# African Californios: Uncovering the African past of Spanish and Mexican California using Data Science Methods

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### Introduction

Scholars and the public readily accept that Afro-descendants populated Spanish and Mexican California, though little work has been done on the topic. Often cited is the 1790 census of California's four presidios, San Diego, Santa Barbara, Monterey, and San Francisco, and its two struggling towns, San Jose and Los Angeles, which identifies roughly 19% of their populations as being of African descent. The extent of the impact of Afro-descendants in early California, however, has been little understood and underexamined. This is because most Californians of African descent elided their origins in sacramental church records referring to themselves as "gente de razón" or people of reason. This ethnic designation was prevalent among frontier areas in Northern Mexico (now the U.S. Southwest) such as California and generally referred to those persons who lived in or near the missions, spoke Spanish, and acknowledged Catholicism, but were not under the control of the missionaries. For Afro-descendants the ability to alter their race was an opportunity to raise their social position under the anonymity that distance from the centers of political power provided. They hoped that the Crown's desire for Hispanicized settlers could overcome their perceived inferior origin that elsewhere barred them from entering the higher echelons of society. Anecdotal evidence suggests that Afro-descendant populations were much larger and prevalent than reflected in church records. This presentation therefore aims to show how African and Afro-descendant presence in early Spanish and Mexican California can be reconstructed utilizing data science techniques.

### Data

There are two principal sources of data we are using. The first is the California Census of 1790. This census was carried out by the Spanish government, which essentially at this point is just the military, and contains about a thousand names of the first settler-colonists to California. The census does contain race and thus has long been the only point of data for the racial of California. To hance this understanding we will be combining this information with the much larger Early California Populations Project (ECPP) database. The ECPP contains sacramental records for most of the 21 Spanish California missions as well as for the city of Los Angeles and Santa Barbara's presidio from 1769 to 1850. These records represent the performance of some 104,000 baptisms, 28,000 marriages, and 71,000 burials. These records have served as the most definitive source on early Californian populations since they were published on the Huntington Library website in 2006.



Figure 1. Pío Pico, his wife María Ignacia Alverado, and two nieces, Maraneto Alvarado and Trinidad de la Guerra

Yet, these records critically lack racial identities since most records merely designate individuals as either indigenous or nonindigenous. Only by combining the information from other sources and aggregating them into a larger database can a clear understanding of the African presence be made manifest.

## Methodology

The first step in analyzing this data is aggregating it. Google Colab cloud computing platform was used for all programming. The ECPP is split into three sets of records: baptisms, marriages, and death. Each set of records contains information regarding the individual in question, as well as some auxiliary information about that person. A Person data structure was created to capture all relevant known information about a single individual from any of the data sources. As each record is read in, a new Person data structure is created and added to our dataset. Part of the information regarding this person is their parents and children, so as these new people are encountered a new Person data structure is created and linked to that of the previous. Joining the ECPP is fairly simple as each person has the mission in which they were baptized, as well as their baptismal number. However, this is not the case when joining the ECPP with the 1790 California Census. Doing this required the creation of a matching algorithm that assigns each census person to their ECPP counterpart using multiple criteria such as name, year and family members. A fuzzy string matching Python library called TheFuzz was used to help determine if two names should be considered the same one with slight spelling differences. Once data is joined the final step is to traverse the family trees and trace the lineage of persons through all known records.

### Results

Based on an analysis of census and sacramental church records, we normalize names and identify distinct individuals and family trees. Of those we identify three generations of individuals whom we determine to be of African descent, based on a fairly strict and a more permissive criteria which we postulate would be close to an estimate for the upper and lower bounds of the population. In addition, we conducted a geographical analysis of all census and birth/death/marriage records filed at California missions.

Table 1: Presence of Afro-descendants within records

Generation	Dates	Individuals (lower bound)	Individuals ( <b>upper bound</b> )
Initial Afro-descendants	1790	114	183
Generation 0	1790	210	232
Generation 1	1797-1848	355	355
Generation 2	1813-1850	18	18

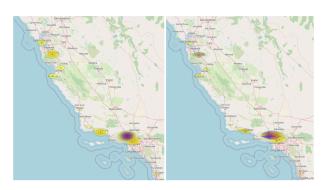


Figure 2. Heat map of African Californio presence based on strict (left) or permissive (right) criteria

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