confirmed by another note from $Mx^{v}1A-41$ which says:

The material taken from the squares that is not specimen material is being piled next to the schoolhouse according to types: a bone pile, a burnt-earth pile, a flint pile, a rock pile. By this plan reference may be readily made of these materials ($Mx^{v}1A$ 1941: Field Catalogue and Daily Notes).

Once again, these items were not catalogued by provenience and it appears that they were not analyzed.

Conclusion

This review has shown how the University of Chicago field school technique actually consisted of multiple methods of excavation and treatment of artifacts that changed from year to year. It is apparent that the Chicago Method described by Cole and Deuel (1937) in *Rediscovering Illinois* does not fully encompass the techniques used at the Kincaid site. As situations warranted, new techniques were often used or old techniques were adapted to provide the best information about the area being excavated and also to provide the most efficient method for excavation. In many ways, the methods being used were ahead of their time.

In the Chicago Method, for example, artifacts were almost all provenienced by grid square and depth, as well as whether they were in a feature; such information was not routinely recorded by many non-Chicago archaeologists (Welch 2006:96). As already mentioned, the Chicago field schools also extensively documented their excavations with photographs, experimenting with different kinds of black-and-white films, filters, and even with infrared film.

Rather than teaching students to apply a rote excavation formula, the Chicago field school taught students to adapt excavation techniques to the problem and developments at hand, while documenting the provenience and context of artifacts. These new excavation methods, especially the horizontal exposure of large features such as structures, also allowed the archaeologists to not just focus on the chronology of the site and materials being found, but also to question the social, functional, and human significance of what was being found. With the passing of the Kincaid alumni (summarized in Table 1) we no
| Year | Director | Students | |
|------|---------------------|---------------------------------------|-----------------------------|
| 1934 | John C. Harrington | Langdon Bakus | Horace Miner |
| | | William Russell Bascom - photographer | Maurice Mook |
| | | Fred Carder, Jr. | Georg Neumann |
| | | James Duncan | Marshall T. Newman |
| | | Robert Elder, Jr. | Robert Stuart Neitzel |
| | | John Elliott | John Pelzel |
| | | Ku Huang | James Slotkin |
| | | Jesse D. Jennings | William Underbrink |
| | | Paul Maynard | |
| 1935 | Thorne Deuel | Lewis Austin | Paul Maynard |
| | Jesse D. Jennings - | Ralph Brown | Horace Miner |
| | Assistant Director | Joffre Lanning Coe | Charles Nash |
| | | Paul Cooper | Robert Stuart Neitzel |
| | | William Crockett | Georg Neumann |
| | | John Fast | Roger Willis |
| | | Russell Hastings | |
| 1936 | Thorne Deuel | Taha Baquir | Paul Maynard (?) |
| | | William C. Beatty | John Rinaldo |
| | | Brownwell | G. Hubert Smith |
| | | Joseph R. Caldwell | Alexander Spoehr |
| | | Carl H. Chapman | William L. Van Ness |
| | | Charles Fairbanks | C. Martin Wilbur |
| | | Jack Hevesh | |
| 1937 | Thorne Deuel | Frank H. Blackburn - photographer | Richard K. Meyer |
| | | Jeannette Blackburn (chaperone) | Bethune Millen |
| | | Mary Butler | Mildred Mott |
| | | Joseph R. Caldwell | Iva Osanai |
| | | Eleanor Cook | Robert E. T. Roberts |
| | | Gretchen Cutter | Dorothy Shapiro |
| | | David Eisendrath | C. L. Simmons |
| | | Roland Elderkin | Roger Willis |
| | | Gordon Gibson | Donald Zaun |
| 1938 | Horace Miner | John Alden | Ben Paul |
| | | John Armstrong | Earl L. Reynolds |
| | | Conrad Bentzen - photographer | Henry Sims |
| | | Benjamin Bradley | Carl Smith |
| | | Joseph Chamberlain | Harriet Smith |
| | | Arch Cooper | Mary Spencer |
| | | J. Joe Finkelstein | Edward H. Spicer |
| | | Annesta Friedman | Rosamund Spicer - chaperone |
| | | E. Friedman | Robert Tschirky |
| | | Nan Glen | Sara "Sally" Tucker |
| | | Edward Haskell | Frances Weckler |
| | | Moreau Maxwell | Andrew "Bud" Whiteford |
| | | Robert Merz | Roger Willis |
| | | Richard Meyer | |

Table 1: University of Chicago Kincaid field school participants

| Year | Director | | Students |
|------|--------------------|---------------------|-----------------------|
| 1939 | Edward H. Spicer | John Bennett | Cora Passin |
| | Roger Willis - | Conrad Bentzen | Herbert Passin |
| | | J. Blackburn | |
| | Assistant Director | (Jeannette?) | John Percell |
| | | J. Carlander | Karl Schmitt |
| | | Kenneth | R. Snodgrass |
| | | W. Lessa | R. Spicer (Rosamund?) |
| | | Ray Martin | K. Tiedke |
| | | Richard S. MacNeish | A. Whiting |
| | | Maxwell | |
| | | (Moreau?) | |
| 1940 | Frank Setzler | Robert Armstrong | John V. Murra |
| | | Melvyn Baer | Robert Ritzenthaler |
| | | John W. Bennett | Robert E. T. Roberts |
| | | J. Norman Emerson | Chandler Roe |
| | | George Fathauer | R. Tschirky |
| | | Alfred Harris | Roger Willis |
| | | George Howard | Phil Yampolsky |
| | | Richard S. MacNeish | Robert Yampolsky |
| | | E. Lynn MacQuiddy | Ernest Young |
| _ | | Robert Merz | |
| 1941 | Roger Willis | John W. Bennett | |
| | | Gordon Gibson | |
| | | Richard S. MacNeish | |
| | | Kenneth G. Orr | |
| | | Roger Willis | |

Table 1: University of Chicago Kincaid field school participants (cont.)

CHAPTER 5

INFLUENCE OF THE CHICAGO METHOD

This chapter examines the extent to which the Chicago Method influenced archaeological work being conducted elsewhere in the United States. Most of what is known about archaeological excavation techniques in North America can be found in reports on specific archaeological sites. For the Kincaid site, as mentioned previously, information on excavation methods can be found in the 1951 volume on Kincaid and also in Cole and Deuel's *Rediscovering Illinois* (1937). The methods described are what have typically been referred to as the Chicago Method. Little has been done to compare these various descriptions of excavation methods on a wider scale. An examination of these and other reports leads to more knowledge about the spread of the Chicago Method in the United States and how it was adapted or changed at other sites.

First, this chapter provides a brief history of how the University of Chicago field schools influenced New Deal archaeology in the 1930s and 1940s. It also examines selected excavations at other sites in North America in the 1920s, 1930s and 1940s. These include government-aided projects in Tennessee and Alabama, as well as excavations in Louisiana and Indiana. An assessment of these reports shows how much influence the University of Chicago excavation methods and former students had on excavations in a number of states in the 1930s and 1940s. Not only does this chapter look at excavations influenced by the Chicago field school, but, for comparative purposes, it also examines excavations that had no direct connection to Chicago field school alumni.

The New Deal and the Chicago Method

During the 1930s, the United States was suffering from a depression, which had led to massive unemployment. To deal with the unemployment, President Roosevelt created the New Deal, through which government programs were developed to provide work. The first of these programs was the Federal Emergency Relief Administration (FERA) in 1933. It was shortly followed by the Civil Works Administration (CWA) in late 1933 and the Works Progress Administration (WPA) in 1935 (Lyon 1996:27). FERA became the first program to sponsor a large archaeological project, at Marksville in Louisiana under the direction of Frank Setzler (Lyon 1996:28). In the 1930s, there were few experienced archaeologists able to supervise the vast number of relief laborers. One of the best sources for trained archaeologists was the Chicago field school at Kincaid, and a list of those students is found in Table 1. The 1951 Kincaid volume states that the New Deal even came to the Kincaid site, and the field workers for later field seasons included laborers from the WPA (Cole et al 1951:vi) (Butler 2008:29; McCorvie 2008:5). As DeJarnette and Peebles (1970:80) stated in their article on the Snow's Bend site in the Journal of Alabama Archaeology, "It was the University of Chicago's field school that gave many of the early Southeastern archaeologists their 'formal' training before they went into the field under the sponsorship of the various works programs."

Chicago-Related New Deal Excavations

This section provides a description of the excavation techniques being used by Chicago-related archaeologists at other archaeological sites in the United States. These are addressed chronologically, although some of the dates overlap. There is one apparent similarity among all of these site excavations, which is that they were supported or funded by government programs, particularly the Works Progress Administration and the Tennessee Valley Authority.

Shiloh Indian Mounds

The Shiloh Mounds site in Tennessee has been the focus of numerous investigations throughout the 1900s, but the most widespread excavations were conducted from December 1933 through March 1934 (Welch 2006:95). They were overseen by F. H. H. Roberts, Jr. of the Smithsonian Institution with Moreau B. C. Chambers, a former Chicago field school student, as his field assistant (Welch 2006:95). The excavations were funded by a federal relief agency with the labor being provided by the CWA (Welch 2006:95).

