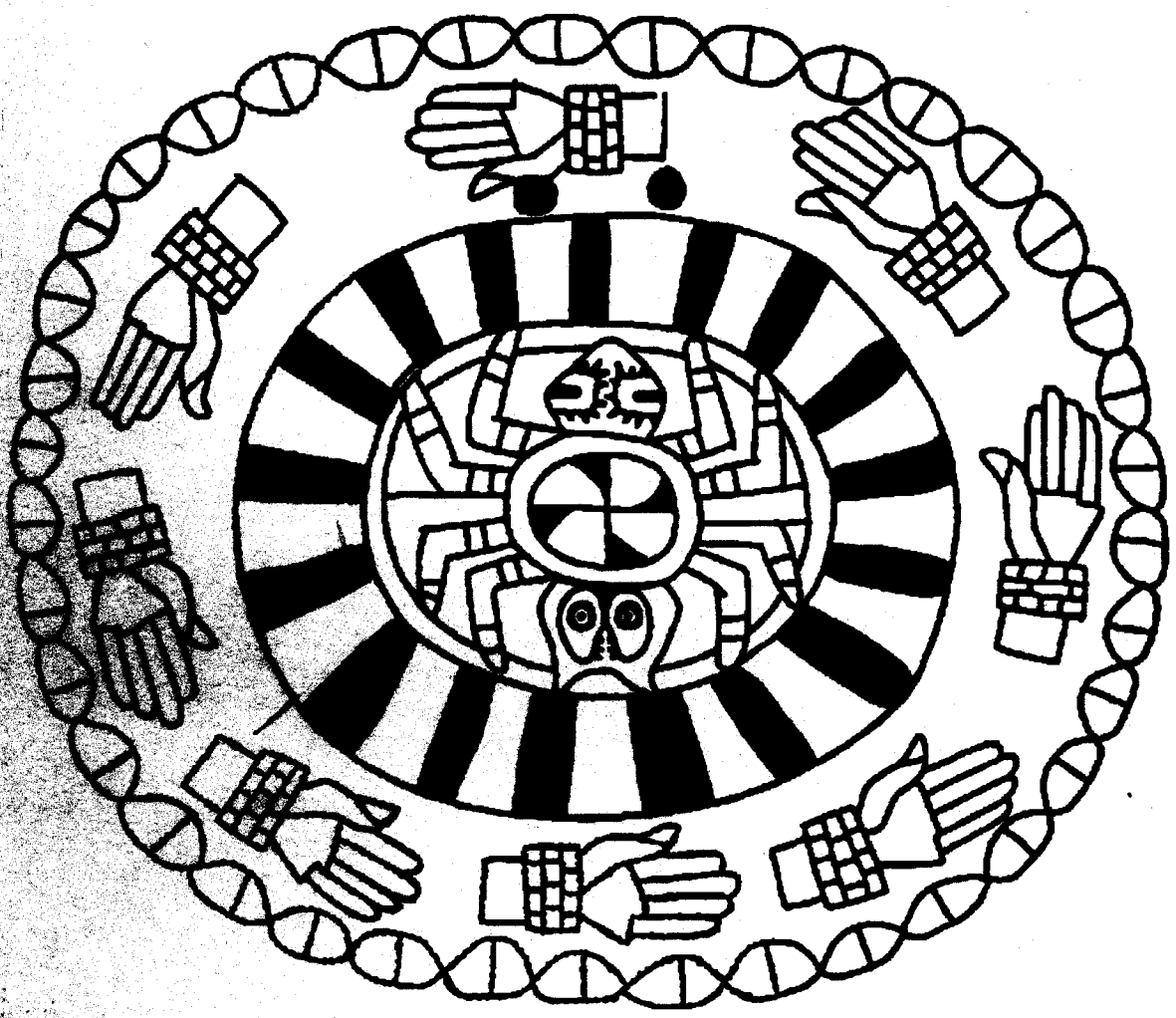
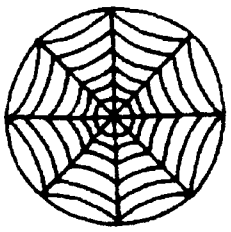
CADDOAN

ARCHEOLOGY



Volume 7, Number 1 April, 1996

TABLE OF CONTENTS



EDITOR'S PAGE

Once again ... already ... another academic year has ended, another Caddo Conference has been held, we're all a year older, I'm learning to use yet another new computer (with lots of new software), and it's time to renew subscriptions to Caddo Archeology. Hopefully, by the time for the next issue I will be able to report an e-mail address. As soon as the people from Telecommunications can be prevailed upon to hook us up, we'll join the rest of the late 20th century.

Congratulations to Pete Gregory and all of folks down at Northwestern State University in Natchitoches for a good, although relatively small, Caddo Conference. The idea of having the sales tables in the large, student union ballroom so that everyone could hear the papers seemed to work quite well. It was too bad that many people left so early on Saturday evening, leaving the Caddo dances with such a small contingent of archeologists.

While we're on the subject of the Caddo Conference ..... we have checked the dates for OU's spring break next year, and have set the date for the conference. It will be March 14-15 in Oklahoma. Obviously, we haven't worked on the schedule yet, but we will be working with the Caddos again, and will probably have part of the conference in Binger. We have been talking about going to the Caddo Tribal Complex on Friday afternoon for dinner and dancing, at least. We hope to have a good turnout again. We'll try to schedule good weather, and not a blizzard!

There was discussion at this year's conference about having some roundtable discussion/show and tell sessions again. This is a great idea, but let's try to do a variety of things. We will have at least one discussion session next year. This would be most valuable if people bring things which illustrate the ideas to be discussed. I also think that Pete's idea of having a short session at the beginning of the conference to very short, informal field reports was good. This keeps everyone (at least those who are there) up to date about what is happening out in the field.

As usual, manuscripts are needed to upcoming issues of *Caddoan Archeology*. I'll also contact people before the next issue, so that we can have a regional news section. By that time, several state society digs will have taken place. If you have news and I haven't called you by June 15, call me. Until then, have a great start to the summer.

UPCOMING MEETINGS AND EVENTS

Continuing into 1996 *State Museum of History, Oklahoma City: Saturday Film Series* continues at Wiley Post Historical Building (Lincoln Boulevard near the Oklahoma Capitol; Free). For scheduling information, call (405) 522-5241.

1996

Through September 15 *Echoes of Ancient America: Art from Lost Civilizations of the New World.* Museum of Art and Archaeology, University of Missouri, Columbia MO. The exhibit showcases works by the Maya, Aztec, and Inka, as well as artifacts from lesser known peoples of western Mexico. It includes pottery, gold, jade ornaments, and featherwork.

May

20-22 *1996 AMQUA Meeting*. Flagstaff AZ. Meeting theme: Global Warming: Interglacials, Interstadials, Climatic Optima, and Other Events. Fourteen pre- and post-symposium field trips planned. For further information, contact Jim Mead, Department of Geology, Northern Arizona University, Flagstaff AZ. Telephone: 520-523-9220; e-mail: jim@vishnu.glg.nau.edu or AMQUA's home page at: http://cc.usu.edu/~DKaufman/AMQUA.html

20-24 *International Symposium on Archaeometry*. University of Illinois. For additional information, contact: S. Wisseman, ATAM Program, University of Illinois, 116 Observatory, 901 S. Mathews, Urbana IL 61801. Telephone: (217)-333-6629; fax: (217) 244-0466; e-mail: wisarc@ux1.cso.uiuc.edu.

20-24 *The Seventh International Conference on Accelerator Mass Spectrometry (AMS-7)*. Tucson AZ. The conference will focus on all aspects of the techniques, methods, and applications of AMS. There will be several theme sessions on special topics, and there will be four pre- and post-conference workshops. One pre-conference workshop will be in La Jolla CA. A post-conference workshop will be held in Tucson on May 25 on geological applications of AMS. Some sessions at the main conference will highlight specialized topics in AMS: Reports on new AMS facilities, negative ion physics and ion sources, trace element studies using AMS, and new radionuclide studies with AMS. For more information contact: Timothy Jull or Warren Beck, NSF Arizona AMS Facility, University of Arizona, Physics Building, Tucson AZ 85721. Telephone: 520-621-6810; fax: 520-621-9619; e-mail: AMS@ccit.arizona.edu. The conference third circular is available on the WWW at *http://www.physics.arizona.edu/ams/*

24-26 *The 3rd Eastern States Rock Art Conference*. University of Maine at Machias. The conference will include participants from eastern and central United States and Canada. Guided tours of prehistoric Algonkian petroglyph sites on Machias Bay are planned for Friday afternoon, May 24, and Sunday morning, May 26. Saturday, May 25, will be presentations on rock art research with informal meetings and discussions Friday and Saturday evenings. For further information contact Mark Hedden, Maine Historic Preservation Commission, 55 Capitol St, Augusta ME 04333.

