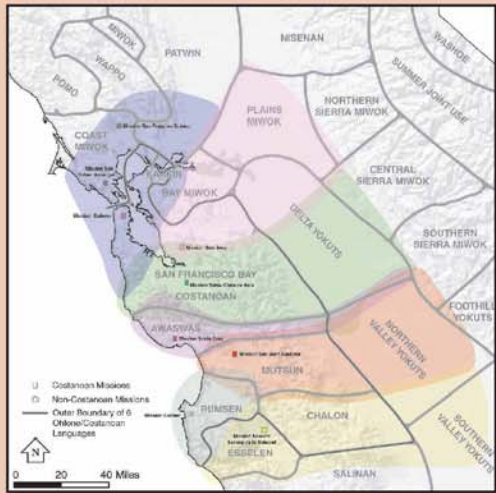


Antecedents of the Community Distribution Model

Outreach Zones of Seven Missions that took in Costanoan-speaking Populations



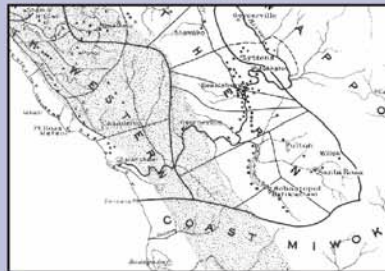
Classic Ethnographers Reported their Ethnogeographic Data in Text and on Maps

Kroeber 1925



The San Joaquin River belonged to the Yokuts, the Sacramento to the Maidu and Wintun. At the point where these two streams debouch into San Francisco Bay, Costanoan territory begins.
[Kroeber 1925:462]

Kroeber 1927



Initial mission record studies, such as Bennyhoff (1977) and Gibson (1983), used clues from baptism and marriage records to reconstruct the homeland areas of groups that were mentioned in the Franciscan mission records by name only.

Gibson's 1983 Map



Having mapped the tribelets with known locations, one attempts to find...the unplaced names which best fit a vacant space on the map. All the available data are brought to bear on the first attempt—do the marriages and alliances make sense in terms of distance or known ethnic affiliation?
[Bennyhoff 1977:21]

Major Rancherias named in the Mission Registers

Milliken and Johnson 2005



Hexagons = arbitrary, equal-sized, inhabited areas with assigned names

Milliken and Johnson 2005

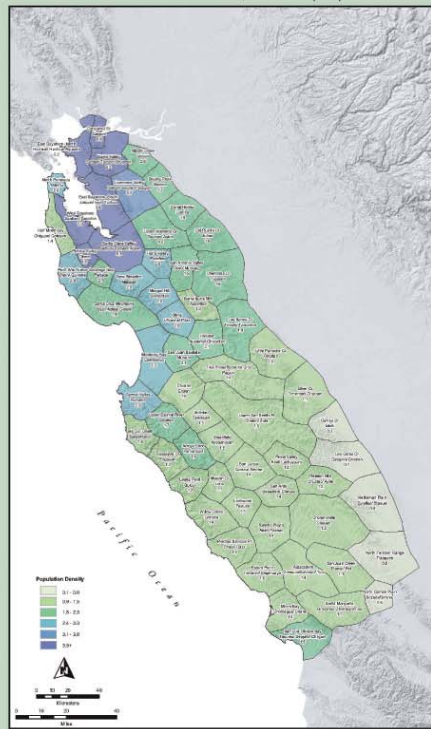


We undertook our study (1) to verify Gibson's rancheria locations, and (2) to determine whose language map, Gibson's or Kroeber's, was correct. ...we feel that most language boundaries in the South Coast Ranges are now clear.
[Milliken and Johnson 2005:147]

Development of the Community Distribution Model

In 2006, Milliken shifted from "hexagon" modeling to the polygons of the Community Distribution Model, based on ridges and watersheds, to better reflect the Native world. The model reconstructs ethnogeographic boundaries from Central Place inferences and the logic of the local landscape.

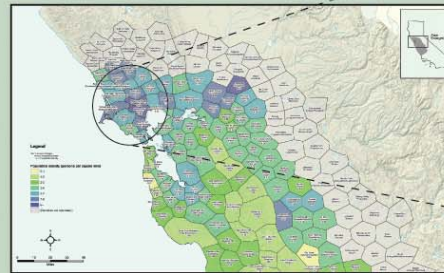
Two new composite databases are used, containing the names of more than 37,000 tribal people.



