TAKIC FOUNDATIONS OF NICOLEÑO VOCABULARY

Pamela Munro

Department of Linguistics, University of California-Los Angeles Box 951543, Los Angeles, CA 90095-1543 (310) 825-0634; FAX (310) 296-57431, E-mail: munro@ucla.edu

ABSTRACT

This paper is a linguistic analysis of the available data on Nicoleño, the language of Juana María, the "Lone Woman" of San Nicolas Island, one of the Channel Islands off the coast of southern California, who was brought from this island to Santa Barbara in 1853. The two corpuses are first, four words reportedly uttered by this woman, written down (with translations) by several non-linguists, and second, two songs (each in two versions) that she reportedly sang. There have been numerous previous attempts to identify the language. As observed by earlier scholars, the four words have clear connections to vocabulary from several southern California languages of the Takic branch of the Uto-Aztecan language family (including Gabrielino, the language spoken on Santa Catalina Island). Analysis of these words confirms that the language is certainly Takic, appearing most similar to the languages of the Cupan subbranch of Takic. However, the previously assumed translations of Juana María's words may not all be correct. The song texts are less easily classified: one appears to contain some Takic words and at least one borrowed word, while the other may consist mainly of "vocables" or nonsense syllables.

Keywords: San Nicolas Island, Nicoleño, Juana María, "Lone Woman", Takic languages, Cupan languages, Uto-Aztecan language family.

INTRODUCTION

This paper is a survey of the available data on Nicoleño, the language of the "Lone Woman" of San Nicolas Island, one of the Channel Islands off the coast of southern California, who was removed from the island to Santa Barbara in 1853. The two corpuses are first, four words reportedly uttered by this woman, written down (with translations) by non-linguists, and second, two songs (each in two versions) that she reportedly sang. The four words have clear connections to vocabulary from several southern California languages of the Takic branch of the Uto-Aztecan language family, as observed by such previous scholars as Alfred L. Kroeber and John P. Harrington. The song texts are less easily classified: one appears to contain some Takic words and at least one borrowed word, while the other may consist mainly of "vocables." The analysis reveals that one word of the original vocabulary was probably incorrectly translated.

Nicoleño shows closest similarity to the Cupan subbranch of Takic.

METHODS AND MATERIALS

Primary contemporary accounts of the Lone Woman (baptized shortly before her death as Juana María) are collected in Heizer and Elsasser (1961), along with selected secondary reports based on interviews with people who had known her. These constitute the only sources of data on the Nicoleño words recorded by the Lone Woman's contemporaries. Many attempts have been made to relate Nicoleño to other languages.

The earliest reports on the Lone Woman give no examples of Juana María's language, uniformly noting that it could not be identified. Captain George Nidever's description (1961:21) is typical: "The same day [that] we arrived here, the Fathers from the Mission came down to see her. They continued to visit her, and also sent for Indians from different parts of this section, and speaking different tongues, in hopes of finding someone who could converse with her. Several came, each representing a different dialect, but none of them could understand her or make themselves understood." (For another comparable report, see Dittman 1961:11.) It is unfortunate that such records give no details about the language Juana María used or the languages of the visiting Indians. Other inhabitants of San Nicolas Island had been removed to the mainland some years earlier (cf. Hudson 1981:189-90), but there are no reports concerning their language.

Our only information about the Nicoleño language spoken by Juana María is in two secondary reports first published in the early 1880s. Thompson and West (1961:45-46), for example, write: "Hundreds flocked to Nidever's house. Among others came Fathers Gonzales, Sanchez, and Jimeno. Though familiar with all the dialects of the coast, not a word of her language could they understand. Indians from Santa Ynez, Los Angeles, and other places were brought, with no better success: not one of them understood a word of her language.... It was but a short time before her death that they succeeded in making her understand their desire to have some words of her own language. The following are about all that were learned of it: A hide she called

'tocah;' man, 'nache;' the sky, 'toygwah;' the body, 'puoochay.'"