June

22-29 *Ninth International Palynologic Congress*. Houston TX. Symposia topics may include: ecology and paleoenvironmental reconstruction; entomopalynology & archeological palynology; melissopalynology and forensic palynology; new frontiers and applications in palynology; palynomorph preparation techniques; palynomorph sampling; palynostratigraphy & sequence stratigraphy; pre-Quaternary and Quaternary studies; TEM and SEM applications in palynology. There will be a maximum of 700 oral presentations and space for 250-300 posters. For information contact: D.J. Nichols, U.S. Geological Survey; fax 303-236-5690; e-mail: dnichols@greenwood.cr.usgs.gov

26-30 and **July 3-7** *Smithsonian Festival of American Folklife*. The National Mall, Washington DC. It is part of the 150th anniversary celebration for the Smithsonian.

July

18 - August 3 *Southern Crossroads*. Atlanta GA. A festival of southern culture, from the Smithsonian Center for Folklife Programs and the Olympic Games Cultural Olympiad.

August

3-9 *Fifth Triennial Oxford Conference in Archaeoastronomy: "Cultural Aspects of Astronomy: An Intersection of Disciplines*. St. John's College, Santa Fe, New Mexico. Contact: Rolf Sinclair, Division of Physics, National Science Foundation, 4201 Wilson Blvd, Arlington VA 22230. Telephone: 703-306-1809; fax: 703-306-0566; email: rsinclai@nsf.gov; URL: http://www,phys.umn.edu/-zeilik/oxfordV.

10-11 *Smithsonian Institution's 150th Birthday Celebration*. The National Mall, Washington DC. This will be a gala festival featuring exhibits, family activities, music/dance performances, fireworks, food concessions, and the installation of the 150th Anniversary bell.

October

26-29 *Eastern States Archeological Federation, 62nd Annual Meeting*. Wilmington DE. For more information contact: Faye L. Slocum, DE SHPO, #15 The Green, Dover DE 19901; telephone 302-739-5685.

November

6-9 *Southeastern Archeological Conference*. Sheraton Civic Center, Birmingham, AL, hosted by the University of Alabama Museum, The University of Alabama Press, and the Department of Anthropology, University of Alabama-Tuscaloosa. Meeting registration $30.00 ($35.00 after October 1), students $20. Deadline for symposium proposals August 1; proposals must include 1) proposal forms for symposium and all papers; 2) registration fees for participants, and 3) membership dues for participants who are not current members of SEAC. There will be a poster session. Program chair: Ian W. Brown, Alabama Museum of Natural History, University of Alabama, Box 870340, Tuscaloosa AL 35487-0340; phone 205-348-9742; fax 205-348-4219.

14-17 *29th Annual Chacmool Conference*. University of Calgary, Calgary, Alberta, Canada. The theme for the meeting is "The Archaeology of Innovation and Science". The organizers hope to present a conference which reveals how archeologists identify techniques, technologies, and sciences used by past cultures. Participation in the conference is open to all and is not restricted to professional archeologists. Papers are solicited from avocational archeologists as well as students. Some suggested categories and topics are: Communication Systems (writing systems, signalling devices, roads); Numerical Systems and Calendrics (mathematics, calendars, computers); Public Works (buildings, earthworks, terracing [landscapes], design techniques); Health & Healing (nutrition, medicine, surgery, pharmacology, shamanism); Domestication (plants and animals); Hydrology (water management, irrigation systems, transportation); Transportation (roads, transportation means [vehicles etc.], navigation]; Pyrotechnology (metallurgy, ceramics, casting, glassmaking); Warfare (weapons, fortifications); Archaeology of the Industrial Revolution; Food-gathering, Processing, and Storage. If interested in presenting a paper or organizing a session, contact the Organizing Committee at 403-282-9567. For more information, contact Catherine Christensen, 1996 Conference Committee, Department of Archaeology, University of Calgary, Calgary, Alberta, Canada T2N 1N4; telephone 402-220-5227 (leave message); fax: 403-282-9567; e-mail: 13042@ucdasvm1.admin.ucalgary.ca.

20-24 *American Anthropological Association Annual Meeting*. San Francisco CA. Contact: American Anthropological Association, 4350 N Fairfax Drive, Suite 640, Arlington VA 22203. Telephone: 703-528-1902.

1997

February 3 - March 5 (tentative) *America's Smithsonian.* This is a traveling exhibit celebrating the Smithsonian's 150th anniversary. It will feature everything from dinosaurs to space travel. No other information available at present.

March

14-15 *39th Caddo Conference.* University of Oklahoma, Norman and Caddo Tribal Complex, Binger.

April

2-6 *Society for American Archaeology Annual Meeting.* Opryland, Nashville TN. Contact: SAA, 900 Second St NW, Suite 12, Washington DC. Telephone: 202-789-8200.

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University of Florida Press
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A recent flier from the University of Florida Press listed the following books with relevance to Caddoan area archeologists:

Lost Cities of the Ancient Southeast. Mallory McCane O'Connor, with site photographs by Barbara B. Gibbs. Explores sites from the metropolis of Cahokia to the island stronghold of Calos (of the Florida Calusa). Discusses architecture, archeology, and iconography for 20 sites of the Mississippian culture. Illustrated with maps, site plans and photographs. 176 pp., cloth, $49.95.

Political Structure and Change in the Prehistoric Southeastern United States. Edited by John F. Scarry. Combines archeological information and historical documents to present information about the political structures of southeastern societies. Offers new perspectives on "cycling" - the growth, collapse, and reappearance of chiefdoms. 304 pp., cloth, $49.95.

Fifty Years of Southeastern Archaeology: Selected Works of John W. Griffin. Edited by Patricia C. Griffin. This is a compilation of 16 selections from Griffin's publication list, which began in the 1930s. Ten essays relate to Florida archeology and history, and the others cover other parts of the Southeast and the Midwest. Griffin was the first professional archeologist employed in the state of Florida. 272 pp., cloth, $39.95.

Foraging and Farming in the Eastern Woodlands. Edited by C. Margaret Scarry. Covers Native American agricultural practices and has a detailed list of references. 365 pp., cloth, special price $39.95.

Archaeology of Aboriginal Culture Change in the Interior Southeast: Depopulation During the Early Historic Period. Marvin T. Smith. Covers the history of the interior Southeastern nations between the Late Prehistoric and the 18th century. 198 pp., cloth special $23.95, paper special $14.95.

Aboriginal Subsistence Technology on the Southeastern Coastal Plain During the Late Prehistoric Period. Lewis H. Larson. Covers subsistence, settlement, and adaptive systems for the protohistoric and historic period Indians of the Southeast. 260 pp., cloth special $27.95.

Perspectives on Gulf Coast Prehistory. Edited by Dave D. Davis. 379 pp., cloth special $31.95.

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39th CADDO CONFERENCE (1996) ABSTRACTS

Albert, Lois E., and Russell G. Townsend. *An Archeological Survey in Eastern Oklahoma Emphasizing Early Cherokee Sites.* During the fall of 1995, we conducted an archeological survey of 16 quarter-sections in Cherokee, Adair, and Delaware counties of eastern Oklahoma. During the time we were in the field, we recorded 67 sites and 87 isolated finds. Of these sites, at least 17 were associated with early Cherokee history in Oklahoma. Fifteen others may be as well, but not enough evidence, either artifactual or archival, is available to ascertain their ethnic and temporal associations. Forty sites were prehistoric, ranging in age from possible Dalton/Meserve, through Calf Creek, into Late Archaic or Woodland.

Avery, George *The Los Adaes Station Archaeology Program: '95 Stump Excavations.* The results of the excavations of the stumps of storm-damaged trees at the Los Adaes State Commemorative Area, the site of an 18th-century Spanish provincial capital, are presented. Artifact distributions suggest that several stumps were located in the vicinity of structures depicted on a 1767 map of the fort, mission, and associated structures, roads, and agricultural fields at Los Adaes.