Based on Paul Welch's study of the Shiloh Mounds site, it appears that the Chicago Method had little if any influence on the methods of excavation used in 1933 and 1934, possibly due to the fact that the excavations at Shiloh were completed in 1934 prior to the beginning of the Chicago field school excavations at the Kincaid site the same year. Although Chambers was a graduate of the University of Chicago field school in Fulton County, Illinois, he did not use the extensive methods of record-keeping at the Shiloh site

that he likely learned at the Chicago field school. "It is particularly surprising that the Shiloh work was not up to the recording standards inculcated by the University of Chicago field school, given that Chambers had been a student there the previous summer" (Welch 2006:96). Unlike the Chicago Method, no grid system was set in place before excavation of the site began which Welch states was due to the many workers provided by the CWA that had yet to be put to work (Welch 2006:95). Eventually a grid system was set up, but it was different from the one used by the Chicago archaeologists at Kincaid, which will be noted later. Welch notes that the Shiloh grid system used coordinates that "were specified in north-south and east-west terms rather than the rightleft terms used in the Chicago system" (Welch 2006:101). This is only a minor difference, but it does show that the Shiloh excavations were not heavily influenced by the Chicago excavations. Also interesting is that Roberts, who received his doctorate from Harvard, did not use the same methods that Browman claimed were developed by Putnam at Harvard. This could be because Putnam had retired by the time Roberts attended Harvard so there was probably little to no direct contact between the two. The photographs from both the Shiloh and Kincaid excavations also show a difference in excavation methods being used. Welch (2006:116) thought that the excavations southwest of Mound A involved the excavation of trenches that traced lines of postholes, resulting in a number of intersecting trenches at different levels. This technique of following lines of postholes resembles the previously mentioned excavations at Deasonville and may have been suggested by Chambers who had worked there. None of the photographs from the Chicago excavations indicate that similar trenching methods

were being used. Trenches at Kincaid sometimes did intersect, but apparently not for the same purpose of tracing lines of postholes.

As Welch (2006:96) points out, Roberts and Chambers improved their field techniques over time; but, the excavations at Shiloh were still not up to the standards of the Chicago field school work.

Wheeler Basin Survey

The archaeological survey of the Wheeler Basin in northern Alabama was begun as a response to the Tennessee Valley Authority's plans to build the General Joe Wheeler Dam that would result in the flooding of a large section of the Tennessee River in northern Alabama (Webb 1939:1). It was deemed important that an archaeological survey of the area be conducted because of the acknowledgement that a large number of prehistoric sites would be destroyed as a result of the flooding.

It was not until 1933, with the establishment of the CWA, that funding was made available for this project. Survey work began in December 1933, with Burnam S. Colburn of the TVA as director; William S. Webb became the supervising archaeologist for the TVA in January 1934. Labor was provided by the CWA and work continued until July 1934 when the CWA was demobilized. In the course of the survey, 19 sites were excavated (Webb 1939:2).

For the excavations, a uniform grid system identical to that used by the University of Chicago field schools was used. This method involved a base line, which ran northsouth, that was staked off in five-foot intervals along with a median line that was also staked off in five-foot intervals and ran perpendicular to the base line and designated as left or right (Webb 1939:7). From the base line and median line, five-foot squares were then designated (Webb 1939:7).

The excavation techniques used at the sites during the Wheeler Basin survey appear to have varied, depending on what was encountered. At site Lu^o 86, a shell mound, the technique used was vertical slicing as described by Cole and Deuel in 1937 (Webb 1939:23). At site La^o 37, a sandy mound, excavation began using the vertical slicing technique with "one man ... put to each 5-foot square and the mound worked in from four sides simultaneously" (Webb 1939:46); but, when a pit was detected on the floor of the mound, a technique similar to horizontal stripping was adopted. Webb (1939:46) states that, "All the earth above the mound floor was removed and when the entire floor was bare it was restaked and excavated. Beginning on the edge of the mound, the floor was taken down in 1-foot levels and worked in from all four sides as before." It appears that this horizontal method of excavation was continued at other sites in the Wheeler Basin. One example is at the site La^o13 where "the mound was taken down in 1-foot levels," thus "maintaining at all times a clean floor and accurate vertical profile" that made it easier to indicate pits and burials (Webb 1939:62).

There is a connection between the Wheeler Basin work and the Chicago field school. In 1933, David DeJarnette was appointed as the primary archaeologist for the state of Alabama; he had participated in the University of Chicago excavations in Fulton County in 1932. DeJarnette would go on to work with Webb, who was the head of the TVA program, which allowed him to participate in the Wheeler Basin excavations (Griffin 1978:3). One definite contribution made by DeJarnette was the detailed method of record-keeping (DeJarnette and Peebles 1970:80). Although not explicitly stated, DeJarnette clearly had some influence on the excavation methods being used at Wheeler Basin, introducing some of the Chicago methods he had learned in 1932. For example, the method of excavation for submound features described above is the same as that described in *Rediscovering Illinois* (1937) for village excavations, so DeJarnette was applying what he had learned in Fulton County. The adoption of the horizontal excavation technique in 1933 or 1934, if that is really what it was, by the Wheeler Basin archaeologists may have occurred around the same time as the adoption of the horizontal stripping technique by the Chicago field school. The first instance of the Chicago archaeologists using horizontal stripping was in 1934 at the village site Mx^v1A (Cole *et al.* 1951:44). No matter when the Wheeler Basin archaeologists began to use the horizontal excavation technique, both were using similar methods of excavation.

Ocmulgee Archaeology

In December 1933, archaeological research began at the Macon Plateau site, which later became part of the Ocmulgee National Monument, outside of Macon, Georgia. This research was federally funded, lasted approximately eight years, and also included excavations at a number of other sites in the area (Hally 1994:1). Arthur Randolph Kelly was hired by the Civil Works Administration to lead the excavations. These excavations would ultimately provide work for thousands of unemployed workers and also for a number of young archaeologists, including James A. Ford, Gordon R. Willey, and Jesse D. Jennings (Walker 1994:17).

Archaeological field methods at Ocmulgee were definitely influenced by the University of Chicago field school excavations. In the edited volume on Ocmulgee, Stephen Williams (1994:12) mentions the use of broad horizontal excavations as being useful, especially referring to the exposure of ridged agricultural fields. These horizontal excavations probably had a connection to the Chicago field school methods. Chicago connections can also be made through the personnel who worked at Ocmulgee. Kelly had worked in Illinois as the director of the Illinois Archaeological Survey, 1929-1930, and for four years as an assistant professor in anthropology at the University of Illinois, 1929-1933 (Walker 1994:17). During that time he had even published an article on Illinois archaeology titled "Rediscovering Illinois" (Kelly and Cole 1931) with Fay-Cooper Cole in 1931 (Walker 1994:17). Jennings, another Chicago field school alumnus hired to succeed Kelly at Ocmulgee, also would have brought knowledge of the Chicago Method to the excavations conducted at Ocmulgee. When Willey left Ocmulgee to work with Ford in Louisiana in 1938, he was replaced by Charles H. Fairbanks, a Chicago field school alumnus, who had also worked as an assistant for Chicago alumnus Charles Nash at the Hiwasee Island site in Tennessee, which will be discussed below.

Chickamauga Basin Survey, Including Excavations at the Hiwassee Island Site

The archaeological survey of the Chickamauga Basin in Tennessee was another WPA-funded project, beginning in 1936 as a result of the TVA's plan to construct a reservoir in the Chickamauga Basin (Sullivan 1995:xvi). The survey, under the direction of Thomas M. N. Lewis of the University of Tennessee, resulted in the excavation of thirteen sites and the large WPA crews allowed for extensive excavations (Sullivan 1995:xvii). Because of the large crews it was necessary to hire a number of archaeologists as supervisors. Many of these supervisors and staff members were alumni of the University of Chicago field schools and brought along the procedures they had learned (Sullivan 1995:xvii). One of the Chicago alumni, Jennings, expressed his dislike for Lewis in his autobiography Accidental Archaeologist, stating that Lewis "had no professional credentials, either academic or in experience, that qualified him to be employed by the state of Tennessee in such an operation" (Jennings 1994:89). Whatever Jennings thought of Lewis, good work was being done in the Chickamauga Basin and Lewis did have archaeological experience. Nonetheless, because of his dislike for Lewis, Jennings apparently never followed Lewis' instructions unless Lewis was present, which was not a common occurrence (Jennings 1994:89). Another Chicago field school alumnus who worked with Jennings on the Chickamauga Basin survey was Robert S. "Stu" Neitzel, who also excavated at the Greenhouse site in 1938, as discussed later in this paper. Madeline Kneberg, a University of Chicago graduate who never actually attended the Chicago field schools, was also an important name in Tennessee archaeology at the time. Chaperoned females were allowed to attend the Chicago field school beginning in 1937, but Kneberg had graduated with a B.A. in 1932. Kneberg became the laboratory director for the University of Tennessee projects and would later marry Lewis (Sullivan 1995:xvii). She also coauthored many of the archaeological reports supervised by Lewis through the University of Tennessee, including the Hiwassee Island report and the Chickamauga Basin report.