Emma Hardacre's romantic "Eighteen Years Alone: A Tale of the Pacific" presents a remarkably similar account (1880:663; reprinted with slight changes in Heizer and Elsasser 1961). "A few days after her arrival, Father Antonio Jimeño sent for Indians from the missions of San Fernando and Santa Ynez, in hope of finding someone who could converse with the islander. At that time there were Indians living in Los Angelos county, belonging to the Pepimaros, who, it was said, had in former years communication with the San Nicolas Indians. But neither these, nor those from San Buena Ventura, or Santa Barbara, could understand her, or make themselves understood...Beyond a few words, nothing was ever known of her tongue. A hide she called to-co (to-kay'); a man, nache (nah'-chey); the sky, tegua (tay´-gwah); the body, pínche (pin-oo-chey)." (The meaning of the variable italics here is unknown. The words are presented here exactly as printed, except that in the parenthesized version of the third word the accent is over the y of the original.) Thompson and West, and Hardacre provide no information about their sources of information concerning the visiting Indians or Juana María's four words. J. P. Harrington (Hudson 1981:188-89) learned from Mrs. Hardacre that these accounts were based on interviews with the founders of the Santa Barbara Society of Natural History, who had spoken with Nidever and Dittman and visited Juana María's home on the island. However, I have found no account of who wrote down the four Nicoleño words, or under what circumstances they were spoken.

We do not know which Mission Indians attempted to communicate with Juana María. Probably none of the nineteenth-century writers whose accounts survive were aware that the Indians of the coast of southern California spoke languages from three very different linguistic families: those from present-day Malibu north spoke Chumash languages, those between Malibu and present-day Oceanside spoke languages from the Takic branch of the Uto-Aztecan family, and those from Oceanside south spoke Yuman languages. It is most unlikely that all these groups were represented among those sent for by Father Jimeño and his colleagues. Almost certainly most of the Indians summoned were speakers of different Chumash languages: Ineseño, Barbareño, and Ventureño Chumash were spoken by Indians around Missions Santa Ynez, Santa Barbara, and San Buenaventura and, indeed, many Chumash speakers lived in the area of Mission San Fernando (Sally McLendon and John Johnson, pers. comm.); speakers of Cruzeño (Island) Chumash were also probably available. Presumably, however, there were Takic speakers among those summoned, most likely speakers of Fernandeño or Gabrielino from around Mission San Fernando or from the Los Angeles area. Hardacre's reference to "Pipimaros" (using a word that in Gabrielino (pepii'mar) can refer specifically to a Catalina Islander or sometimes more generally to any Gabrielino or Fernandeño) certainly suggests that some Takic speakers must have heard the Lone Woman's speech. This is confirmed by Harrington's early twentieth century consultants, who specifically claimed that the woman heard but could not understand Fernandeño (Hudson 1980:110, 1981:194). Some of the same consultants reported to Harrington that "the people of San Nicolas Island...came originally from Santa Catalina Island. These people spoke the language of the Gabrielinos" (Hudson 1978:27); Harrington also was told that one "Fernandino" speaker "conversed with her freely" (Hudson 1978:25, 1981:194). Given all the other reports that no one understood even a word of the woman's speech, however, Hudson (1981:194) reasonably concludes that this claim is dubious.

Alfred L. Kroeber (1907:153), in the first linguistic discussion of Nicoleño, notes that one need not assume that Nicoleño was incomprehensible to all Takic speakers: "The statement that Indians from Los Angeles and other places, and fathers familiar with all the dialects of the coast, could not understand a word of this woman's language, has the appearance of an overstatement. It must be remembered that she was brought to Santa Barbara, which is in Chumash territory, and that there is no evidence that anyone conversant with Luiseño interviewed her." (Hudson interprets Kroeber as saying "that there is no evidence that anyone conversant with a Shoshonean language ever interviewed her" (1981:193), but this also seems like an overstatement, since Kroeber only mentions Luiseño, without discounting the possibility that she might have spoken with a Gabrielino or Fernandeño, or indeed any other Takic speaker.) Based on the four words cited by Thompson and West, and Hardacre, Kroeber identifies Nicoleño definitely as "Shoshonean" (1907:153), a now outdated term referring to four or five Northern Uto-Aztecan groups (Southern California Shoshonean (i.e., Takic), Plateau Shoshonean (Numic), Pueblo Shoshonean (Hopi), Kern River Shoshonean (Tübatulabal), and the poorly documented Giamina (Kroeber 1907:126-28)). However, his phrasing certainly suggests that he had a Takic identification in mind: "The place of the San Nicolas island dialect in the general classification of the Shoshonean family cannot, however, be determined from this scanty material, especially as the spelling is English and there is no evidence that the four words are free from errors of typography or copying. It is not impossible that the dialect was fairly close to Gabrielino or Luiseño, or, on the other hand, that it was much differentiated from all others."