Barnes, Mark (with discussants) *Discussions about Discontinuous Historical Landmark Districts for the Caddo Mounds.* A discussion of National Historical Landmark designations and their advantages. Then, this will be followed by a discussion of the application of Landmark designations to major mound centers in the Caddoan area.

Carter, Mary Cecile *The Turkey Dance.* A video, by the Caddo Tribe of Oklahoma.

Corbin, James E. *The Juan Pedro Walker Map of 1806 and the Location of 18th-Century Caddoan Communities.* In 1806, cartographer Juan Pedro Walker drew a map of the route from Nacogdoches to the Trinity River. The geologic, geographic, and historical information on the map is compared to 18th- and 19th-century records and contemporary soils, vegetation, and geologic data to reconstruct the locations of 18th-century Caddoan communities.

Early, Ann M. *Caddoan Settlement in the Ouachita Mountains Revisited: The Winding Stair Site and Locality.* The 1994 AAS Training Program continued research on Caddoan settlement in the Ouachita Mountains by returning to the upper Little Missouri River Valley. At the Winding Stair site, the feature tested in 1993 was found to be a nearly square timber and thatch building with two interior support posts flanking the central fireplace. Ceramics indicate links to other Ouachita Mountain settlements and to the Arkansas River basin. A second prehistoric site nearby revealed a contemporary residential site comprised of a different style structure, storage/refuse pits, and sheet midden. The Winding Stair structure may have been the anchor for a community tucked into the narrow valleys and hollows of the upper Little Missouri Valley in the late 14th, early 15th centuries.

Girard, Jeff *Synthesizing Archaeological Data in the Caddoan Region: Comments and Discussion.* The advent of NAGPRA and recent debates concerning non-Caddoan prehistoric occupations within the Caddoan region prompt discussion of basic concepts we employ to synthesize archaeological data. In recent studies, we find a diverse mixture of terms such as phases, foci, stages, periods, and cultures without explicit discussion or apparent reflection on their meanings. The purpose of this session is to stimulate thought and discussion regarding the

ways we integrate archaeological data in time and space.

Gregory, Pete (with discussants) *Historic Caddoan Ceramics: Formal Distribution in Time and Space.* A discussion of historic Caddo ceramics - where they are distributed in context with datable items, the dates on the late historic Caddo pottery.

Jurney, David H. *The Last Mexican-Indian Silver or Lead Mine: Myth or Reality?* Several unconnected historical sources point to the location of a channel lag deposit of silver and lead in the Sabine River north of Merryville. These sources are examined and critiqued, and directions for future study are proposed.

Kelley, David B. *Preliminary Findings of Large-scale Survey in the Red River Valley of Southwest Arkansas.* This paper presents preliminary findings of an on-going large-scale survey in the Red River Valley of southwest Arkansas. The survey is being conducted prior to levee enlargement work by the Vicksburg District, U.S. Army Corps of Engineers and to date has examined 56 miles of 0.25 mile wide right-of-way. Fifty-three new sites have been located, and Caddo components are present at 21 of these. The majority of these appear to be Late Caddo occupations, although Early and Middle Caddo components are present as well. New information has also been obtained on several recorded sites, including the Foster and Friday Places.

Lee, Dayna, and Lowell Edmonds *Music Traditions of the Caddo People.* A discussion of Caddo songs and dances with Lowell "Wimpy" Edmonds.

Schambach, Frank *The Womack Site, an Early Eighteenth Century Tunica Entrepot on the Red River in Northeast Texas?* New bioanthropological data developed by Sharon Derrick and Diane Wilson confirm my hypothesis that the Sanders mortuary complex represents an intrusive population of Spiroan traders from the Arkansas Valley. But evidence that this same population may be represented five hundred years later in early eighteenth century graves at the nearby Womack site requires me to try to determine whether my "Tunica as Spiroan traders" hypothesis can be expanded to account for them.

Scholes, David M. *The Process of Using Historical and Archaeological Information to Discern Cultural Boundaries.* In claiming burial objects, tribes, under NAGPRA, must create a spatial and temporal boundary. This also must occur when construction inadvertently uncovers burials or artifacts. To whom does it belong? A core cultural area is pretty well known among the Caddo, but the fringe areas raise interest and debate. The historic and archaeological record is used to demarcate cultural areas. There are many problems and limitations with these records. Thus, tribes must develop consensual agreements in order to stave off conflict and competing claims. Science is not performed in a vacuum. The items covered under NAGPRA represent contemporary political conflicts as much as they represent data.

Vogel, Robert *Paul Bouet Lafitte and Caddoan-European Relations in the Red River Borderlands.* Paul Bouet Lafitte was a major trader on the Sabine River. His influence on tribes and his neighbors will lead to a broader discussion of French, Spanish, Native American cultural exchanges in the Bayou Pierre settlement.

18th ANNUAL FLINT HILLS CONFERENCE ABSTRACTS

Adair, Mary (University of Kansas) *Ethnobotany of the Protohistoric and Historic Wichita: Two Approaches.* Archaeobotanical samples collected by Waldo Wedel in 1965-1971 from Rice County sites and recently processed flotation samples from Cowley County sites provide an opportunity to address several issues of importance to Great Bend research. Included are subsistence, the introduction of new foods (from either Europeans or indigenous groups, and feature construction and variability. Uses of plants for medicinal purposes, often difficult to determine from archaeological remains, can be addressed by an analysis of the contents of two early 1900s Wichita medicine bundles. Plants collected from the Anadarko region by women were placed in fabric bags which have been retained over the years by family members. Both bags were recently loaned to me by Virgil Swift for analysis.

Adair, Mary (University of Kansas) *The Good, the Bad, and the Ugly: AMS Dates on Kansas City Hopewell Maize.* Five direct accelerator dates were recently obtained on maize remains collected from three Middle Woodland Kansas City Hopewell sites. Two maize samples from the Trowbridge site (14WY1) were processed by Beta Analytic while an additional sample from this site was run by the University of California-Riverside. Samples from both the McPherson (14LV357) and the Quarry Creek (14LV401) sites were also processed by UCR. The results indicate a need to reexamine models of early maize in the Central Plains and a reevaluation of morphological characteristics often used to describe early maize in North America.

Benison, Chris (Kansas State Historical Society) *A Prehistoric Lithic Extraction/Reduction Site in Greenwood County, Kansas.* Archeological investigations were conducted at a Permian chert quarry locus by the Kansas State Historical Society. Located in southwest Greenwood County, Kansas, this site is at the interface between the Flint Hills and Osage Cuestas physiographic zones.

The site assemblage was characterized by over 100 local chert multistage bifaces and unifacial scrapers. Diagnostic projectile points recovered from this site indicate that extraction and reduction of local Permian cherts occurred during Late Archaic through Late Woodland times (*ca.* 4000-900 BP).

Flakes made of non-local chert types were also found at the site. The presence of non-local chert types suggests: 1) existence of large hunting territories during this time period; 2) lithic exchange with non-local groups; or 3) direct procurement of non-local cherts by local groups.

Documentation of extraction/reduction sites is important in tracing economic behaviors among prehistoric peoples. Data from the Greenwood County site serves as a baseline for future research on lithic quarrying behavior.

Bevitt, C. Todd (Kansas State Historical Society) *The Seuser Site: Results of Test Excavations at a Plains Village Habitation Site in Central Kansas.* A weekend testing project carried out by a small crew of individuals from the KSHS and KAA in 1970 yielded important data on Plains Village period culture (A.D. 1000-1500) in western portions of central Kansas. Several cultural features were excavated and numerous other possible features were mapped. The collection of artifacts and debris offers additional information (though somewhat limited by the nature of the excavation) on poorly understood complexes along the Central/Southern Plains border. A discussion of the material will include pertinent data on lithics, ceramics, fauna, and limited floral remains. The site will be placed within a presently defined culture based on the overall characteristics of the collection with discussion focusing particularly on the ceramic assemblage.

Blakeslee, Donald J. (Wichita State University) *A Coronado Campsite in Texas.* The route of the Coronado expedition through Texas has been the subject of research for the last 100 years. Contemporary documents indicate that his army made two major camps, probably somewhere along the eastern edge of the Llano Estacado, but scholars have been unable to agree on any precise location.

