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

*Evidence for Innovation in Pre-State Religious Systems: Research at Ancient Chavín de Huántar, Peru* ($250,000). Global Heritage Fund. PI: John W. Rick (Stanford University)

This project is aimed at understanding the 3000-year-old monumental temple site of Chavín de Huántar in the highlands of Peru as a context of innovation in the development of Andean religion. The project has involved extensive fieldwork aimed at revealing specific areas of ritual activities that were the core of ceremonialism at the site. The project involves collaboration between archaeologists of a wide variety of specialties, in addition to colleagues in allied disciplines that range from anthropology to psychology to civil engineering and geophysics. Extensive collaborations occurred in the first year of the project, but key face-to-face meetings between project members and contributors happened in the second year, between June 2013 and May 2014.

The intellectual achievements of the project have been inspiring. The introduction of the issue of innovation in Chavín studies has had a widespread effect, and opened many paths to understanding this important stage in Andean cultural evolution. Since many conclusions need to be based on analyzed field data, much of what can be said here is preliminary and incomplete in character. The following covers synthetic conclusions, going from those of most material nature to the most theoretical.

The monumental center of Chavín de Huántar has proven to have unsuspected detail on diachronic ritual development. The excavated contexts have provided reasonably well dated and intact ritual contexts, something largely lacking at Chavín up until now. The intense rhythm of construction and rebuilding of very specialized ritual contexts talks of a very capable authority system that could mobilize and coordinate resources for the building of the temple system. Previous evidence of continuity in design and construction traditions in the site is confirmed in our data, reinforcing the idea that a long-term politico-religious core group retained control over the site for centuries. At the same time, evidence for long-distance interactions suggests that interaction and competition were strong between the cult centers of the later Formative period in the central Andes. This sets the stage for innovation: a location that has established itself and gained credibility within emerging socio-politically complex Andean groups, but with a need to provide a distinguishing identity to differentiate it and probably compete successfully with other parallel peer organizations. Obviously, innovation could have played a major role here by creating distinctions in stylized objects, and in new applied technologies at both the object and site level. Organizational innovation should not be overlooked, combined with conceptual creativity, as enabling cultural
characters that would have made it all possible. These latter are necessarily of difficult access to archaeological investigations, but we think we have purchase on the necessary inferences from material data.

The site of Chavín shows the development of a number of ritual contexts that are apparently original and unique (at least in their developed condition) within contemporary sites. First is extensive use of heavily worked stone in both architectural forms and decorative art. No other site of this time period in the central Andes displays this same level of development. This involves both a technology and design of an identity-conscious style, both of which would have supported the credibility of the growing politico-religious machine. On a more detailed level, Chavin seems to have specialized in underground ritual contexts, coupled with development or sophistication of psychoactive drug use, manipulation of sound in acoustically designed situations, and effective use of reflected light in dark situations. Although these specialties have been mentioned for Chavin for some time, the degree of sophistication and integration of these media has been documented at entirely new levels by the Chavin Project. Even more striking and original to our project is the clear ritual importance of the underground canal system – perhaps the most sophisticated and creative of all the Chavin efforts. With the canals and the ritual materials found within them we have evidence of the development of a complex, multi-dimensional technology aimed at manipulation of an important natural element – water – through understanding of canal engineering and hydraulics, heavily planned and coordinated to produce an overwhelming sensory-driven experience. These phenomenon represent innovation at many levels: 1) conceptual, in the development of meaning around issues of water, underground character, and apparently, sacrifice; 2) theatrical, in the coordination of multiple sensory inputs into an effective convincing mechanism; 3) technological, in the creation of categories of architecture and objects that provide the material context and content of these ritual actions.

The current evidence all points to Chavin as having been a major producer of innovations during the relatively extended period of 1200-600 B.C., but peaking around 900-800 B.C. The ideas, actions, objects, and architecture that are being generated are inevitably, perhaps intentionally exported in the expansive cult system, perhaps increasing the reputation of Chavin, but also possibly diluting the uniqueness of the site and the experiences available there. Interestingly, the peak of innovation comes 200-300 years before the site’s termination as the outstanding Formative center, something that suggests a relationship between innovation, leadership, cult following, and collapse. Further comparative work in dating and analysis of material culture over a range of contemporary sites will be necessary to detail this picture.