Kroeber specifically cites one Nicoleño word ('sky') as given by Thompson and West above; similarly, Harrington discusses these versions of the words in his fieldnotes (unpublished, n.d.), and Hudson gives them also (1978:27). None of these scholars acknowledges the versions reported by Hardacre, though certainly Harrington and Hudson, at least, were certainly aware of them. I will continue the tradition of preferring the Thompson and West spellings, and will discuss below some reasons why the spellings presented by Hardacre are less accurate. (One reason for possible inaccuracy in Hardacre's published account is suggested in Harrington's interview with Mrs. Hardacre (Hudson 1981:189) — her account was rushed into print by *Scribner's*

Monthly, perhaps in a form different from that she had submitted.)

A completely different theory of the Lone Woman's origins is proposed by Daily (1989), who suggests that "the Lone Woman of San Nicolas Island may have been an Indian from the north, and not a native Nicoleño" (1989:41), citing skeptical remarks about the woman's origins in Emma Hardacre's diary, various connections between San Nicolas Island and the sea otter trade, and an observation that the wild dogs on the island may have represented an Alaskan breed. It does not seem to me that the issues Daily raises bear on the Lone Woman's origins, and her discussion of Juana María's language does nothing to call Kroeber's conclusions into question. Daily (1989:40) repeats Heizer and Elsasser's claim (1961:4) that "there is considerable confusion on the meaning ascribed to the four words." I cannot understand these claims of "confusion" of "meaning," since to my knowledge no one except myself (as I report in the next section) has suggested that any of the meanings ascribed to these words might be in error. Perhaps both statements refer to confusion only concerning the linguistic identification of the words rather than about their meaning, although even here "confusion" seems too strong a term. Daily presents no new evidence regarding the identification of the words, though she does report (not surprisingly) that "a search for familiarity between Juana Maria's words and various northwest languages [conducted by Michael Krauss and Jeff Leer; Daily 1989:65] has failed to find any correspondence. Aleut, Koniag, Eyak, Tlingit, Haida, Yupiak, and Inupiaq languages have been examined, thus far without result" (1989:40). I will thus continue to use the tern "Nicoleño" for the language spoken by Juana María, the four surviving words of which I will show can safely be identified as Takic based upon their close similarity to related words in other Takic languages.

The texts of the songs supposedly sung by Juana María, collected by J. P. Harrington from speakers who had learned them from others who had heard Juana María first hand, are presented and discussed by Hudson (1978:24-25, 1981:190-92). Unfortunately, these provide less evidence that helps to identify the language, though they are consistent with southern California Indian music.

The methodology of comparative linguistics was used to provide the results presented in the next section and the following discussion. I compared the Nicoleño data with words in other Uto-Aztecan languages.

RESULTS

I discuss below each of the four Nicoleño words recorded from Juana María and the two Nicoleño song texts.

Four Words of Nicoleño

Table 1 presents once more the four Nicoleño words recorded from the Lone Woman with their English definitions, as spelled both by Thompson and West (1961) and by Hardacre (1880). None of these Nicoleño words is exactly

Table 1. Two versions of four words in Nicoleño.

English Meaning	Tompson and West (1961)	Hardacre (1880)
'man'	nache	nache (nah'-chey)
'sky'	toy gwah	te-gua (tay'-gwah)
'hide'	tocah	to-co (to-kay')
'body'	puoo-chay	pinche (pin-oo-chey)

like the corresponding word in local languages, but each can be argued to show clear Takic connections, with most apparent similarity (rather surprisingly) to the Cupeño language of inland San Diego County. Kroeber's negative comments regarding these spellings (quoted above) are entirely appropriate, as I will show below; I believe (as did Kroeber and Harrington, though without acknowledging or defending their assumption) that Thompson and West's spelling is more accurate than Hardacre's (despite Hardacre's attempt to represent pronunciation), and I will use it as my primary source in the discussion below, where I consider each of the four words in turn, following an introduction to the Takic languages and the sources used for comparison.