Descriptions of the excavation methods used during the Chickamauga Basin survey can be found in the report titled *The Prehistory of the Chickamauga Basin* (Lewis and Kneberg 1995b) and the *Manual of Field and Laboratory Techniques Employed by the Division of Anthropology, University of Tennessee, Knoxville, Tennessee* (Lewis and Kneberg 1995a). Many of the excavation techniques were borrowed from the University of Chicago field schools. For the excavation of mounds a trench was dug into the mound and the "vertical face of this trench is then carried forward into the mound" (Lewis and Kneberg 1995a:630). The same approach was taken at the Hiwassee Island site in the Chickamauga Basin. The Hiwassee Island publication states, "Excavation was begun from both the north and south sides and carried forward to within one foot of either side of the east-west axis" (Lewis and Kneberg 1946:22). This method is the vertical slicing technique described by Cole and Deuel in *Rediscovering Illinois* (1937). However, for the excavations of village areas at Hiwassee Island, the horizontal stripping technique employed by the Chicago field schools was utilized. Large areas were excavated and once the plow zone was removed, the underlying deposit was excavated in three-inch levels (Lewis and Kneberg 1946:26). In the foreword to the Chickamauga Basin publication, Lynne Sullivan states:

In addition to using the University of Chicago field procedures, the Chickamauga project experimented with other new field techniques in an effort to improve information recovery. For example, the 'peeling' technique for mound excavation...[was] a great success on the large Mississippian platform mound at the Hiwassee Island site (Sullivan 1995:xviii) (see Fig. 21).

The technique Sullivan is describing is a combination of vertical and horizontal excavation (Lewis and Kneberg 1946:29). With this method, excavation of a mound is begun using vertical slicing with trenches being carried forward into mounds (Lewis and Kneberg 1946:29). Excavation is then stopped at a point where postmolds or floor patterns would become visible and the trench is stepped up in numerous phases (Lewis



Mound peeling

Figure 21: Mound Peeling Technique

and Kneberg 1946:29). Vertical profiles are recorded and then horizontal stripping begins (Lewis and Kneberg 1946:29). Lewis and Kneberg state that "this combination of vertical and horizontal excavation made it possible to obtain a complete series of vertical profiles along the north-south and east-west axes, and to expose an entire building level at one time" (Lewis and Kneberg 1946:29). The 1941 field notes from the Chicago excavations at Mx^v1A-41 also mention a combination of vertical and horizontal excavation, but this method was being used on a midden deposit, not a mound. Although the techniques are similar, they do not appear to be the same. Also, the Chicago archaeologists never excavated an entire mound using this method. If the techniques are the same, the archaeologists working in the Chickamauga Basin definitely developed them a couple of years before the Chicago archaeologists. At any rate, the techniques are definitely similar in that they both allowed for vertical profiles to be taken and for the exposure of structures on the horizontal surface.

One difference between the Chicago excavation methods and the methods employed in the Chickamauga Basin survey is the layout of the grid system. Although only a minor distinction, the Tennessee archaeologists used a ten-foot grid system rather than the five-foot grid system used by the Chicago archaeologists (Lewis and Kneberg 1995a:609). Part of this was due to the large number of workers employed because "5foot intervals would seriously impede the ability of large crews of men" (Lewis and Kneberg 1995a:609).

The excavations in the Chickamauga Basin, much like those at the Kincaid site, were also influenced by certain anthropological questions. Sullivan indicates that the Tennessee archaeologists did develop elaborate cultural trait lists consistent with the Midwest Taxonomic System and connected these traits chronologically using the stratigraphic records seen in the field (Sullivan 1995:xviii). Eventually the archaeologists began to wonder if a connection to historically known tribes could be determined. Sullivan states that the Tennessee archaeologists used similarities between the archaeological trait lists and the historical record of southeastern tribes "to assign ethnic identifications to the foci" (Sullivan 1995:xix). Along with their emphasis on establishing culture trait lists, the Tennessee archaeologists developed new excavation techniques which suggest a concern for linking the archaeological record with past human behavior, much like the Chicago archaeologists.

Overall, the archaeological work conducted in the Chickamauga Basin had strong connections to the University of Chicago field school methods. These included the use of Chicago field school alumni as supervisors, similar methods of excavation, and although not mentioned above, very detailed record keeping, including the use of photographs to document excavations.

The Eva Site

The Eva site, in Benton County, Tennessee, was excavated in 1940 under the direction of Douglas Osborne, a project sponsored by the TVA (Lewis and Lewis 1961:v). It is discussed here because of its connection to the University of Tennessee and the authors of the final report. The WPA also aided in the project by providing field laborers.

Eva was an Archaic site that was to be flooded by the construction of the dam that created Kentucky Lake (Lewis and Lewis 1961:1). The authors very briefly mention the excavation methods used at the site, but they appear to be similar to methods used by the Chicago field schools. First, two test trenches were dug, which is consistent with Chicago excavations in village areas. These test trenches were 200 feet long and "revealed the full extent of the main deposit, as well as the stratigraphy present" (Lewis and Lewis 1961:5). These test trenches were expanded to cover a total area of 3200 square feet (Lewis and Lewis 1961:5). Although an exact excavation method is not mentioned, it is likely that a horizontal stripping method was used, based on the ground plan figures found in the report (e.g. Figures 5, 6, and 7) (Lewis and Lewis 1961:6-8). This is similar to the Chicago excavations of Mx^v1A, at which the excavation of a trench was expanded in order to uncover more features. Once again, it is not stated whether the excavations. However, owing to the previous excavations in the Chicago field school excavations. However, owing to the previous excavations in the Chicago, it is quite probable that the analy connections that existed with the University of Chicago, it is quite probable that

Pickwick Basin Survey

The archaeological survey of the Pickwick Basin was begun in May 1936 and continued until the spring of 1939 (Webb and DeJarnette 1942:5). It was begun as a result of TVA plans to build the Pickwick Landing Dam on the Tennessee River, which would result in the flooding of about 75 square miles in parts of Tennessee, Mississippi, and Alabama (Webb and DeJarnette 1942:2-3). The TVA provided the supervision for the project and the labor was funded by the WPA (Webb and DeJarnette 1942:5). Overall, 19 sites were excavated. As noted above, DeJarnette had been a student of the Chicago field schools in the early 1930s and at the time of the survey of the Pickwick Basin was curator of the Alabama Museum of Natural History (Webb and DeJarnette 1942:v).

The Pickwick Basin report states that the previous method used for excavating shell mounds had been the vertical slicing technique as described by Cole and Deuel (1937; Webb and DeJarnette 1942:95). The vertical slicing method was also used at the Georgetown Cave site, Ct^c 42, in the Pickwick Basin (Webb and DeJarnette 1942:269).

Changes in excavation method did take place. One example is the method of excavation used on the shell mound at the Bluff Creek site, Lu^o 59. The authors state, "Previous experience in excavation of shell mounds had seemed to indicate that possibly a somewhat different technique might be productive of increased information" and claimed that the previous vertical slicing technique "left much to be desired" (Webb and DeJarnette 1942:95). Again, the new method pursued seems similar to the combination of horizontal and vertical excavation described in the 1941 Chicago field notes. According to the authors, two parallel trenches would be dug into the mound, and the midden between the trenches "would be cut into a block which could be completely surrounded and the profiles read on all four faces" (Webb and DeJarnette 1942:95). The isolated block of midden between the two trenches "was cut down in 5-foot cuts in 5-foot squares" and the material was recovered in one foot levels (Webb and DeJarnette 1942:97). Again it is unclear whether there is a connection between the Chicago excavations and those in the Pickwick Basin. Based on the dates of the excavations, it is possible that Chicago borrowed this technique, if it is the same, from the archaeologists in the Pickwick Basin.

The block method used at the Bluff Creek site was also used at the Georgetown Landing site, Ct^o 34. DeJarnette was the supervisor for the excavations of the mound at the site, which began in January 1938 (Webb and DeJarnette 1942:267). The authors describe a twenty-foot block that was to be outlined by four trenches and then "zoned and excavated by horizontal cutting" (Webb and DeJarnette 1942:267). William G. Haag (1986:68) thought that this "block" technique developed as an "outgrowth of the preoccupation with stratigraphy" and because the isolated block would not have artifacts dislodged from the profiles becoming integrated with lower levels. Haag did not mention exactly where this technique developed, but it seems likely it was through the TVA work. Despite the connections to the Chicago field schools, this method of horizontal cutting or stripping of isolated blocks was never used at the Kincaid site. The excavation at the Georgetown Landing site was never completed because the area was flooded a month earlier than planned (Webb and DeJarnette 1942:267).

Another site excavated in 1938 was a shell mound located at the Flint River site, Ma^o48, in the Wheeler Basin. At this site, blocks about 25 to 30 feet on each side were isolated by digging trenches around them (Webb and DeJarnette 1948:25). In other words, the vertical profiles on all sides of the block were exposed from the surface down to the bottom of the cultural deposits. Once these profiles were recorded, the blocks were horizontally excavated in 6-inch levels and any features were recorded (Webb and DeJarnette 1948:25). This block method proved to be useful in the excavation of shell mounds because it prevented cultural material from falling down to a lower level and losing its context. Although Webb was in charge of the entire survey project, DeJarnette supervised all of the fieldwork (Lyon 1996:127). Therefore, there is little doubt that DeJarnette contributed his knowledge of the Chicago excavation methods to the project. Another Chicago field school alumnus, Charles Wilder, may also have influenced the excavations, but this is never stated in the Pickwick Basin report.

