PROTOHISTORIC CALIFORNIA: PARADISE OR PANDEMIC?

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ABSTRACT

In this paper, we question the common perception that the Protohistoric period in Native California was a time of relative tranquility before the devastation wrought by Spanish, Mexican, and American colonization. We do so by: (1) summarizing the extent of European contacts with California’s coastal peoples during the era of maritime exploration; (2) examining the possibility that potentially devastating Old World diseases were transmitted to Native Californians during those encounters; and (3) by outlining some problems that inhibit the archaeological study of the potential effects of protohistoric contacts. We believe the potential for protohistoric Old World disease epidemics was quite high in California, and that tangible evidence for such impacts should be searched for area by area and tribe by tribe. Because evidence for acute epidemic disease is rarely found on human skeletons, archaeological studies of settlement patterns, cemetery data, craft specialization, and other cultural markers may hold the key to understanding if, how, and when Old World diseases impacted various Native California tribes.

The destruction of the Indians of California occurred in a series of steps, separated geographically as well as temporally. The first of these stages accompanied the settlement of the coastal strip from San Diego to San Francisco, and was associated distinctly with the development of the Catholic missions. This phase may be considered as beginning with the expedition of Gaspar de Portola and Junipero Serra in 1769... (Cook 1978:91).

As time distances us from the past, there is a tendency to romanticize and idealize certain aspects of history. Such historical romanticism was exemplified by the “Ramona Myth” (Jackson 1925), which portrayed California’s Mission period as an idyllic paradise. Through historical, ethnographic, and archaeological research, scholars have effectively dismantled this myth piece by piece. Today, the motives of European colonizers may be debated, but the virtual genocide imposed on Native Californians during the historical period cannot be denied. Until recently, historical romanticism may have significantly affected our interpretations of California’s Protohistoric period (A.D. 1542 to 1769), as well.

New World Peoples and Old World Diseases

Anthropologists have debated the timing and magnitude of European impacts on Native American peoples for decades. Much of this debate has focused on the impacts of Old World epidemic diseases. One school of thought views such diseases as having little or no effect on Native Americans prior to sustained European settlement, while the other proposes that Old World diseases devastated many Native American societies years or even decades before detailed historical and ethnographic accounts were collected. The more ardent proponents of the latter view believe many Native American tribes lost 90% or more of their people before the first historical censuses, that the magnitude of death and culture change during the Protohistoric period has been greatly underestimated, and that such losses constitute an “American Holocaust” (Stannard 1992; Thornton 1987). This debate also has major implications for archaeologists, who rely heavily on the direct historical approach and ethnographic models to reconstruct precontact Native societies. In recent years, this debate has been revitalized by the 500th anniversary of Columbus’ “discovery” of America, by the desire of many anthropologists to more effectively integrate Native American perspectives into our historical reconstructions, and by provocative books such as Ramenofsky’s (1987) Vectors of Death, Thornton’s (1987) American Holocaust, Stannard’s (1989) Before the Horror, and Thomas’ (1989, 1990, 1991) Columbian Consequences series.

So far, archaeological data from California have been marginal to this debate, although the potential for protohistoric disease epidemics is sometimes briefly mentioned. The lack of attention to the possibility that such epidemics occurred in California is surprising given that the Pacific Coast was the scene of some of the earliest and most sustained contacts in western North America. Due to their lack of immunological...
resistance to Old World diseases, their generally high population densities, large village sizes, and extensive socioeconomic interaction, California Indians would have been highly susceptible to the spread of Old World epidemic diseases.

We recently published a paper that examines the possibility that early Spanish maritime expeditions transmitted Old World diseases to the Chumash and their neighbors during the 16th and 17th centuries A.D. (Erlandson and Bartoy 1995). Among the early European expeditions that contacted the Chumash, Cabrillo's voyage of A.D. 1542-3 and Vizcaino's voyage of A.D. 1602-3 had the most sustained contact with southern California’s coastal tribes. Cabrillo and his men wintered among the Chumash on the northern Channel Islands and Vizcaino's crew also had extensive contacts with the Chumash and their neighbors.

In northern California, Sir Francis Drake and his crew spent five weeks among what appear to have been coastal Miwok peoples in Drakes Bay in A.D. 1579 (see Heizer 1947). In A.D. 1595, Cermeno and his men also spent about five weeks among the coastal Miwok (Wagner 1929). Both expeditions had extensive contacts with Indian people, exchanging clothes, food, and other goods.

