PROBLEMS IN PARADIGMS: CULTURAL "COMPLEXITY" IN COASTAL CALIFORNIA

Jon M. Erlandson
Department of Anthropology
University of Oregon, Eugene, OR 97403-1218

ABSTRACT

The complexity of California's maritime peoples is well established in historical and ethnographic accounts, as well as Late Holocene archaeological records. Tracing the emergence of such complexity, however, one of the primary goals of California archaeologists for the last 20 years, is fraught with difficulties. In this paper, I discuss some problems related to defining and identifying "complexity" in the archaeology of the California coast. I conclude that the anthropological concept of complexity, as well as some of the processual paradigms used in its identification, is problematic.

The chronicles of early European visitors to the Pacific Coast of North America, recorded during the 16th to 19th centuries AD, indicate that much of the coast was thickly populated by people who lived in large and relatively permanent settlements. Historic and ethnographic accounts indicate that California's coastal peoples were characterized by diverse and intensive economies in which aquatic and terrestrial resources both played important and complementary roles. Sociopolitically complex, they also had relatively elaborate material cultures to facilitate a wide range of hunting, fishing, collecting, manufacturing, and ceremonial pursuits. They actively participated in extensive social and commercial networks, exchanging goods and ideas over a region that ultimately encompassed much of western North America.

Archaeologically, California has one of the most thoroughly studied coastlines on earth, though the intensity of such research still varies up and down the coast (see Jones 1991). It is also clear that California's maritime peoples have great time depth, at least along the south and central coasts, where they settled the mainland and at least two of the Channel Islands by at least 10,000 years ago (Erlandson 1994; Erlandson and Moss 1996). In these circumscribed coastal environments, Native Californian societies grew and prospered for millennia, leaving a rich record of their cultural history. Listed in Breschini et al. (1996), in fact, are over 1000 ^{14}C dated coastal sites. These include a handful of sites dated to the terminal Pleistocene (10,000-12,000 RYBP), about 100 dated to the Early Holocene (10,000-6750 RYBP), well over 200 to the Middle Holocene (6750-3350 RYBP), and roughly 700 to the Late Holocene (3350-0 RYBP). These sites, as well as numerous others that have never been radiocarbon dated, represent a vast reservoir of information with which to study the development of California's maritime societies and adaptations.

The search for complexity and explanations for its development have structured much of what Pacific coast archaeologists have done for the past 20 years. Complexity is unquestionably a "hot topic" in American archaeology and a buzz word widely used by California archaeologists, myself included. In this short paper, I want to pose a few questions and briefly explore some issues related to complexity and the scales at which we seek to understand the archaeology of the California coast. Why did Native peoples of the California coast become complex? How complex were they? How did such complexity develop and how did it vary through space and time? What changes in demography, subsistence economies, technology, and sociopolitical organization are evident in the archaeological record? What forces influenced these changes and how did transitions from early egalitarian societies to the stratified and elaborated Late Holocene societies occur? Some of these are relatively simple questions and, with such a vast data base available, the answers

should be decidedly knowable. Why then should the search for answers be so problematic, so contentious at times, and subject to such varied explanations? The fact that such questions continue to generate considerable debate suggests that the root of the problem is not a lack of data but the very nature of anthropological and archaeological paradigms related to complexity, its identification, and its interpretation.

COMPLEXITY: A SIMPLISTIC PARADIGM

The problem lies largely in the nature of human knowledge, in our urge to classify things into dichotomous frameworks - - artificial polarities - - or bounded boxes like bands, tribes, chiefdoms, and states. In an excellent 1996 volume called *Debating Complexity*, Tainter (1996:14) made several important points about the study of human cultural complexity. These include: (1) there is no point at which societies become complex, all human societies are complex to greater or lesser degrees; (2) it is meaningless to debate whether particular societies were or were not complex; (3) the proper focus of study is the processes by which societies change or maintain their organizational structure; and (4) all kinds of societies can collapse, changing their social structure to less complex forms. In other words, the levels of complexity humans devise to organize their societies occur in a bewildering array of continuous variation, through both space and time. It should also be pointed out that such organizing structures can be extremely fluid, varying by season or circumstance, due to changes in natural or social environments, including variations in group size or makeup, the nature of external threats, and the charisma of individual leaders. It is this diversity and fluidity, along with the difficulty of translating a flawed concept of complexity into tangible material correlates, that makes it so hard to agree on the nature and causes of complexity along the California coast.

The fact is that modern archaeological paradigms, models, and theories are full of such artificial polarities: simple vs. complex, tribes vs. chiefdoms, foragers vs. collectors, agriculturalists vs. hunter-gatherers, commoners vs. elites, gradual vs. punctuated change, core vs. periphery, peace vs. war, Gabrielino vs. Chumash, culture history vs. processual archaeology vs. post-processual archaeology, maritime vs. terrestrial, or my own "Gardens of Eden vs. Gates of Hell" (Erlandson 1994). Each of these polarities is a simplification of the diversity evident in the Californias at the time of European contact, or in the techniques that we use to classify various phenomena we observe in the archaeological record. As McGuire (1996:24) recently noted, such "oppositional thinking creates debates over false choices that do not advance our understanding of human experience." The problems associated with such oppositional schemes are clearly evident in recent debates about whether cultural evolution along the California coast was gradual or punctuated. Common sense tells us that the cultural evolution evident in any society over time will occur through a combination of gradual change punctuated by periods of more rapid change. Arguing over which process is most important to cultural evolution hardly seems productive to me, since the answer will vary depending on what time period we look at, which traits we choose to measure, and the resolution of the archaeological record itself.