Excavations in the Carbondale, Illinois Area

Under the direction of Moreau S. Maxwell and the archaeologists from the University of Chicago, a number of sites were excavated around Carbondale, Illinois between 1938 and 1941 using WPA labor (Butler 2008:30). Maxwell developed a terminology to describe the material culture, primarily ceramic, of these sites that is still used today (Butler and Jeffries 1986:523; Butler and Wagner 2000:686). The first site to be excavated was a bluff shelter called the Cove Hollow Shelter Site, J^s1, located in Jackson County (Maxwell 1951:44). The first field season began in July 1938 under the direction of Robert Tschirky, a 1938 Kincaid alumnus, and the second season began in July 1939 under the direction of Maxwell. The excavation technique used was definitely the same as that being used at the Kincaid site, beginning with the layout of a five-foot grid system followed by trenching using the vertical slicing method (Maxwell 1951:47-48).

The second site excavated by Maxwell was the Sugar Camp Hill Site, Wm^v1, located in Williamson County east of Carbondale, beginning in September 1939 and lasting until April 1940 (Maxwell 1951:78 and 81). Maxwell began excavation using the vertical slicing method after laying out a five-foot grid system; but, he switched to horizontal stripping due to the "absence of soil lines demarking stratigraphy, we elected to dig the nuclear section of the midden in six inch levels" (Maxwell 1951:82). Maxwell also introduced a new control to the excavation in the form of control pillars, which were located in different sections of the site and would be excavated at a later date "for the testing of the conclusions reached in the laboratory analysis" (Maxwell 1951:83). When the results from the laboratory analysis suggested differences in culture material, these pillars were excavated down in smaller levels. Some of the pillars were excavated in three-inch levels and some were excavated down in a way that the provenience of every sherd or artifact was recorded (Maxwell 1951:83). There is no evidence that this control method was used at Kincaid.

A third site excavated by Maxwell was Wm^v2 in Williamson County, which was located during a survey of the Crab Orchard Basin. Excavation began in March 1941 with the establishment of a five-foot grid followed by excavation of six squares running south to north down the center of the midden and four more squares to the left of the first five (Maxwell 1951:180). It is unclear what excavation method was used for these squares.

Finally, Maxwell excavated the Raymond Site, which is located on a bluff along the Big Muddy River about three miles northwest of Carbondale. A total of forty squares were excavated using what appears to be the vertical slicing method (Maxwell 1951:194). Overall, there is no doubt that Maxwell was influenced by the methods being used by the University of Chicago, publishing his dissertation research on these sites the same year as the Kincaid volume, but he also came up with changes to these methods, such as the use of control pillars.

The Crooks Site

The Crooks site is located in La Salle Parish, Louisiana and was excavated from October 1938 until April 1939, as part of the Louisiana WPA and sponsored by Louisiana State University under the direction of James A. Ford (Ford and Willey 1940:1). Two mounds were excavated, using the vertical slicing technique mentioned before. Originally, the archaeologists planned to use a stripping method, but, it is unclear whether they were referring to the horizontal stripping technique or the "mound peeling" technique that was used at Hiwassee Island. In any event, the possibility of mantles over a central burial led to the decision to use vertical slicing. The authors stated:

A stripping technique would appear to be the most effective means of handling such a compound structure, but at the initiation of the work there was no certainty that it would be possible to discover the lines of

demarcation between the possible mantles (Ford and Willey 1940:11).

Despite the overall use of the vertical slicing technique, the authors also stated that the excavators were prepared to use the horizontal stripping method if necessary, though this never happened. One of the mounds also contained more than 1,000 burials, which might also have influenced the choice of excavation technique.

Again, there is no indication of whether the knowledge of the horizontal stripping technique derived from the Chicago field school excavations, but both Ford and Willey had worked with Arthur Kelly at Macon Plateau, and as mentioned before, Kelly was connected with the Chicago archaeologists. Willey had also worked for a little over a year with Jennings at Macon Plateau. It is also known that Willey visited the Kincaid site in 1938 for one of the field conferences (see Fig. 22). Therefore, the methods being used



Figure 22: "Griffin, Morgan and Willey concentrate on the pottery classification" (Mx670:1938 photo log). Courtesy, Illinois State Museum.

at the Crooks site, although not explicitly stated as such, likely derived out of the Chicago Method. There was also a connection with the University of Chicago in that all of the skeletal material recovered was sent to Chicago for study (Ford and Willey 1940:40).

The Greenhouse Site

The Greenhouse site, which includes seven small mounds, and midden deposits, is located near Marksville, Louisiana, and like the Crooks site was part of the large-scale archaeological project conducted by the Louisiana WPA (Ford 1951:11-12, 15). Excavations began in 1938 under the direction of Robert S. Neitzel, a Chicago field school alumnus, and Edwin B. Doran (Ford 1951:12).

The excavation methods used at the Greenhouse site have influences from the Chicago excavations and the TVA excavations. As in the Chicago excavations, Neitzel and Doran first laid out a grid system and then began the excavation using exploratory trenches (Ford 1951:22-23). The trenches were dug in 3-inch levels with the material from each level being saved by ten-foot sections of the trench (Ford 1951:23). The excavation of the trenches in levels seems to have been horizontal stripping.

Mound excavations were begun with trenches five feet in width being dug into the four sides of the mound in order to "find the preceding mound surface so that, as layers were stripped from the top, the men would not be so likely to cut through house floors before they were discovered" (Ford 1951:32). This technique was developed by the Chickamauga Basin archaeologists and was previously described. Material was recorded and saved by level and five-foot squares (Ford 1951:34).

Although it is not stated whether some of the excavation methods at the Greenhouse site were borrowed from the Chicago field school methods, it is very likely, based on Neitzel's connection to Chicago. Because Neitzel was the director of the excavations at Greenhouse, he probably used much of what he learned from his Chicago days as well as his experience from the Chickamauga project, where he would have seen the "peeling" technique.

The Angel Site

The excavations at the Angel site on the Ohio River in southern Indiana that will be discussed here began in 1939 and lasted until 1942. During those years, the project was funded by the Indiana WPA. Glenn A. Black was in charge of the excavations and would eventually continue excavations of the site as a field school from 1945 through 1962 (Black 1967:vii). Between May 1939 and May 1942, 277 men were employed by the WPA at the Angel site and a total of 119,800 square feet was excavated (Black 1967:22, 26).

Before excavations could begin, a grid system, much like that described by Cole and Deuel (1937), was established using ten-foot blocks (Black 1967:33). Unlike the Chicago system, at Angel the grid was divided into 200-foot blocks, known as divisions, running east-west along the grid. The divisions, which were designated by the letters of the alphabet, each contained four 100-foot subdivisions, which were labeled A, B, C, and D (Black 1967:33). Each subdivision was then divided into 10-foot blocks, with those to the left labeled 'L' and those to the right labeled 'R' (Black 1967:33). The Angel site excavations, like the Chicago field school excavations, also put a lot of effort into recordkeeping. As Black states, prior to the excavation "a great deal of thought [was] given to the matter of recording. Specimens would have to be catalogued and burials would have to be given numbers, as would features and photographs" (Black 1967:83). Because of the inexperienced WPA labor, the recording procedure was standardized, using forms. Black (1967:84) says, "One was a burial data form, another was a feature data form, and both were copied after those which had been devised and used successfully in Illinois by Fay-Cooper Cole and Thorne Deuel". This is the first definite indication that the Chicago field school excavations influenced those at Angel.

It seems that Black's original excavations used trenches that were dug using the vertical slicing method. The trench was excavated down to a level referred to as a "working floor" with the hope that "any strata encountered could be seen and measured with accuracy and facility". This "working floor" was usually carried down to a greater depth, at least to the point where the possibility of a cave-in made it dangerous (Black 1967:106). Not only was the "working floor" kept level, the vertical exposure was kept smooth and watched closely for any soil changes (Black 1967:108).

In 1940, the Chicago field school visited the Angel site. The Kincaid crew was so impressed with the method of excavation being used at Angel, that they borrowed it and implemented the technique at the site $Mx^{\nu}1D$ at Kincaid. Black thought that the method of excavation involving a vertical profile adjacent to a horizontal floor provided evidence which "would illuminate a feature the significance of which, if seen alone, would have been missed" (Black 1967:129). In order to take advantage of this kind of information, Black developed a method in which ten-foot excavation blocks were removed in layers that were 0.4 feet thick and vertical walls or balks were left standing around each block

(Black 1967:130). This method allowed for horizontal exposure while also preserving vertical profile information. Black may have adopted this method from Mortimer Wheeler's excavations in 1936 at the Maiden Castle site in England. Wheeler states:

At Maiden Castle in Dorset I dug the northern portal of the eastern entrance in 1935 by trenching, and can still recall the appalling complexity of my record as the work proceeded and my trenches widened. In the following year I dug the southern portal as an area by the 'square' method, to be described below (Wheeler 1954:82).

On the next page he describes the square method as "a series of squares, a grid, dug so that a balk is left between each pair of adjacent squares until the extreme end of the work" (Wheeler 1954:83). No note of this square method was made in Wheeler's second preliminary report (Wheeler 1936), but he only discusses the excavations from 1935. Black may have come across Wheeler's 1936 square methodology via another source, but that is unknown. As Black stated in reference to the area of excavation X-11-C, "there were few instances in which a feature was seen in vertical profile which was not also visible in the working floor. There were times, though, when the walls helped considerably, and one instance alone made the effort worthwhile" (Black 1967:131). Eventually the vertical walls could be removed and pits, post holes and wall trenches could then be excavated.

