

CALIFORNIA IN WORLD PREHISTORY

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ABSTRACT

This is the text of the keynote address delivered by Prof. Fagan at the 1989 Annual Meeting of the Society. In the address Prof. Fagan emphasizes that California archaeology is part of a global enterprise aimed at creating a world prehistory. California archaeologists therefore must guard against overspecialization and recognize the broader contributions their research can make. He also points out that because the prehistory archaeologists create may fly against traditional belief systems, new ways of communicating the knowledge of prehistory must be developed to bridge the differences in outlook between archaeologists and the public.

--Michael A. Glassow

Back in the 1960s, I was excavating an Iron Age village in Central Africa. The inhabitants were farmers and cattle herders, who lived more or less continuously at the same location from A.D. 600 to 1200. We managed to establish the layout of the last settlement, a circle of huts surrounding a central cattle corral. We had accurate dimensions for several huts, details of their construction, inventories of their contents.

Now we confronted a fundamental question: how many people had lived in each hut, and what was the population of the village 800 years ago? No one had done any such research in Africa before--so we searched the literature from elsewhere. The only person we found working on such problems was Bob Heizer in distant California. We applied modified versions of Heizer, Cook, and Treganza's formulae to our data and came out with a figure of about 150 people for our village. The figure stands to this day.

I am glad to have a chance to acknowledge the intellectual debt I owe California archaeology, both from this early contact, and also from having had the privilege of working alongside fine colleagues who are working in the far west for more than 20 years. The title of my talk may seem a little surprising, for the lofty topic of world prehistory may seem far removed from the much smaller universe of California archaeology. In fact, it is not, for the notion of world prehistory is one of the most exciting theoretical developments to come along in archaeology in a long time.

World prehistory is a recent phenomenon in archaeology, a phenomenon that came into being in the late 1950s. It was the Cambridge archaeologist Grahame Clark who first thought in truly global terms. His World Prehistory, published in 1958, covered far more ground than the great synthetic works of Vere Gordon Childe, or the magisterial culture histories of Gordon Willey. But, perforce, World Prehistory had a heavy bias toward Europe and the Near East, with a passing nod to the Pacific and the Americas. Little was known about such continents as Africa, or about prehistory in south-east Asia, much of Latin America, and Siberia--to mention only a few places. Indeed, like so many Old World archaeologists of his generation, Grahame Clark considered North American archaeology a little out of the mainstream.

World Prehistory appeared at a seminal moment in archaeological history. We were at the threshold of the so-called "New Archaeology," new directions that stemmed from fresh theoretical concepts and a stimulating concern with cultural ecology and reconstructing past subsistence. Cambridge-trained archaeologists were finding jobs in Africa, Asia, and the Pacific, far from the comfortable confines of western Europe. They ushered in an era of exploration in hitherto archaeologically virgin lands. American-trained archaeologists were becoming more and more internationally minded. Braidwood and his team were working in the Near East. The Leakeys had stimulated a generation of new research into human origins in Africa. American anthropologists were working on first settlement of the Pacific.

World Prehistory appeared, too, at a time of intellectual ferment about the origins of food production, about the emergence of states, about explanations, as opposed to descriptions, of the prehistoric past. Above all, it appeared as the radiocarbon revolution took hold, enabling us for the first time to compare individual artifacts, single sites, entire cultures, and even long cultural sequences on a global basis. We could pose new questions, major and minor: When did fishing first assume significant importance in Southern Africa, Northern Europe, and California? What was the chronology for the spread of Homo sapiens sapiens from the Near East, into Western Europe and across the northern steppe-tundra into the Americas? How does the dating of Clovis points in New Mexico compare with Jomon pressure flaked artifacts in Japan?

Two things made world prehistory possible. The first was radiocarbon dating; the second was a new, truly global perspective, that valued archaeological research in highland New Guinea as much as that at Stonehenge or on Catalina Island. The new generation of world prehistorians realized that archaeology was a unique way of studying cultural change over long periods of time--and a unique, dispassionate way of looking at the broad, universal perspective of our prehistoric past. California archaeologists are important players in the much more sophisticated world prehistory of the late 1980s. Today, thirty

years after Clark's World Prehistory, we look out on a radically different archaeological landscape.

The superficial idea of world prehistory is a commonplace, an intricate jigsaw puzzle of sites large and small, of elaborate theories and sophisticated settlement research that extends over more than 2.5 million years of human experience. There are thousands more archaeologists studying this vast prehistoric landscape, resulting in an explosion of new information--and chronic unemployment among archaeologists. When I left Africa in 1966, there were nine professional archaeologists working between the Cape of Good Hope and the Sahara. Today there are 63 professionals in South Africa alone--the figures speak for themselves. There have been changes in emphasis, too. Today, cultural Resource Management research engages the efforts of a significant majority of North American archaeologists, in California and elsewhere. Much of this work involves regional and area surveys, looking at culture change against the background of the natural environment. Inevitably, archaeology has become more specialized, more focused, and far more detailed. Interdisciplinary team research is a commonplace. Historical archaeology has become a respected and invaluable part of American history, a priceless way of gaining new insights into the lives of common folk, into cultural change as recently as a century ago. Sub-specializations involving increasingly hi-tech methods proliferate every day. Graduate students receive ever more specialized training, for they are trained by ever more specialized archaeologists along the way.

