

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

University of Nebraska Press -- Sample Books  
and Chapters

University of Nebraska Press

---

2012

## The Archaeology of the Caddo

Chester P. Walker

Timothy K. Perttula

Follow this and additional works at: <https://digitalcommons.unl.edu/unpresssamples>



Part of the [Arts and Humanities Commons](#)

---

Walker, Chester P. and Perttula, Timothy K., "The Archaeology of the Caddo" (2012). *University of Nebraska Press -- Sample Books and Chapters*. 118.

<https://digitalcommons.unl.edu/unpresssamples/118>

This Article is brought to you for free and open access by the University of Nebraska Press at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in University of Nebraska Press -- Sample Books and Chapters by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

## **The Archaeology of the Caddo**



# The Archaeology of the Caddo

Edited by Timothy K. Perttula  
and Chester P. Walker

University of Nebraska Press  
Lincoln and London

[Buy the Book](#)

© 2012 by the Board of Regents of the University  
of Nebraska

All rights reserved

Manufactured in the United States of America

Chapter 8, “The Evolution of a Caddo Community  
in Northeastern Texas,” by Timothy K. Perttula and  
Robert Rogers, was originally published in *American  
Antiquity* 72.1 (2007): 71–94. It has been slightly  
modified to conform with the editorial guidelines  
followed for the volume.



Library of Congress Cataloging-in-Publication Data

The archaeology of the Caddo / edited by  
Timothy K. Perttula and Chester P. Walker.

p. cm.

Includes bibliographical references and index.

ISBN 978-0-8032-2096-6 (pbk.: alk. paper)

1. Caddo Indians—History. 2. Caddo Indians—  
Antiquities. 3. Caddo Indians—Social life  
and customs. 4. Excavations (Archaeology—  
Great Plains). 5. Great Plains—Antiquities.

I. Perttula, Timothy K. II. Walker, Chester P.

E99.C12A73 2012

976'.01—dc23 2011052083

Set in Quadraat and Quadraat Sans.

Designed by A. Shahan.

[Buy the Book](#)

## Contents

List of Figures	vii
List of Tables	xiii
Foreword	xv
1. The Archaeology of the Caddo in Southwest Arkansas, Northwest Louisiana, Eastern Oklahoma, and East Texas: An Introduction to the Volume	I
TIMOTHY K. PERTTULA	
2. Form and Structure in Prehistoric Caddo Pottery Design	26
ANN M. EARLY	
3. At the House of the Priest: Faunal Remains from the Crenshaw Site (3MI6), Southwest Arkansas	47
H. EDWIN JACKSON, SUSAN L. SCOTT, AND FRANK F. SCHAMBACH	
4. Bioarchaeological Evidence of Subsistence Strategies among the East Texas Caddo	86
DIANE WILSON	
5. Spiro Reconsidered: Sacred Economy at the Western Frontier of the Eastern Woodlands	117
JAMES A. BROWN	
6. Viewshed Characteristics of Caddo Mounds in the Arkansas Basin	139
GREGORY VOGEL	
7. Exploring Prehistoric Caddo Communities through Archaeogeophysics	177
CHESTER P. WALKER AND DUNCAN P. MCKINNON	

8. The Evolution of a Caddo Community in Northeast Texas	209
TIMOTHY K. PERTTULA AND ROBERT ROGERS	
9. Settlement Patterns and Variation in Caddo Pottery Decoration: A Case Study of the Willow Chute Bayou Locality	239
JEFFREY S. GIRARD	
10. Caddo in the Saline River Valley of Arkansas: The Borderlands Project and the Hughes Site	288
MARY BETH TRUBITT	
11. Spatial Patterns of Caddo Mound Sites in the West Gulf Coastal Plain of Arkansas	313
JAMI J. LOCKHART	
12. Decisions in Landscape Setting Selection of the Prehistoric Caddo of Southeastern Oklahoma: A GIS Analysis	335
ROBERT L. BROOKS	
13. The Character of Fifteenth- to Seventeenth-Century Caddo Communities in the Big Cypress Creek Basin of Northeast Texas	363
TIMOTHY K. PERTTULA	
14. The Belcher Phase: Sixteenth- and Seventeenth-Century Caddo Occupation of the Red River Valley in Northwest Louisiana and Southwest Arkansas	411
DAVID B. KELLEY	
15. The Terán Map and Caddo Cosmology	431
GEORGE SABO III	
References Cited	449
Contributors	499
Index	501

## Figures

1-1. Distribution of the main Mississippian period groups in eastern North America . . . . .	3
1-2. Sites and areas mentioned in the text in the Southern and Northern Caddo areas . . . . .	6
1-3. The geographic extent within the Southern and Northern Caddo areas discussed by contributors in this book . . . . .	15
1-4. Looking south-southwest at the Battle mound site in southwest Arkansas in 2007 . . . . .	23
2-1. Map of Arkansas showing the area where the sample of Friendship Engraved, <i>var. Freeman</i> vessels used in this study came from, and the 1938–1950 collecting area of the Henderson State University Museum and Hodges pottery collections . . . . .	31
2-2. Friendship Engraved, <i>var. Freeman</i> carinated bowl, showing scribing lines laying out the design fields . . . . .	33
2-3. The first three steps in decoration . . . . .	34
2-4. The design choices found in the study sample . . . . .	35
2-5. Finishing stages and options . . . . .	38
2-6. Final decorative choices available for the oval-within-an-oval design option . . . . .	39
2-7. Examples of “nongrammatical” vessels . . . . .	41
2-8. Friendship Engraved, <i>var. Meador</i> bowl . . . . .	42
2-9. Examples of stacked or fused vessels . . . . .	45
3-1. Location of the Crenshaw site . . . . .	51
3-2. The Crenshaw site . . . . .	52
3-3. Simplified plan view of the 1969 and 1983 Arkansas Archeological Survey Excavations at Crenshaw . . . . .	53
3-4. Size distribution of fish remains from Crenshaw, distributed according to family . . . . .	70
3-5. Deer anatomical distribution in structure and midden fan samples, grouped by food utility . . . . .	75



3-6. Comparison of percent NISP of faunal assemblages from Crenshaw and four Caddo sites in the Red River region . . . . .	77
3-7. Comparison of MNI of faunal assemblages from Crenshaw and four Caddo sites in the Red River region . . . . .	78
3-8. Comparison of relative bone weight contributions by family to the Crenshaw and McLelland faunal assemblages . . . . .	79
4-1. The relationship between apatite delta <sup>13</sup> C and delta <sup>15</sup> N collagen values through time . . . . .	104
4-2. The relationship between apatite delta <sup>13</sup> C and delta <sup>15</sup> N collagen values through time . . . . .	105
5-1. The Craig mound from the northwest during the winter of 1913–1914 . . . . .	118
5-2. The Great Mortuary floor showing the approximate location of the major cult figures and other furniture recovered by the relic hunters among the litter burial constructions and other features uncovered by the WPA . . . . .	129
6-1. Relief map showing locations of sites employed in this study . . . . .	141
6-2. Viewshed size from the ground surface . . . . .	153
6-3. Viewshed size from mound summits . . . . .	154
6-4. Gain in mound viewsheds . . . . .	155
6-5. Mound viewsheds plotted by echelon . . . . .	157
6-6. Mound viewsheds ranked against the statistical background of 99 generated samples . . . . .	162
6-7. Relief map showing viewshed from the summit of Brown mound at Spiro . . . . .	163
6-8. Relief map showing viewshed from the Craig mound at Spiro . . . . .	163
6-9. Relief map showing viewshed from the Cavanaugh mound . . . . .	164
6-10. Topographic cross-section across the Poteau/Arkansas bottoms, with mound base and summit elevations . . . . .	168
6-11. Relief map showing viewsheds from Mound I–II at Norman, Mound Unit 7 at Harlan, and Fort Davis . . . . .	170
6-12. View from the bottoms approximately 2 km north of Ewing Chapel Cemetery . . . . .	172
7-1. The magnetometer survey areas at the George C. Davis site . . . . .	182

7-2. Interpretive map showing the architectural features identified in the magnetometer surveys and past archeological excavations . . . . .	184
7-3. Examples of button houses at the George C. Davis site . . . . .	185
7-4. The excavated and geophysical architectural features from the George C. Davis site, including the structures excavated under Mound A . . . . .	187
7-5. Locations of possible plazas and community spaces at the George C. Davis site . . . . .	188
7-6. The location of Area A and Area B at the Hill Farm site, channel lakes of the Red River, and an ancient abandoned stream channel . . . . .	190
7-7. Plan of Area A collection blocks and interpretation of the geophysical data . . . . .	192
7-8. Plan of Area B collection blocks and interpretation of the geophysical data . . . . .	193
7-9. Detail of the western portion of the 1691 Terán map showing the old abandoned channel of the Red River and the household compounds that may represent the likely area of the Hill Farm site . . . . .	195
7-10. Total coverage of the magnetic gradiometry survey at the Battle site . . . . .	197
7-11. Clusters of possible structures, a community cemetery, a potential compound fence, a borrow pit, and a possible linear causeway identified in the Battle site archaeological data . . . . .	198
7-12. House 6 at the Belcher site compared with a small circular structure with a possible extended entranceway identified in the Battle site data. . . . .	199
7-13. A complex grouping of high magnetic values forms a possible farmstead with a compound fence . . . . .	200
7-14. Numerous circular structures located on two rises east of the large mound . . . . .	202
7-15. Structure 1 at the McLelland site compared with two large circular structures identified in the Battle mound site data . . . . .	204
7-16. Structure at the Werner site compared with the several concentric circular patterns identified in the Battle mound site data . . . . .	205