Initially, the excavation of mounds at Angel involved the vertical slicing method, based on Black's description of the excavation of Mound F. It had been planned that the mound would be excavated in stages in order to expose any internal structures, such as a primary mound, which is essentially the Chickamauga "peeling" technique (Black 1967:245). During the excavation of Mound F, a primary mound was encountered, so the secondary mound was removed. A horizontal excavation method, or horizontal stripping, was used to remove the secondary mound. Ultimately, there were "three vertical faces to watch at all times, in relation to the horizontal exposures" (Black 1967:245).

These are just a few of the examples of excavation methods used at the Angel site between the years 1939 and 1942. There is a definite connection between the Angel site excavations and the Chicago field school excavations. Not only did Chicago influence the archaeology at Angel in the use of record forms and possibly the horizontal stripping technique, but the Chicago archaeologists implemented a technique used at the Angel site.

The Bessemer Site

The Bessemer site is located near the town of Bessemer, Alabama. The first excavations at the site were conducted in the late 1800s as part of the Smithsonian Institution's Mound Exploration project (DeJarnette and Wimberly 1941:3). The next set of excavations were begun in 1934 under the direction of Carl Guthe, who employed the Chicago vertical cutting and slicing technique for the excavation of mounds (DeJarnette and Wimberly 1941:xi and 6). David DeJarnette began to visit the site and was put to work, eventually taking over the project, but using the same excavation methods, which he had also learned through the Chicago field school (DeJarnette and Wimberly 1941:xi and 6). Welch later stated that:

DeJarnette is said to have regretted in later years the application of this technique to the oval mound at Bessemer, but it was the way Guthe had

begun the excavation and the way DeJarnette had just been taught at the University of Chicago field school (Welch 1994:6).

In 1939, the final excavation of the Bessemer site began under the direction of DeJarnette, with Steve Wimberly acting as the field supervisor. By this time, DeJarnette had worked on a number of other projects in the Southeast and both had worked in the Pickwick Basin. They had seen the efficacy of the mound peeling technique developed by the Chickamauga Basin archaeologists and therefore Wimberly used this method to excavate the other two mounds at Bessemer (DeJarnette and Wimberly 1941:26 and 60). Wimberly would also employ a variety of Chicago-related excavation methods at other mound sites in Alabama, including the McQuorquodale Mound in southwest Alabama (Wimberly and Tourtelot 1941:2).

Non-Chicago Related Excavation

The Brewerton Locality

Excavations of two sites, Robinson and Oberlander, on the eastern edges of the town of Brewerton, New York, were conducted in 1937 and 1938 under the direction of Ritchie. The excavations at the Robinson site consisted of a series of trenches fifteen feet in width and varying in length, laid out in separate parts of the site (Ritchie 1940:4-5). Five more trenches were eventually added and much of the site was test pitted for special features (Ritchie 1940:6). As features such as pits, hearths, and burials were encountered, they were excavated and the depth at which they were first seen, the depth of the pit, and the contents were recorded.

In order to check on the conditions being recorded in the excavation of the trenches, two test blocks, each having a cross-section area of 84 square inches, were left intact to be excavated later (Ritchie 1940:18). The sod or plow zone was removed from each test block, the sides were squared and the blocks were divided into four sections that would be excavated, using trowels, by four different workers (Ritchie 1940:18). Interestingly, different excavation methods were used on each block. In Test Block 1, each section was troweled using a vertical slicing method. In Test Block 2, each section was excavated using horizontal cutting in one-inch layers (Ritchie 1940:18). Each block was then scrutinized as to the soil conditions and positions of anything found in order to determine if the findings were consistent with the rest of the trench (Ritchie 1940:18).

At the Oberlander site, six trenches were excavated along with extensive test pits (Ritchie 1940:51). Again the trenches were fifteen feet in width and had varying lengths (Ritchie 1940:51). As at the Robinson site, any features encountered were recorded, but unlike the Robinson site excavations, no test blocks were excavated.

It is clear that Ritchie implemented the same trenching method at the Brewerton locality sites as he did at the Lamoka Lake Village site mentioned in Chapter 3. However, he did begin to use new methods. Although there is no written connection to the University of Chicago, it is interesting that knowledge of the horizontal cutting technique existed. Ritchie would have known about the Chicago excavations and may have tested the horizontal technique to see how useful or worthwhile it was. Whether Ritchie got the horizontal approach from Chicago or not, it is interesting that it was only used on one test block, and the same can be said for the vertical slicing technique. It is unclear which of these methods, or possibly both, was used to excavate trenches at the two sites.

Conclusion

The descriptions provided of excavations at other sites in North America indicate that many connections to the Chicago Method are evident. These are mostly seen in the New Deal archaeological excavations that involved University of Chicago field school alumni (see Table 2). Because of them, the excavation methods being used at the Kincaid site were spreading to other sites, particularly those in the Southeast and possibly even to Ritchie's excavations in New York. The examination of these various excavations also reveals that the methods being used at Chicago were not the only new techniques being developed; for example, Glenn Black at Angel and the Tennessee archaeologists were developing new mound excavation techniques that would be adopted throughout the Southeast. It is apparent that the field of archaeology was becoming more scientific, both in terms of increased documentation and experimentation with new methods, and that the University of Chicago field school played a large, although not always primary, role in this advancement.

| Alumnus and year at Kincaid | State/Country of archaeological work |
|-------------------------------|--|
| Joseph R. Caldwell (1936-37) | Illinois (Illinois State Museum) |
| | Georgia |
| | Smithsonian River Basin Survey |
| Carl Chapman (1936) | Missouri |
| Joffre Lanning Coe (1935) | North Carolina |
| Charles Fairbanks (1936) | Georgia |
| | Florida |
| Jean C. Harrington (1934) | National Park Service - historical archaeologist |
| Jesse D. Jennings (1934-1935) | Tennessee |
| | Mississippi |
| | Georgia |
| | Utah |
| Richard S. MacNeish (1939-41) | Canada |
| | Mexico |
| | South America |
| | Southwest United States |
| | China |
| Moreau Maxwell (1938) | Illinois |
| | Canada |
| Mildred Mott (1937) | Kansas |
| | Iowa |
| | North and South Dakota |
| | Wyoming |
| | Texas |
| | Oklahoma |
| John Murra (1940) | Andean Archaeology - Peru, Ecquador |
| | Ethnohistory - Peru |
| Robert S. Neitzel (1934-1935) | Tennessee |
| | Louisiana |
| | Mississippi |
| Kenneth Orr (1941) | Oklahoma |
| Robert Ritzenthaler (1940) | Southwest United States |
| | Micronesia |
| | Guatemala |

Table 2: Famous University of Chicago field school alumni with significant Careers in archaeology

| Alumnus and year at Kincaid | State/Country of archaeological work |
|-----------------------------|--------------------------------------|
| Frank Setzler (1940) | Southwest United States |
| | Ohio |
| | Australia |
| | California |
| | Louisiana |
| | Maryland |
| | Florida |
| | Texas |
| | Virginia |
| | West Virginia |
| | |
| Harriet Smith (1938) | Chicago Field Museum |

Table 2: Famous University of Chicago field school alumni with significant careers in archaeology (cont.)

CHAPTER 6

CONCLUSION

This thesis has shown that the University of Chicago field school had a great influence on the archaeology of the United States, particularly in the Southeast. It is apparent that the Chicago Method as described by Cole and Deuel in *Rediscovering Illinois* (1937) was not one single method used at the Kincaid site but consisted of multiple techniques of excavation and treatment of artifacts. As situations warranted, new techniques were often used or old techniques were adapted to provide the best information about the area being excavated and also to provide the most efficient means of excavation. The types of techniques used also varied from year to year based on the anthropological questions being asked, with much of the change due to the introduction of functional interpretations of anthropology at the University of Chicago.

The "Chicago Method" could be considered an example of a polythetic set of techniques (Clarke 1968:37-38, 473-474). In any given field situation, several but not necessarily all of the techniques might be applied, but no single technique was necessarily used. These techniques included vertical slicing, horizontal stripping, a combination of vertical slicing and horizontal stripping, and area excavations using square units separated by balks.

During the time of the University of Chicago field schools, referred to as the Classificatory-Historical Period by Willey and Sabloff (1974), the field of archaeology was being influenced by new ideas emerging out of anthropology. The most important of these ideas was the introduction of functionalism. The Chicago archaeologists were exposed to functionalism through a number of anthropologists. The first was Robert Redfield who began teaching at the university in 1927. Redfield's form of functionalism focused on social change in and among communities (Cole and Eggan 1959:655). In 1931, Radcliffe-Brown came to Chicago as a visiting professor and brought with him his ideas of "structural-functionalism." Radcliffe-Brown's version of functionalism explored the social structures of culture, such as kinship and political organization, and how these social structures influenced and related to each other. In an obituary for Radcliffe-Brown, Redfield is quoted as saying:

Professor Radcliffe-Brown brought to this country a method for the study of society, well defined and different enough from what prevailed here to require American anthropologists to reconsider the whole matter of method, to scrutinize their objectives, and to attend to new problems and new ways of looking at problems (Eggan and Warner 1956:545).