The languages to which I will compare Juana María's Nicoleño words are seven Takic languages of southern California. Takic is a major branch of the large Uto-Aztecan family of American Indian languages, which I consider to have three component subbranches, Cupan, Gabrielino-Fernandeño, and Serrano-Kitanemuk. Cupan has two subgroups, each with two languages, Luiseño-Juaneño and Cupeño-Cahuilla. Gabrielino-Fernandeño and Serrano-Kitanemuk each consist of two languages (or perhaps, in the case of Gabrielino-Fernandeño, dialects). However, the position of the Gabrielino-Fernandeño group is not well accepted — it may be a third coordinate branch of Takic, as I suggest here (following Kroeber 1907:99-101, 1925:577), it may form an additional subgroup within Cupan (Bright 1974), or it may be coordinate with the languages called Cupan above, forming a second Cupan-Gabrielino division within Takic coordinate with Serrano-Kitanemuk.

My lexical sources for these languages are as follows: Luiseño (Bright 1968), Juaneño (Bright, unpublished, 1994), Cupeño (J. Hill and Nolasquez (eds.) 1973), Cahuilla (Seiler and Hioki 1979; Sauvel and Munro 1981), Gabrielino (Munro et al. in progress, unpublished), Serrano (K. Hill, unpublished, 1988), and Kitanemuk (Anderton, unpublished, 1988). Additional grammatical sources include Hyde (1971) for Luiseño, Sauvel and Munro (1981) for Cahuilla, and K. Hill (unpublished, 1967) for Serrano. Fernandeño (thought to be a dialect of Gabrielino) is poorly documented, and not considered further here. I cite Luiseño, Juaneño, Cupeño, Cahuilla, and Gabrielino words in practical orthography, marking only non-initial stress. (Luiseño words from Bright (1968) appear in an updated version of the orthography of Hyde (1971)); words from Seiler and Hioki (1979) are in the orthography of Sauvel and Munro (1981).) I cite Kitanemuk and Serrano words as in my sources. For broader Uto-Aztecan comparisons, I occasionally refer to cognate sets of related words from Miller (1967).

"Nache" 'man'

This word illustrates a fundamental problem with any comparison of this sort — we have a good idea what "n" means (an alveolar or dental nasal stop, much like n in English, most likely), but what does "ch" mean? Although Kroeber calls this an "English" spelling, there is little evidence that his is an accurate characterization: all we can be sure of is that these are not consistent phonetic transcriptions. The sound of ch in English church (alveopalatal affricate) or chorus (velar stop) is different from that of ch in French chat (alveopalatal fricative) or ch in German ach (velar fricative); in Spanish, the pronunciation of ch varies between dialects. So "ch" in this word might indicate the sound in the writer's native language, but it just as easily might indicate a different sound that the writer had no other convenient way to represent.

This word seems easy to relate to Takic sources such as Luiseño and Juaneño *naxánmal* 'old man'; Cupeño *naxánish* 'man'; Cahuilla *naxanish* 'man', *naxaash* 'young man'. The *na*- is certainly comparable, and the *-ch*- probably represents the [x] sound found following this sequence in all the cognate words. Thus, here "*ch*" seems to indicate the sound of the voiceless velar fricative [x], as in German *ch* or Spanish *j*. So this word appears to include the same *nax* sequence that appears in each of the suggested cognates.

Harrington came to the same conclusion, comparing this word to the two Cahuilla words cited above. (For Harrington's analysis, I cite the Smithsonian microfilm of Harrington's notes (unpublished, n.d.)). Kroeber does not provide specific discussion of cognates to the Nicoleño words

The *nax* 'man' stem appears only in Cupan, apparently — there are no similar words for 'man' in Gabrielino, Serrano, or Kitanemuk, and Miller (1967) does not list any such general Uto-Aztecan form. The Nicoleño word is clearly closest to the Cupeño-Cahuilla forms, especially Cahuilla 'young man': the main difference is that the Cahuilla form includes a final absolutive (noun ending) *-sh*. However, we cannot tell from this form whether its final vowel was [e] or [i], a problem that recurs with 'body' (as discussed below).