7-17. A large cluster of pits possibly representing a large community cemetery about 300 m east of the large mound at the Battle site . . . . .	207
8-1. Oak Hill Village in the Caddo area of northeast Texas and other important contemporaneous Caddo sites and phases . . . . .	210
8-2. Plan of structures and features at the Oak Hill Village . . . . .	213
8-3. Structure groups A–H and structures 2, 5, and 10 at the Oak Hill Village . . . . .	214
8-4. Plans of the different kinds of structures at Oak Hill Village . . . . .	215
8-5. Three overlapping circular structures in the northeastern part of the site . . . . .	221
8-6. Circular structures in the western part of the site . . . . .	222
8-7. Overlapping structures in the northwestern part of the Oak Hill Village site. . . . .	223
8-8. Unraveling the sequence of structures in the northwestern part of the Oak Hill site, from A (oldest) to E (youngest) . . . . .	224
8-9. Inferred distribution of the earliest village at the Oak Hill Village site . . . . .	227
8-10. Inferred distribution of structures in the middle-era village . . . . .	229
8-11. Inferred distribution of the latest village at the Oak Hill Village site . . . . .	231
8-12. Middle Caddo period ceramic complexes in northeast Texas, including a complex on the Sabine River and tributaries where the Oak Hill Village site is located . . . . .	235
8-13. Changes in atmospheric delta <sup>14</sup> C and climatic minima (peaks in atmospheric delta <sup>14</sup> C) during the three village components at the Oak Hill Village site . . . . .	237
9-1. Location of the Willow Chute Bayou locality . . . . .	240
9-2. Terán map of 1691–1692 . . . . .	241
9-3. Land surfaces in the Willow Chute Bayou locality. . . . .	245
9-4. Distribution of recorded archaeological sites along Willow Chute Bayou . . . . .	248
9-5. Contour map of the Vanceville mound site . . . . .	260
9-6. Profile of test pit 96B . . . . .	264
9-7. Profile of test pit 96C . . . . .	268
9-8. Percentage stratigraphy for contexts at the Vanceville site . . . . .	270

9-9. Scatter plot of first two dimensions for the correspondence analysis .....	278
9-10. Frequency seriation of collections used in the correspondence analysis with order following DIM1 scores .....	280
9-11. Schematic view of the Willow Chute locality with sites coded according to DIM1 scores in the correspondence analysis ...	282
10-1. Portion of Arkansas and surrounding states with physiographic regions and locations of sites discussed in text ....	290
10-2. Photograph of main mound at the Hughes site, taken in 1972 .....	292
10-3. Partial vessel, Mound Place Incised and Brushed type, from 1972 testing .....	293
10-4. Topographic plan map of the Hughes site .....	294
10-5. Excavation unit N199E244, feature 16 .....	296
10-6. Probability curves of 2-sigma calibrated age ranges for radiocarbon assays from the Hughes site compared with other area sites .....	298
10-7. Common ceramic patterns found in the Hughes site sherd assemblage .....	302
10-8. Class C rim patterns, Class B body patterns .....	304
10-9. Class E sherds .....	306
10-10. Arrow points from the Hughes site .....	309
11-1. Statistical clusters of mound sites compared with similar clusters grouped by watershed boundaries .....	321
11-2. Environmental similarity model for Caddo mound sites in the West Gulf Coastal Plain of Arkansas .....	328
11-3. Habitation, activity, and accessibility spaces of prehistoric Caddo culture in the West Gulf Coastal Plain of Arkansas based on Caddo mound site density and environmental similarity .....	331
12-1. Study area of Choctaw and McCurtain Counties and streams and rivers of southeastern Oklahoma .....	338
12-2. Distribution of Caddo settlements in Choctaw and McCurtain Counties, southeastern Oklahoma .....	348
12-3. Elevation of Caddo settlements by built environment .....	356
13-1. The distribution of the Titus phase .....	364
13-2. Titus phase Caddo political communities in the Big Cypress Creek basin of northeast Texas .....	368

13-3. The important Titus phase village and political community center at the Shelby site on Greasy Creek . . . . .	370
13-4. Mound C at the Harroun site . . . . .	384
13-5. Number of recorded burials from Titus phase cemetery sites on different drainages in northeast Texas . . . . .	394
13-6. Variation in the size of Titus phase cemeteries . . . . .	395
13-7. The structure of Titus phase community cemeteries . . . . .	398
13-8. Distribution of Titus phase cemeteries with burials of individuals of presumed high social rank . . . . .	406
14-1. The location of Belcher phase sites mentioned in the text . . .	413
14-2. Belcher phase structure patterns . . . . .	416
14-3. Belcher phase pottery from the Belcher site . . . . .	418
14-4. Marine shell ornaments from the Belcher site . . . . .	426
15-1. Facsimile of the Terán map, 1691 . . . . .	434

## Tables

1-1. Caddo chronological framework . . . . .	13
3-1. Counts and weights of identified taxa from Caddo I contexts . . . . .	63
3-2. Charring of Early Caddo deer postcranial elements by body part. . . . .	72
3-3. NISP, NNE, and MNI for whitetail deer from all analyzed Early Caddo deposits. . . . .	74
3-4. Percent NISP for taxa from five Caddo sites . . . . .	76
3-5. Unusual taxa recovered from elite contexts at Crenshaw, Lubbub Creek, and Toqua sites . . . . .	82
4-1. Average dental attrition scores for sites in northeast Texas . . .	90
4-2. Caries data for sites discussed in the Blackland Prairie, Post Oak Savannah, and Pineywoods of northeast Texas . . . . .	94
4-3. Stable isotope data from the study region . . . . .	99
4-4. Mean isotopic values through time alongside caries rates and dental wear scores . . . . .	106
4-5. Stable isotope means in the Blackland Prairie, Post Oak Savannah, and Pineywoods . . . . .	109
4-6. Stable isotope means in the east Texas river basins . . . . .	110
4-7. Stable isotope means for Caddo mound and non-mound sites . . . . .	111
6-1. Recorded mounds in the Arkansas Basin, ordered by state site number . . . . .	144
6-2. All mound viewsheds . . . . .	150
6-3. Parameters used to generate the predictive model of mound locations within the Arkansas and Neosho River regions . . .	158
6-4. Parameters used to generate the predictive model of mound locations within the Ozark Plateau and Ouachita Mountain regions . . . . .	159
6-5. Results of Monte Carlo analysis . . . . .	160
8-1. Details of the circular structures at the Oak Hill Village site . . . . .	217

8-2. Radiocarbon dates from the Oak Hill Village site . . . . .	219
9-1. Summary of radiocarbon assays from the Vanceville mound site . . . . .	266
9-2. Sherd percentages for contexts at the Vanceville mound site . . . . .	267
9-3. Counts and percentages of sherd categories for collections in the Willow Chute locality . . . . .	274
9-4. Summary of correspondence analysis . . . . .	277
10-1. Results of radiocarbon dating of Hughes site samples . . . . .	297
10-2. Ceramic sherd surface decoration by temper . . . . .	300
11-1. Geographic Information System data layers . . . . .	317
11-2. Caddo mound coincidence with Arkansas physiography using $\chi^2$ statistic . . . . .	319
11-3. Caddo mounds and land use/land cover in the West Gulf Coastal Plain . . . . .	325
11-4. Summary of environmental variables associated with most Caddo mounds in the West Gulf Coastal Plain . . . . .	325
11-5. Statistics for the seven-class environmental similarity model . . . . .	327
12-1. Distribution of Caddo sites by soil association . . . . .	353
12-2. Soil associations and the constructed landscape . . . . .	354
12-3. Distribution of the Caddo constructed landscape by land- form . . . . .	355
12-4. Distribution of Caddo sites by slope . . . . .	357
12-5. Distribution of Caddo constructed landscape by slope direction . . . . .	358
12-6. Distribution of Caddo constructed landscape by nearest water . . . . .	359
13-1. Titus phase radiocarbon dates . . . . .	375
13-2. Titus phase radiocarbon dates from earthen mounds in the Pineywoods and Post Oak Savannah of northeast Texas . . . . .	378
13-3. Titus phase cemeteries . . . . .	389
13-4. Frequencies of funerary objects in selected Titus phase cemeteries . . . . .	402
13-5. Notable burials from Titus phase cemeteries and kind of mortuary treatment . . . . .	404
14-1. Frequency of ceramic types in four Belcher phase assem- blages . . . . .	422