Some scholars believe there were additional contacts between Pacific Coast tribes and undocumented Manila galleon ships, Portuguese ships, or other maritime expeditions (e.g., Walker and Hudson 1993; Woodward 1986). Muche (1978, 1981), for instance, believes the Spanish galleon San Pedro wrecked off the coast of Santa Catalina Island, followed by two salvage expeditions that may have used native divers to help salvage the ship's cargo (Johnson 1988:3). Woodward (1986:253) also argued that a Portuguese vessel wrecked on the Oregon coast between A.D. 1630 and 1638, part of a trans-Pacific trade route linking Macao, China, Japan, and Peru. For the Oregon coast, Minor (1995) stated that the “introduction of epidemic diseases in protohistoric times led to rapid decline in the native population, with the result that the complexity of Southern Northwest Coast societies is almost certainly underestimated in the limited ethnographic record.”

Overtland disease epidemics spreading northward from central Mexico may also have affected Native Californians during the 16th and 17th centuries A.D. (Walker and Hudson 1993:20-21). By A.D. 1520, Old World diseases already were devastating the Aztecs and their neighbors (Cook and Lovell 1991). In 1535-36, a small group led by Cabeza de Vaca traveled from Texas, through northern Mexico, to the Pacific Coast (Bancroft 1884:7). In 1539, a Spanish expedition led by Marcos de Niza contacted Pueblo peoples, and Coronado explored the American Southwest with 300 Spaniards and 800 Mesoamerican Indians in 1540-42 (Gutierrez 1991:45). In 1598, soldiers, civilians, and priests led by Don Juan de Onate established Franciscan missions among the Pueblo peoples of New Mexico. These missions became centers of disease spread, with at least 15 Old World disease epidemics (smallpox, measles, etc.) devastating Indian peoples of New Mexico between 1636 and 1770 (Stodder and Martin 1992:66). Nineteen missions founded by the Jesuits in Baja California from 1697 to 1768 also hastened the northward spread of Old World diseases (Jackson 1994).

Did Old World diseases devastate California Indians during the Protohistoric period? The answer to that question is not clear, but the question merits serious consideration. The Spanish and other early European maritime expeditions sailed out of Pacific Coast ports in Mexico and Southeast Asia that were ripe with disease. During several extended stays on the California coast, they exchanged a variety of goods with native peoples, brought them aboard their ships, ate with them, worked with them, and occasionally fought with them. Meanwhile, land-based Spanish exploration and colonization in northern Mexico, Baja California, and the Southwest brought Old World diseases to California’s borders.

Infectious diseases such as smallpox, influenza, and tuberculosis could have been transmitted to California Indians either through direct contacts with Europeans or indirect contact with intermediate tribes. It seems even more likely, however, that venereal diseases like syphilis and gonorrhea were transmitted directly to coastal peoples by the members of early European maritime voyages like Cabrillo’s and Drake’s. The all-male crews of these ships—isolated on long sea voyages, armed with archaic attitudes about women, non-Christians, and non-European cultures, and possessing European trade goods coveted by the Indians—must surely have had sexual encounters with Native Californians. If venereal diseases were introduced to California’s populous coastal tribes at this time, they may have spread like wildfire from town to town, and possibly from tribe to tribe.

Today syphilis and gonorrhea are easily cured diseases. Even if left untreated, they progress relatively slowly. Yet, they had rapid and deadly effects in Hawaii in the late 1700s, sweeping through the islands in a few short years, killing, disfiguring, and sterilizing tens of thousands of Native Hawaiians (see Stannard 1989). While there is some evidence that a form of syphilis may have been present in the Americas prior to European contact, new and virulent strains developed in the Old World could have devastated Native Americans, just as they did during the historic period.

