The Early California Cultural Atlas is a collaborative project led by Professor Steven Hackel at UC Riverside in collaboration with the Electronic Cultural Atlas Initiative, of which I am a technical director. The California Center for Native Nations at UCR is a sponsor. In Phase 2 we are also partnering with the Stanford Spatial History Lab and the National Center for History in the Schools (NCHS).

Beginning in 1769, California was resettled by Spanish Franciscans, soldiers, and colonists. Over the next eighty years the peoples and lands of California were transformed by political and biological forces, which we are only now beginning to understand. The Early California Cultural Atlas (ECCA) attempts to demonstrate visually the spatial and temporal aspects of these enormous changes and thereby promote new ways of understanding California before 1850.
The ECCA integrates multiple types of data such as:

- California Mission records from the Early California Population Project based at the Huntington Library in Pasadena
- Historical maps from the Library of Congress and David Rumsey Collection
- Hand drawn maps, images, and texts from the Online Archive of California

Dynamic spatio-temporal visualizations for the area around Monterey in central California were developed under the initial NEH Start-up Grant. Embedded Google Earth visualizations show changes by year from 1797 through 1850 and allow the user to interact with the data layers and time bar. The incorporated datasets have different types of ambiguity and perspective. The project is exploring appropriate methods for visualization, navigation, and documentation using dynamic maps, which address certainty and scale. Cartography for each dataset is designed to give users a visual understanding of the overall process and allow access to additional information about the data, including: ambiguity characterization, images and maps for a historical perspective of the spatial understanding of the time, and links to additional reference material.

We have chosen to intentionally address ambiguity in this study. Each of the data sources has its own ambiguity characteristics. For instance, Native Californian’s used oral stories to map
their complex territories and their residential seasonality lifestyle meant that what a person reported to the missionaries as their place of origin could vary considerably. To characterize the possible meanings of place of origin or village we developed a matrix of common spatial or land use habits of the Native Californians in this area as documented at first encounter with the Spaniards, then experimented with methods to visualize these characteristic land use patterns.

With our Level I funding we constructed a basic website of historical change in the region of Monterey, California, and resolved many technical issues. In the process, we encountered significant new historical questions. In Phase 2, we expect to: refine the mapping technologies to ensure that they show ambiguity, are scalable, and are suitable for a wide range of users; add additional visualizations and curriculum materials; and extend the project to include the Los Angeles Basin.

For more information see: [http://ecai.org/nehecca/](http://ecai.org/nehecca/)