## Foreword

The archaeology of the Caddo Indian peoples that lived in the forested habitats of southwest Arkansas, northwest Louisiana, eastern Oklahoma, and eastern Texas, in the far western reaches of the southeastern United States, has been the topic of archaeological inquiry since the early twentieth century. The study of Caddo archaeology over the years has been important in inspiring questions and interpretations of the native history of the Caddo peoples beginning some 2,500 years ago, as well as their relationships with Woodland and Mississippian cultures in the lower Mississippi valley and the eastern United States, as well as possible relationships with northern Mexican and Mesoamerican cultures. These interpretations have flowed from the early study of such impressive Caddo mound centers at the George C. Davis site (in east Texas), the Gahagan, Mounds Plantation, and Belcher sites (in northwest Louisiana), the Crenshaw and Battle sites (southwest Arkansas), and the Harlan and Spiro sites (in eastern Oklahoma), to the more wide-ranging and eclectic archaeological and geophysical studies of many sites, features, and material culture assemblages that are the foundation of Caddo archaeology today. Nevertheless, while the character of Caddo archaeology, and the histories of generations of Caddo peoples embodied in preserved archaeological sites, is better known today than ever before, it is fair to say that the appreciation of the diversity of cultural practices and traditions that came to characterize the pre-Columbian Caddo world is only now being realized. As new advances come to light on a range of new and old research themes and issues and on previously recorded and new sites, it is an exciting time to be involved in the study of Caddo archaeology

This book presents new advances in the native history of the Caddo Indian peoples, focusing on key sites and several research approaches and themes, among them better ways to understand mortuary practices, ceramic analysis, reconstruction of settlement and regional histories of different Caddo communities, Geographic Information Systems and



geophysical landscape studies at several spatial scales, and the cosmological significance of mound and structure placements. Our purpose in compiling this book is to bring the unique and compelling story of the Caddo Indians to a broad audience, including those interested in Native American life who may not know of the Caddo peoples and their proud heritage. The native history of the Caddo has all too often been portrayed as little more than that of a peripheral Mississippian culture, and we wish to remedy this by placing the focus of the book squarely on the archaeology of the Caddo's ancestral world, one that can be defined beginning around A.D. 800–900 over an area perhaps covering as much as 80,000 square miles of four states.

In ancestral times, the Caddo Indians were mound builders, expert traders and artisans, and accomplished farmers, as well as the most socially complex Native Americans living between the Mississippi River Mississippian societies and the ancestral Puebloan peoples of the American Southwest. When Europeans came among the Caddo in the late seventeenth century, they relied on the goodwill of the Caddo to explore what became Arkansas, Louisiana, Oklahoma, and Texas, as well as the diplomatic and economic skills of the people. The Caddo's rewards were disease, depredations, and territorial dispossession at the hands of French, Spanish, English, and American speculators, mercenaries, priests, traders, and land developers. By 1835, the Caddo's fate in the land that had once been theirs became clear, and the policies of the Republic of Texas and the United States between them led to their forced exodus from Texas to Indian Territory in 1859. The Caddo live to this day in their new Oklahoma home.

We take an archaeological perspective in relating the native history of the Caddo Indian peoples because this is the best way to convey, as well as to experience, the long sweep and dense chronicle of a politically and religiously astute Native American group. This archaeological chronicle of the Caddo Indian people hopes to bring to light their heritage, their creativity, and their political and religious abilities. We look forward to the continued archaeological study of the sites left behind and abandoned by the Caddo Indian peoples in their traditional homelands and to refining our understanding of how these peoples lived and thrived in this part of the southeastern United States.

## **The Archaeology of the Caddo**



# 1. The Archaeology of the Caddo in Southwest Arkansas, Northwest Louisiana, Eastern Oklahoma, and East Texas

## *An Introduction to the Volume*

TIMOTHY K. PERTTULA

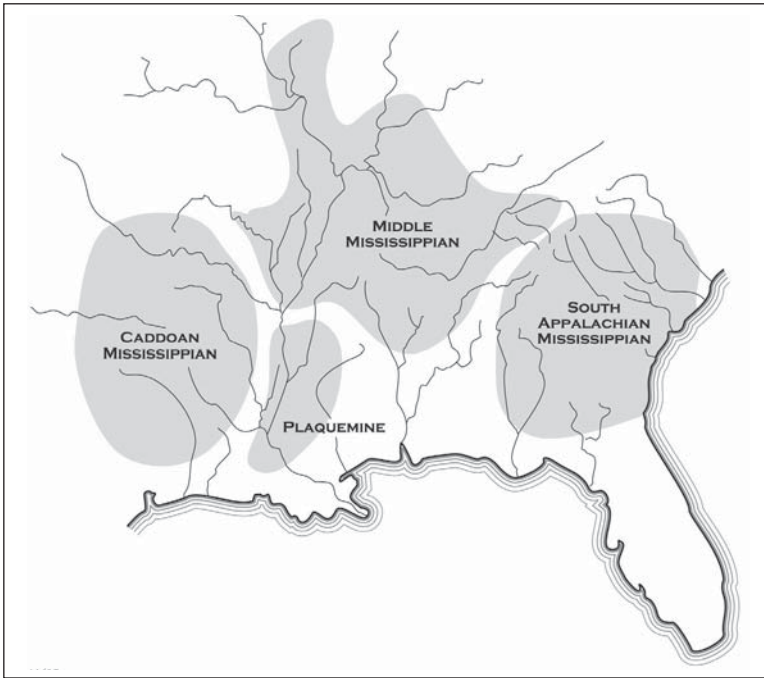
This volume examines the archaeology of the Caddo Indians who lived in southwest Arkansas, northwest Louisiana, eastern Oklahoma, and east Texas from at least as early as 2,500 years ago, if not before then, ca. 3,300 years ago based on glottochronological dates and maize term evaluations (Brown 2006:table 47-4), until they were removed to Oklahoma in 1859.<sup>1</sup> In the broadest terms, and seen as evolving from their Woodland period forefathers (see Early 2004; Schambach 2001, 2002; Story 1990; Wyckoff 1980), the Caddo archaeological and cultural tradition represents “an archaeological concept . . . recognizable primarily on the basis of a set of long-standing and distinctive cultural, social, and political elements that have temporal, spatial, and geographic connotations” (Perttula 1992:7). What these elements are, and how they are represented in the archaeological record of the Caddo area after ca. A.D. 800, has no simple answer, primarily because the archaeology of the Caddo by region is quite variable in material culture expressions (especially in its stylistically diverse fine ware engraved ceramic vessels), social and political practices, use of landscapes, subsistence strategies and use of cultivated plants, interaction with neighbors (both Caddo and non-Caddo, especially with Mississippians to the east), and the tempo of cultural changes. The chapters in this book take up the challenge of examining Caddo archaeology through thematic, regional, and micro-historical perspectives.

It has been common practice by archaeologists since at least the 1940s (e.g., Krieger 1947:199) to refer to the archaeology of this broad

area as “Caddoan” or as the “Caddoan area,” even as it was recognized that these terms are more than problematic, primarily due to the reluctance to link a linguistic label (i.e., “Caddoan”) with the archaeological record of indigenous peoples who lived in a specific geographic area. “Caddoan” is a linguistic term that has been in use since John Wesley Powell’s 1891 pioneering language studies, and it refers to a language family that includes two branches: the Northern Caddoan, including the Pawnee, Arikara, Kitsai, and Wichita languages, and the Southern Caddoan, including the Caddo language (Goddard 1996:319). The Adai language, of the Adaes group that lived in northwest Louisiana in historic times (Gregory 1983; Gregory et al. 2004), has an uncertain but unlikely relationship to the Caddo language (Wallace Chafe, September 2010 personal communication). It is the archaeology of the Caddo peoples that speak the Southern Caddoan language (and its many dialects) that is the primary focus of this book.

We will employ the term “Caddo” to refer to the peoples who lived in the area in question, rather than the hackneyed term “Caddoan,” and also use the term “Caddo” to refer to the many archaeological sites and abundant material they left behind. The use of the term “Caddo” conveys the belief that the peoples who lived in east Texas, northwest Louisiana, southwest Arkansas, and eastern Oklahoma, centered on the Red River and its tributaries, shared a common cultural heritage and native history. The annual Caddo Conference is the principal venue in which Caddo people and archaeologists who study their native history and culture “remember that the contributions of Caddo people continue to teach us how to better understand what we mutually share” (Gregory 2009:2): a deep and abiding interest in the native history and cultural traditions of the Caddo peoples.

The term “native history” (cf. Trigger 1980, 1985) as used in this book refers to the totality of the archaeological history of the Caddo peoples from at least 2,500 years ago to the present in the geographic area that has come to be recognized as the traditional territory of the Caddo people. In other words, we view archaeology as long-term history (Mitchell and Scheiber 2010:18–19). The term “prehistoric” is also employed by several authors in this book. By it, they are referring to the period in the archaeological record before A.D. 1680 and the first sustained contact with Europeans. By using that term, they do not mean to imply that the Caddo peoples did not have their own history, they do not intend



1-1. Distribution of the main Mississippian period groups in eastern North America (after Fagan 1995:437).

to “frame native culture change in terms of European processes and European experiences,” or that “they embody the belief that the forces unleashed by the arrival of Europeans were both novel and irresistible” (Mitchell and Scheiber 2010:13).

The term “pre-Columbian” is found in George Sabo’s chapter 15, employed as a counterpoint to the term “prehistoric.” This word, however, still has strong connotations that history in the New World began with Columbus in 1492, “the year the world began” (Fernandez-Armesto 2009:315), and thus is not widely used herein.