This specialization, while producing ever more fine-grained interpretations of the archaeological record, is beginning to raise serious intellectual problems. Archaeology, and this includes California archaeology, is in an intellectual dilemma, at a cross-roads we must confront and cross. How can we counteract the dangers of increasing specialization and prevent archaeology from becoming a narrow, myopic form of trivial information gathering? This may seem like a harsh statement, but I am convinced that our ever more focused approaches are making us forget the important role of world prehistory--as part of the common intellectual heritage of humankind. There is a passionate interest in archaeology among members of a much more well traveled and better educated public than that of even a generation ago. Of course, there are still pot hunters and looters, but there is an even larger reservoir of informed, interested lay people with a deep interest in the past, and in California archaeology. It is an interest that, by and large, remains almost completely unsatisfied.

This interest comes at a time when international concern about world environmental problems is finally coming to a head. We are finally worrying seriously about the so-called Greenhouse Effect, about the decimation of forests in the Third World, about the specter of global famine. There is a slow realization that we have to redirect our thinking about global environmental

problems in several new directions. Our focus must be global rather than local, our perspective divorced from those of purely nationalistic self-interest. We must think in terms of long term solutions to such problems as acid rain and the destruction of the ozone layer, in a sense create the millennia-long historical processes that will mitigate such environmental destruction and degradation. Above all, we have to train people to think altruistically, to think seriously and constantly not about short-term solutions, but about long-term goals. This requires humanity to adopt new perspectives about the present and the future. Such perspectives require radical shifts in human value systems and human behavior, perhaps shifts so fundamental that they are still beyond our total comprehension. I think that archaeology, whether prehistoric or historic, has an important role to play in developing such perspectives. Archaeology, whatever its academic countenance, is unique among the social sciences because it enables us to describe, analyze, and explain cultural evolution, and human adaptive responses to both local and global problems over immensely long periods of time.

The study of world prehistory is now at a point where, for the first time, we can begin to understand the subtle interplay between changes in the global environment and the major developments in our early history. For most of prehistory, from over two and a half million until about 700,000 years ago, human beings were tropical animals. Then our predecessors tamed fire, developed ways of adapting to cooler climates, and moved out of Africa into Europe and Asia. For more than 650,000 years, the world population remained infinitesimally small, often isolated by major, and constant climatic change on a global scale. Then, after 35,000 years ago, Homo sapiens sapiens, with its infinitely more sophisticated technology and superior intellectual capacities, exploded across the Old World and into the Americas. Human beings first crossed into Alaska at least 12,000 years ago; the date is highly controversial.

These were Upper Palaeolithic hunter-gatherers, people who subsisted off large and medium sized animals, generally enjoyed a highly mobile life way, were organized in small, flexible bands. Only in a few areas with highly predictable and abundant seasonal food resources did more complex, more sedentary hunter-gatherer societies develop--and these in places like southwestern France and the Ukraine. A few of these small, basically Upper Palaeolithic bands were the first inhabitants of California at the very beginning of the Holocene, just as retreating ice sheets and rising sea levels changed the Stone Age world. These people, and their Old World relatives, exploited enormous, relatively homogeneous territories, enjoyed basically standardized cultural traditions that extended over tens of thousands of square miles of the late Ice Age world.

Then came the Holocene, mass extinctions of Ice Age big-game, and a great and new diversity of complex, local

environments. This was a critical transition in world prehistory, a far more critical one than has often been realized: the transition from Upper Palaeolithic to Mesolithic in Europe, from arctic big-game hunters to forest and coastal hunter-foragers. This transition saw greater specialization in local subsistence strategies, smaller territories, more specialized tool kits, and much more efficient ways of exploiting local food resources. It was the transition from Paleo-Indian to Archaic in California and throughout the Americas, a transition akin to that of the European Mesolithic, but even less well understood. This global development was the threshold, the cultural baseline not only for animal and plant domestication, but also for the emergence of far more complex human societies all over the world.

