

THE UNIQUENESS OF CALIFORNIA'S ETHNOHISTORIC RECORD

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ABSTRACT

Although the Spanish colonial period had tragic demographic consequences for California's native peoples, the detailed information preserved in mission registers provides a data base that may be mined to elucidate many aspects of California Indian life. These records have contributions to make in all of the sub-fields of anthropology: ethnology, linguistics, physical anthropology, and archaeology. From a cross-cultural perspective, the geographic extent and comprehensiveness of California's ethnohistoric record is unusual, so that its data are destined to play a significant role in anthropological understanding of how hunting-gathering communities interacted in regional settlement systems. With recent advances in our understanding of California's late prehistoric record, the opportunities to combine ethnohistoric observations with archaeological findings hold promise for major contributions to understanding cultural development in Native America.

INTRODUCTION

I take the view that the ethnohistory of California's native peoples is a treasure that, if carefully investigated, can yield incredible insights into how cultural systems developed in our region. Without an understanding of the ethnohistoric context of our finds, we archaeologists who examine sites and collections dating from the Late, Protohistoric, and Historic periods will be hampered in our investigations and interpretations. I make reference to a number of examples of the ways in which ethnohistoric studies shed light on cultural patterns that have broad implications for how we interpret prehistory.

Ethnohistory is a hybrid discipline, ideally combining the methods of archaeology, ethnology, and history - of both science and humanities. Instead of excavated artifacts, the discipline of ethnohistory uses archival documents that, like artifacts, must be understood in their larger behavioral context. These documents were created for a variety of purposes - practical, social, bureaucratic, and ecclesiastical - and a fragmentary record remains, just as in archaeology. The individuals who wrote these records reflect the experiences, biases, and cultural systems in which they participated. Taking into account such

limitations, the ethnohistoric record of California Indians is quite remarkable, even unique, in the documentary history of Native North Americans, having preserved on a large, regional scale, a snapshot of cultures and the transitions these underwent during a relatively restricted time.

I will organize this brief exposition by focusing on one particular part of the ethnohistoric record - the mission registers kept by early Franciscan missionaries - and by illustrating how such data can be used in each sub-field of anthropology to shed light on California prehistory. For those who have heard of mission register research, but who have not been initiated to the mysteries of this esoteric cult, a few words are necessary by way of introduction. At each of the twenty-one missions founded in Alta California between 1769 and 1823, sacramental registers were kept of baptisms, marriages, confirmations, and burials. In addition to these principal records, various other registers were often used to keep track of other aspects of running a mission, including account books, books of plantings and animal husbandry, records of clothing distribution, and, most importantly for purposes of studying the Indian population, the *padrón* or

census register. All of these records provide valuable information regarding the nature of mission economic activities, demographic trends, and social patterns.

ETHNOLOGY

For nearly every individual whose name was recorded in mission registers, we possess the means to study the basic facts of that person's life history, from the place and approximate date of birth, to marriage(s), post-marital residence, kin relationships, family structure, and date of death. Because the birthplace and/or village of residence was recorded for most people baptized at the missions, detailed information was obtained pertaining to native settlement patterns at the time of European contact. This is one of the most important contributions of mission register research to the ethnological study of California Indians. Mission register studies have mapped native villages and tribal boundaries in the San Francisco Bay region (Milliken 1995), the Sacramento Delta (Bennyhoff 1977), the Monterey Bay and Big Sur districts (Milliken 1987, 1990), the Salinas River valley (Gibson 1983), the Santa Barbara Channel region (Brown 1967; Johnson 1988; King 1975, 1984; McLendon and Johnson 1999); the Los Angeles Basin (Johnson 1997; King 1993); and southern coastal California (Earle and O'Neil 1994; Johnson, Crawford and O'Neil 1998; O'Neil 1988).

The mapping of settlement patterns provides us with an important opportunity to study the social interaction among villages on a regional scale. It is extremely rare in cross-cultural literature to possess this kind of database. Concepts and techniques derived from the study of social networks and cultural geography can be applied to the study of the distribution of native settlements and the marriages and kinship patterns between them. The regional nature of our data permits us to build into our models of social evolution the variable of a settlement's *structural position* in a social network vis-à-vis other settlements in the region. In a geographic analysis of settlement populations, I have argued that a heterarchical model of the Chumash economic system predicts many of the features of social hierarchical relations that were documented in ethnohistoric accounts. A Chumash coastal town's political importance is predicted by its geographic

centrality in the regional interaction sphere (Johnson 1988, 1999).