To many archaeologists who work in the eastern and southeastern United States and the Great Plains today, the archaeology of the Caddo is poorly understood. Maps of the Caddo area in relationship to the Mississippian Southeast are often inaccurate or incomplete with respect to the locations of important Caddo sites as well as the territorial “boundaries” or limits of the Caddo area (i.e., Cobb 2003:fig. 1; Cobb and Giles 2009:fig. 3-1; Milner et al. 2001:figs. 2-1-2-3; Payne and Scarry

1998:fig. 2-1; Scarry 1999:figs. 5-3-5-5; White and Weinstein 2008:fig. 10). The Caddo Indians are rarely mentioned in more accessible archaeological publications. This may be due to the absence of an overarching and modern synthesis of their native history—or at least a synthesis that has been written in the last 35–60 years (e.g., Newell and Krieger 1949; Webb 1959; Wyckoff 1974). Also, much of the present-day consideration of Caddo archaeology and native history is confined to the “gray” (i.e., limited distribution) archaeological literature and the technical writings of archaeologists, ethnographers, linguists, and physical anthropologists.<sup>2</sup>

Instead, much of what is thought to be understood about the Caddo peoples from an archaeological perspective is primarily a product of what seems to be a misplaced focus and emphasis solely on the spectacular mortuary findings and Southeastern Ceremonial Complex (e.g., King 2007; Reilly and Garber 2007) artifacts from the Spiro site on the Arkansas River in eastern Oklahoma (e.g., Brown 1996, 2007; see also Brown, chap. 5, this volume) as representative of the Caddo archaeological record, rather than a proper focus on communicating to others the considerable diversity that underlies and characterizes the Caddo archaeological tradition (Story 1990:320). Still others see Caddo archaeology as a western manifestation of the Mississippian world (see fig. 1-1), perhaps even peripheral to the core Mississippian groups of the central Mississippi valley, but contemporaneous with Plaquemine (see Rees and Livingood 2007), Middle Mississippian (see Butler and Welch 2006; Pauketat 2004, 2007), and South Appalachian Mississippian aboriginal groups. Blitz (2010:7) describes the Caddo as being situated “at the far edges of the Mississippian world.”

Caddo archaeologists, in the main, however, have argued that the evolutionary development of the Caddo cultural tradition in the ninth century, from an indigenous Woodland world, took place independently of the emergence of Mississippian period developments in the southeastern United States, although they consider Caddo society to be southeastern in character because of related political histories, similar platform and burial mound constructions, the social hierarchy of populations (including priests [*Xinesi*] and chiefs [*Caddi*] as the elite), and an eventual reliance on cultivated plants. Rogers (1991:224) called it a “Caddoanization” of local groups within this broad region along the far western edge of the Southeast. Helen Tanner (1993:6) has perceptively noted

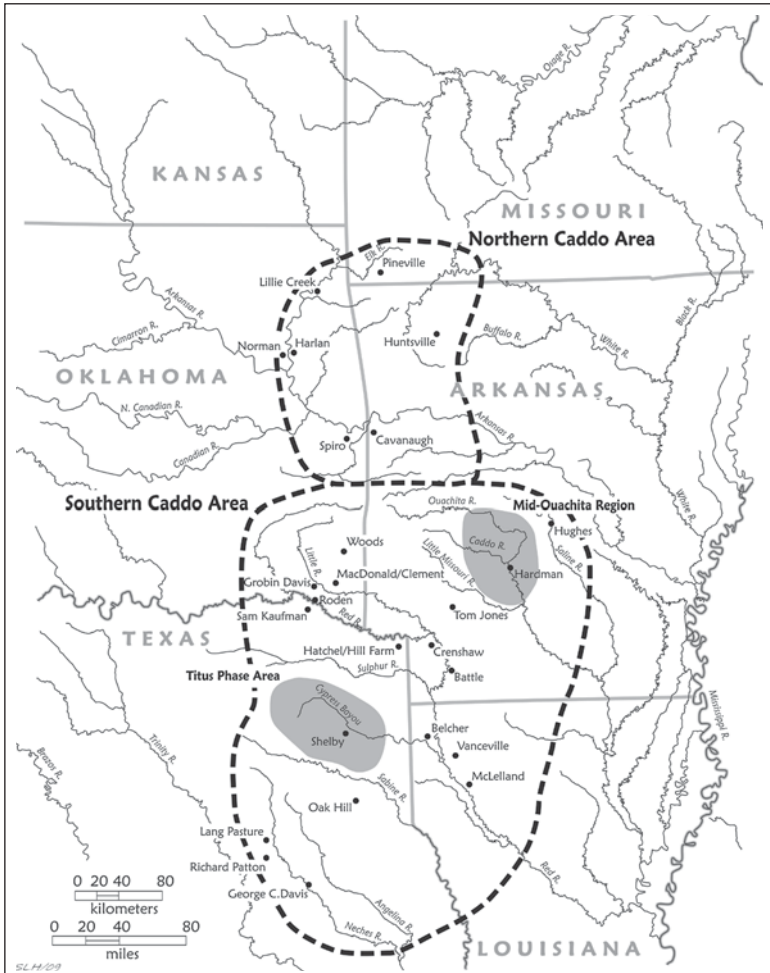
that “the Caddo became the most western of the great chiefdoms that developed in what is now the southeastern United States. . . . Of all the great southeastern chiefdoms, the Caddo was the only one west of the Mississippi River. No other comparable social and political organization existed between the Caddo country and the land of the Anasazi in New Mexico.” Consequently patterns of cultural change that have been identified among cultural groups within the Caddo archaeological area are not thought to be directly comparable with, nor temporally synchronous with, those of Mississippian groups (e.g., Blitz 2010; Livingood 2008; Pauketat 2005). There are clearly discernible sociopolitical and trade relationships between the Caddo and a number of aboriginal groups living in the Southeast in prehistoric and early historic times, and Caddo societies share much with their Mississippian neighbors—including the eventual adoption of maize and the intensification of maize agricultural economies, as well as in systems of social authority and ceremony (Butler and Welch 2006; Livingood 2008:3–11). But the Caddo area is manifestly different in several intriguing ways. We find a 1,000-year record of broad cultural change and social complexity that is manifest in cultural, ethnic, and presumed genetic continuity among peoples who maintained their own distinctive sociopolitical and economic dynamic and had no need for fortified settlements (Dye 2008:12). They continued to build mounds into the seventeenth century and had well-populated settlement areas, whereas Mississippian polities fought and competed for power and tribute (cf. Cobb and Giles 2009; Dye 2006, 2008; Dye and King 2007; Pauketat 2004; Brown 2006; King 2006) and abandoned many parts of the Southeast shortly after 1450.

This book’s purpose is to present the most current findings, from a number of approaches and regions, concerning what is known about the diverse Caddo archaeological record. The chapters range from the Arkansas River basin, to the Pineywoods of east Texas, and to the traditional and centrally placed Caddo heartland along the Red River and its major tributaries. The contributors to this volume have devoted much of their careers to the study of the Caddo Indian peoples.

### **Historical, Ethnographic, and Archaeological Context**

Before the middle of the nineteenth century the term “Caddo” denoted only one of at least 25 distinct but closely affiliated groups centered around the Red River in Texas, Arkansas, Louisiana, and Oklahoma (see





1-2. Sites and areas mentioned in the text in the Southern and Northern Caddo areas.

Swanton 1942). The term derives from the French abbreviation of “Kadohadacho,” a word meaning “real chief” or “real Caddo” in the Kadohadacho dialect. European chroniclers referred to the Caddo groups as the Hasinai, Kadohadacho, and Natchitoches confederacies, although the “confederacies” are better interpreted in modern parlance as kin-based affiliated groups or bands of Caddo communities. The many Hasinai groups lived in the Neches and Angelina River valleys in east Texas, the

Kadohadacho groups on the Red River in the Great Bend area, and the Natchitoches groups on the Red River in the vicinity of the French post of Natchitoches (Fort St. Jean Baptiste aux Natchitos), established in 1714 (see Swanton 1942:fig. 1). The first European description of the Caddo peoples came in 1542 from diarists traveling with the de Soto entrada, then led by Luis de Moscoso Alvarado (Hernando de Soto had died in the spring of 1542). The Spanish described several of the Caddo groups as having dense populations living in scattered settlements and having abundant corn reserves (Hudson 1997; Young and Hoffman 1993).

Recent investigations of many pre-1680 Caddo sites indicate that Caddo communities were widely dispersed throughout the major and minor stream valleys of the Caddoan area by around 800. Their roots can be traced to several ancestral Woodland Period culture groups of varying sociopolitical complexities, including the Fourche Maline (Schambach 2002), Mill Creek (Perttula and Nelson 2004a), and Mossy Grove (Story 1990) cultures, which began to settle down in dispersed communities throughout the region, to manufacture ceramics for cooking and storage of foodstuffs and to develop a horticultural way of life based on the raising of tropical cultigens (corn, squash, and beans) and certain native plants (Early 2004:560–566). By the early ninth century, however, the Caddo had begun to develop a series of fundamentally complex and sedentary societies, fueled by distinctive but still poorly known ideological and cosmological perspectives, creating an extensive archaeological record of their life that spanned at least nine centuries, or until they were forcibly removed from Louisiana and Texas, beginning in the 1830s (see Neighbours 1973, 1975). That record is marked by the remains of farmsteads, hamlets, villages, family and community cemeteries, many small and large mound centers with public structures on and off mound platforms, plazas, and the burials of the social and political elite in and off mounds, as well as a rich material culture, especially their well-crafted ceramic wares.