Testing Models of Protohistoric California Demography

The sketchy written records for the Protohistoric period only hint at the possible effects of early European contacts on California’s coastal tribes. Given the nature of such contacts, Native Californian demography at the time, and previous models of epidemic disease transmission, we proposed three models for the Chumash region that are equally applicable elsewhere in California (Erlandson and Bartoy 1995): (1) no transmission, the prevailing opinion of most California historians and anthropologists; (2) limited transmission, where epidemics occurred but were limited in geographic extent and scale (San Miguel Island, for instance, or the Northern Channel Islands); (3) regional devastation, where epidemics spread over wide areas such as the malaria outbreak in Oregon and Northern California in the 1830s.
Testing these models archaeologically is not as easy as it might seem. As Ortner (1992) has pointed out, acute epidemic diseases are rarely expressed on the human skeleton. “This means that most of the great epidemics that have punctuated human history...” leave...non-specific and indirect evidence in skeletal samples.” A second problem is that many coastal California cemeteries were excavated long ago by antiquarians who kept poor records. Many of these collections remain undated or poorly dated. Even collections that have been carbon dated need to be calibrated to calendar years to identify protohistoric components (Erlandson and Bartoy 1995)—a step taken only recently by most California archaeologists. Finally, European trade goods are often uncommon in sites occupied in protohistoric times.

Instead we must look carefully at age-sex ratios for cemetery populations, changes in burial patterns, and other attributes that are increasingly difficult to conduct in today’s political climate. Even with the best available cemetery data, however, the patterns of devastation wrought by Old World epidemic diseases may often be difficult to identify. Accounts of the 1830-33 malaria epidemic in California and Oregon describe the random dispersal of the dead through the countryside (Cook 1955). Years after the epidemic had subsided, travelers continued to encounter the scattered bones of its victims.

Fortunately, there are other avenues of study that can inform us about the possible effects of protohistoric disease epidemics. On the Northwest Coast, as epidemics devastated historic tribes, many villages or even entire large bays were abandoned when survivors resettled in large aggregation villages (Inglis and Haggarty 1987; Erlandson et al. 1992). Studies of occupational continuity and settlement size across the Late Prehistoric, Protohistoric, and Historic periods might reveal a great deal about demographic changes among California’s coastal tribes. Due to the loss of labor, knowledge, and leadership, economic disruptions associated with population loss should also be evident in the archaeological record. For instance, we might expect to see local or regional reductions in the intensity of craft specialization and intervillage trade, the accumulation of wealth and status markers related to social ranking, and other signs of cultural complexity. Unlike the unrelenting and widespread impacts of sustained historical contacts, however, the demographic and socioeconomic effects of periodic protohistoric epidemics may have been more localized and reversible, with native populations and economies rebounding during long periods between European contacts.

Considering the Validity of the Ethnographic Record

In considering the magnitude of protohistoric population loss and culture change in North America, Dunnell (1991:572) suggested that:

The dramatic loss of population in the New World in consequence of contact with Europeans is not just another fact to be discussed, modified, and integrated in the existing anthropological lore of the Americas. That huge losses did occur seems now firmly estab-

lished, although the precise magnitude, regional variability, and exact timing has yet to be worked out in detail. As a consequence, the general assumption of continuity between ethnographic/historical accounts of native Americans and the people responsible for the archaeological record is no longer valid. A collapse must be assumed to have taken place unless it can be explained how and why particular areas escaped the devastation of epidemic disease.

In California, there presently is little direct evidence for devastating population losses and socioeconomic changes during the Protohistoric period. Whether this lack of evidence is due to some of the analytical problems outlined above, the fact that few archaeologists appear to have searched systematically for such evidence, or to the absence of devastating protohistoric disease epidemics remains to be seen. Aside from a simple quest for historical “truth,” there are compelling reasons to study the possibility that protohistoric disease epidemics significantly affected California Indians. Ethnographically-derived models of Native Californian settlement, subsistence, and social organization permeate our research, providing the baselines for many of our interpretations. The direct historical approach has been used effectively to study aspects of the later periods of California prehistory—Richard Gould’s (1966) work among the Tolowa and Chester King’s (e.g., 1971, 1975, 1990) work among the Chumash are just two examples that come to mind. However, very few anthropologists or historians seem to have fully appreciated the magnitude of early European impacts on California’s Native peoples and just how early these impacts may have occurred.

Working in Southeast Alaska in the mid-1980s, Moss (1989) used a settlement model based on the classic ethnographic seasonal round to generate expectations about the different contents of village, fort, and fish camp sites. Analysis of the recovered faunal remains found little evidence for intersite variability, however, suggesting that the seasonal round resulted from postcontact population losses, the abandonment of numerous villages, and the increased travel time required to reach traditional resource territories after resettlement in now distant aggregation villages (Moss 1989). In British Columbia, Inglis and Haggarty (1987) and others also found that ethnographic models of settlement and land use did not fit well with precontact archaeological data (Moss and Erlandson 1995).