"Toygwah" 'sky'

This is also a clear Takic cognate (the only word of the four specifically named by Kroeber), with a number of potential cognate words to which it can be compared, including Luiseño *tukva* 'night' and *tuupash* 'sky', Juaneño *tukav* 'yesterday' and *tuukmonga* 'night', Cupeño *tukva'ash* 'sky', Cahuilla *tukvash* 'sky', Gabrielino *tokúupar* 'sky', Serrano *to:k* 'at night' and *tokohpcz* 'sky', and Kitanemuk *tukuhpač* 'sky' and *tuka* 'at night'.

The original word for 'sky' in these languages appears to derive from a word for 'dark' or 'night' of the form *tuku*, with the addition of *-pa-* plus an absolutive (noun ending). (Miller (1967) reconstructs **tuku* for 'sky', based on

cognates throughout Northern Uto-Aztecan; *tuk 'night' is an even more well justified stem.). In some languages, such as Luiseño, the k was completely lenited (pronounced in a more lax, less precise fashion); in others, such as Cupeño and Cahuilla, the vowel between the k and the p was lost, yielding a kv sequence. Nicoleño "toygwah" may reflect this whole form (minus the absolutive), if the recorded "gw" corresponds to the Cupan kv. The writer's use of "g" rather than k in this word may indicate that the sound was pronounced with more lenition than in most well-documented Takic languages, or perhaps with less aspiration than English k. If this word was pronounced with a v, like the other Takic words, this sound must have been heard as a "w". The first Nicoleño vowel is "oy" rather than the original u preserved in most forms; perhaps a high glide transition to the palatal k was added after the rounded vowel. (The o in the first syllable of the Gabrielino word could also reflect etymological u, since underlying Gabrielino u and o are neutralized when short and unstressed.)

Once again, the Nicoleño looks most similar to the Cupeño-Cahuilla forms; again, it lacks a final absolutive ending.

"Tocah" 'hide'

It seems most likely that the "c" of this word represents a k sound, and I have not found any similar words with other sounds that might be written "c", such as s, sh, or ch.

Nouns meaning 'hide' do not seem to be directly comparable; rather, this word is related to words for 'skin', 'flesh', 'muscle', or 'meat'. The words to be compared to the Nicoleño are Luiseño -tuká 'muscle', Cupeño -tuk'a 'skin', Cahuilla -tuk'u 'flesh', Gabrielino -tuuken 'meat' (-n is an ending used on Gabrielino possessed nouns), Kitanemuk -toko 'skin', and Serrano tokoč 'flesh'. (Miller (1967) reconstructs *tuhku for 'meat, body, flesh'. Bright's short vocabulary (unpublished, 1994) suggests no Juaneño cognates.)

All of the words cited are very similar in sound and meaning to the Nicoleño. The Luiseño and Cupeño words seem most similar in form, since they end in *a*; the Cupeño and Kitanemuk words seem most similar semantically, since they mean 'skin'. Thus, the Cupeño word appears most similar on both counts. (In many forms of the Luiseño word, the first *u* is deleted, as exemplified below.)

There is a grammatical oddity about all the Nicoleño words discussed so far. As noted for 'man' and 'sky', these words do not include the final absolutive ending found in the other Takic words cited. Absolutives are consonantal endings that appear on nouns uttered in isolation or used in various grammatical contexts (such as sentence subjects). These endings do not appear on nouns with certain other affixes, such as possessive prefixes. (The hyphens before most of the cognates cited in this section indicate that they must be used with a preceding possessive prefix, like most Takic words referring to parts of the body; the Serrano form is given with an absolutive ending.) Generally, then, a noun will have either an absolutive or a possessive prefix: not both, but also not neither. (This is an oversimplification, of

course. There are other affixes that generally do not co-occur with absolutives, such as postpositional endings, and in Cahuilla certain types of noun stem need no possessive prefix with a third-person singular possessor. Also, in each language there are some nouns that do not have absolutive endings.) Why, then, did the Lone Woman use no absolutives on words like 'man' and 'sky', and why did she use 'hide' without a possessive prefix? It surely cannot be the case that those who heard her words knew enough of the grammar of this completely unfamiliar language to write down stem forms of her utterances, with the grammatical affixes eliminated. Perhaps Nicoleño speakers had reanalyzed the inalienably possessed word 'skin' as an ordinary noun referring to an animal hide used as a wrap, so it was treated as a noun that did not require a possessive prefix, and thus, like the words for 'man' and 'sky', it simply lacks an absolutive. (Luiseño has a noun that looks exactly like 'muscle' would look in absolute form, tukát 'willow bast'. Perhaps this word is connected with the unpossessed Nicoleño word.) Intriguingly, however, Juana María's fourth word does contain a grammatical affix.