Postmarital residence information may be derived from mission records through determination of where a couple's children were born. From these data we are beginning to appreciate the diversity of marriage practices present among California Indians beyond what early twentieth century ethnographies could tell us. For example, Earle and O'Neil (1994) have documented the existence of patrilocal clan communities among the Juaneño and Gabrielino, and analysis of the San Luis Rey mission *padrones* has demonstrated the use of patrilineal clan names as surnames (Johnson, Crawford, and O'Neil 1998). In contrast to these predominantly patrilineal patterns for southern California Uto-Aztecan groups, Johnson (1988) has demonstrated that the Central Chumash practiced matrilocality approximately 75 percent of the time. Documentation of these differences in postmarital residence and social organization offer us the opportunity to use comparative California data as a means of testing hypotheses regarding the demographic, environmental, and economic conditions that lead to different forms of residence practices.

Demographic analyses of mission register data permit us to investigate the causes of population decline during the colonial period and to contrast the age and sex ratios of different native groups (Cook and Borah 1979; Jackson 1987, 1994; King 1984; Milliken 1995; Walker and Johnson 1992, 1994). These data show how high infant mortality and lowered fertility from introduced infectious diseases affected the demographic structure of California Indian populations at the missions. Extrapolating these trends back in time permits more accurate estimates of population levels just prior to the advent of European settlement. Several authors have argued that epidemics could have spread to Alta California in decades prior to the founding of the missions (Erlandson and Bartoy 1996; Preston 1996). Mission register data allow us to test this hypothesis. For example, an analysis of the effects of the 1806 measles pandemic among the Chumash indicates that the highest mortality was experienced among the very young but that the

elderly, usually equally susceptible to epidemic disease, appear to have been resistant (Figure 1). This implies prior exposure to measles, which until that time had not been present in Alta California since the founding of the first mission in 1769. A population pyramid reconstructed for the Chumash shows a notch for the age cohort born in the decade of the 1760s, indicating that measles indeed had spread northward to non-missionized groups from Baja California, where it has been documented in the missions there (Jackson 1981; Walker and Johnson 1994). However, the fact that there was population recovery after this epidemic should provide a note of caution against sweeping generalizations about lasting effects of pandemics prior to actual European settlement.

LINGUISTICS

Mission documents can provide important information regarding the mapping of linguistic groups during the colonial period. Such evidence may result from direct comments by missionaries in their reports or correspondence or indirect information contained in mission register data. Several methods can be applied to the mission register data to obtain linguistic data:

(1) Examination of village names and personal names to ascertain whether these are translatable in a particular language. For example, based on names recorded in mission records, Catherine Callaghan was able to determine that six tribelets located just southeast of Mt. Diablo were mostly composed of Bay Miwok speakers, rather than of Costanoan or Yokuts dialects (Callaghan 1996).

(2) Reconstruction of family genealogies for individuals known historically to have spoken particular languages. By this means, Johnson and Earle (1990) were able to lend support to the geographic position of the poorly documented Tataviam, whose very existence as a distinct speech community had been questioned. Within the past year an early missionary manuscript has been surfaced that records the name "Tatabian" as one of four languages spoken at Mission San Fernando in 1804. The geographic position of this linguistic group, as mentioned in this document, is precisely as predicted from minimal ethnographic data collected

over one hundred years later (Bright 1975; King and Blackburn 1978).

(3) Reconstruction of marriage patterns and kinship relationships between villages. Groups of intermarrying villages tend to mirror the distribution of dialectal communities. For example, Gibson (1983) has argued that the Northern Chumash/Salinan linguistic boundary is discernible in the southern Salinas Valley because marriages far less frequently occurred between villages north of Paso Robles and those to the south.

PHYSICAL ANTHROPOLOGY

Before European contact, California had one of the most diverse populations of Native Americans anywhere in the country. Over 60 different languages were spoken within a vast patchwork of different cultural groups. How closely were these groups related to one another? Did intermarriage result in genetic similarities or did some populations maintain their genetic distinctions? How can such questions from the past be answered today? One of the most exciting developments in recent physical anthropological research has been the study of population historical relationships through mitochondrial DNA (mtDNA) comparisons (Wiersema and Cordero 1998). For a number of years, I have been collaborating with physical anthropologists at the University of California, Davis in a survey of native groups in south-central California to determine the degree to which linguistic differences mirrored genetic affinities. Our goal has been to gain some clues regarding past population movements from the distribution of genetic lineages. Some preliminary results of this research have been included in wider surveys of genetic haplogroups among North American Indians (Lorenz and Smith 1994, 1996, 1997).