This leads us to conclude that archaeologists should be extremely careful in using ethnographic records to structure interpretations of the precontact era. It may be more fitting, in fact, to do just the opposite—to use archaeological data as baselines with which to understand the timing and magnitude of the devastating impacts of European colonization on Native Californians—and to test the validity of ethnographically derived models. We should be careful, however, not to throw the proverbial baby out with the bath water. Historical and ethnographic accounts have contributed tremendous amounts of data about Native California societies. These “snapshots in time,” whether or not they are representative of the prehistoric or protohistoric past, provide invaluable information about the con-
Summary and Conclusions

Was the Protohistoric period a final respite in paradise prior to the onslaught of cultural devastation wrought by European colonization (see Castillo 1978:100; Kelsey 1985)? Or were California Indians devastated by Old World diseases during the Protohistoric period? Only further research can answer these questions. However, many California Indian groups had dense populations that lived in closely-spaced and relatively large and permanent communities, with intensive social and economic interactions with their neighbors. These demographic characteristics, along with the lack of prior exposure to a host of Old World diseases, would have left them highly susceptible to devastating epidemics (Ramenofsky 1987).

Documented protohistoric contacts between European maritime expeditions and a number of coastal tribes—particularly the Miwok, Chumash, Tongva (Gabrieleno), Luiseño, Ipai, and Tipai—were extensive enough to conclude that the possibility of disease transmission was high. A frontier of Spanish colonialism also was encroaching on California from the south and east at this time, and it is possible that Old World disease epidemics spread through Indian communities well in advance of actual Spanish settlement. For the Protohistoric period, direct transmission seems most likely for venereal diseases like syphilis and gonorrhea, but non-venereal diseases (smallpox, tuberculosis, influenza, etc.) may also have been communicated.

At present, there is no "smoking gun" that unequivocally demonstrates that Old World disease epidemics took place in protohistoric California. Even if such direct evidence eventually is found, it will take considerable research to determine the nature and scale of the impacts of such epidemics on Native Californians. For now, we believe there is enough circumstantial evidence to warrant a systematic search for more data. Certainly, California archaeologists need to consider: (1) the possibility that Old World diseases decimated many California tribes significantly before detailed historical accounts, population censuses, or ethnographic studies were made; (2) that such epidemics may have affected some California tribes as early as A.D. 1540 to 1605; (3) that these could have had devastating impacts on some of California's populous and sedentary tribes; (4) that the evidence for such disease epidemics is not likely to be found on human skeletons; and (5) that other archaeological expressions of epidemics and related cultural changes may be almost as elusive. Finally, we believe California archaeologists should reexamine existing archaeological data—areal by area and tribe by tribe—to assess the possibility that the Protohistoric period was one of pandemic rather than paradise. We owe it to the survivors to search for the truth, and to rewrite the history books if they turn out to have been wrong.

REFERENCES CITED


Erlandson, Jon M. and Kevin Bartoy  

Erlandson, Jon, Aron Crowell, Christopher Wooley, and James Haggarty  

Gould, Richard A.  

Gutierrez, Ramon A.  
1991 *When Jesus Came, the Corn Mothers Went Away: Marriage, Sexuality, and Power in New Mexico, 1500-1846.* Stanford University Press.

Heizer, Robert F.  

Inglis, Richard I. and James C. Haggarty  

Jackson, Helen Hunt  

Jackson, Robert H.  

Johnson, John R.  
1988 The People of Quinquina: San Clemente Island's Original Inhabitants as Described in Ethnographic Documents. Ms. on file, Santa Barbara Museum of Natural History.

Kelsey, Harry  

King, Chester D.  
1971 Chumash Inter-Village Economic Exchange. *Indian Historian* 4:31-43.


Minor, Rick  

Moss, Madonna L.  

Moss, Madonna L. and Jon M. Erlandson  

Muche, James F.  


Ortner, Donald J.  

Rabenofsky, Ann F.  

Stannard, David E.  


Stodder, Ann L. W. and Debra L. Martin  

Thomas, David Hurst (editor)  

Thomas, David Hurst (editor) (continued)

Thornton, Russell

Wagner, Henry R.

Walker, Phillip L. and D. Travis Hudson

Woodward, John A.