Recent work in Blanco Canyon has revealed 16th century artifacts scattered along several miles of canyon floor. Copper points from crossbow arrows (quarrels) identify the site as the remains of one of Coronado's camps, as only the Coronado expedition carried crossbows (already becoming obsolete in 1541) into the Southwest. Other items recovered from the site include puebloan pottery, nails, a scabbard tip, buckles, and horse gear.

Cameron, Bertha, Dick Keck, and Rodney Staab (Kansas City Archaeological Society) *14JO451: A Shawnee Reserve Homesite.* Family recollections, archival research, and archaeological investigation combine to shed new light on life on the Shawnee Indian Reserve during the mid-nineteenth century. The Shawnee Reserve was established by treaty in 1825 in an area south of the Kansas River in northeast Kansas. Site 14JO451 is located above the floodplain in a soon-to-be developed area of present Shawnee, Kansas, on the eastern edge of the former Reserve.

Excavations during the winter of 1995-96 revealed the foundation of a small structure which the associated artifacts indicate was for domestic use, dating to the mid-nineteenth century. Historic research identifies this acreage as the homestead of Elizabeth Captain Chouteau (*ca.* 1830-1870), a Shawnee) and Samuel Garrett (1831-1891, an English emigrant) married in 1855. Family tradition holds that site 14JO451 may have been occupied as the first house of Elizabeth and Samuel: post-1859 occupation may have included other family members or renters.

The excavation revealed buckles and other iron hardware, minimally three whiteware types, five stoneware types, seven bottle glass types, coal, machine cut nails, two possible window glass sherds, no bricks, and (on the interior floor) an 1868 five-cent piece. Nothing in the archaeological record indicates use of the structure into the twentieth century.

Feagins, Jim D. (St. Joseph Museum) *The Bourbon Complex: A Late Prehistoric Plains Caddoan Occupation Near the Kansas-Missouri Border.* This paper concerns late prehistoric Plains Caddoan people, who once resided in the Little Osage River basin and adjacent drainages near the Kansas-Missouri border. Their (Bourbon complex) sites are generally small and contain relatively light scatters of cultural materials. Among the more common artifacts are: blunt-end scrapers, unbeveled and beveled bifaces (including side-notched, beveled knives), unnotched triangular-shaped (Fresno) arrowpoints, abundant large to medium beveled flakes (Marion blades), and occasional shell and/or sand-tempered pottery. Florence chert from the Flint Hills was commonly utilized for tools. These tools are like those found on Great Bend aspect sites farther to the west and southwest.

A preliminary description of the 1995-96, St. Joseph Museum excavation of the Bourbon complex component at the Meech Brothers site, 14BO3462, is given. This part of the site contained two hearths and their surrounding activity areas. Animal bone, charcoal, shell-tempered pottery sherds, and a few lithics were recovered from around one hearth. The activity area around the second hearth contained a bone and lithic scatter, but no pottery sherds. A blunt-end scraper, a sandstone abrader, and a Fresno point were found within and adjacent to the second hearth. Charred walnut shells from near both hearths suggest two relatively brief episodes of fall occupation.

Certain mobile prehistoric subsistence strategies for Great Bend aspect people are hypothesized. The presence of the Bourbon complex supports the contention that the protohistoric/historic Osage occupation of this general area does not extend far into antiquity.

Giesen, Myra J., and Leah M. Gagne (Bureau of Reclamation; Shughart, Thomson & Kilroy) *NAGPRA: A Review of 1995 Regulations and Current Case Law.* The Native American Graves Protection and Repatriation Act [(NAGPRA) 25USC 3001 *et seq.*] was signed into law on November 16, 1990, although the regulations (43CFR Part 10) for administering NAGPRA were not formally established for another five years. NAGPRA is concerned with Native American human remains, associated and unassociated funerary objects, objects of cultural patrimony, and sacred objects. NAGPRA requires Federal agencies and museums to take certain actions, within a pre-

scribed time frame, under the provisions of the law. For example, summaries of unassociated funerary objects, objects of cultural patrimony, and sacred objects must have been completed by November 16, 1993. Inventories of human remains and associated funerary objects must have been completed by November 16, 1995. In addition, NAGPRA requires repatriation, on request, to the culturally affiliated tribes. It also strictly limits the sale or purchase of Native American human remains and cultural objects identified in the act, whether or not they derive from Federal or Indian lands. This paper will provide an overview of NAGPRA; the effects of the recent passage of federal regulations (December 4, 1995) to implement the law; and procedural differences in how to establish cultural affiliation with remains found before and after passage of NAGPRA. A recent court case involving NAGPRA will be explored. Special emphasis will be placed on the Freedom on Information Act and what is construed as a "good faith" effort when completing an inventory.

Hawley, Marlin F. (Kansas State Historical Society) *The Great Bend Aspect Occupation of the Lower Walnut River Valley: A Report on Intensive Highway Archeological Investigations Near Arkansas City, Kansas.* Defined by Waldo R. Wedel following fieldwork in 1940, recent highway-related archeological work conducted by the Kansas State Historical Society near Arkansas City, Kansas, has added significant new data about the Lower Walnut taxon. Still in the fieldwork state, large-scale removal of plowzone and the excavation of hundreds of pits, basins, and post molds, together with a program of intensive flotation have revealed further evidence of exchange with varied cultures, including European groups, settlement patterns, technology, subsistence, chronology, and even ceremonialism.

Hawley, Marlin F., and Frederick W. Scott (Kansas State Historical Society) *The Pre-Great Bend Aspect Occupation of the Lower Walnut River Valley: A Preliminary Report.* Recent archeological investigations in the lower Walnut River valley reveal not only an intensive Great Bend aspect (Late Ceramic) settlement but earlier occupations, as well. As yet unanalyzed data points to use of the area during the Early Ceramic and, possibly, Middle Ceramic periods. Sporadic finds of other artifacts suggest even earlier occupations.

Hofman, Jack L., and India S. Hesse (University of Kansas) *The Distribution of Clovis Points in Kansas.* Although no unequivocal Clovis sites have been excavated in Kansas, there is a variety of surficial evidence from specific sites and isolated artifact finds. A summary is provided of Clovis artifacts (*ca.* 11,300-10,900 radiocarbon years BP) known from throughout Kansas in relation of modern physiographic regions and faunal provinces. Information on breakage and potential function of projectile points is reviewed. Lithic material sources are also considered and compared with the slightly later Folsom evidence from Kansas.

Kraft, Kenneth C., and Jesse A.M. Ballenger (University of Oklahoma) *The 1995-96 W.C.D. Survey: Cultural Resource Assessment of 2400 Acres in the Washita River Valley, Caddo County, Oklahoma.* A survey was conducted on Wichita (and affiliated tribes) tribal land in the Washita River basin of Oklahoma. The survey area consisted of upland and flood plain settings. Twenty-four archaeological sites were identified that ranged from Historic Indian to possible Paleoindian affiliation. This presentation will discuss the original location of the oldest continually operated boarding school in the United States, an anomalous Plains Village site, a possible Paleoindian cache, and several lithic procurement sites commonly associated with the Late Archaic.

Logan, Brad (University of Kansas) *The DB Site: A Stratified Upland Occupation, Fort Leavenworth, Kansas.* Survey and test excavations of the DB site, located on an upland ridge overlooking the confluence of the Missouri River and Salt Creek in Leavenworth County, Kansas, have revealed stratified evidence of Late Prehistoric (Steed-Kisker phase) and Late Archaic occupations at depths of 0-40 cm and 40-60 cm respectively. A third component of unidentified cultural affiliation is located from 70-100 cm in the B horizon of a buried soil above Peoria (Late Pleistocene) loess. The potential of this NRHP eligible site for

enhancing our understanding of changes in prehistoric settlement-subsistence variability in the Lower Missouri River Valley is explored.

Odell, George H. (University of Tulsa) *The Meaning of Spatial Clustering at the Lasley Vore Site.* The Lasley Vore site, overlooking the Arkansas River, was excavated in 1988 to mitigate the impact on cultural resources of the construction of the Kimberly-Clark Paper facility 13 miles south of Tulsa, Oklahoma. The site yielded Protohistoric Native American lithic, ceramic and faunal assemblages, and paleobotanical remains that included corn kernels, nut fruits, and a variety of wood charcoal dominated by oak. An additional item of interest is the presence of abundant French trade goods that some errant French explorer such as La Harpe might have brought into the area.