Because mtDNA is passed only from a mother to her children, we can use genealogical records to determine if modern California Indian descendants have an unbroken link through their matriline to an ancestor of known tribal affiliation. California mission records have

proven an invaluable tool in this research because many individuals can have their ancestry traced back to a known individual born in a particular village prior to Spanish colonization. The accompanying map shows the number of lineages sampled from each linguistic area, all with tribal affiliation established through ethnohistoric records (Figure 2). For the Chumash Language Family, a total of nineteen surviving lineages have been identified. Based on the evidence gathered to date, we have discovered what appears to be a non-random distribution of the four principal haplogroups (A through D) found among American Indians. Most Chumash lineages belong to Haplogroups A and D, while Haplogroups B and C predominate among speakers of Uto-Aztec languages. People of Yokuts tribal backgrounds are mostly from A and B haplogroups.

In a more detailed look at three Haplogroup A lineages from widely separated Chumash villages, a surprising finding emerged. Approximately 400 base nucleotide pairs from the control region on the mtDNA molecule were sequenced. Statistical comparison of these with sequences from other American Indian lineages indicates that these three Chumash lineages clustered together, differing only slightly by one or two base pairs from each other. They were more closely related to each other than to any other Haplogroup A lineages in the Americas. This research provides a window into the past through which we see the first hint of genetic relationships among Chumash peoples. The slight degree of variation in mitochondrial lineages may have resulted from matrilineal residence patterns and slowly accumulating genetic change over a long period of time. If this initial observation is supported by further research, it attests to great antiquity for Chumash presence within the Santa Barbara region.

ARCHAEOLOGY

Archaeologists who work at Mission Period village sites in California benefit by being able to associate findings regarding material culture with ethnohistoric data about social fabric and community population history. An example is provided by a recent study of the inland Chumash village site of *Xonxon'ata*, recently excavated by Far Western Anthropological Research Group. People from this village were baptized at four missions between 1788

and 1810 (Johnson and Crawford 1999). Genealogical diagrams were constructed for all individuals from *Xonxon'ata* based on information about family relationships contained in mission registers. Only those marriages and affinal family relationships that existed prior to a person's arrival at the missions are included in these diagrams in order to approximate native patterns of intermarriage prior to missionary influence.

Intervillage marriage patterns reflect the frequency of amicable interaction between communities and may be studied as a means of reconstructing social networks (Horne 1981; Johnson 1988; King 1984). Understanding the position of a village in its larger network of social relations assists in understanding archaeological finds that reflect intervillage trade. *Xonxon'ata* was well positioned to participate in the Chumash intervillage exchange system by virtue of being midway along a natural travel corridor between coastal towns and inland villages (Figure 3). When the geographic extent of family relationships from this village are mapped, the northward extension of *Xonxon'ata*'s social interaction sphere is very pronounced. These long-distance relationships take on added significance when one notes the high degree of intermarriage between people from *Xonxon'ata* and its larger neighbor, *Soxtonokmu'*, situated in a mountain canyon to the northeast. The great range and frequency with which people from inland towns interacted with people from *Xonxon'ata* imply the importance of its central position in routes of travel to the nearest large towns on the mainland Santa Barbara Channel coast. Its abundant evidence of contact with coastal peoples, consisting of fish bone, shellfish remains, and shell beads, reflects this commerce. A recently completed M.A. thesis (McRae 1999) fruitfully compared densities of particular classes of trade items from *Xonxon'ata* to assemblages recovered from contemporaneous nearby villages to derive preliminary interpretations regarding the symmetry, directionality, and degree of centralization of the Ineseño Chumash exchange system.

