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The East Texas Caddo: Modeling Tempo and Place

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Caddo Radiocarbon

While large strides have been made in Caddo archaeological research during the last 30 years, there remains no shortage of research questions and problems that can be addressed concerning the Caddo culture. A.D. 800-1600 Caddo-era occupation of East Texas. For instance, what did the development and progression of Caddo political and economic systems look like through time and space, and were there specific axes of power that can be identified? How and when did Caddo political, economic, and religious systems manifest themselves across the region in the form of multiple mound centers, community cemeteries, shaft tombs for the elite, evidence for long-distance trade, and the establishment of sedentary farming communities?

The Caddo Sample

The raw sample of Caddo 14C dates (n=889, T=k53) exceeds the minimum number of dates needed for statistical significance—750 as suggested by Michelszynja and Paudir (2004) and 500 by Williams (2012)—but does not. However, the distilled sample of 405 dates reduces probability bias introduced by sites with large totals of 14C dates, and provides a more accurate representation of the temporal character for sites with ≥ 14C dates, which were combined for two reasons: (1) to reduce the standard deviation and increase the accuracy of each site's temporal assignments and (2) to reduce sampling bias created by the number of samples during statistical analyses.

TEMPORAL FRAMEWORK

Borrowing—philosophically—from Pautke (2007), we need to dig deeper into the cultural nuances and traditions of the Caddo people to investigate how they influenced the creation of this socially powerful group of complex mound-building societies at the western edge of the Eastern Woodlands, not the other way around. To do so, the logical first step in addressing the temporal and spatial character of the East Texas Caddo tradition is through an analysis of the 14C data presented here. Although “deceptively simple” (Pautke 2012:12), the current chronology of the Caddo tradition embraces “no uniaxial assumption...that these periods represent linear or evolutionary views of regional developments or that archaeological developments within the East Texas Caddo area conform in any way from one region to another within the overall regional framework” (Pautke 1992:58).

Analysis of the Caddo sample (n=889 dates) from the East Texas radiocarbon database is used to establish the tempo and place of Caddo era (A.D. 800-1680) archaeological sites, site clusters, and communities across the region. The temporal and spatial distribution of radiocarbon ages from settlements, mound centers, and cemeteries across the region have utility in exploring the development and geographical continuity of the Caddo peoples; establishing the specific times when areas were abandoned or population sites diminished; and defining times and areas illustrating an intensification in mound construction and large cemeteries became a focus of community social practices.

TEMPORAL RANGE OF OCCUPATION

Caddo sites with ≥ 14C dates include Lang Pasture (41AN38), George C. Davis (41CE19), Kitchen Branch (41CP22), Pilgrim’s Pride (41CP304), Hickory Hill (41CP408), Spider Knoll (41DT1), Arnold (41HP102), Hurricane Hill (41HP106), Professors Bottoms (41HP175), Pine Tree Mound (41HS15), Tallow Grove (41NA231), Bench Ridge (41NA242), Noot haua mesa (41RR170), Oak Hill Village (41RK214), Ear Spool (41TT651), George E. Richey (41TT851), William A. Ford (41TT852), James E. Richey (41TT853), and Roscoy Ridge (41UR133). The number of dates garnered through investigations at each of these sites is biased by variable research designs, mitigation strategies, and access to funding.

Results

Although the number of sites is small, they highlight a possible temporal hiatus of nearly 400 years in the Red River basin, and another of nearly 200 years in the Cypress Creek basin, both of which appear here on the basis of data from one site in each river basin. The remaining peaks correlate with populations from the kernel density plot, and they illustrate a small peak in the Red River basin around 400 B.C. followed by slight increases in the dates from the Sulphur, Cypress, and Sabine basins around 200 B.C. This is prior to a 200-year peak in dates from the Sulphur and Sabine River basins for A.D. 50-220, after which a marked increase occurs in the number of dated Woodland sites for the Sulphur, Cypress, Sabine, and Neches River basin dates from A.D. 600-800.

Conclusions

We are quickly approaching an era where typological assignments can be associated with radiocarbon samples in a similar manner, but significant advances in correlating these data with specific aspects of archaeological assemblages still need to be made as we progress in our analyses of the Woodland period of East Texas. This analysis represents only a small sample of 14C dates from the ETRD, which remains a large and understudied amalgam of radiocarbon dates that is available for use within current cultural resource management endeavors. Through the systematic employment of this methodological approach, it is plausible that similar analyses would illustrate the arguments presented here (i.e., shorter hiatuses during the later and better-understood Caddo period, and longer hiatuses ranging from the Archaic through Paleoindian periods), providing a productive medium through which dialogues regarding the material culture of East Texas can continue to be developed.