Since the site had been thoroughly plowed and used as a dairy farm, a strategy of plow zone removal and feature excavation was pursued. Eighty features, mostly pits and hearths, were discovered, but no structural remains were recognized. Given the paucity of structural remains, interpretations of the site have rested on the analysis of the features. These form 10 clusters, five of which have abundant enough material to compare statistically. So far, atomic absorption spectrophotometry analysis of pottery clays suggest that the pottery of most clusters originated in different areas. A use-wear analysis of the lithic material also suggests differential tool use in the clusters. Continuing analysis of the cultural remains centers around the issues of site function and its articulation with the French presence in the region.

Peterson, John K., and Joseph Herman (University of Nebraska State Museum) *A Materials Science and Design Perspective on Plains Pottery: General Discussion and Examples from One Locality on the Loup River.* Studies dealing with issues of pottery function and design are becoming more common in the archeological literature. These topics have not been widely addressed in reference to Central Plains pottery and are poorly understood. Most of the discussion in this paper will center around one Protohistoric Pawnee and two Central Plains Tradition sites on the Loup River in central Nebraska. This paper will present some preliminary ideas and data in regards to understanding Central Plains pottery function and design. Raw material procurement is likewise poorly understood, and a brief discussion of local clay sources and clay properties will also be presented.

Reynolds, John D., Harold Reed, and Greg Jackson (Kansas State Historical Society; Kansas Anthropological Association) *Experiments in Heat Treating Florence A Chert.* The Archeology Office of the Kansas State Historical Society is currently involved in large scale salvage efforts at Arkansas City in southcentral Kansas. The archeological sites that are the focus of this major work are attributable, in large part, to the Lower Walnut focus of the Great Bend aspect, a late prehistoric/protohistoric taxon that is believed to represent one of the late prehistoric bands that eventually coalesced into a culture that we identify as the Wichita Indian Nation. One of these large village sites, at the east edge of Arkansas City, was the focus of the 1994 Kansas Archeology Training Program, a program that is jointly sponsored by the Kansas State Historical Society and the Kansas Anthropological Association. The presence of large quantities of Florence A chert, most in thermally altered form, on this and other Lower Walnut sites, attests to the importance of this lithic resource to the late prehistoric/early historic residents.

Utilizing a lithic technology class that was conducted as a part of the 1994 KATP, John Reynolds and Martin Stein conducted exploratory investigations of a large prehistoric Florence A chert quarry, 14CO5, some 14 miles east of Arkansas City. Some of the freshly quarried stone was then used for experimental heat treating, both during the 1994 KAPT and again in June of 1995. These experiments suggest a feasible heat treating method and document aspects of the physical and chemical changes that this chert undergoes when it is subjected to controlled heat in the 500 to 600 degree Fahrenheit range. Several as yet unanswered questions are posed by the current experimental attempts.

Romine, John (Kansas Anthropological Association) *"LITTLE RIVER PEOPLE": Their Daily Lives and Actions with the Arrival of Coronado in 1540, Through Heavy Fraction Flotation Sampling.* The

heavy fraction flotation samples taken during the Sharp's Creek excavation during the 1992 and 1993 field school of the Kansas Anthropological Association (KAA) and the Kansas State Historical Society (KSHS) have yielded a great amount of information on the daily life of the proto-historical Quiviran Indians. This group of Indians has been presumed to be the group which was encountered by Coronado in his search for gold on his 1540 expedition into the Great Southwest and central Great Plains area of North America. The heavy fraction samples taken at Sharp's Creek substantiates that there were foreign visitors to the area and also reveals some of the everyday activities which were encountered by these foreign visitors.

Roper, Donna C. (Kansas State University) *Investigations of Upper Republican Extramural Features at Medicine Creek, Nebraska.* The 1995 session of the Kansas Archaeological Field School investigated several non-house debris scatters in the Medicine Creek valley, Frontier County, Nebraska. The major excavation effort was directed toward a feature at 25FT30 that is tentatively identified as an outdoor work area, probably associated with a house excavated by the RBS. Lithic reduction was a very prominent activity in this work area, and the collection is ideally suited for defining Upper Republican lithic technology. Only small quantities of other debris classes are represented. Also tested was a feature exposed in a cutbank at 25FT39. Some pottery and chipped stone debris was collected, but mussel shell predominated. This feature is similar to one earlier tested at 25FT22. These results, along with results of some other investigations in the valley, suggest the need to revise our conception of Upper Republican domestic localities from a house along to a house-centered compound of a house and associated extramural work areas.

Scott, Frederick W. (Kansas State Historical Society) *Ceramic Assemblages of the Lower Walnut Focus Sites in Cowley County, Kansas.* Currently, on going, highway salvage of Lower Walnut focus sites of the Great Bend aspect in Cowley County, Kansas, has produced new data on the Lower Walnut ceramic assemblage. While Cowley Plain ware make up the greater part of the assemblages there is a presence of Southwestern and Southeastern ceramics, with Southeastern wares showing up in higher numbers than previously thought.

Stein, Martin (Kansas State Historical Society) *The Geology of the Maple City Quarry (14CO5).* The 1994 Kansas Archeology Training Program (KATP) activities included a surface survey of the Maple City Quarry (14CO5) locality and the excavation of a small trench. This trench was an extension of an earlier excavation, dug by the author, that bisected an aboriginal quarry pit. The purpose of the 1994 KATP trench was to expose a section of the chert bearing Florence limestone deposits for observation and to collect chert for experimental purposes. This paper describes the surface evidence for prehistoric/protohistoric quarrying activities and poses line of inquiry for further investigation of the site. The characteristics of the chert deposits are described.

Swift, Virgil *The Wichita Indian Nation Today* (abstract not available).

Thies, Randall M. (Kansas State Historical Society) *Red Wine, White Mice, Blue Hills: Scatological Analysis of a Living History Experience.* In May 1995, a select group of archeologists, biologists, and assorted interested onlookers gathered at a Blue Hills residence in Manhattan, Kansas, for a mouse roast. Gathered around a campfire, using white mice from a local pet store, they skinned, gutted (some), roasted, and then ate the little critters in an attempt to emulate and qualitatively assess the vole-eating habits of prehistoric populations. Afterwards, three of the participants faithfully collected the end results of their experiment. The scat samples were then processed by water flotation, after which they were carefully analyzed to determine the nature and abundance of faunal remains within each specimen. The results were suprisingly varied: one individual failed to pass any remains; another produced prolific amounts, including several whole bones. Further analysis indicates that up to 75% of the bone displayed evidence of having been burned.

Vehik, Susan (University of Oklahoma) *Formation of the Great Bend Aspect: Social, Political, and Economic Changes* (abstract not available).

Watson, Danial R. (University of Nebraska State Museum) *Plows, Plant, and Prairie Dogs: Site Formation Processes at Three Historic Sites in Western Nebraska.* This paper examines briefly the current state of three historic sites along the Oregon-California Trail and the Pony Express Route. Geographically close and topographically similar, these sites have been extensively surveyed by traditional visual surface methods and geophysical remote sensing techniques. Comparisons are made between surface manifestations and sub-surface evidence at the three sites. Comments and observations on the nature of site formation and preservation over a known period of time are offered.

Witty, Thomas A., Jr. *Review of Great Bend Aspect Archaeology* (abstract not available).

Zehnder, John (Wichita State University) *Asessment of the 1993 Kansas Anthropological Association's Experimental Sourcing Method.* Cataloging and sourcing lithic material from archaeological sites is time consuming using traditional methods. In 1993, the Kansas Anthropological Association under the direction of the Archeology Department of the Kansas State Historical Society began an experiment to expedite the sourcing and data collection of lithic material. The KAA/Archeology Department experiment used member volunteers during a two day "Fall Fling" on October 9 and 10, 1993, to, among other duties, sort, source, weigh, and bag lithic debitage from 14MP408 (Sharps Creek site in central Kansas).

The purpose of this experimental method, with a large group of amateurs under the direction of professional archaeologists, was to catalog and record data in less time than traditional methods in the laboratory using comparative samples for the purpose of sourcing.