CONCLUSION

The brief nature of this survey of the contributions of California mission studies to anthropology precludes an extended discussion of applied anthropology. Actually there are a number of ways in which ethnohistoric data can benefit contemporary California Indian communities and assist government agencies in the application of laws pertaining to cultural resource management and Native American consultation. A number of efforts by California Indian groups to gain federal recognition, currently underway, are depending to a large degree on documentation of genealogies and tribal history by recourse to mission register data. Consultation mandated for government agencies by such laws as NAGPRA (Native American Graves Protection and Repatriation Act) depend upon such concepts of "cultural affiliation" and "lineal descent." Several California studies have demonstrated the utility of using mission register data and other ethnohistoric sources to demonstrate "shared group identity" and "continuity" that such laws require (Johnson et al. 1998; McLendon and Johnson 1999).

California's detailed ethnohistoric record is unique in the annals of European settlement of North America and seldom equaled in its breadth and detail in any part of the world. Unlike missions in Florida, where most records were destroyed, or in Texas, where mission converts were fewer, the California database has preserved a record of its indigenous peoples. This database may be fruitfully studied to gain new insights into the social dimensions of hunter-gatherer adaptations and the dynamics of cultural process in contact situations.

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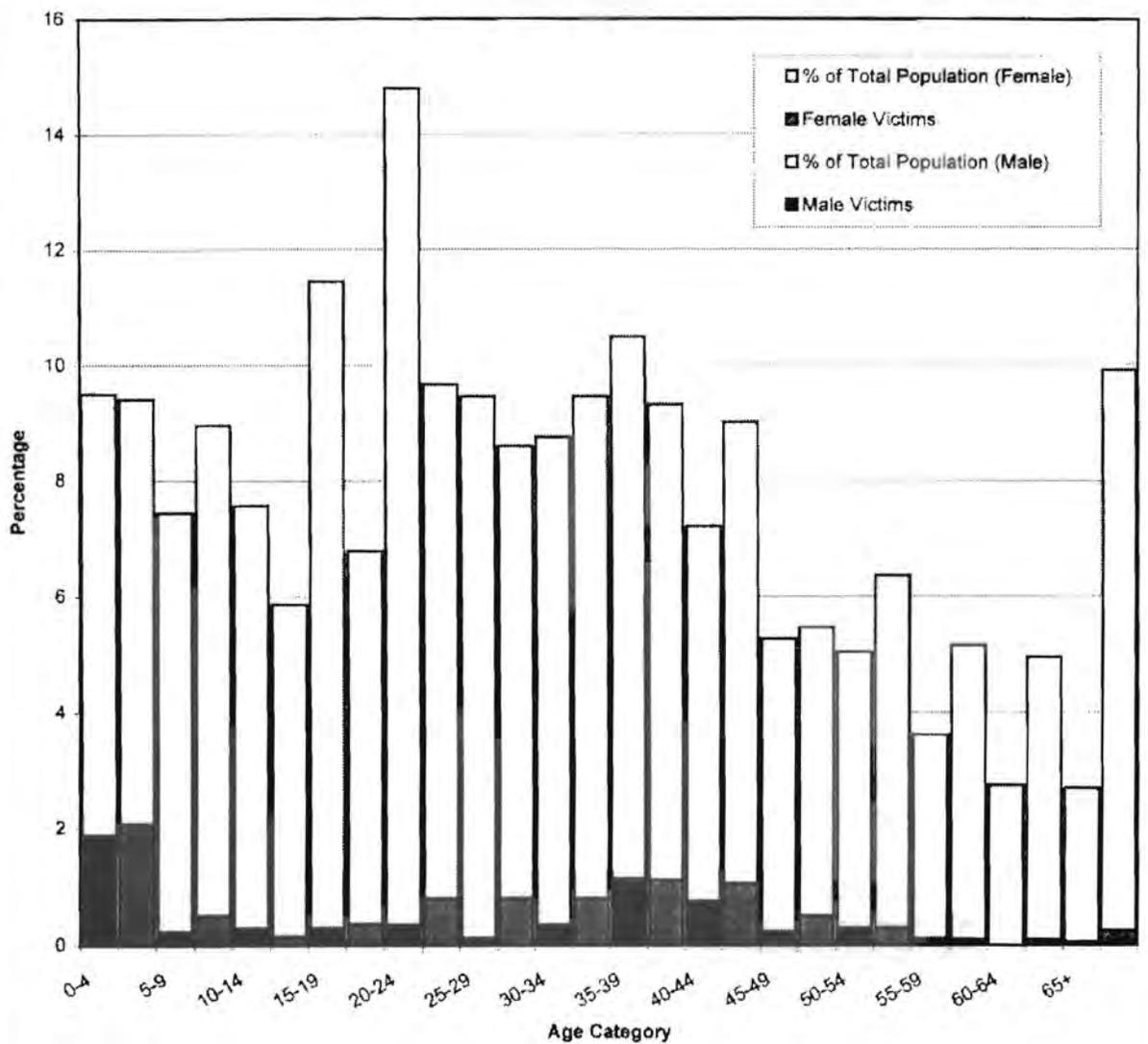