The development of Caddo culture in ancestral times may have been the result of several factors, including (a) the rise, elaboration, and maintenance of complex social and political symbols of authority, ritual, and ceremony (centering on the construction, dismantling, remodeling, and use of earthen temple and burial mounds) and ideology; (b) the development of elite status positions within certain Caddo communities; (c) increased sedentary life and the establishment of both domestic and

sacred “places . . . that lent order to the chaotic worlds of people and nature” (Pauketat 2007:198); and (d) the expanding reliance on tropical cultigens in the economy, with an intensification in maize production after the thirteenth century (see Wilson, chap. 4, this volume), accompanied by increases in population.

Regardless of the processes involved, it is clear that after the tenth century, the Caddo groups in the main were complex and socially ranked societies with well-planned civic-ceremonial centers. These Caddo peoples conducted elaborate mortuary rituals and ceremonial practices at sacred places and engaged in extensive interregional trade and social interaction (Early 2004; Kidder 1998, 2004, 2007:203). Caddo societies shared much with their Mississippian and Plaquemine neighbors, particularly the eventual adoption of maize and the development of maize agricultural economies, as well as the aforementioned systems of social authority and ranking.

In the times before European observations and written reports, the Caddos lived in dispersed communities of grass and cane-covered houses of various forms and construction methods. The communities were composed of isolated farmsteads, hamlets, a few larger villages with compounds of farmsteads, and the civic-ceremonial centers. These centers used earthen mounds as platforms for temple structures for civic and religious functions, for burials of the social and political elite, and for ceremonial fire mounds, all expressions of social complexity (Knight 2010:1). The largest communities and the most important civic-ceremonial centers were primarily located along the major streams: the Red, Arkansas, Little, Ouachita, and Sabine Rivers (see fig. 1-2). The Caddo peoples developed a successful horticultural economy based on the cultivation of maize, beans, and squash, as well as such native cultigens as maygrass, amaranth, chenopods, and sunflowers, but they also consumed a wide variety of wild plants and animals found in the wooded habitats of the region. By about 1300 most Caddo groups were consuming large amounts of maize (Perttula 2008; see Wilson, chap. 4, this volume). Several varieties of corn were cultivated, an early or “little corn,” harvested in July, and the “flour corn,” harvested in September at the harvest of the Great Corn. Deer was the most important source of meat to the Caddos, who also exploited bison (especially among the Arkansas basin Caddo, see Wyckoff 1980) and bear for their furs and meat. After

the introduction of the horse in the late seventeenth century, the Caddos began to participate in winter communal bison hunts on the prairies to the west of their settlements, and Caddo groups also became heavily invested in the deer hide trade with Europeans.

They developed long-distance trade networks in prehistoric times. Important products were bison hides, salt, and bois d'arc bows, along with copper, stone, turquoise, and marine shell used for gorgets, cups, and dippers, as well as finished objects such as pottery vessels and large ceremonial bifaces made from high-quality cherts. Many of the more important trade items were obtained from great distances (e.g., turquoise from New Mexico, copper from the Great Lakes, marine shell from the Gulf Coast, and finished marine shell items and fired clay pipes from the Cahokia area). These items were often placed in the graves of the social and political elite. The Caddo peoples used clay, stone, bone, wood, shell, and other media to manufacture tools, clothing, ceramic vessels, basketry, ornaments, and other material items. The Caddos are particularly well known, and have been since the early archaeological investigations of C. B. Moore (1909, 1912), for the beautiful artistic and functional ceramic wares they made. Stone was fashioned into arrow points, and the Caddos also made ground stone celts and axes for use in girdling and removing trees and turning over the soil. They made bone into awls, beamers, digging implements, and hoes, as well as ornaments, beads, and whistles. Hoes and digging tools were also made of freshwater mussel shells, while marine shells obtained through trade were used in the production of shell pendants, gorgets, beads, and cups.

The Caddos traced descent through the maternal line rather than the paternal. Matrilineality was reflected in kinship terms, as an individual's father and father's brothers were called by the same term as the mother and the mother's sisters. The Caddos recognized and ranked a number of clans. Marriage typically occurred between members of different clans. Religious and political authority in historic Caddo society rested in a hierarchy of key positions within and between the various affiliated communities and groups. The xinesi inherited a position of spiritual leadership, the caddi the position of principal headman of a community (also a hereditary leadership position), and the canahas the position of subordinate headmen or village elders. The Caddo people turned to the xinesi for mediation and communication with the supreme

god, the Caddi Ayo, for religious leadership and decision-making influence between allied villages and in leading certain special rites, including first-fruits, harvest, and naming ceremonies. The xinesi imbued everyday life with the supernatural. The caddi was primarily responsible for making political decisions for the community, sponsoring ceremonies, leading councils for war expeditions, and conducting the calumet (or peace pipe) ceremony with visitors to the communities. The most influential and politically astute Caddo leaders, or caddices, in historic times were Tinhiouen (ca. 1760–1789) and Dehahuit (ca. 1800–1833) of the Kadohadachos, and Iesh or José María (ca. 1842–62) of the Anadarko or Nadaco tribe.

At the time that sustained Spanish and French contact began in the late seventeenth century (see Barr 2007:17–25), Caddo peoples lived mainly on the Red River and in east Texas, with the exception of the Ouachita and the Cahinnio groups on the Ouachita River (see Swanton 1942:fig. 1). European populations—living in missions, ranches, and trading posts—increased throughout the eighteenth and nineteenth centuries in the Red River valley and in the vicinity of Natchitoches and Nacogdoches, important fur trading centers, while epidemics between 1691 and 1816 greatly reduced Caddo populations (see Perttula 1992:70–76; Derriek and Wilson 2001; Barr 2007:59–60, 304n58). At the same time, the Caddo peoples participated in the fur trade, traded guns, horses, and other items to Europeans and other Indians, and developed new trade and economic networks. The resulting economic symbiosis between the Caddo groups and Europeans (cf. Gregory 1973) was an important means of interaction for the Caddo because great quantities of European goods became available to the Caddo. While the Hasinai Caddo groups continued to live through the 1830s in their traditional east Texas homeland in the Neches and Angelina River valleys, the Kadohadacho groups moved off the Red River in the 1790s to distance themselves from Osage depredations and slave-raiding. Their new settlements were established between the Sabine River and Caddo Lake, generally along the boundary between the territory of Louisiana and the Spanish province of Texas (Tiller 2008:fig. 1). Most of the Kadohadacho remained in the Caddo Lake area until about 1838, although with the cession of Caddo lands in Louisiana to the United States in 1835 and increased settlement by Anglo-Americans in the province of Texas, other Kadohadacho were forced to move to the Brazos River in what is now north central Texas to

avoid Anglo-America depredations. By the early 1840s, all Caddo groups had moved to the Brazos River area to remove themselves from white repressive measures and colonization efforts (see Neighbours 1975; La Vere 2004; Anderson 2005; Smith 2005). They remained there until they were placed on the Brazos Indian Reservation in 1855 by the U.S. government, and then, because of harassment from encroaching Texans, in 1859 the Caddos (about 1,050 people) were removed to the Washita River in Indian Territory (now west Oklahoma) with the help of Robert S. Neighbors, superintendent of Indian affairs in Texas.

During the Civil War most of the Caddo groups abandoned the Indian Territory and resettled in south and east Kansas, but they moved back to the Wichita Reservation in 1867. By 1874 the boundaries of the Caddo reservation were defined, and the separate Caddo tribes agreed to unite. Under the terms of the General Allotment Act of 1887, the Caddo reservation was partitioned in 1902 into 160-acre allotments for each enrolled Caddo, and the remaining lands were opened for white settlement (see Smith 1996). The Caddo peoples continue to live in west Oklahoma, primarily in Caddo County near the Caddo Nation of Oklahoma Tribal Complex, outside Binger.

### **Chronological Framework**

The Caddo chronological framework has passed through a series of iterations since the pioneering typological and chronological schemes developed in the 1940s by Alex D. Krieger (1944, 1946; see also Suhm et al. 1954:151–227) and Clarence H. Webb (1945, 1959). That scheme was solidly grounded in the culture history practices of that era of North American archaeology (e.g., Lyman et al. 1997), and led to the definition of two Aspects (the chronologically earlier Gibson and the younger Fulton) and various foci, and the recognition of a range of components (i.e., the archaeological manifestation of a specific focus at particular sites), including mound centers, villages, and hamlets, as well as cemetery sites, based on the Midwestern Taxonomic System (MTS) (McKern 1939).

