

5. Chumash numerals

The term “Chumash” refers to a language group native to the southern California coastal region, as well as several of the islands nearby and some of the adjoining interior mountainous area. Today, no native speakers of the Chumash languages remain. But some native speakers did survive into the 19th century, and this enabled researchers to gain some information about seven of the Chumash dialects (there may once have been more).

The dialects vary primarily according to geographical location. “Central Chumash” incorporates the variations spoken at five coastal Franciscan missions, all of which were established in the late eighteenth and early nineteenth centuries. These five dialects include Ventureno, Barbareno, Ynezeno, Purismeno, and Obispeno, named for the missions where they were spoken. “Cruzeno” refers to the Chumash spoken on the islands of Santa Cruz, Santa Rosa and San Miguel. “Interior Chumash” refers to the Chumash variety spoken in non-coastal regions.

Information about the Chumash has been gleaned primarily from mission records and from the few speakers surviving into the 1900s. One of the major sources of information came to light in 1961 in the form of an early-nineteenth-century “Confesionario” (handbook for father confessors), written in Ventureno, Spanish, and Latin by Jose Senan (1760-1823). It included an explanation of the Ventureno counting system. While most available information about the Chumash numerical system was recorded in the late nineteenth century, Senan’s observations were made early enough that European influence had not yet significantly skewed the native approach to counting.

The Chumash counting systems of all dialects are quaternary (based on 4 instead of the decimal system of base 10). Each dialect included words for the numbers 1, 2, 3, and 4, and for the concepts of addition, subtraction and multiplication. This allowed other numbers to be written as compound words in terms of fours. For example, “five” would be “four and one,” while “twelve” would be “three fours.” No clear reason has been given for the choice of four as a base. Sixteen, the quaternary base multiplied by itself, was given a special term meaning “complete.” After European interference, the same term was applied to 100, retaining its abstract meaning while referring to a different number.

Ventureno is the most completely documented dialect in terms of its number words, and the least polluted by Spanish. (Some other dialects directly adopted Spanish terms.) The words for numbers 1-4 are fairly similar in most of the dialects, with slight pronunciation variations; a few notable deviations do occur. In Ynezeno, the word for “ten” is borrowed from another aboriginal language (Yokuts) that used a decimal counting system. In the Cruzeno dialect, “one” is totally unlike that of other dialects, perhaps because islanders were less able to communicate with (and borrow from) other native groups.

Unfortunately, the Chumash counting method is difficult to study in its original form because the native culture was accustomed to borrowing. Faced with the rigidity of European modes of thought, the Chumash language adapted quickly and much of its initial nature was irretrievably lost.

Ariel Lindorff
January 27, 2004