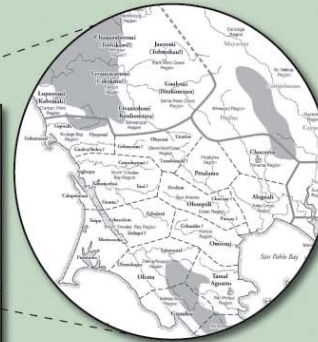
STEPS:

- Database consolidation
- Inferred population density
- Rancheria coalescence
- Topographic regions
- Apportion rancherias to regions
- Adjust regions for variable effects of pre-mission population collapse
- Iterative corrections for regional boundaries

Regional population densities were reconstructed by multiplying the "total baptized population" by a factor based upon "baptized adult/baptized child ratio" (a proxy for increased pandemic-based infant mortality in the tribal area) and "length of time between initial Spanish settlement and regional group migration to the missions" (a proxy for population reduction due to European-introduced epidemics)



An example of processing mission record and ethnographic data into polygons in the Point Reyes Area, a local transition zone.



Future Development of the Community Distribution Model

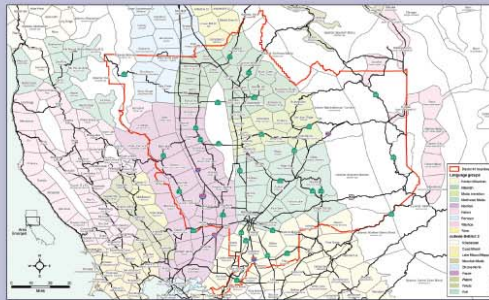
The Community Distribution Model is merely a step towards the most accurate possible reconstruction of [Native American] ethnogeography. Each region should be debated and re-evaluated in the future.

[Milliken 2006:25]

Central California Communities at Spanish Contact
100 Years from now - Who will use it? Who will maintain it?



The polygon structure is as valuable for areas where the mission record didn't extend as it is for the missionized areas. We have shown this for the near North Coast Ranges, the central Sacramento Valley, and the northern Sierra Nevada foothills, where mission influence did not reach.



In the future, each local region's full complement of anthropological field note data, tribal oral history data, and environmental data can be coalesced into retrievable text tied to interactive maps. A final result can be a California-wide Community Distribution Model. Eventually, the maps and related text could be available in web formats such as Google Earth.

Text Linked to Davis Region

- Davis (Yolo and Solano counties) - Puttoy Homeland
- This flat region on the west side of the Sacramento Valley takes in the lower reaches of Putah Creek where it meets the Sacramento River floodplain. The town of Davis lies in the center of the region. This region was almost certainly the homeland of the Puttoy (Spanish orthography) local tribe.
- Early Expeditions: No pre-missionization expeditions are known to have traveled through this region.
- Mission Register Evidence: The Puttoy group sent 6 people to Mission San Francisco during the years 1817-1821 (embedded among Ulialtos from Vacaville) and 41 people to Mission San Francisco Solano during the years 1825-1835 (in mixed groups with Libbeytos of Winteer and/or Ulialtos). The Puttoys are not to be confused with the Putistas (Spanish orthography); the latter group, consistently distinguished at Mission San Francisco Solano (and having a significant percentage of Wapoo female personal names), are thought to have lived in the Capet Valley region north of Fairfield. In addition, the otherwise unlocated small Oionapmatne (Spanish orthography) group people may have been Puttoys under a Plains Miwok alias; 15 Oionapmatne people were baptized at Mission San Jose as spouses and associates of the Plains Miwok Yarnes of the Yolo region and Quasiocomes of the Freeport region during 1834-1836 (alternatively, Oionapmatne may have been Putsine Nisenans).
- Post-Mission Historic Evidence: Mexican citizens named Putah Creek, which passes through Davis, "Arroyo de los Putos." They also gave that name to a Mexican rancho on the south side of the creek just east of Davis.
- Ethnographic Period Evidence: Merriam (1967:280) did not mark any groups in the Davis region; he considered it territory of the Poo-a-win dialect of Southern Winteer. Nor did Kroeber (1925, 1932) identify any specific groups or villages in the region; he identified the region as Southern Patwin. P. Johnson (1978:320) marked no villages in the region.
- Conclusion: Two clues suggest that the Puttoys were from the Davis region. First, the higher reaches of Arroyo de los Puttoys, or Putah Creek, are known to have been held by other groups, such as the Libbeytos of the Winteer region. Second, other central California streams named after local tribes, such as the Mokelumne, took their names from the group farthest downstream.