The author has selected a sample of the cataloged lithic material to re-source and determined the percentage of error in this experiment. Suggestions are offered for consideration in adjusting this method of sourcing to reduce the percentage of error so as to not compromise the validity of future analysis.

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THE ARKANSAS RIVER VALLEY: A NEW PARADIGM, REVISIONIST PERSPECTIVES AND THE ARCHAEOLOGICAL RECORD

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INTRODUCTION

Recent articles by Schambach (1990a, 1990b, 1992, 1993a, and 1993b) have proposed a new paradigm for the late prehistoric period in the Arkansas River Valley. These arguments challenge traditional and long held views on the subsistence economy, architecture, material culture, biological character, and trade relationships of the prehistoric populations of the Arkansas River Valley, and the middle portion of the Red River (the Sanders phase area). My intention in this paper is to examine Schambach's arguments based on a comprehensive review of the archaeological record and by also drawing upon explanatory models of cultural and economic behavior. For the most part, my comments pertain to the Arkansas River Valley situation; Bruseth, Wilson, and Perttula (1995) have responded to many of Schambach's challenges concerning the Sanders phase in the Red River Valley. Points here are not intended to defend the traditional perspectives as the gospel for the Arkansas River Caddoan tradition. Without doubt, a reexamination of the Arkansas River Caddoan is long overdue. Much of the subsistence data, bioarchaeology, and non-ceremonial aspects of the material culture were derived from analysis completed some 30 years ago, analysis conducted without the benefit of recent theoretical and methodological advances. However, we must reexamine the arguments and the data in an objective, informed fashion. Only from such an approach can we generate a new paradigm worthy of acceptance.

REVISIONIST PERSPECTIVES

Subsistence

In two recent articles Schambach (1990, 1993a) has maintained that subsistence patterns in the Arkansas River valley during the late prehistoric period were substantially different from the economic mix of farming supplemented by hunting and gathering previously identified (Wyckoff 1980; Galm 1981). In brief, he proposes that people of the Northern Caddoan area were minor horticulturists with the major focus being on starchy seeds (*e.g.*, chenopods, amaranth, and cucurbits) and on the use of bison as a meat source. He further argues that this system emphasizes hoe horticulture and grain processing with stone manos, grinding basins, etc., fostering extensive dental attrition. These claims merit further examination of the archaeological record. A casual review of the archaeological record does indeed suggest such a pattern. There are bison in the faunal assemblages from a number of sites in the Arkansas River Valley and

there are certainly a number of questions concerning the horticultural practices of these Caddoan people. But, does this evidence bear up to closer scrutiny? Let us examine the data concerning these issues in greater detail.

Much of the emphasis on bison in the diet stems from the presence of bison bone in the faunal assemblages as well as the occurrence of bison bone tools at a number of Caddoan sites in the Arkansas River Valley. Here, Schambach (1990a) cites School Land I and II, Norman, Wybark, Sheffield, Tyler-Rose, Cookson, and Moore. I might add that there is also bison bone from the Craig and Copple mounds at Spiro. Most of the sites in question represent multiple occupations. Radiocarbon dates (uncorrected) from Sheffield (A.D. 1450, 1510), Tyler-Rose (A.D. 1500, 1530), and Moore (A.D. 1465, 1515) demonstrate the presence of later (post A.D. 1450) Fort Coffee phase occupations at these villages (Rhorbaugh 1984), occupations where bison procurement is recognized as a much more important part of the subsistence regime. The Cookson site, although not dated, also has a Fort Coffee (or Turkey Bluff) component that should date comparably to the Fort Coffee components found at the other sites referenced above (Israel 1969). The School Land I and II sites date to the Spiro phase and do contain bison. However, the MNI for bison at School Land I is 3 and only one individual is identified at School Land II. They are outnumbered by deer in the faunal assemblage at School Land I by 12 to 1 (Duffield 1969). In addition, the School Land sites are on the extreme northern periphery of the Caddoan area, situated on the Grand River in Delaware County adjacent to the tall grass prairie, and probably do not truly represent a setting comparable to other Arkansas River Valley sites. Where the subsistence data for Norman is derived from is uncertain as this site has not been analyzed. The presence of bison at Spiro (Copple and Craig mounds) is slight and does not appear to relate to use of bison as a food source. As Jim Brown (1984) discusses in his study of Spiro, evidence on engraved shell at the site clearly attest to the use of bison. However, it is doubtful that this use extended beyond their selection for "wool" found in textiles. Certainly, no bison bone ornaments or tools appear in the Spiro mortuary assemblages. In retrospect, there is no supportive evidence for bison as a food staple during Harlan and/or Spiro phase times.

The presence of the starchy seeds complex at Spiro comes as no surprise. At Cahokia, consumption of large quantities of *Chenopodium* have been projected based on botanical samples (Lopinot 1991). The same situation has been found at a number of other southeastern Middle Mississippian ceremonial centers and settlements. Thus, the challenge here is to understand not the presence of these plants, but the apparent absence or limited use of tropical domesticates. Corn has been found at a number of Spiro phase sites including Norman, Bowman, Horton, and Jones. Of these, Horton, Bowman, and Jones contain multiple components and corn could come from later Fort Coffee phase occupations. Interestingly, there is corn pollen at Spiro and both kernels or cupules in limited numbers were identified in Fritz's (1989:73-75) analysis of botanical remains from Copple Mound. Fritz also found evidence for many seedy plants in the samples from Copple. These include *Chenopodium* and amaranth, maygrass, little barley, and knotweed, as well as an abundance of nutshell from acorn, hickory, and pecan. This, coupled with Burnett's bioarchaeological evidence indicating little maize dependence at Spiro, is a fairly compelling argument for a subsistence economy tethered around a Woodland base of hunting, gathering, and limited gardening of the starchy seed complex. This still does not, however, explain why corn is present at Spiro in moderate quantities but never forms a substantive contribution to the diet.

There are some additional considerations as well. As recognized by Burnett (1989), their analysis of Arkansas River Caddoan populations was secondarily derived from prior work and was limited principally to ceremonial centers. For example, corn was recovered from 34SQ269

in the Lee Creek valley with an uncorrected radiocarbon date of A.D. 1140 (Albert 1989). It is recognized that elites in stratified societies sometimes receive preferential diets (*c.f.*, Pauketat 1994; Tainter 1980). Thus, the true order of magnitude of maize dependence (or lack thereof) can only be quantified through more systematic and representative study of Spiro phase populations. The other bioarchaeological question to be raised concerns the agricultural potential of Spiro phase people. The low level of maize dependency is based on cary rates found at Spiro and a few other studied centers. There should be some examination of what could be potentially masking cary rates. I would cite as an example the highly maize dependent Antelope Creek phase in the Texas and Oklahoma panhandles. There, cary rates are quite low due to the presence of fluoride in the water. We might also wonder whether starchy seeds might not also be an agent of tooth decay and why this evidence is lacking. Perhaps the high level of dental attrition from grit in the diet is obscuring some of the evidence. Such a situation has been found for agave consumption in Archaic hunter/gatherers of central Texas (Bement 1994).

Most of the village sites bearing on these subsistence questions were excavated before ethnobotanical sampling methodologies were widely practiced. The only two sites which have received detailed ethnobotanical analysis in southeastern Oklahoma are Spiro (Fritz 1989) and Bug Hill (Altchuel 1983). Thus, what is needed is substantive examination of flotation samples from Spiro phase villages. There is also a need to examine the issue of hoes found at Spiro phase villages. These are not the bison scapula, innominate, and horn core hoes found in Fort Coffee phase occupations (Rhorbaugh 1984), but chipped stone hoes of chert, argillite, and siltstone, as well as ones of shell. With only a minor emphasis on agriculture, why were hoes necessary at all? An examination of Boserup's (1964) model of agricultural growth attest to hoes being favored with greater agricultural intensity such as that found in a bush-fallow system, the next stage up in intensity from slash and burn. Another fundamental question concerns the issue of agriculture and domestication. Based on an overview by Fedick (1995:258-261), you can have groups operating an agricultural system with non-domesticates and groups raising domesticates in a non-agricultural context. Obviously, multiple questions can be raised about the complex issue of maize dependency versus the eastern U.S. domesticates (Smith 1989), and a great deal more data and theoretical examination of the Arkansas River Valley subsistence base is needed before answers are readily available.