Figure 1. Comparison of male and female deaths during the 1806 measles epidemic at Missions Santa Bárbara, La Purísima, and Santa Inés. The low proportion of elderly victims suggests exposure to measles in an epidemic that must have predated Spanish settlement in Alta California

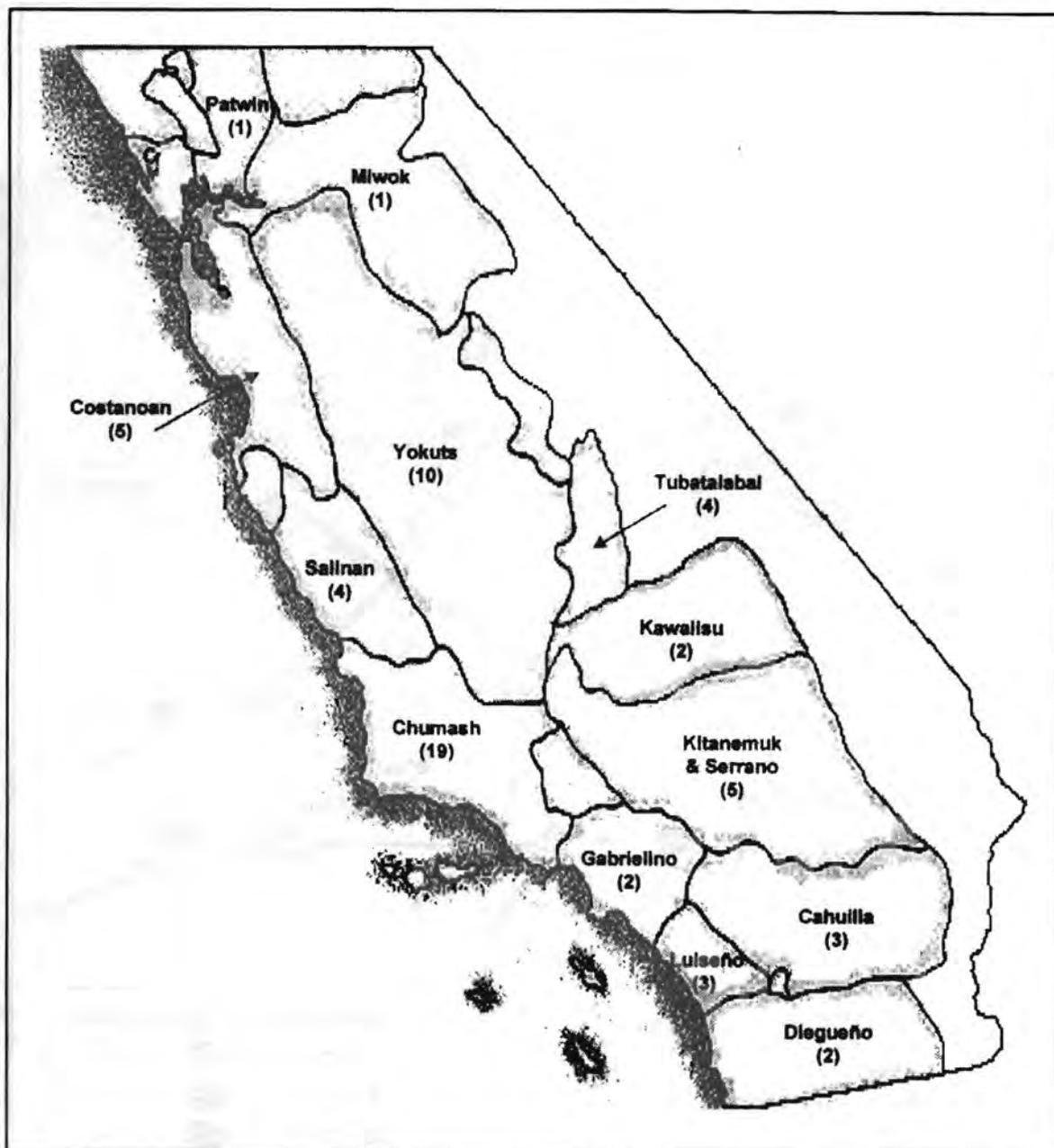


Figure 2. Distribution of mitochondrial DNA lineages with cultural affiliation established through ethnohistoric evidence. Ancestral villages for most Chumash lineages have been identified using mission records.