Radcliffe-Brown would also influence Fred Eggan, an anthropologist who started out as a graduate student at the University of Chicago. Eggan was recruited by Fay-Cooper Cole in 1925 and participated in both archaeological and anthropological field work as a graduate student. In 1931, he took a course being taught by Radcliffe-Brown and became his research assistant, aiding Radcliffe-Brown with his work on the American Indians (Vogt 1995:88-89). After Radcliffe-Brown left Chicago, Eggan continued to teach his

"structural-functionalist" ideas. Although there is no direct evidence to link the changing excavation methods with these influential anthropologists and their functionalist ideas, it is apparent that the Chicago field school archaeologists were exposed to these anthropological views in the classroom; therefore, it is likely that the changes in excavation method were being influenced by the changing views in the field of anthropology.

More evidence of the influence of functionalism on the Chicago archaeologists can be seen in the number of functionalist publications produced by the field school alumni. This study has already noted the publications by Steward and Setzler (1938) and Bennett (1943). Other Chicago students who published works that called for a more functionalist interpretation of archaeological data included Paul Martin and Joseph R. Caldwell. Bennett pointed out the influence of Redfield's form of functionalism and his concept of the "folk society" on a 1937 publication by Paul Martin, Alexander Spoehr and Carl Lloyd on their work in the Ackmen-Lowry area of southwest Colorado. There, they applied a functional functional interpretation of structures, primarily pit houses and surface dwellings, and were ultimately able to "interpret a localized historical development in generalized, or functional terms" (Bennett 1943:211).

In 1959, Caldwell published an article in *Science* in which he described the development of functional interpretation in the field of archaeology. The article began with a discussion of pre-World War II archaeology as focused primarily on chronology and the classification of archaeological materials, then moved on to a new interpretation of archaeological sites and materials not "as things in themselves" but as having more value when looked at differently (Caldwell 1959:303). In other words, Caldwell stated

that the field of archaeology had become "more concerned with culture process and less concerned with the descriptive content of prehistoric cultures" (Caldwell 1959:304). This 1959 article of Caldwell's, titled "The New American Archaeology" has been noted as a precursor of "processual" or "new" archaeology and the Explanatory Period, which Willey and Sabloff start at about 1960.

There is one possible piece of evidence that Radcliffe-Brown did influence archaeology students during his time at Chicago. Edward Spicer, who trained as an archaeologist at the University of Arizona, was encouraged by his mentor there, Byron Cummings, to attend the University of Chicago and work with Radcliffe-Brown in 1934. He has been quoted as saying "Radcliffe-Brown's concept of a 'natural science of society' took hold of me, led me into cultural anthropology, directed all my early fieldwork, and became the foundation of my research and teaching" (Gallaher 1984:381). Although he would go on to be a cultural anthropologist, Spicer did attend the Kincaid field school, where he met his wife, and would even direct the 1939 season. There is no evidence of new excavation methods being used during the 1939 field season at Kincaid, so any connection between Radcliffe-Brown and Spicer in terms of archaeological field methods is circumstantial.

Early 1930s archaeological fieldwork had been focused on the retrieval of chronological information, but there was a shift to a more functional interpretation, which can be seen when the excavation methods being used by the Chicago archaeologists are examined. The two main forms of excavation technique, vertical slicing and horizontal stripping, can be distinctly linked to the anthropological goals of the archaeologists. When the focus was on chronology, vertical slicing provided the best information. It
produced excellent stratigraphic results both in mounds and in village areas that allowed the Chicago archaeologists to establish a generalized occupation sequence for a site. The artifacts found when using vertical slicing could also aid in this chronological interpretation. When the focus shifted from chronology to more functional interpretations of sites, horizontal stripping provided the best information. It allowed the archaeologists to visualize entire features, especially structures, which could aid in interpreting settlement patterns at a particular site, such as how buildings were used (functioned), what the different types of buildings were, and how different buildings were arranged at the site. This form of interpretation provided the archaeologists with a better understanding of the people who once lived at the site, not just the artifacts they made and used. Chronology was still important; however, and a combination of vertical slicing and horizontal stripping was often employed. With this combination, the archaeologists were able to obtain both stratigraphic information and interpret the social and functional layout of a site. The "peeling" of mounds to expose the surfaces of their construction stages, which was introduced by the archaeologists in Tennessee, might be viewed as a variant of horizontal stripping, applied to a curved surface rather than an essentially flat one.

It is also important to note that scientific archaeology was an emerging field. There was an increased refinement of field documentation and new methods were being developed and tested. In many ways, the Chicago methodology was much more advanced than the pre-existing archaeological methods reviewed in Chapter 3. For example, despite the variation in excavation techniques and the differences in artifact collection procedures, the artifacts were almost all provenienced by grid square and

depth. This kind of provenience information was not routinely recorded by many non-Chicago archaeologists at that time, and would eventually become standard practice in archaeological excavations (Welch 2006:96). Along with keeping detailed records of the excavations, the Chicago archaeologists developed an extensive photographic record, even experimenting with different types of film to determine what films provided the best representation of the archaeological record. Ultimately, the Chicago Method provided standards which archaeologists throughout the Eastern United States could implement.

This thesis has also shown how the Chicago Method influenced excavations being conducted elsewhere in the United States. This influence can be attributed to the resulting dissemination of the Chicago Method by the field school alumni who were employed in major excavations across the Midwest and Southeast. The best example of Cole's influence can be found in the volume *Archeology of Eastern United States* (1952) which was published by the University of Chicago Press. The volume came about as a way to recognize Cole's career and service to the field of archaeology at the time of his retirement in 1947. It was decided by James B. Griffin, Fred R. Eggan, members of the Department of Anthropology, and many of Cole's former students that:

a volume of contributions by his former students in the anthropological field in which he had performed such signal service would both be a testimonial to his lasting influence in American archaeology and a volume which would also have meaning in terms of its unity around a central theme (Griffin 1952:vii).

The volume was not published immediately upon Cole's retirement and only a year after Cole's Kincaid volume was published, yet it is an excellent tribute to his contributions to archaeology. The twenty-nine authors of the volume, all but one being former students of Cole's, provided information on the archaeological record of practically the entire Eastern United States along with chapters on more specific topics, such as radiocarbon dates for the Eastern United States, an examination of the ethnological records of Native Americans along with their archaeological background, and even some aspects of material culture, such as Hopewellian dress. Many of the regional syntheses have already been discussed in this thesis, including DeJarnette's work in Alabama, Maxwell's work in the lower Ohio Valley, which also includes a description of Kincaid, and Lewis and Kneberg's work in Tennessee. The influence of this volume can also be viewed in conjunction with the 1951 volume on the survey of the Lower Mississippi Valley conducted by Phillips, Ford, and Griffin, especially when Jennings' chapter on the "Prehistory of the Lower Mississippi Valley" and Griffin's chapter on "Prehistoric Cultures of the Central Mississippi Valley" are examined. Overall, this volume would have and still has an influence on archaeological research in the United States.

The most important contribution Cole made to the field of archaeology was the creation of the Chicago training programs. Guthe remarked, "Training schools were badly needed" and during Cole's:

twenty years of service at that institution a large number of students received a rigorous training in the subject. The volume of which this essay is a part is a partial measure of the tremendous contribution to the study of eastern United States archaeology which has been made by the men and women who received training at the University of Chicago (Guthe 1952:5).

These Chicago men and women were responsible for much of the spread of the Chicago Method, as many of them went to work on New Deal archaeological projects. Because of the New Deal and the federally funded programs it created, there is a vast amount of information available concerning the prehistory of the United States and the published site reports constitute only a beginning summary. Eggan (1952:36) stated, "The large-scale excavations of the depression period crowded a half-century of archaeological research into a decade and furnished a mass of material that is not yet completely digested."

It is important to realize that the contribution of the Chicago Method to archaeology was not one-sided, and that some methods being used at other sites were adopted by the Chicago field school and by other excavations. Examples include the methods borrowed from Glenn Black at the Angel Site in Indiana and the new methods developed in the Tennessee Valley.

It is unfortunate that the publications of the excavations discussed do not lead to a more firm connection with the University of Chicago field school excavations. Nonetheless, based on descriptions of the excavation methods used and the number of Chicago alumni who worked at the various sites, it is safe to assume that a connection did exist and that archaeologists in the Southeast and elsewhere knew and were influenced by what was going on with the Chicago field schools.

Overall, the pre-World War II excavations of the University of Chicago field school had a great impact on the field of anthropology. Archaeological excavations went from being focused on the physical traits of cultural material of past societies to trying to determine how the people in these societies lived. In other words, the archaeological methods were changing based on the changes in the anthropological questions being asked. Because of these changes, a vast amount of knowledge was gained about prehistoric societies in eastern North America, and much of this was due to the influence of the University of Chicago field schools.

REFERENCES CITED

Unpublished Manuscripts

Pursell, Corin

- 2006 Chronology of the Chicago field schools at Kincaid. On file with Corin Pursell at Southern Illinois University Carbondale.
- University of Chicago Field Notes 1934-1941. On file in the Center for Archaeological Investigations, Southern Illinois University Carbondale.

Published Manuscripts

Barrett, S. A.

1970 Ancient Aztalan. Reprinted. Greenwood Press, Westport, CT. Originally published 1933, Milwaukee Public Museum, Milwaukee.

Bennett, John W.