The last issue addressed in this area is the question of plant processing tools. Schambach (1993a) has emphasized that Arkansas River valley people made extensive use of stone manos and grinding basins with this being reflected by extensive tooth wear. Caddoan populations in southwestern Arkansas are apparently using non-abrasive agents to process their seed crops or are eating them green. However, the use of a ground stone technology to process seeds is by no means unique to the Arkansas River Valley. All of our Plains Village traditions extending across Oklahoma and Texas made extensive use of stone manos and metates. I include here virtually all of the cultural complexes of analogous times found along the Arkansas, Washita, Canadian, and upper Red rivers. Additionally, southwestern Pueblos were masters at ground stone processing of corn and other seeds. It is clear that the Caddo of the Lower Red River drainage probably had more in common with southeastern natives than their Arkansas River Valley counterparts in their plant processing techniques.

However, there are also exceptions to this which do nothing to resolve the basic issues here. At the Nelson site (34CH8), there are three burials recovered by the WPA from a non-mound context. The crania for these burials exhibit classic Sanders phase cranial (occipital) deformation. The teeth are in wonderful condition with no evidence of attrition from use of abrasives in the diet. These individuals also have classic Sanders phase ceramics as funerary

objects. Thus, we have an anomaly. Does this represent a distinction in practices of Sanders phase populations or is it a matter of the remains and sites we have examined? While this question has a bearing on plant processing and technological adaptation, I fail to see the uniqueness of, and consequently the argument for, distinguishing Arkansas River Caddoans from other Caddoan groups on an issue that relates to how people process their seed crops and their ethnic origin.

Adaptive Efficiency

The concept of adaptive efficiency has played a major role in examining the physical well being of village farming populations (Burnett 1989). Because of their highly sedentary way-of-life and reliance on an agricultural base, the success of these populations' adaptation to their surroundings has been conducive to bioarchaeological analysis. Such analysis in the Arkansas River Valley has revealed high occurrences of periostitis, osteomyelitis, and osteoporosis in Spiro phase populations (Brues *n.d.*). Even with remote groups thought to be associated with Spiro, such as those whose remains were found at the Nagle site in Oklahoma County (Brues 1957), there is clear evidence of systemic infection. Schambach, following Brown's earlier lead, argues that this represents a sexually transmitted disease (in this instance syphilis). There is also a proposal that this condition extended to the Sanders site population.

A number of issues surround these paleopathologies. First, there exists considerable debate over the response of bone to infectious disease (Ortner 1991; Ortner and Putshar 1985). In addition, there has been substantial discussion of the definition and diagnosis of the various bone pathologies. Suffice it to say that currently there is not a consensus as to the causal agents involved with these conditions, certainly no wide acceptance of syphilis as the primary contributor. Most paleopathologists cautiously acknowledge that conditions such as osteomyelitis are physical expressions of the bone's response to long term, systemic, and chronic conditions, most likely bacteriological in nature. The impression that this is a condition that is expressed principally in the Spiro populations should also be approached with caution. There is evidence for these same pathologies in Wister and Fourche Maline phase populations in the Wister Valley. In fact, the Sam site contains one burial with evidence of osteomyelitis and a radiocarbon date of 300 B.C. occurring immediately above the burial feature (Galm and Flynn 1978). Thus, it is a long term condition within the region. I also suspect that it is highly associated with the "Black Midden Mound" settlement system. Kent (1989) has argued that these types of pathologies are an effect of highly sedentary lifestyles more than any other agent. Thus, the settlement serves as the vector for the diseases. This can be corroborated, to some extent, by the evidence of osteoporosis, periostitis, and osteomyelitis in Washita River and Antelope Creek phase populations -- highly sedentary Plains Village groups. In fact, the ratio of individuals with this type of periosteal bone response may be no higher in the Arkansas River Valley than in Plains Village populations. Another issue addressed by Burnett and not discussed in the restudy of the Arkansas River valley is that burial samples expressing these conditions may be biased to infected individuals being interred in designated areas (*e.g.*, midden mounds) rather than with those individuals who passed away from more traditional causes. In sum, these infectious diseases may potentially reflect a variety of bacteriological agents, a number of contributing vectors, and cultural and natural environmental factors.

From an alternative viewpoint, Owsley and his colleagues have recently demonstrated that syphilis was widespread among Northern Plains populations in late prehistoric and protohistoric times (Owsley, personal communication). The conditions which they use to document this social disease are the same osteomyelitis and periostitis found in the Southern Plains and the Arkansas River Valley. Based on chemical tests there appears to be little doubt that syphilis is almost epidemic in some groups in the Northern

Plains.If the presence of conditions such as osteomyelitis and periostitis do indeed mark the presence of syphilis, then it is extremely common among both Plains Villagers and people of the Arkansas River Valley as rates of occurrence for these bone pathologies are almost identical. In fact, it is surprising that these conditions are not observed among the populations of southwestern Arkansas. Typically, social diseases are not especially discerning of political or social boundaries and we should be highly skeptical of the absence of syphilis-like attributes among Caddo populations in Arkansas and Louisiana. What this means is that the uniqueness of the Spiro people's condition is a false image. Most, if not all, late prehistoric groups across Oklahoma, portions of Texas, and yes, even portions of Arkansas probably had this condition as well. With these considerations in mind, it is not a useful vehicle for distinguishing the Arkansas River Valley people from their southern counterparts.

Architecture and Material Culture

A variety of issues pertaining to the material culture and architecture of the Arkansas River Valley's Spiro phase have been raised by Schambach (1992a). These include the presence of red slipped pottery, ceramics with fabric impressed bases, and house and mound architecture. The issues of a ground stone technology used in seed processing and the use of hoes in agriculture have been dealt with in a previous section.

The question of red-slipped pottery and its relation to the Spiro phase has existed for some time. In his work at Harlan, Bell (1972) noted that the site contained few of the red slipped wares that characterize the ceramic assemblage found at Spiro and other Spiro phase settlements. Does the appearance of these wares in the Spiro phase reveal an influence from the Mississippi River Valley? If these wares were initially found at Spiro, there might be some justification for this argument. However, this is not the case. Red-slipped wares are found in abundance in the Red River Valley in the twelfth and thirteenth centuries (Bruseth, Wilson, and Perttula 1995). These ceramics are associated with the Sanders site as well as numerous other villages and mound sites on both sides of the Red River. The red-slipped pottery of the Spiro phase is somehow linked to the development of these wares within sites related to the Sanders focus. Frankly (no pun intended), this phenomenon is not that big a deal. Red-slipped pottery is by no means a Mississippi Valley creation. A variety of wares with red slips can be found in the Southwest as well as along the Red River.

Another ceramic development of concern in Schambach's treatment of the Arkansas River Valley is the presence of textile impressions on vessel bases. This is stated as being absent from Caddoan ceramic assemblages in Arkansas and Louisiana. I have no problem with this. I question, however, whether this has a significant bearing on the origins or the continuity of Fourche Maline, Harlan, and Spiro phase occupations of the Arkansas River Valley. In searching the literature quite thoroughly for much of Oklahoma and over a span of some 45 years, the instances of ceramics with textile impressed bases appears to reside almost entirely within what has been labeled as Williams Plain or with synonymous styles (Bell and Baerreis 1951). These are found throughout eastern Oklahoma, along the Red River, and at sites of the Bryan focus farther upstream on the Red River.

There is also the issue of house form and mound construction. During the Spiro phase, houses of wattle and daub with two center posts are found. This pattern continues during the Fort Coffee phase. However, during the Fort Coffee phase, we also see the first appearance of circular structures. At this time, these remain poorly understood. Do these represent specialized building related to social/religious behavior or are these domestic dwellings? There are some parallels to this situation on the Plains. In the Washita River phase (A.D. 1250-1450; contemporaneous with the Spiro phase), we find rectangular wattle and daub houses also with two center posts (Brooks 1987). By the mid-16th century, we find

Coronado encountering Plains Villagers (the Wichita) living in circular bee-hive grass houses. Of course, this architecture is also found among the Hasinai in Northeast Texas at a slightly later date (Bolton 1987). The point here is that this pattern seems well established across Oklahoma and Texas. It is my argument that architectural patterns are responses to degrees of sedentism, environmental conditions, and adaptations on the part of these Arkansas River and Red River Valley people (Brooks 1994). In a similar vein, flat-topped mounds occur in the Arkansas River and Red River valleys. On the north side of the Red River, these are found at the Clement site in McCurtain County and at the Nelson Mound in Choctaw County. In other words, I suspect the variation observed here is expressed in an east-west difference which could be tied to environmental conditions as well as cultural themes.

