



Religion and Innovation in Human Affairs (RIHA)

Exploring the Role of Religion in the Origins of Novelty and the Diffusion of Innovation in the Progress of Civilizations

Religion and Innovation in Pre-Columbian Societies

Field Research at "Emerald" Site, Cahokia (\$180,000). Indiana University. PIs: Timothy Pauketat (University of Illinois, Urbana-Champaign) and Susan Alt (Indiana University)

The Project examines the complex causal relationships between place, experience, and human and non-human agencies that produced an emergent religious orthodoxy at the pre-Columbian American Indian city of Cahokia. RIHA investigations in 2012-2014 resulted in the testing of a series of five propositions: (1) Emerald and Pfeffer were, in fact, lunar shrines; (2) they were sites of intimate ritual entanglements based on “hierophantic” experiences; (3) they were visited by pilgrims from distant lands; (4) they were connected to Cahokia and to distant people/places via built processional avenues and pilgrim traces; (5) at least one of them, Emerald, pre-dates the planned reconstruction of Cahokia from a series of horticultural village segments into an ordered city. A series of data recovery techniques were used to test the propositions. The results provide insight into how religion and civilization were intertwined. To wit, a series of “shrine” houses were defined and excavated that appear to have been the central features of the Emerald site. All have lunar alignments, as do other buildings in which offerings were made. Most notably, the Emerald site does pre-date Cahokia, though Cahokians substantially expanded it in later years. Either way, all lines of evidence taken together strongly argue that this American Indian experiment in civilization would have not happened without the lunar shrines.

Pauketat and Alt believe that the fundamental religious associations that generated the city of Cahokia are being revealed in their findings. Future understanding of the singular development of the American Indian city of Cahokia and later “Mississippian” towns and polities across the eastern United States will hinge on the results of their project that, they also believe, will be looked to as a model for understanding early urbanization elsewhere in the world.

Ultimately, their findings should also have a transformative effect on ways in which religion is understood in North American archaeology generally. Currently, religion is treated as secondary to social and political organizations that are, in turn, generally credited to environmental, economic, and subsistence causes. However, the Emerald project will promote an understanding of religion as inseparable and yet determinative of human history.

Major Outputs:

Book:

- Pauketat, Timothy R. & Susan M. Alt, eds. *Cahokian Religion and Cultural Innovation* (manuscript in progress)

Articles/Book Chapters:

- Alt, Susan M. "Building Cahokia: Transformation through Tradition." in Christina Halperin and Lauren Schwartz, eds. *Vernacular Architecture of the Pre-Columbian Americas* (Routledge), (forthcoming in 2016).
- Alt, Susan M. & Elizabeth L. Watts. "Enchained, Entangled, Engaged: Building Mississippian Society." in G.D. Wilson, ed. *Mississippian Beginnings: Variability, Inequality, and Interaction in the Southeast and Midwest* (manuscript submitted).
- Baires, Sarah E., Amanda Butler, B. Jacob Skousen, & T. R. Pauketat. "Fields of Movement in the Eastern Woodlands." in B. Alberti, A. M. Jones, and J. Pollard, eds. *Archaeology After Interpretation: Returning Materials to Archaeological Theory* (Left Coast Press, 2013), 197-218.
- Kruchten, Jeffery D., Susan M. Alt, & Timothy R. Pauketat. "The Implications of the Structured Deposits of Greater Cahokia." in B. Giles and C. Pursell, eds. *Ritual Deposition in the Southeast* (University of Florida Press) (forthcoming in 2015).
- Pauketat, Timothy R., & Susan M. Alt, "The Elements of Mississippian Religion." in *Religion and Politics in the Ancient Americas*, S. Barber and A. Joyce, eds. (Routledge) (forthcoming in 2016).
- Pauketat, Timothy R., & Susan M. Alt, a journal article highlighting our revisionary interpretation of Cahokia for either the *Cambridge Archaeological Journal* or *Time and Mind* to be written and submitted in 2015.
- Pauketat, Timothy R., Susan M. Alt, Jeffrey D. Kruchten, & William Romain, an article in *Science* on Emerald's archaeoastronomy to be written and submitted in 2015.
- Skousen, B. Jacob. "Moonbeams, Water, and Smoke: Tracing Other-Worldly Relationships at the Emerald Site." in M. Buchanan and J. Skousen, eds., *Untangling the Relational: Theorizing Relationships Between Worlds, Spirits, and Temporalities*, M. Buchanan and J. Skousen, eds. (University of Utah Press). (in press).