- 1942 W. B. Nickerson Pioneer in Scientific Archaeology. *American Antiquity* 8:122-124.
- 1942 Recent Developments in the Functional Interpretation of Archaeological Data. *American Antiquity* 4:208-219.

Binford, Lewis R.

1962 Archaeology as Anthropology. American Antiquity 28:217-225.

Black, Glenn A.

1967 Angel Site: An Archaeological, Historical, and Ethnological Study. Indiana Historical Society, Indianapolis.

Blitz, John H.

1988 Henry Collins and Southeastern Archaeology. *Mississippi Archaeology* 23(1):1-11.

Browman, David L.

2002 Origins of Stratigraphic Excavation in North America: The Peabody Museum
Method and the Chicago Method. In *New Perspectives on the Origins of Americanist Archaeology*, edited by David L Browman and Stephen Williams, pp.
242-264. University of Alabama Press, Tuscaloosa.

Brown, James A.

1971 Approaches to the Social Dimensions of Mortuary Practices. In *Society for American Archaeology, Memoir* 25.

Butler, Brian M. and Richard W. Jefferies

1986 Crab Orchard and Early Woodland Cultures in the Middle South. In *Early Woodland Archaeology*, edited by Kenneth B. Farnsworth and Thomas E. Emerson, pp. 523-534. Center for American Archeology Press, Kampsville.

Butler, Brian M. and Mark J. Wagner

2000 Land Between the Rivers: The Late Woodland Period of Southernmost Illinois.
In Late Woodland Societies: Tradition and Transformation across the Midcontinent, edited by Thomas E. Emerson, Dale L. McElrath, and Andrew C.
Fortier, pp. 685-712. University of Nebraska Press, Lincoln.

Butler, Brian M.

2008 The WPA Contribution to Southern Illinois Prehistory. *Illinois Antiquity* 43(3):29-31.

Caldwell, Joseph R.

1959 The New American Archeology. Science 129:303-307.

Clarke, David L.

1968 Analytical archaeology. Methuen, London.

Cole, Fay-Cooper

1976 Exploration and Excavation. Paper given at the Conference of Southern
Pre-history. Birmingham, Alabama. Reprinted. Southeastern Archaeological
Conference and in *Setting the Agenda for American Archaeology: The National Research Council Archaeological Conferences of 1929, 1932, and 1935.* Originally
published 1932, National Research Council, Washington, D.C.

Cole, Fay-Cooper, Robert Bell, John Bennett, Joseph Caldwell, Norman Emerson, Richard MacNeish, Kenneth Orr, and Roger Willis

1951 *Kincaid: A Prehistoric Illinois Metropolis*. University of Chicago Press, Chicago. Cole, Fay-Cooper and Thorne Deuel

- 1937 Rediscovering Illinois. University of Chicago Press, Chicago.
- Cole, Fay-Cooper and Fred Eggan
 - 1959 Robert Redfield, 1897-1958. American Anthropologist 61:652-662.
- DeJarnette, David L. and Steve B. Wimberly
 - 1941 The Bessemer Site: Excavation of Three Mounds and Surrounding VillageAreas near Bessemer, Alabama. *Geological Survey of Alabama*, Museum Paper 17.University, Alabama.
- DeJarnette, David L. and Christopher S. Peebles
 - 1970 Development of Alabama Archaeology: The Snow's Bend Site. *Journal* of Alabama Archaeology XVI(2):77-119.
- Drooker, Penelope B.
 - 1997 The View from Madisonville: Protohistoric Western Fort Ancient Interaction Patterns. Memoirs of the Museum of Anthropology, Number 31. University of Michigan, Ann Arbor.
- Eggan, Fred R.
 - 1951 The Ethnological Cultures and Their Archeological Backgrounds. In
 Archeology of Eastern United States, edited by James B. Griffin, pp. 34-45.
 University of Chicago Press, Chicago.

Eggan, Fred and W. Lloyd Warner

1956 Alfred Reginald Radcliffe-Brown, 1881-1955. American Anthropologist 58:544-547.

Ferrie, Helke

2001 An Interview with Richard S. MacNeish. *Current Anthropology* 42:715-735.

Ford, James A.

- 1951 Greenhouse: A Troyville Coles Creek Period Site in Avoyelles Parish,Louisiana. Anthropological Papers of the American Museum of Natural HistoryVol. 44, Part 1. New York.
- Ford, J. A. and Gordon Willey
 - 1940 Crooks Site, A Marksville Period Burial Mound in La Salle Parish, Louisiana.Department of Conservation, Louisiana Geological Survey, New Orleans.
- Gallaher, Jr., Art
 - 1984 Edward Holland Spicer, 1906-1983. American Anthropologist 86:380-385.
- Gifford, Carol A. and Elizabeth A. Morris
 - 1985 Digging for Credit: Early Archaeological Field Schools in the American Southwest. *American Antiquity* 50:395-411.
- Griffin, James B. (editor)
 - 1951 Archeology of Eastern United States, edited by James B. Griffin.University of Chicago Press, Chicago.
 - 1978 A Brief Tribute to David L. DeJarnette. *Southeastern ArchaeologicalConference Special Publication* No. 5, edited by Drexel A. Peterson, pp. 3-5.

Guthe, Carl E.

1951 Twenty-five Years of Archeology in the Eastern United States. In *Archeology of Eastern United States*, edited by James B. Griffin, pp. 1-12. University of Chicago Press, Chicago.

Haag, William G.

Field Methods in Archaeology. In American Archaeology Past and Future: A Celebration of the Society for American Archaeology 1935-1985, edited by David J. Meltzer, Don D. Fowler, and Jeremy A. Sabloff, pp. 63-76. Smithsonian Institution Press, Washington.

Hally, David J.

1994 Introduction. In *Ocmulgee Archaeology 1936-1986*, edited by David J. Hally,pp. 1-7. University of Georgia Press, Athens.

Hill, James N.

1970 Broken K Pueblo: Prehistoric Social Organization in the American Southwest.
 Anthropological Papers of the University of Arizona, no. 18. University of Arizona
 Press, Tucson.

Jelks, Edward B.

1998 Jean Carl Harrington, 1901-1998. *SAA Bulletin*, 16(5). University of California, Santa Barbara

Jennings, Jesse D.

1994 Accidental Archaeologist: Memoirs of Jesse D. Jennings. University of Utah Press, Salt Lake City. Kelly, John E.

- 2000 Introduction. In *The Cahokia Mounds*. Warren K. Moorehead, edited by JohnE. Kelly, pp. 1-57. University of Alabama Press, Tuscaloosa.
- Kelly, Arthur R., and Fay-Cooper Cole
 - 1931 Rediscovering Illinois. In *Blue Book of the State of Illinois, 1931-1932*, 328-333. Springfield.
- Lewis, Thomas M. N. and Madeline Kneberg Lewis
 - 1960 Eva: An Archaic Site. University of Tennessee Press, Knoxville.
- Lewis, Thomas M. N. and Madeline Kneberg Lewis
 - 1946 Hiwassee Island: An Archaeological Account of Four Tennessee Indian Peoples. University of Tennessee Press, Knoxville.
 - 1995a The Prehistory of the Chickamauga Basin in Tennessee, edited by Lynne P. Sullivan. University of Tennessee Press, Knoxville.
 - 1995b Manual of Field and Laboratory Techniques Employed by the Division of Anthropology, University of Tennessee, Knoxville, Tennessee. In *The Prehistory* of the Chickamauga Basin in Tennessee, Appendix C, edited by Lynne P. Sullivan, pp. 603-656. University of Tennessee Press, Knoxville.
- Longacre, William A.
 - 1970 Archaeology as Anthropology: A Case Study. *Anthropological Papers of the University of Arizona*, no. 17. University of Arizona Press, Tucson.
- Lyman, R. Lee and Michael J. O'Brien
 - 2002 W. C. McKern and the Midwestern Taxonomic Method. University of Alabama Press, Tuscaloosa.

Lyon, Edwin A.

1994 *A New Deal for Southeastern Archaeology*. University of Alabama Press, Tuscaloosa.

Martin, Paul, Carl Lloyd, and Alexander Spoehr

1937 Archaeological Work in the Ackmen-Lowry Area, 1937. *Anthropological Series*, Vol. 23, No. 2, Field Museum of Natural History, Chicago.

Maxwell, Moreau S.

1951 The Woodland Cultures in Southern Illinois: Archaeological Excavations in the Carbondale Area. Logan Museum Publications in Anthropology, Bulletin No. 7, Beloit College, Beloit.

McCorvie, Mary R.

2008 A New Deal in Illinois Archaeology: An Introduction. *Illinois Antiquity* 43(3):3-7.

McGee, R. Jon and Richard L. Warms

2004 Anthropological Theory: An Introductory History. McGraw-Hill, New York. McKern, W. C.

1939 Midwestern Taxonomic Method as an Aid to Archaeological Culture Study.*American Antiquity* 4:301-313.

Moorehead, Warren K.

2000 *The Cahokia Mounds*. Reprinted. University of Alabama Press,Tuscaloosa. Originally published 1923, University of Illinois, Urbana. Edited byJohn E. Kelly.

Muller, Jon

2002 Rediscovering Illinois: The Development of Archaeology in Illinois. In *Histories of Southeastern Archaeology*, edited by Shannon Tushingham, Jane Hill, and Charles H. McNutt, pp. 99-114. University of Alabama Press, Tuscaloosa.