With increasing research in a variety of locations in the Caddo archaeological area, dissatisfaction with the Krieger and Webb classification scheme led to the creation of new Caddo temporal-spatial systematics. This was based on the introduction of the phase scheme (Willey and Phillips 1958; Phillips 1970) and a new type-variety system for ceramics

(Schambach and Miller 1984) from the lower Mississippi valley into the Caddo area. These phases replaced the foci of the MTS, sometimes (but not always) with substantive changes in definitions of archaeological traits characteristic of the phase (i.e., a formal content that almost always comprised a range of ceramic fine ware and utility ware types), their geographic space, and their estimated temporal duration. Components recognized at specific sites were the building blocks of phases, as they were with foci, and through the years the study of components within phases—and the comparison of the archaeological character of specific phases—have been employed by archaeologists when defining and unraveling the development of local and regional cultural-historical sequences of past Caddo groups. This concern with culture history, or the temporal breadth of Caddo native history as seen through the study of the preserved archaeological record, is still a major pursuit of Caddo archaeologists as new sites, localities, regions, and sub-areas continue to be investigated. This has proceeded along with the development of new technological and methodological approaches (cf. Lockhart 2007; Walker 2009) that are basically in step with archaeology as it is being practiced in North America (cf. Davis and Davis 2009:4). Theoretical developments with archaeological applications specific to the Caddo area have not had much currency.

The broad Caddo chronological framework followed in this book is provided in table 1-1. It is deceptively simple, being divided into five periods of roughly equivalent temporal length, beginning with the Formative Caddo period at ca. A.D. 800–1000 (Story 1990) and ending with the Historic Caddo period. There have been few, if any, professional archaeological investigations on Caddo sites that date after ca. 1830 in the traditional Caddo homelands (but see Parsons et al. 2002; Marceaux and Perttula 2010), and none (that I am aware of) on post-1859 Caddo sites in Indian territory.

The strength of the Formative to Historic Caddo period scheme is that contemporaneous regional Caddo archaeological entities can be related one to another in a consistent manner. Within each of these periods are a series of content-based archaeological phases recognized at the scale of the region or locality, including the major regions: Arkansas basin, the western Ozark Highlands, the Great Bend, Little River, Northwest Louisiana, the Middle Red, the Ouachita River, the southern Ouachita

Table 1-1. Caddo chronological framework

Period	Dates (A.D.)
Formative Caddo	800–1000
Early Caddo	1000–1200
Middle Caddo	1200–1400
Late Caddo	1400–1680
Historic Caddo	1680–1860+

Mountains, Big Cypress Creek, the upper Sabine River, and the Neches River basin (see fig. 1-2; see also Perttula 1992:table 3). Unlike earlier period schemes (i.e., Caddo I–V, see Davis 1970), there is no unstated assumption in the chronological framework presented in table 1-1 that the Formative to Historic Caddo periods represent linear or evolutionary views of regional developments, or that archaeological developments within the Caddo area conform in any way from one region to another within the overall areal framework (Perttula 1992:58).

It may well be the case, however, that these archaeological periods and their associated phases have outlived their usefulness in framing Caddo chronological and taxonomic problems and research questions. Dunnell (2008a:58–64), who has thoroughly belabored the archaeological value of phases in the lower Mississippi River valley (and elsewhere), granting them little currency in modern research efforts, has noted that “as radiocarbon dates become cheaper and the number of ways to obtain chronometric dates has increased, the phase should be out of work. It is now possible to assign virtually any assemblage to an independent time scale. The actual relations between data points can be studied instead of boxes of our own cryptic creation” (Dunnell 2008a:64). The day may come in the Caddo area when sufficiently robust sets of calibrated radiocarbon dates, thermoluminescence dates (see Feathers 2009), or optically stimulated luminescence dates are available from a broad range of contexts on Caddo sites of different ages to put the “phase” and “period” out of work. We are not there yet, as few Caddo sites have more than 10–20 absolute dates. Consequently, phases and periods will take on most of the heavy lifting in this book when there are discussions and comparisons made of the specific archaeological content of site assemblages and components in different regions and localities in the Caddo archaeological area.

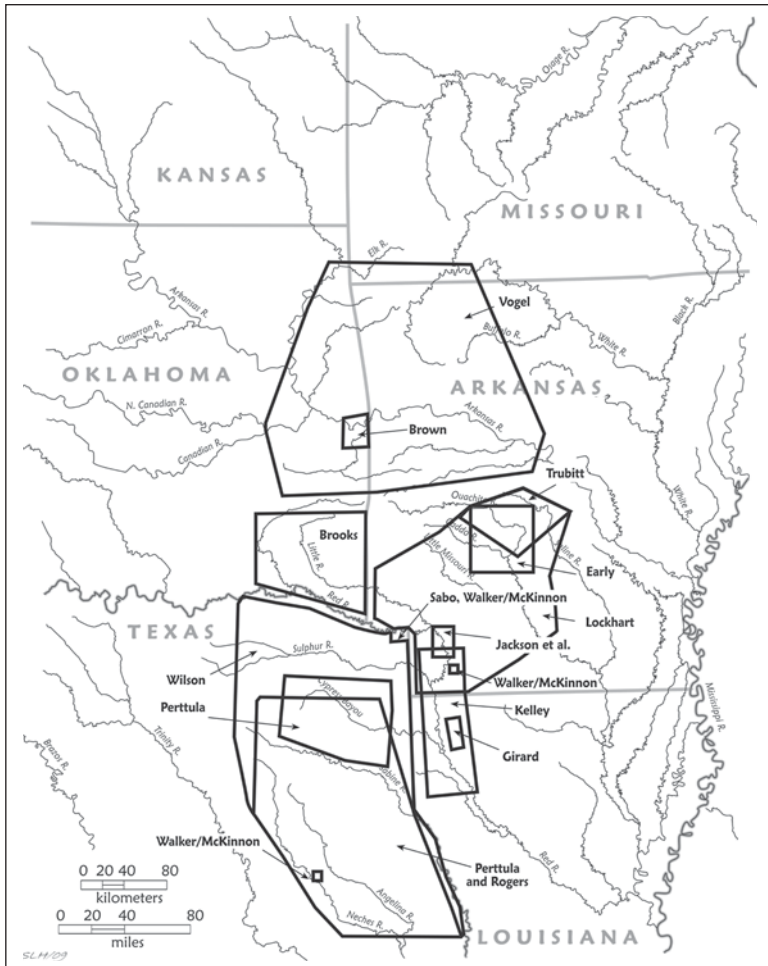


## Contents of the Volume

The chapters in this volume run the gamut of archaeological issues and research problems of concern to Caddo archaeologists. Certainly a fundamental issue is the stylistic character of Caddo decorated ceramic vessels and the importance of understanding ceramic stylistic variation in exploring the temporal, geographical, communitywide, and sociocultural character of prehistoric groups in Arkansas, Louisiana, and Texas.

Ann Early (chap. 2) considers the form and structure of prehistoric Caddo pottery in the mid-Ouachita region in southwest Arkansas. The complex decorative patterns and vessel shapes made by Caddo potters represent one of the great independent developments of North American Indian ceramic technology. Patterns and designs on ceramic vessels are regularly employed by archaeologists as sources of cultural and historical information, and this has certainly been the case in Caddo archaeological investigations since its early days. However, the sophisticated nonrepresentational ceramic decorative tradition of the Caddo may be brought into play to investigate other aspects of their culture. Early's consideration of design organization and pattern analysis of mid-Ouachita Caddo ceramics explores a grammar of design and tests whether this underlying structure expresses more fundamental cultural concepts that united regional Caddo societies. Using a sample of 300 Friendship Engraved vessels, Early outlines the process of design building and investigates whether this process embodies broader symbolic principles expressed in other material and behavioral aspects of Caddo culture.

In chapter 9, Jeffrey S. Girard examines a large archaeological ceramic database at a spatial scale concordant with a dispersed Caddo floodplain community in northwest Louisiana and discusses the implications of the ceramic findings for the study of inter-community variation and past Caddo social structure across the landscape. Archaeological investigations along Willow Chute Bayou have identified numerous archaeological sites (through repeated surface collections and test excavations) with similar ceramic assemblages that date between 1050 and 1450. The locality proved well suited to addressing questions concerning the meaning of ceramic variation at a community level because it is at a spatial scale consistent with Caddo communities described in historic records, and the locality is bounded by natural areas that have significant limita-



1-3. The geographic extent within the Southern and Northern Caddo areas discussed by contributors in this book.

tions for human habitation. Using primarily correspondence analysis, Girard attributes most of the variability between ceramic collections along Willow Chute Bayou to spatial shifts in Caddo settlement through time, beginning with the initial development of the community from a small aggregated hamlet to the establishment of a dispersed village.

The Oak Hill Village (41RK214) in the Sabine River basin of northeast Texas is a ca. A.D. 1150–1450 Caddo settlement that was completely excavated in the mid-1990s prior to lignite mining activities. Analysis of

the architectural remains, including more than 40 structures and several granaries, along with a series of key calibrated radiocarbon dates from habitation features, and finely detected changes in ceramic vessel stylistic decorative elements by Timothy K. Pertulla and Robert Rogers (chap. 8), indicate that the village evolved as three temporally and spatially different communities composed of a number of separate households. Emerging in the latter two communities, after 1250, were important social institutions (a plaza, an earthen mound, and specialized structures with extended entranceways) that bound this singular Caddo community together for 150–200 years (ca. 1250–1450).