Classifying cultures, both archaeological and historical, has a long history in anthropology, developing out of antiquated cultural evolutionary paradigms formulated by 19th century scholars such as Herbert Spencer and Lewis Henry Morgan. Morgan (1877) and others believed that human societies evolved through various stages of complexity, from savagery, to barbarism, to civilization. No detailed knowledge of the history of science is required to guess where European peoples were placed in these classification systems and where Native Americans fell. This problematic paradigm was rejuvenated by White (1959), Fried (1967), Service (1975), and others who defined more objective criteria for classifying cultures into evolutionary stages such as bands, tribes, chiefdoms, and states. These stages, each representing an increase in the organizational complexity of human society, were enshrined in the concept of progressive evolution that has been central to processual archaeology for the past 35 years. Today we all know, of course, that cultural evolution operates on continuous scales and that "complex" societies can fall as well as rise. However, an examination of the incredibly

nuanced diversity with which various social groups (families, ethnic groups, religious groups, craft guilds or unions, sports groups, fraternal organizations, corporations, political groups, etc.) organize themselves within our own society renders our anthropological classification systems hopelessly simplistic. In recent years, I have become increasingly convinced that continuing to shoehorn such cultural variation and dynamism into arbitrary classification schemes is not just fruitless but counterproductive.

For archaeologists, the problem of classifying variation that operates on continuous scales is compounded by the fact that securely identifying many of the traits cultural anthropologists use to classify historical cultures is extremely difficult in the archaeological record. This problem seems evident in a recent debate about when inherited (ascribed) status, one hallmark of chiefdom-level societies, developed among the Chumash, in which different authors come to different conclusions based (in part) on the analysis of different cultural traits and data sets. In my opinion, it is time to ask the heretical question of whether the anthropological notion of a chiefdom continues to have any archaeological utility.

In asking this question, and critiquing the concept of cultural complexity, I do not mean to imply that such debates or classification schemes have not played a useful role in archaeology. One of the central tenets of processual archaeology was that we needed to build and test an explicit body of theory and models to help us interpret the archaeological record and reconstruct human history. Let us not forget, however, that the vast majority of our models are simplified abstractions of reality that are only as good as the data we put in them – garbage in, garbage out as they say. McGuire (1996:24) noted that the archaeological concept of cultural complexity:

> springs from the observation that societies consist of a myriad of interconnected social roles, and that the number and connectedness of these roles varies. Paradoxically, complexity reduces this richness to a single dimension . . . . Thus, we try to understand something that is incredibly complex by making it simple.

Simplified schemes or models hold little utility in the search for understanding the behavioral and organizational complexity inherent in human societies and human history.

I do not accept McGuire's (1996) relatively radical rejections of evolutionary and processual paradigms, although I find much worth pondering in reading his arguments. I do share his call to return archaeology to the more explicitly historical foundations on which it was built. For me this means less emphasis on theorizing and modeling, with fewer but more sophisticated models that more closely approximate the complexity of human societies and ecosystems. It also means more emphasis on the relatively straightforward reconstruction of chronologies, environments, technologies, other lifeways, events, and environments, with comparison of the reconstructed patterns through space and time. For me, it also means ecology and evolution with a more human face, with an emphasis on people, not populations, and on actors, not automatons. Finally, it means less emphasis on such elusive archaeological concepts as "complexity" and simplistic classificatory schemes such as "chiefdom."

REFERENCES CITED

Breschini, Gary S., Trudy Haversat, and Jon Erlandson
1996 *California Radiocarbon Dates* (8th edition). Coyote Press, Salinas.

Erlandson, Jon M.
1994 *Early Hunter-Gatherers of the California Coast.* Plenum, New York.

Erlandson, Jon M. and Madonna L. Moss
1996 The Pleistocene-Holocene Transition along the Pacific Coast of North America. In *Humans at the End of the Ice Age: The Archaeology of the Pleistocene-Holocene Transition*, edited by L. G. Straus, B. V. Eriksen, J. M. Erlandson, and D. R. Yesner, pp. 277-301. Plenum, New York.

Fried, Morton
1967 *The Evolution of Political Society.* Random House, New York.

Jones, Terry
1991 Marine Resource Value and the Priority of Coastal Settlement: A California Perspective. *American Antiquity* 56:419-443.

McGuire, Randall H.
1996 Why Complexity is too Simple. In *Debating Complexity: Proceedings of the 26th Annual Chacmool Conference*, edited by D. A. Meyer, P. C. Dawson, and D. T. Hanna, pp. 23-29. Archaeological Association of the University of Calgary.

Morgan, Lewis Henry
1877 *Ancient Society or Researches in the Lines of Human Progress from Savagery through Barbarism to Civilization.* World Publishing Company, New York.

Service, Elman
1975 *The Origins of the State and Civilization: The Process of Cultural Evolution.* W. W. Norton, New York.

Tainter, Joseph A.
1996 Valuing Complexity. In *Debating Complexity: Proceedings of the 26th Annual Chacmool Conference*, edited by D. A. Meyer, P. C. Dawson, and D. T. Hanna, pp. 10-15. Archaeological Association of the University of Calgary.

White, Leslie
1959 *The Evolution of Culture.* McGraw-Hill, New York.