Interesting in historical comparison is the seamless integration of technical innovations with those of a more intrinsically religious nature – stylistic, conceptual, and ritualistic innovations. It seems clear that Chavin was one of a number of centers not only of religion, but of ‘research and development’ that are implied by such a creative complex. The relatively sudden appearance of centers of innovation, within a conservative hinterland of agrarian culture, suggests a major societal redesign, and not necessarily one capable of holding up over the long run. The system seems based on a voluntary participation at various levels. First, the economic base to support these development centers is necessarily from the agrarian population, yet there is little to suggest that the greater productive population were integrated fully into the centers’ activities. Second, those participating in the techno-religious
rituals of the centers, judging from many factors but especially the very intimate and restricted ritual contexts, seem to have been secondary elites, perhaps in search of promoting themselves to primate roles. Third, then, is the likely role these secondary elites would have had in transfer of economic resources to the centers to fuel their development. Innovation is intrinsic to this type of system, requiring updating by participants to maintain currency in the cult system, and providing competitive edge between centers. Also, the impressiveness of the visible technological developments would have helped in convincing the underclass of the exalted role of their local leaders, the Chavín secondary elite. But ultimately, the message is not one of integration, but of hierarchical distinction. One suspects that increasing contradictions were built over time, creating social stresses that were eventually hard to mitigate. If innovation should cease in such a system, perhaps due to lack of support or intent, or to conditions that made it unviable, it would presage a likely collapse of the credibility system. It is thus not very surprising to find that the transition from the late Formative to the earliest state systems of the Andean Early Intermediate (0-700 A.D.) is characterized by a turning away from a relatively pure religious base toward a militarily-enabled, coercive strategy.

Our fieldwork has produced data meeting and exceeding our expectations for documenting Chavín period ritual activity over important time segments. We believe the Chavín Project RIHA grant has produced major new perspectives on the role that innovation played in helping Chavín leadership in that regard, convincing cult followers of the validity of the particular propositions put forth in this ancient setting.

Major Outputs:

Book:
- Rick, John W., ed. Ancient Chavín: Toward a New Synthesis in the Peruvian Formative Period (manuscript in progress)

Articles/Book Chapters:
- Contreras, Daniel. “(Re)constructing the Sacred: Landscape Geoarchaeology at Chavín de Huántar, Peru.” in Christopher Roos and Christian Wells, eds. Geoarchaeology of Ritual Behavior and Sacred Places: Special Issue of Archaeological and Anthropological Sciences (manuscript submitted).
- Rick, John W. “Religion and Authority at Chavín de Huántar,” in Chavín: Peru’s Enigmatic Temple in the Andes, ed. by Peter Fux (Zurich: Scheidegger & Spiess, 2013), 175-84.


• Sayre, Matthew P., M. Miller, & Silvana Rosenfeld, “New Evidence for the Use of Marine Mammal Bone at Chavín de Huántar, Peru.” (manuscript submitted).

• Sayre, Matthew P. “A Synonym for Sacred: Vilca Use in the pre-Conquest Andes,” in *Psychoactive Substances in Ancient Societies*, Scott M. Fitzpatrick, ed. (manuscript under editorial review).


Conference Sessions/Symposia:

• *Ritual Innovation, Material Culture, and Environment in Formative Chavín de Huántar, Peru*, Society for American Archaeology Symposium, Honolulu, April 5, 2013. [Papers delivered by seven members of John Rick’s team included analysis of residential areas of the site, psychoactive drug use, archaeoacoustics, landscape, water ritual, iconography, and feasting, and carried a general theme of innovation.]

• *Institute of Andean Studies 54th Annual Meeting*, University of California Berkeley, January 11-12, 2014. [Chavín Project members met and presented their findings in the context of the annual meeting of the Institute of Andean Studies of which John Rick is the president. Rick gave the keynote address on recent advances in understanding Chavín.]

• *Ancient Chavín: Toward a New Synthesis in the Peruvian Formative Period*, Stanford University’s Archaeology Center and Center for Latin American Studies, January 13-14, 2014. Fifteen presentations were made by Chavín project members and consultants over two intensive days of non-stop meetings. The goal of this meeting was to synthesize project results with previous Chavín studies, and particularly turn toward the issue of religion in Chavín and its role in a broad range of Andean innovations that occurred at that time. This is the culmination meeting of the RIHA-sponsored project, and the call is for finished manuscripts in the fall of 2014, with submission to a publisher around the end of the year.

Presentations:


Media Coverage/Events:

• “Opening of the Exhibition “Chavín – Peru’s Mysterious Temple in the Andes” Rietberg Museum (Zurich)” November 23 2012, with talk by John Rick
http://www.youtube.com/watch?v=3ApzxTF3TuI

• “Chavín – Peru’s Enigmatic Temple in the Andes” Major digital production effort based on Chavín Project findings, produced by ArcTron. http://m.youtube.com/watch?v=NBas6hNXTLM

• “Chavín de Huántar – El Teatro de la Mas Allá” (Chavín de Huántar – Theater of the Otherworld). Hour-long documentary on Chavín de Huántar, based on Chavín Project information, produced by José María Morales for Wanda Films, directed by José Manuel Novoa