Other contributions in the volume are concerned with the organization and interrelationship of Caddo communities at various spatial scales. This includes the evolution at the micro-scale of the aforementioned Oak Hill village in northeast Texas; the development and dispersion of a larger Middle Caddo period community in the Red River floodplain of northwest Louisiana; the intra-site organization of several mound centers in east Texas and southwest Arkansas as discerned through archaeogeophysical study; and the meaning of the regional distribution of Caddo mound centers and associated habitation sites in the Arkansas River basin, the Red River basin in southeastern Oklahoma, and the Red and Ouachita River basins in southwest Arkansas. One chapter considers the cosmological significance of the layout, organization, and directionality of structures, a temple mound, and open spaces at an important Caddo mound center and village on the Red River visited and mapped by a 1691–1692 Spanish entrada.

In chapter 7, Chester P. Walker and Duncan McKinnon discuss recent archaeogeophysical investigations at several pivotal Caddo mound and village sites along the Red River and in east Texas, namely, the George C. Davis (41CE19), Hill Farm (41BW169, part of the Nasoni Caddo village known as the Hatchel site [41BW3]), and Battle mound (3LA1) sites. This work obtained primary datasets of geophysical features that allow a more detailed consideration of community organization at a landscape scale as well as a better appreciation of the character and intra-site distribution of Caddo architectural features. It is becoming increasingly economically feasible to use archaeogeophysics as a complementary investigative tool in the study of Caddo community spatial organization across the landscape, and thus the use of archaeogeophysical data as a primary dataset in landscape archaeology studies can obtain compre-

hensive images of overall site spatial layout and intra-organization of structures, mounds, and other cultural and geological features that are difficult to identify using traditional archaeological methods. Walker and McKinnon point out that where excavations have the ability to confirm interpretations of individual archaeogeophysical anomalies, a broad-scale map of the overall site spatial layout from archaeogeophysical investigations complements these datasets with an analysis of spatial relationships and patterning of cultural features across entire sites.

The visual impact of mounds has long been underestimated. However, because many mounds were among the most prominent features of the landscape in ancient times, were covered periodically with brightly colored soils, were topped by substantial structures and occasionally with large fires, and were constructed in ways that made evident the effort in human planning and labor it took to construct them, large mounds were grand and impressive sights. In chapter 6, Gregory Vogel reviews visual aspects of Caddo mounds in the Arkansas River basin in eastern Oklahoma and west Arkansas, and presents a Geographic Information Systems (GIS) model of mound viewsheds. Vogel determined that mounds along the Arkansas River and its major tributaries, particularly the mounds at larger and more elaborate civic-ceremonial centers, were located in areas where they could be seen from a distance. Mounds in the Ozark Plateau region, however, are more likely to have been built in areas with small viewsheds, suggesting that these monuments had different uses or meaning to Ozark Plateau aboriginal populations than was the case among the more substantial Arkansas River valley populations. Additionally, several mounds in the Arkansas River basin were situated where ground level at the base of the mound was hidden from the view of the adjacent bottomlands, but the mound itself, and any structure it may have supported, would have been visually prominent from the same bottomlands.

The Caddo groups of southeastern Oklahoma made deliberate choices in construction of their built environment after 1000. For some 500–600 years, the Caddo built residential communities and mounds along the Red River and its principal southward-flowing tributaries. Robert Brooks (chap. 12) considers the distribution of these sites through a GIS approach. Site selection criteria included soils, elevation, floodplain width, biotic habitats, and the presence of other nearby Caddo residences or mound centers.

Recent geophysical surveys and excavations at the Tom Jones site (3HE40) in southwest Arkansas have provided information about intra-site organizational patterns and material culture (see Schambach 2003; Lockhart 2007). Jami J. Lockhart (chap. 11) extends the search for recognizable inter-site spatial patterning to the broader region, encompassing pre-1680 Caddo landscapes within Arkansas's West Gulf Coastal Plain physiographic subdivision. Employing the statewide database of archaeological sites, GIS technology, ethnographic and archaeological information, and exploratory data analysis techniques, Lockhart details a research approach for recognizing and integrating natural and cultural components of past landscapes. Quantifying relationships between environmental themes and the locations chosen by the Caddo for mound sites are used to develop an environmental similarity model, which, combined with a statistically derived area of accessibility, encompasses 92 percent of all Caddo sites within less than half of the West Gulf Coastal Plain. This model also delineates potential cultural buffer areas to the east that contain land environmentally similar to the land chosen by the Caddo, but in which there are no sites, and also identifies an atypical set (11 percent) of Caddo mounds sites that are entirely surrounded by, but not included in, the modeled area of environmental similarity. These few Caddo mound sites, among them the Tom Jones site, were located in the highest elevations of the West Gulf Coastal Plain in proximity to major watershed boundaries and small, isolated refugia of Blackland Prairie ecosystems.

In the volume's concluding chapter, George Sabo examines a map produced in connection with an early Spanish entrada to the Caddo, the 1691–1692 exploration of east Texas by Domingo Terán de los Ríos. The Terán map depicts a Nasoni Caddo village along the Red River, including farmstead compounds, the headman's compound, and a temple mound complex at the western end of the village. Sabo convincingly argues that the position of the temple mound complex within the village marks a boundary separating the community not only from an external terrestrial world but also from its associated spiritual realm. The map is interpreted by Sabo as a cosmogram captured by the Spanish mapmaker that coincidentally incorporated a Nasoni Caddo view of their place in a spiritually transcended world.

Chapters by Diane Wilson and Edwin Jackson, Susan L. Scott, and Frank Schambach consider different aspects of Caddo subsistence from

east Texas and the Crenshaw mound site, respectively. Their contributions point out that subsistence strategies and the utilization of domesticated plants and various wild plant and animal foods were tremendously variable among Caddo populations through time and across space, as well as equally diverse between elite and non-elite groups.

The Caddo believe that cultivated plants such as corn and pumpkin are gifts from the earth that “they were to hold and use for their benefit. The two gifts most closely associated with the earth were corn and pumpkin” (Newkumet and Meredith 1988:30). The adoption and use of maize sometime before 900 is one of the key features that defines Caddo culture archaeologically, along with the cultivation of beans, pumpkin, and various oily and starchy seeds (chenopods, sunflower, sumpweed, and maygrass), because it is not seen in their hunter-gatherer predecessors, but yet there is growing archaeological and bioarchaeological evidence of significant variability in the utilization of maize by the east Texas Caddo. The analysis of recovered plant remains suggest that the Caddo began to use tropical cultigens after the ninth century, but intensive food production based on maize apparently became most important across almost all of the traditional Caddo homelands only after the thirteenth century.

Diane Wilson (chap. 4) reviews the dental and stable isotope evidence from the bioarchaeological study of human remains for maize subsistence among east Texas Caddo peoples. Maize subsistence generally increased through time, but there was considerable variability by individual, site, and region. Her synthesis has led to an understanding of the bioarchaeological character of the Caddo people in parts of east Texas, especially in the upper Neches River basin, that is currently unparalleled anywhere in the larger Caddo archaeological area (cf. Wilson 2011). The bioarchaeological information she gathered regarding diet, health, and pathologies obtained during the course of the Lang Pasture site (41AN38) investigations in 2006 has an import well beyond the local archaeological context, because it provides a sweeping view of more than 800 years of Caddo life. The Lang Pasture bioarchaeological investigations were done in consultation with the Caddo Nation of Oklahoma. That consultation has allowed the Caddo peoples to keep abreast of the bioarchaeological approach and findings from the project as it moved forward and provided them an opportunity to communicate their

perspectives on the meaning of the findings from these investigations. This is a first for the field of Caddo archaeology, and it is a step in the right direction of making room for the Caddo peoples to be full partners in future archaeological and bioarchaeological investigations in their traditional homelands.

The Crenshaw site (3MI6) is a late Fourche Maline–Early Caddo period ceremonial center located on the Great Bend of the Red River in southwest Arkansas. Excavations some years ago by Frank Schambach uncovered a structure, “House of the Priest,” that was used between 1000 and 1200 as the residence of an individual with both elite social status and religious responsibilities. Adjacent to the structure was a truly impressive deposit of 2,042 antlers, representing a minimum of 1,021 white-tailed deer. As discussed by Edwin Jackson, Susan L. Scott, and Frank Schambach in chapter 3, the very well preserved faunal assemblage from the Crenshaw site provides a sense of the ways in which patterns of faunal procurement and consumption in this Caddo ceremonial center transcended economic considerations. The character of the faunal assemblage from those excavations have led Jackson et al. to strongly argue that remains found there were the product of individual social and political status and preferential access to quality wild animal foodstuffs for the elite, and decisions on wild animal procurement that would have helped create, maintain, and demonstrate the supernatural relationships that would have legitimized and supported the elite status quo. Ultimately, the faunal assemblage from the “House of the Priest” at the Crenshaw site represents a considerable departure from what would otherwise be expected as typical wild animal food dietary patterns for Early Caddo sedentary communities along the Red River and other parts of the Caddo area (cf. Hunter et al. 2002; Perttula and Bruseth 1983).