O'Brien, Michael J. and R. Lee Lyman

2001 Setting the Agenda for American Archaeology: The National Research Council Archaeological Conferences of 1929, 1932, and 1935. University of Alabama Press, Tuscaloosa.

Peebles, Christopher S.

1970 Moundville and Surrounding Sites: Some Structural Considerations of Mortuary Practices. In Approaches to the Social Dimensions of Mortuary Practices, edited by James A. Brown, pp. 68-91. Society for American Archaeology, Memoir 15.

Price, T. Douglas, James H. Burton, and James B. Stoltman

2007 Place of Origin of Prehistoric Inhabitants of Aztalan, Jefferson Co., Wisconsin. *American Antiquity* 72:524-538.

Plog, Fred T.

1974 The Study of Prehistoric Change. Academic Press, New York.

Redman, Charles L.

- 1978 Social Archeology: Beyond Subsistence and Dating, edited by Charles
 - L. Redman. Academic Press, New York.

Ritchie, William A.

- 1932 The Lamoka Lake Site: The Type Station of the Archaic Algonkin Period in New York. *Research Records of The New York State Archaeological Association*, *Lewis H. Morgan Chapter*, Vol. VII, No. 4, Rochester.
- 1940 Two Prehistoric Village Sites at Brewerton, New York: Type Components of the Brewerton Focus, Laurentian Aspect. *Research Records of the Rochester Museum of Arts and Sciences*, No. 5, Rochester.

Steward, Julian H.

1980 The Direct Historical Approach to Archaeology. *American Antiquity* 7:337-343.

Steward, Julian H. and Frank M. Setzler

1937 Function and Configuration in Archaeology. *American Antiquity* 4:4-10.Stocking, George W.

1984 Radcliffe-Brown and British Social Anthropology. In Functionalism Historicized: Essays on British Social Anthropology. History of Anthropology, Volume 2, edited by George W. Stocking, Jr., pp. 131-191. University of Wisconsin Press, Madison.

Sullivan, Lynne P.

1995 *The Prehistory of the Chickamauga Basin in Tennessee*. University of Tennessee Press, Knoxville.

Trigger, Bruce G.

1989 A History of Archaeological Thought. Cambridge University Press, Cambridge. Vogt, Jr., Evon Z.

1995 Frederick Russell Eggan: September 12, 1906 – May 7, 1991. Biographical Memoirs, Vol. 68, pp. 85-102. National Academy of Sciences.

Walker, John W.

1995 A Brief History of Ocmulgee Archaeology. In *Ocmulgee Archaeology:* 1936-1986, edited by David J. Hally, pp. 15-35. University of Georgia Press, Athens.

Webb, William S.

- 1939 Archaeological Survey of Wheeler Basin on the Tennessee River in Northern Alabama. Smithsonian Institution Bureau of American Ethnology, Washington.
- Webb, William S. and David L. DeJarnette
 - 1942 An Archaeological Survey of Pickwick Basin in the Adjacent Portions of the States of Alabama, Mississippi, and Tennessee. Smithsonian Institution Bureau of American Ethnology, Washington.
 - 1946 *The Flint River Site, Ma^o48.* Geological Survey of Alabama, Museum Paper
 23, University, Alabama.

Welch, Paul D.

- 1994 The Occupational History of the Bessemer Site. *Southeastern Archaeology* 13(1): 1-26.
- 2006 Archaeology at Shiloh Indian Mounds, 1899-1999. University of Alabama Press, Tuscaloosa.

- 1936 *The Excavations of Maiden Castle, Dorset: second interim report.* Oxford University Press.
- 1954 Archaeology from the Earth. Penguin Books, Baltimore.
- Willey, Gordon R. and Philip Phillips
 - 2001 *Method and Theory in American Archaeology*. Reprinted. University Of Alabama Press, Tuscaloosa. Originally published 1958, University of Chicago Press, Chicago.
- Willey, Gordon R. and Jeremy A. Sabloff
 - 1974 *A History of American Archaeology*. W. H. Freeman and Company, San Francisco.
- Williams, Stephen
 - 1994 The Ocmulgee Investigations in Historical Perspective. In Ocmulgee
 Ocmulgee Archaeology: 1936-1986, edited by David J. Hally, pp. 8-14.
 University of Georgia Press, Athens.
- Wimberly, Steve B. and Harry A. Tourtelot
 - 1941 McQuorquodale Mound: A Manifestation of the Hopewellian Phase in South Alabama. Geological Survey of Alabama, Museum Paper 19, University, Alabama.
- Winters, Howard D.
 - 1969 The Riverton Culture: A Second Millenium Occupation in the Central WabashValley. Illinois Archaeological Survey, 1. Illinois State Museum, Reports ofInvestigation, 13. Springfield.

APPENDIX





Anthropology Section

Phone: 217-782-6695 FAX: 217-785-2857 email: martin@museum.state.il.us Research & Collections C 1011 East Ash : Springfield, IL (Telephone (217) 782

Ms. Jessica Howe Station Assistant Arkansas Archeological Survey P.O. Box 3087 Monticello AR 71656

Dear Ms. Howe:

The Museum Director has approved your request to use photographs in your M.A. thesis of the archaeological excavations at the Kincaid site during the 1930s and 1940s by the University of Chicago, which are curated at the Illinois State Museum. A credit line must appear wherever the photographs are used and must be in the form of "Courtesy, Illinois State Museum" or "Collection of the Illinois State Museum." Please also provide a copy of the final version of your thesis to the Illinois State Museum so that it can be included in the Museum's library. Permission is for one-time use only. If the images are to be used subsequently or for any purpose than originally designated, written permission for the additional usage must be obtained from the Illinois State Museum. All responsibilities for questions of copyright that may arise in the use made of the copies is assumed by the requesting individual. Please contact me if you have any other questions.

Sincerely,

Vartino rance

Terrance J. Martin, Ph.D. Curator and Chair of Anthropology

Printed on Recycled Paper

University of Chicago Press

Permissions Department 1427 East 60th Street Chicago, IL 60637 Phone: 773-702-6096 / Fax: 773-702-9756

Permission Grant

Jessica Howe 128 McKnight Dr Monticello, AR 71655 Date: June 08, 2011 Grant Number: 105127 Request Date: 06/07/2011 Reference Number: 0049535555

Dear Requester:

Thank you for your request for permission to use material from the publications(s) of the University of Chicago Press. Permission is granted for use as stated below. Unless specifically granted below, this permission does not allow the use of our material in any other edition or by any additional means of reproduction including (by way of example) motion pictures, sound tapes, electronic formats, and phonograph records; nor does this permission cover book clubs, translations, abridgment, or selections which may be made of the publication. No subsequent use may be made without additional approval. This permission is subject to the following terms:

1) On each copy of the selection full credit must be given to the book or journal, to the author (as well as to the series, editor, or translator, if any), and to the University of Chicago as publisher. In addition, the acknowledgement must include the identical copyright notice as it appears in our publication.

| 2) This permission does not apply to any part of the selection which is independently copyrighted or which bears a separ | parate source notation. The responsibility for | |
|--|--|--|
| determining the source of the material rests with the prospective publisher of the quoted material. | | |
| 3) This permission grant for the materials listed on the invoice below is provided GRATIS. | | |
| | | |
| This Permission covers publication of one edition of the work up to 250 copies. | | |
| THE WORLD IN THE ENGLISH LANGUAGE ONLY | | |

5) Permission granted is non-exclusive and, unless otherwise stated, is valid THROUGHOUT THE WORLD IN THE ENGLISH LANGUAGE ONLY.

6) Author approval is not required.

7) Permission is granted GRATIS.

8) This permission is void if more than 10% of your forthcoming work, exclusive of index and bibliography, is composed of University of Chicago Press material.

| Reference | ISBN | Materials | | ExtPrice |
|------------|------------|--|------------------|---------------|
| 0049535555 | GEN001172 | COLE, KINCAID: PREHISTORI | CILLINOIS | \$0.00 |
| | | METROPOLI. "Map of the Kinca | aid Site," p. vi | * 0.00 |
| 0049535555 | 0226113361 | COLE, REDISCOVERING ILLINOIS ARCHAEOLOGICAL EXPLORATIONS. "Method of Staking Out a Mound," p. 25 | | \$0.00 |
| | | | Order Total: | \$0.00 |
| | | | Handling: | \$0.00 |
| | | | Tax: | \$0.00 |
| | | | Sub Total: | \$0.00 |
| | | | Payments: | \$0.00 |
| | | | Balance Due: | \$0.00 |

For Use In:

MA Thesis, "The Chicago Method of Archaeological Excavatin at Kincaid" for a degree at Southern Illinois University

Approved By:

Perry Cartwright, Rights & Permissions

VITA

Graduate School Southern Illinois University

Jessica R. Howe

howe@uamont.edu

Westminster College, Fulton, MO Bachelor of Arts, Anthropology/Sociology, May 2005

Thesis Title: The Chicago Method of Excavation at Kincaid

Major Professor: Paul D. Welch

Publications:

Bragg, Don C. and Jessica R. Howe

2010 An Archeological Search for the Remains of he Drew County Courthouse. In *Drew County Historical Journal*, Vol. 25, edited by Mary Heady, pp. 33-42. The Drew County Historical Society.