It is with this important transition that California emerges on the stage of world prehistory, where our researches have an important relevance to the broad canvas of the human past. California has a great diversity of coastal and inland Archaic cultures, cultures that were sometimes remarkably sophisticated in their exploitation of local environments. In time, as research intensifies, the meticulous study of the dynamics of these societies, whether on the slopes of the High Sierra, in the Central Valley, or in the Bay area, will provide fresh and exciting insights into the intricate processes of cultural diversification during the Archaic. An understanding of the dynamics of this diversification will aid research in every corner of the Stone Age world. California was home to some of the most complex hunter-gatherer societies on earth. The Chumash of the Santa Barbara Channel, the Augustine Pattern of the Bay area, complex hunter-gatherer societies in the Sacramento region--all enjoyed remarkably sophisticated hunter-gatherer adaptations that emerged over many centuries.

One of the major, and most long-lived, intellectual debates in world prehistory surrounds the processes by which such complex societies emerged in resource-rich areas such as California. This debate is becoming an increasingly important one. We recognize that we lack the large bodies of information needed to test ever-more fundamental hypotheses. These surround such issues as storage, optimal foraging strategy, and the role of rising population densities and carrying capacity in the emergence of complex societies. The rich, informative prehistoric archives of our state offer a unique and very promising opportunity for California archaeologists to make a major, substantive contribution to the emerging theory of world prehistory.

In my archaeological travels, I am struck by the remarkable similarities in archaeological conditions between California, Australia, South Africa, New Zealand, and other sub-tropical areas. South Africa and Australia are open-air archaeological laboratories with mind-boggling potential not only to answer major questions about world prehistory, but to develop cutting

edge methodologies and theoretical approaches that will impact on archaeologists everywhere. I think that California, with its large population of talented scholars and non-academic archaeologists and its complex, challenging archaeological record, has an even greater potential, if nothing else because of the remarkable cultural diversity that once flourished within its boundaries.

But I am struck by the intellectual myopia of many archaeologists, eminent and not-so-eminent, field workers, theoreticians, and cultural resource managers. Archaeology, by its very nature, is a very local subject, focused often on small trenches and small scale surveys. But every excavation, however small, however ambitious, is part of the intricate jigsaw that is human history. I beg you never to forget the wider intellectual canvas of which California archaeology of all kinds is such an important part. Over-specialization and intellectual myopia have the capacity to trivialize archaeology, to strengthen the case of those ignorant people who argue that it is merely a luxury in a world of homeless people and starving Third World nations. We know it is not--our challenge is to show others that it is not.

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Our new concern with World Prehistory comes at a time when the value and morality of archaeological research is questioned on many sides. This questioning has come to a head in many parts of North America in recent years, as the political and legal agendas of native Americans come in conflict with those of archaeologists. The reburial issue is but one of these complex problems. But there are fundamental intellectual concerns as well.

Today, we are sometimes told that some native American groups are offended by the suggestion that the first Americans crossed from Siberia some 15,000 years ago. "We have been here since time immemorial," say these groups. "This is what we believe, and these beliefs are the foundation of our society." There is another variation on this theme: "Why are you archaeologists bothering to dig up the past. Talk to us: we know what happened in ancient times." How does one respond to such attitudes, to such assumptions? Surprisingly, I can find little or no evidence that either archaeologists or anthropologists have thought profoundly about this very basic problem. It is an issue that goes hand in hand with our thinking about world prehistory--and is long overdue for an airing. I will go further and commit a heresy: I suspect that we need to make an exploration of this problem a priority for basic research, a priority as important as a major excavation in an unknown area.

All societies, even our own, have their own creation myths, their own fables that define the spiritual and actual world--the

Creation itself. "In the beginning, God created the heavens and the earth...." "Creator scraped the earth from under Turtles nails and rolled it around in his hand. At first nothing happened, then the earth began to grow...." Whether from Genesis or from Maidu Indian legend, the intent is the same--a comprehensive, unique definition of the known and unknown world that sets the agenda for the living, the dead, and those yet to be born. And, invariably, this is considered the one and only way of interpreting human origins, of explaining the world. To suggest otherwise is to commit offensive heresy, to undermine the very nature of human existence.

Those who question the validity of archaeological research in these ways are confronting a very real predicament. Their traditional beliefs are deeply imbedded in ancient beliefs and value systems, established tenets that are shared by everyone in that society. They are intensely personal beliefs. To question them, to consider alternative beliefs, to challenge orthodoxy--that is to threaten chaos, to invoke the cosmic abyss, and to bring on acute anxiety. While some groups who shout loudest about the racist offensiveness of archaeology do so with political agendas in mind, there is no question that they have a point. How does one resolve the intellectual dilemma, create an environment in which science and cherished traditional values can live alongside one another?

Archaeology was born out of an intense Western curiosity about human origins, about the very nature of humankind in all its diversity. This Backward Looking Curiosity is a peculiarly Western concern. Our society has developed formal science as a way of visualizing alternatives, alternatives that not only study the past, but predict the future. Quite simply, archaeologists live in a cultural and social environment where intellectual alternatives are considered socially acceptable. We have a vastly diminished anxiety about threats to traditional beliefs, beliefs which are often held to be less sacred than was once the case. This tolerance of alternatives seems incomprehensible to many non-Westerners. As a West African once said to a European missionary: "Does your God really want us to climb to the top of a tall palm tree, then take off our hands, and let us fall?"