Several chapters examine the character of specific sites and well-defined archaeological phases in different parts of the Caddo area. These studies nicely illustrate the diversity in material culture content, social relationships, subsistence, and settlement character that existed in broadly contemporaneous Late Caddo period groups.

Mary Beth Trubitt (chap. 10) focuses on the Caddo archaeological record in the Saline River valley in south central Arkansas. The Saline River valley was something of a “borderlands” between the trans-Mississippi south and lower Mississippi valley archaeological areas, and between Caddo and Mississippian cultures in the Late Caddo/protohistoric pe-

riod. Recent archaeological research on this poorly known area has included work at the Hughes site (3SA11), an important mound center, designed to reach a better understanding of Caddo social and ceremonial systems, settlement patterning and economic organization, and relationships with neighboring groups. Excavations at the site provide a glimpse into activities conducted near the main mound, based on the excavation of portions of stratified burned structures that date to at least the fourteenth and fifteenth centuries. Trubitt summarizes the results of the Hughes site excavations and compares the archaeological record of the Saline River valley with the neighboring Middle Ouachita River valley, Ouachita Mountains, and Arkansas River valley.

The Caddo peoples living in the Big Cypress Creek basin in northeast Texas from the fifteenth to the seventeenth centuries, known archaeologically as the Titus phase, are the topic of Timothy K. Perttula's chapter 13. These Caddo, never ethnographically documented, were a strong and powerful group of peoples, not a society in eclipse. They were farmers living in dispersed communities, and they were active traders. These Caddo groups were among the most populous and socially complex of the many Caddo societies living at that time, and they were the westernmost aboriginal group that was sociopolitically akin to middle and late Mississippian polities in the southeastern United States. The Caddo communities living in the heartland of the Big Cypress Creek basin experienced rapid and sustained population growth during times of fluctuating climatic conditions. These dynamic farming communities dealt with climatic and subsistence stresses by effecting new means of holding their societies together, forming several stronger communities with larger mound centers, community cemeteries, and villages at key nexuses in the Big Cypress Creek basin.

In chapter 14, David Kelley summarizes the archaeological character of the Belcher phase (ca. 1500–1700) in northwest Louisiana. The Belcher phase is one of the better known Late Caddo period archaeological manifestations, and it represents the peak of Caddo settlement in this part of the Red River valley. The formal archaeological content of the phase was originally based on Clarence H. Webb's (1959) excavations at the Belcher mound site (16CD13) in northern Caddo Parish, Louisiana. His work provided the first detailed information on the nature of the ceramic and lithic assemblages, architectural patterns, and burial programs of the upper level of Belcher phase Caddo society. More



recent excavations at Caddo farmsteads belonging to the Belcher phase have gathered important new data on Caddo settlement and social hierarchies, leading to a more comprehensive view of the Belcher phase, especially in terms of settlement patterns, the subsistence character of these Caddo people, and material culture assemblages.

Wrapping up the volume, chapter 5 by James A. Brown is concerned with the utterly unparalleled (i.e., unparalleled in the Caddo area, and unparalleled in the eastern and southeastern United States) assemblage of exotic mortuary goods recovered from the Spiro site in the Arkansas River basin in eastern Oklahoma at the western frontier of the eastern Woodlands. The changing interpretation of these mortuary goods has challenged customary ways of explaining the pre-Columbian past here and in the larger context of the native history of the eastern United States.<sup>3</sup> Debate has centered on the archaeological interpretation of the findings in the Great Mortuary in the Craig mound at Spiro, which Brown demonstrates in a tour de force to be a three-tiered sacred monument organized around an *axis mundi* upright pole. Sacred objects were laid out in the Great Mortuary to represent the universe, the *imago mundi*. The accumulation of shell, copper, and other mortuary objects is best attributed to the attractions of the “sacred economy,” not the operation of a centralized chiefdom or the mobilization of a long-distance network of trade and exchange.

## Conclusions

The chapters in this volume consider the long sweep of Caddo native history, from its origins and ancestral times, still clouded in mystery and limited archaeological investigations, to the early years of contact between the Caddo and European adventurers and explorers. Just as the Caddo built impressive monuments (fig. 1-4) to honor their leaders and their god above, Ayo-Caddi-Aymay, we hope that the contributions in this volume honor the strengths, creativity, and traditions of the Caddo peoples.

In recent years, in pace with developments in the lower Mississippi valley (see Dunnell 2008b), the Southeast (Livingood 2008, 2010), and adjoining archaeological regions (Baugh and Perkins 2008), while the Caddo archaeological interest with temporal-spatial systematics has remained strong (along with approaches that can discern rapid ce-



1-4. Looking south-southwest at the Battle mound site (3LA1) in southwest Arkansas in 2007.

ramic stylistic changes with fine chronological control, see Schambach and Miller 1984), Caddo archaeologists have also turned to addressing broader and equally significant research problems about the Caddo peoples and past communities that concern such themes as settlement patterning, sociopolitical organization, construction and destruction of Caddo houses, ceremony and ritual, iconography, subsistence change, health and adaptive efficiency, and exchange networks (see Brown 1996, 2007, 2010; Early 2000, 2004; Emerson and Girard 2004; Kay and Sabo 2006; Lankford 2007a, 2007b, 2008; McKinnon 2009; Perttula 1996, 2008; Trubitt 2009). Even the discussion of Caddo warfare with Southern Plains people (but see Baugh 2007) has entered the Caddo archaeological field (Burnett 2010), to account for the dismembered remains of more than 350 individuals at the Crenshaw site (see Jackson et al., chap. 3, this volume).

These developments have taken place in tandem with the burgeoning field of cultural resources management and its accompanying laws, regulations, and practices—under which most Caddo archaeological work is done these days—and in conjunction with the development and use of new scientific methods, the most significant among them being geophysical surveys of Caddo sites (Lockhart 2007; Perttula 2010; Perttula et al. 2008; Walker 2009; see Walker and McKinnon, chap. 7, this

volume). Caddo archaeologists have also come to more fully appreciate the social and cultural complexity and diversity that characterize the Caddo peoples' heritage (cf. Newkumet and Meredith 1988; Carter 1995; Halfmoon 2004; Gonzalez et al. 2005; Sabo 2005; Gregory 2009). There is every reason to think that we will continue to learn a great deal more about the native history of the ancestors of the Caddo peoples who lived in the Caddo area, building upon the archaeological findings of those who came before us.

To honor the modern Caddo peoples, as well as their ancestors, the royalties from this book are dedicated to the Caddo Nation of Oklahoma.

### **Acknowledgments**

I would first wish to thank Elisabeth Chretien and Elaine Maruhn at the University of Nebraska Press for their assistance in bringing this volume to fruition. Chester P. Walker and I also appreciate the comments and efforts of the two anonymous book manuscript reviewers, as well as the work of each of the contributing authors to this book, and we thank the contributors for their patience as this volume was assembled.

I also wish to thank the Society for American Archaeology (SAA) and John Neikirk of the SAA for permission to reproduce chapter 8 from a 2007 volume of *American Antiquity* and for permission to reproduce three photographs from Webb (1959) in chapter 14. Pictures of Record, Inc. also gave permission to reproduce three photographs in chapter 2. Sandra L. Hannum prepared several figures that are used here in chapter 1.

Finally, I would like to thank the Caddo Nation of Oklahoma for everything they have done for me over the years, especially Bobby Gonzalez (Native American Graves Protection and Repatriation Act coordinator), Robert Cast (Tribal Historic Preservation Officer), LaRue Parker (past tribal chairwoman), and Elizabeth Edwards (current tribal chairwoman). The editors and authors hope this volume, in some small way, is a measure of payback and appreciation in return for their support of the archaeological community's studies of the Caddo Indian people.

### **Notes**

1. The northern Caddo area (or Northern Caddoan area, as it is often referred to) even includes a bit of the Ozark Highlands in southwest Missouri (Ray and Lopinot 2008).

2. A recent Caddo bibliography of archaeological, bioarchaeological, ethno-

historical, ethnographic, and historical writings on the Caddo Indians has been published by the Arkansas Archeological Survey (Perttula et al. 2006), and it is now updated on a website developed by the Caddo Conference Organization. Archaeological research on the Caddo may also be found in the *Caddo Archeology Journal*, published by Stephen F. Austin State University (Nacogdoches, Texas), and generally in the publications of the Arkansas, Louisiana, Missouri, Oklahoma, and Texas archaeological societies.

3. Some archaeologists still give credence to the notion that the archaeology of the Arkansas River basin in eastern Oklahoma is linked with the Wichita people. For instance, Don G. Wyckoff (2008:377) has recently written that “some of us believe this cultural tradition [Arkansas Basin] has something to do with one, if not more, of the Wichita bands.” The presentation of the pros and cons of this issue of ethnic and cultural affiliation of the Arkansas Basin peoples that lived there between ca. 900 and the late seventeenth century (Rogers 2006; Baugh 2009) would take at least another volume to summarize, if even then. The reader should consult the chapters here by James A. Brown and Gregory Vogel for their perspectives, the writings of archaeologists who have worked in the Arkansas Basin, and the views of the Caddo Indian peoples.