Trade

The last area pertaining to the Arkansas River Valley and revisionist perspectives that I wish to address is that of trade and the *entrepot* model. Schambach (1993a) has suggested that the Nagle site in Oklahoma County and the Sanders site in Lamar County, Texas functioned as the equivalents of "Ports of Trade" or smaller gateways to the people on the Plains. The issue of Sanders and its importance as a trade center has been dealt with by Bruseth, Wilson, and Perttula (1995). Thus, I will limit my comments to the overall consideration of the *entrepot* model, the Nagle site, and trade with the Plains. Schambach would have us believe that Spiro had two substantial ports of trade on the periphery of the Spiroan area of influence. The initial question that should be examined is whether such a model is consistent with Spiroan society. *Entrepots* and "trading posts" are typically found in highly structured, extended rank-level or state-level societies. For example, Mayan society had "Ports of Trade" where commerce could function between states that were normally at war with one another (Berdan 1978; Polanyi 1963). We also find the Aztec making use of *entrepots* and "Ports of Trade". Complex chiefdoms such as we find in the southeast do not utilize such highly structured (political) and formal means of trade. As well documented in the literature, chiefdoms relied on the use of "trading partners" (Earle and Erickson 1976). These trading relationships were often extensive and complex, sometimes involving a number of down-the-line partners. However, they never relied on maintenance of a permanent settlement in the foreign territory. I would argue that Spiroan society probably maintained a trading partnership system with trading "power" vested in the hands of some of the priestly elites. We can also look at the ethnographic and ethnohistoric literature for further confirmation of the "trading partners" approach. Numerous French and Spanish accounts document the presence of individuals from another group within the settlement they were visiting (John 1975). Typically, these individuals were either present to arrange a trading agreement or to physically exchange goods. Often, these individuals would travel among a number of groups formalizing some type of down-the-line exchange. From these accounts, the traders would often visit these villages a couple of times a year. Of greater interest is the fact that these visitations were often with groups in conflict with the trader's people. There was obviously some type of arrangement whereby a trader traveled under a truce flag. On the Plains, there is a sophisticated macro-economy model documenting trade between southwestern Pueblos, middlemen, and agricultural Plains Villagers farther east (Spielman 1983). We find numerous accounts of the Caddo or Tejas participating in such trade relationships. The other type of exchange documented in the literature is the trade fair where different groups might rendezvous for exchanges. Based on La Harpe's famous description of the trade fair he visited somewhere in the vicinity of Tulsa, Oklahoma, numerous groups were present including some who were often in conflict with one another (Wedel 1971). All these facts point to the *entrepot* model being highly unlikely for Spiroan society.

Concerning the Nagle site, I have a number of

comments. First and foremost, there is no evidence of a settlement at this location or in the immediate vicinity. This is based on Dr. Bell's efforts to find a village as well as later work by the Oklahoma Archeological Survey. It is also highly unlikely that a "Port of Trade" would include infants and young children. The 20+ individuals recovered from the Nagle cemetery reflect a normalized population of an elderly male, young adult males and females, adolescents, children, and infants. In fact, 50% of the Nagle population is under 15 years of age, highly suspect for a group of traders. It is also unlikely that surrounding people, if on good terms with the traders, would permit them to reach the extent of malnutrition described by Brues (1953) and confirmed by Owsley. I think my idea of a refugee population is more parsimonious than that of trade. There is evidence of conflict and the population does not conform to what we normally find for Spiroan groups. As to why a group would be out on the Plains, I suspect there could be a number of reasons for this. First of all, it is well documented that relations between Caddoan groups were often strained. Caddos proper fought with one another, one confederacy against another as well conflicts within confederacies. They also had conflicts with groups such as the Wichita and the Kichai. I doubt that a Spiroan group would travel north or east because of the potential presence of Osage ancestral groups. They were also likely to encounter other Caddoan groups with whom they were not on friendly terms by traveling south or southeast. Thus, they might move west where groups of Wichita might be encountered. It is difficult to know whether the group they ultimately encountered was Wichita or another, non-Caddoan, people. Regardless, this meeting was apparently not a friendly meeting. Enough said about Nagle.

CONCLUSIONS

I find that there are substantial and important differences between what I view as Caddoan populations in the Arkansas River Valley and those found in southwestern Arkansas and northwestern Louisiana. And, I would ask, "Why shouldn't there be"? To assume that all groups of a general cultural pattern are alike falls into the trap that ethnicity sets for us. I would also say that I see nothing in these differences to suggest that Spiroan people are not Caddoan. Along this line, I will add that Susan Vehik has been examining the ethnohistoric record for any sort of information bearing on this problem (Vehik 1995). To date, there is confirmation for Wichita groups (the Tawakonis) in eastern Oklahoma in the 18th century. However, there is no indication of the presence of Tunicas. More importantly, there is no indication among the Wichita of any contact with the Tunicas. This would be highly unlikely if the Tunicas were indeed the people responsible for Spiro. At present, we find no credibility to this argument.

What Schambach's revisionist perspectives has brought us to, however, is the realization that we don't really know the Arkansas River Valley all that well. There are numerous questions pertaining to subsistence, physical well being, and social/economic processes that need a lot of work. Despite 50+ years of archaeology, many of the sites excavated by the WPA have not been examined. This is also true of the physical populations. We desperately need detailed ethnobotanical analysis at sites other than ceremonial centers. These same conditions also hold true for the Red River Valley (at least our portion of it). With the implementation of NAGPRA, I hope we can go forward in a cooperative spirit with the Caddo and Wichitas to examine these critical questions pertaining to their heritage.

Before closing, there are two issues which I think merit discussion. These are ethnicity and the dilemma posed between academic exercises

and political reality.

●1. The revisionist strategy for the Arkansas River Valley tradition has done a service for the academic community because it has brought us to the point where we must face the issue of ethnicity. In the past, archaeologists have causally approached ethnic diversity and cultural boundaries. I would argue that this can be ultimately be traced back to Clark Wissler and A. L. Kroeber and the cultural area concept where cultural and territorial boundaries neatly conformed. With passage of the Native American Graves, Protection, and Repatriation Act we are now faced with the consequence of establishing the relationships between prehistoric material culture and contemporary groups (correctly or erroneously). Archaeological studies of ethnicity have revealed the sometimes tenuous nature of these connections. In some cases, there appear to be clearly defined correspondence between material culture and identified ethnic groups. In other instances, we find substantive distinctions between groups speaking a common language such as that found between the Pawnee and Wichita proper. From the other perspective, we can cite examples of different and sometimes antagonistic groups that exhibit comparable if not identical material culture patterns (*e.g.*, the Arikara and the Kansa). Where a cultural tradition is extremely widespread, it may be very difficult to define the ethnic boundaries that existed in prehistoric times. Here, the Plains Village tradition is a classic example, even considering our excellent ethnohistory and ethnography for the region. When proposing ethnic relationships between archaeological cultural patterns and known Native American groups, multiple paths of continuity need to be established. In Oklahoma, where we deal with the Caddo, the Wichita and the Pawnee, I wonder if some of the problem in these revisionist perspectives is not one of definition. Because of the multiple associations, we refer to Caddoan in a big C sense, meaning the various groups of Caddoan language affiliation (Caddo, Wichita, Kichai, Pawnee, etc.), whereas in southwestern Arkansas and northwestern Louisiana, Schambach need only be concerned with the small c sense of the Caddo confederacies.

●2. The second issue of political reality is one to which all of us in the archaeological profession must become increasingly sensitive. In the past, archaeological argument could be expressed as a challenge to conventional views. Provocative perspectives during the early Binford years in fact became almost "*de rigeur*". This "shock" approach was initially intended to bring attention to a subject. We are now faced with the situation that such challenges have much broader legal and political implications. If we are to discuss issues of cultural affiliation (by the definition of NAGPRA) and deal with ethnicity, the cases we bring forth must be well grounded empirically. To do otherwise poses ethical and professional dilemmas to the archaeological community, museologists, and Native American people as well as compromising the ultimate disposition of the resources.

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