Conference Session:

- *Hopewell Reinvented Six Centuries Later at Emerald Mound: Results of the RIHA Project*. A symposium at the Annual Meeting of the Midwestern Archaeology Conference, Columbus, OH, October 24-27, 2013

Presentations:

- Alt, Susan M., and Elizabeth Watts. "Enchained, Entangled, Engaged: Building Mississippian Society." Symposium: Mississippian Beginnings: Variability, Inequality and Interaction in Southeast and Midwest at the 69th Annual meeting of the Southeastern Archaeological Conference, Baton Rouge, Louisiana (Nov. 7-10, 2012).
- Alt, Susan M., T. R. Pauketat, and Jeffery D. Kruchten, "Cahokian Religion, the Emerald Pilgrimage Center, and Cultural Innovation." Illinois Archaeological Society meeting, Southern Illinois University (Oct. 4-5, 2013).
- Alt, Susan M. "A Tale of Two Temples." Symposium: Hopewell Reinvented Six Centuries Later at Emerald Mound: Results of the RIHA Project." Midwestern Archaeological Conference Annual Meeting, Columbus, Ohio (Oct. 24-26, 2013).
- Alt, Susan M., "Immigrants on the Border: Cahokia and the Synergy of Mississippians on the Edge." Symposium: Beyond Peripheries: Material and Conceptual Borderlands of Becoming at the Society for American Archaeology Meeting, Honolulu, HI, April 3-7, 2013.
- Alt, Susan M., "Building Cahokia: Transformation through Tradition." Symposium: Vernacular Architecture in the Americas at the 79th annual meeting of the Society for American Archaeology, Austin, Texas (April 23-27, 2014).
- Barzilai, Rebecca M. "Pottery, Pilgrims, and Pathways: An Analysis of the Ceramic Assemblage from the 2012 and 2013 Excavations at Emerald Mound (11S1)." Symposium: Hopewell Reinvented Six Centuries Later at Emerald Mound: Results of the RIHA Project, annual meeting of the Midwestern Archaeology Conference, Columbus, OH, Oct. 24-27, 2013.
- Barzilai, Rebecca M. "Moving People, Moving Pots: Ceramic Analyses from the 2012 and 2013 Excavations at Emerald Mound (11S1)." Indiana University Anthropology Graduate Student Association Symposium, Feb. 21-23, 2014.
- Hogan, Maura. "Pottery and Social Process at an Upland Mississippian Mound Center: The Pfeffer Site in Lebanon, IL." Midwest Archaeological Conference in East Lansing, April 17-21, 2012.