Not that this tolerance was born easily. When sixth century Greek philosophers challenged established thinking, they evoked strong and anxious reactions. Medieval free thinkers were persecuted by the established church. Today, the Western world view is fashioned not so much by religious belief but by impersonal, ever-changing science. But the workings of this science, of which archaeology is a part, are like magic to most of us. As the philosopher Jacques Barzun once wrote (1961): "Western society today may be said to harbour science like a foreign god, powerful and mysterious. Our lives are changed by its handiwork but the population of the West is as far from understanding the nature of this strange power as a remote

peasant of the Middle Ages may have been from understanding the theology of Thomas Aquinas." Our own society is still engaged in the painful process of developing its awareness of alternative world views. This process takes time--many generations. The transition is even more traumatic and sudden for American Indians and Third World societies--which accounts for the emerging reaction against archaeological explanations of the prehistoric past.

One of the reasons, perhaps, that archaeologists have trouble convincing even fellow Westerners of the importance and validity of their research is because many anxious people still retain the old sense of confrontation to their cherished belief systems. Even some of those who are interested in archaeology--people with bizarre, simplistic theories about the past, are threatened by scientific archaeologists and their interpretations. They respond either by trying to blot out those responsible for their confrontation, or by stating that archaeology is unscientific, or by trying to convert everyone to their own beliefs through fanatical missionary activity. Others adjust to their fears by developing an inordinate faith in progress toward a future in which The Truth will be known.

Archaeology flourishes in Western society in spite of its critics--and they are many. This is probably because tolerance of alternative explanations is less precarious in Europe and North America, simply because society as a whole perceives that science is a useful activity, with practical outcomes. And in the case of archaeology, the practical outcome is a better understanding of our collective ancestry, and of the great biological and cultural diversity of all humankind. Sometimes, too, archaeology can have even more direct practical utility, as has been the case in Peru, where archaeologists have reconstructed, and reintroduced prehistoric farming techniques.

In Western society, the theoretical models of the human past propounded by scientific archaeologists are part of the intellectual tradition of a large segment of the moderately well educated public at large. Garbled and watered down though it may be, Childe's outmoded notion of a Neolithic Revolution, for example, is a standard possession of many educated Westerners. But the lay person's grounds for accepting the models propounded by archaeologists are often no different than those of a young African villagers uncritical acceptance of creation legends recited by an elder. In both cases the propounders are deferred to as the accredited agents of tradition--which is why cultists and other eccentrics sometimes achieve such success with ancient astronauts, Phoenicians, and other strange manifestations.

We would be well to remember that the rules which archaeologists use to guide themselves in the acceptance or rejection of models of the past seldom become part of the intellectual equipment of the public at large. Our challenge, then, is to develop new ways of communicating the workings of

archaeology to all humankind, ways that bridge cultural chasms, and that make our fascinating discipline ever more accessible to the world at large.

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I have tried to make two points about California archaeology. First, all of us archaeologists--whether California specialists, experts in European prehistory, or Africanists; whether professionals who do nothing but short term CRM contracts in downtown San Francisco, or academics concerned with an esoteric way of reconstructing ancient life ways or entirely theoretical issues; whether just field workers, laboratory technicians, archaeological bureaucrats, graduate students, or full professors living in an ivory tower--should never forget that our researches and professional activities are part of a truly global enterprise: the study of world prehistory and the more recent human past. Under this rubric, any form of archaeological provincialism or intellectual myopia is dangerous and ultimately counter-productive for everyone.

Second, none of us archaeologists has a divine-given right to assume that everyone is happy with, or wants to accept and believe, in the scientific vision of the past that we construct. I am not talking about the absurd and eccentric pseudo-scientists who pound our ears about Atlantis, the Pyramids, and Ancient Astronauts--I am talking about those who cherish their traditional culture. We live in a diverse and ever more complex world. There is ample room for alternative beliefs and philosophies about the past, which give people a sense of identity, a distinctive world view that they may have inherited from remote and revered ancestors. In this rapidly changing world of ours, such perspectives, such world views are vital anchors for the present, and avenues to the past that we should always cherish and respect. It behooves us all to be sensitive to such alternative perspectives.

Finally, let me salute the remarkable achievements of California archaeologists, famous and obscure, living or long dead, working on chilly mountain tops, in swelteringly hot deserts, on windy offshore islands, or amidst city streets. To you we owe the rich panoply of California's past revealed by the spade, a dazzling vision and perception of the brilliant achievements of the prehistoric Californians. From this panoply, we, our successors, and the world at large, will achieve a greater understanding of the essential unity that is humankind.

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