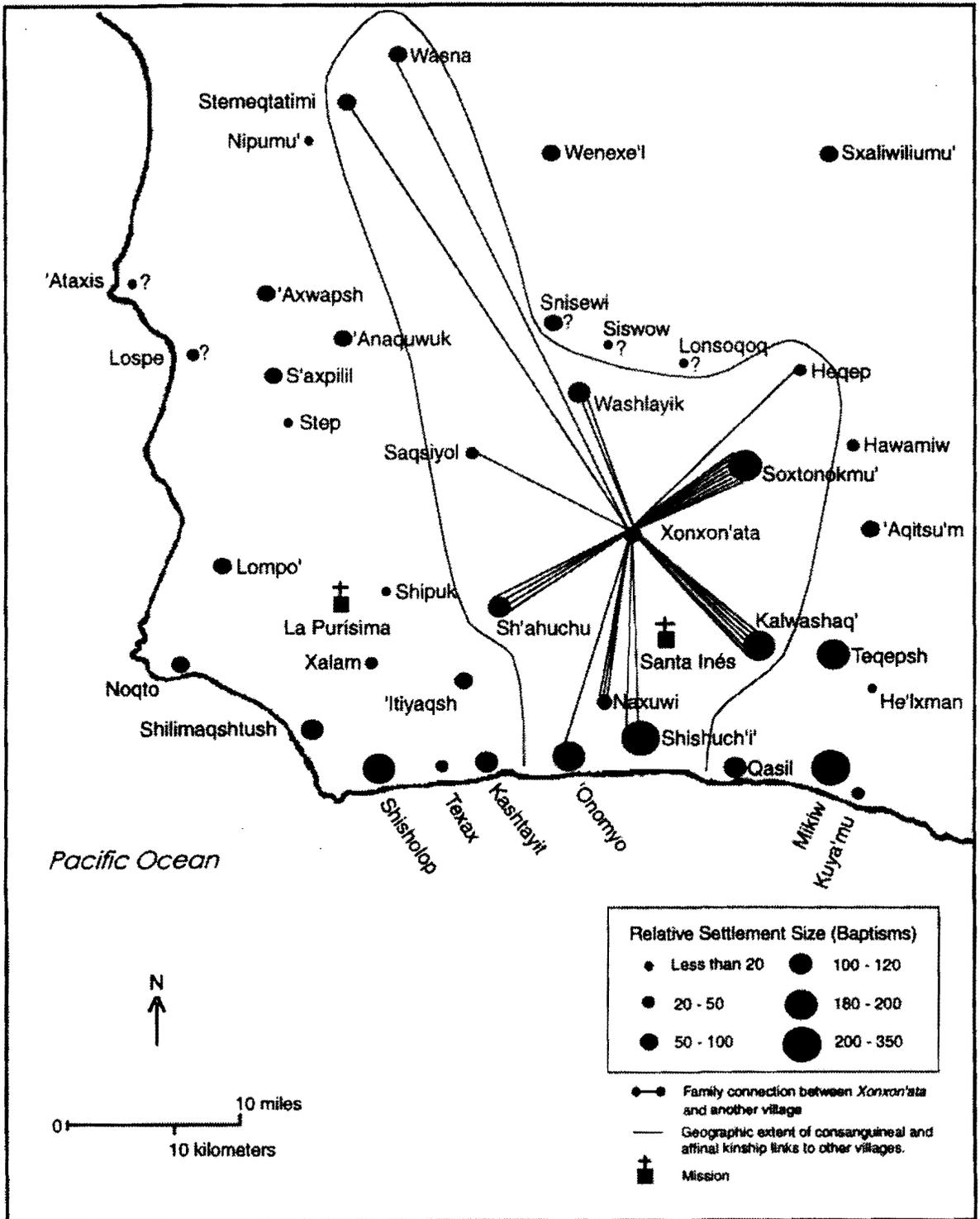


Figure 3. Social interaction sphere of people from Xonxon'ata.