- Hogan, Maura E. "Findings at Ford Mound: A Preliminary Report on Recent Excavations at the Pfeffer Site." Mississippian Conference, Cahokia Mounds State Historic Site, July 28, 2013.
- Hogan, Maura E. "Geochemical Insights into Early Mississippian Monumentality: Results from the 2012 Ford Mound Excavation at the Pfeffer Site." Midwest Archaeological Conference, Columbus, OH (October 24-26, 2013).
- Kruchten, Jeffery D. "Overbuilt and Underpopulated: the Abundance of Specialized Architecture at Emerald." Paper presented at the Midwest Archaeological Conference, Columbus, OH, October 24-27, 2013.
- Kruchten, Jeffery D. & Susan M. Alt. "The Implications of the Structured Deposits of Greater Cahokia." Paper presented in the symposium "Theorizing Ritual Deposition: The Implications of the Structured Deposits of Greater Cahokia" at the 69th annual meeting of the Southeastern Archaeological Conference, Baton Rouge, Louisiana (November 7-10, 2012).
- Kruchten, Jeffery D., Susan M. Alt, & Timothy R. Pauketat. "Revealing Cahokia's Religion, Year 2: Preliminary Results from Summer 2013 at Emerald." Presented at the Mississippian Conference, Crisp Museum, Southeast Missouri State University, Cape Girardeau, MO, July 20, 2013.
- Kruchten, Jeffery, Susan M. Alt, & Timothy R. Pauketat. "Revealing Cahokia's Religion, Year 2: Preliminary Results from Summer 2013 at Emerald." Presented at the Mississippian Conference, Crisp Museum, Southeast Missouri State University, Cape Girardeau, MO, July 20, 2013.
- Larson, Timothy, M. DeLucia, B. Skousen, S. Alt, & T. Pauketat. "Resistivity Profiling to Delineate a Mississippian Culture Trail at the Emerald Site, Southwest Illinois". Paper presented at the 26th Annual Symposium on the Application of Geophysics to Engineering and Environmental Problems, Denver, CO, March 17-23, 2013.
- Pauketat, Timothy. "Ancient American Cities, Religion, and the Case of Cahokia," Archaeological Institute of America, Athens, Georgia chapter, March 27, 2014.
- Pauketat, Timothy. "Moon Medicine and Social History in the Indigenous Mississippi Valley," Brigham Young University (Grace Elizabeth Shallit Memorial Lecture series), March 6, 2014.
- Pauketat, Timothy. "Creating the Great Center Place: The Moons and Missions of Cahokia," University of Wisconsin, Department of Anthropology, November 22, 2013.
- Pauketat, Timothy. "Ancient American Cities, Religion, and the Case of Cahokia," Archaeological Institute of America, Santa Fe chapter, November 12, 2013.
- Pauketat, Timothy. "A Full Moon over Cahokia Mounds 1000 Years Ago," Pulitzer Foundation for the Arts, St. Louis, Missouri, October 18, 2013.
- Pauketat, Timothy R., Susan M. Alt, & Jeffery D. Kruchten. "Emerald Excavations 2012: Four Discoveries that Challenge an Understanding of Cahokia." Presented at the Annual meeting of the Illinois Archaeological Survey, Urbana, IL, September 8, 2012.
- Pauketat, Timothy R., Susan M. Alt, Jeffery D. Kruchten, & William F. Romain. "The Emerald Effect: Agency and the Convergence of Earth, Sky, Bodies, and Things." Paper presented at the 70th Annual Southeastern Archaeological Conference, Tampa, Florida, Nov. 7-10, 2013.
- Pauketat, Timothy R., Susan M. Alt, Jeffery D. Kruchten, & William F. Romain. "The Archaeology of a Moonscape." Paper presented at the 2013 Annual Meeting of the Midwestern Archaeological Conference, Columbus, Ohio, October 24-26, 2013.
- Skousen, B. Jacob. "Memory, Monuments, and the Moorehead Phase Occupation at the Emerald Site." Paper presented at the 59th Annual Meeting of the Midwest Archaeological Conference, Columbus, Ohio, October 24-26, 2013.=
- Skousen, B. Jacob & Maura Hogan. "Cahokia's Ancient Religion." Presentation given at a meeting of the Lebanon Rotary Club, Lebanon, Illinois, July 2012.
- Skousen, B. Jacob & Amanda Butler. "Pilgrims and Proselytizers: The Movers and Shakers of Mississippian Beginnings." Paper presented at the 69th Annual Meeting of the Southeastern Archaeological Conference, Baton Rouge, Louisiana, November 7-10, 2012.
- Skousen, B. Jacob, & T. R. Pauketat. "Emerald: A Lunar Shrine and Pilgrimage Center in the Richland Complex." Paper presented at the Cahokia Conference, Collinsville, Illinois, July 28, 2012.

PhD Dissertations:

- Barzilai, Rebecca (Indiana): "A sourcing study and ceramic analysis of the Emerald site pottery," anticipated April 2017.

- Hogan, Maura (Indiana): “Mound construction and memory at the Pfeffer site,” anticipated 2016-17.
- Kruchten, Jeffery (Illinois): “Architecture at the Emerald site,” anticipated April 2017.
- Skousen, B. Jacob (Illinois): “Emerald, Pilgrimage and the Rise of Cahokia,” anticipated April 2016.

Media Coverage/Events:

- “Cahokia,” story by Michael Toner in *Archaeology* magazine (forthcoming in 2014).