"Puoo-chay" 'body'

This word is the most puzzling of the four. It seems immediately likely that the "pu" at the beginning of the word is a third-person singular possessive prefix, since possessive prefixes (as just noted) are virtually always used on inalienably possessed words (like those for body parts). If this word for 'body' was used by the speaker about some third person's body (neither hers nor her immediate hearer's), then a prefix of just this shape would be expected in several of the languages: the usual form of the Luiseño third-person singular possessive prefix is pu-, that of the Juaneño prefix is po-, and that of the Cupeño prefix is pe-. In many languages, the third-person singular prefixes are different: Cahuilla he- (or zero) and Gabrielino, Serrano, and Kitanemuk 'a-look very different. (However, each language does have some third-person p-vowel prefixes used in other grammatical contexts.)

We have seen already that the "ch" in Nicoleño 'man' probably represents the voiceless velar fricative [x], so it would be logical to assume that it represents the same sound in this word, but such an interpretation does not yield satisfactory results - though many languages have words for 'body' that contain an x, such as Luiseño -taaxaw or Cupeño -taxwi, all Takic words for 'body' contain a t sound absent in the Nicoleño word. Harrington asks (unpublished, Fr. 67 (1)), "Why not take the ch to be hard?", i.e., representing the same [k] sound that it does in English chorus, suggesting a comparison with Luiseño pútka 'his muscle', possessive puplus the same unstressed possessed stem -tuka (with u deleted) that we compared to Nicoleño 'hide'. (The plural possessed form reveals the missing vowel, e.g., in *pumtuká* 'their muscles'.) While this comparison is possible, it does not explain the lack of t and the strange vowel sequence "uoo" in the Nicoleño form. Also, it is highly unlikely that two

such different Nicoleño words would both be related to the same Luiseño word.

Given the dissimilarity of the Takic words for 'body' to the Nicoleño word, I will suggest, rather, a comparison with a word like Luiseño *pówki* or *pówke* 'its wing'. The Nicoleño word looks remarkably appropriate: "*uoo*" seems like a plausible way for someone to try to represent a diphthong like *ow*, "*ch*" may represent *k* (as Harrington suggests), and "*ay*" is certainly the normal English spelling of the [e] sound.

The semantics are of course more problematic, and one would like to know more about the way the translation was obtained. It's easy to imagine that if the Lone Woman was pointing to a bird's wing and giving the word for that, observers might have supposed she was indicating its body. (All early accounts suggest that birds were very important to her — but we have, as noted above, no information whatever concerning the context from which the meanings of Juana María's four words were deduced. Although she is reported to have been proficient in sign language, it is reasonable to suppose that observers might not have understood the meanings of her words precisely.) The fact that the word shows up with a third-person possessive prefix (meaning 'his, her, its') seems to support the idea that the word does not mean 'body'. It is reasonable for a speaker of a language that requires specification of a possessor for all body parts to point to a part of an animal that her own body lacks and say, for example, 'its wing' — but if she was demonstrating 'body', surely she would point to her own body and say 'my body', or at the hearer's, and say 'your body'.

Other Takic languages have similar words: Juaneño -awk 'wing'; Cupeño -wik'i 'flight feather'; Cahuilla -wak'a 'wing', wikily 'feather'; Gabrielino -wooken 'wing'; perhaps Kitanemuk wakpit 'foreshaft of arrow'. (I have not found a Serrano cognate. This seems to be a purely Takic root; Miller (1967) does not list it.)

It is harder in this case to evaluate which word is most similar to the Nicoleño: if similarity of prefix is important, only Luiseño, Juaneño, and Cupeño should be considered, and the lack of a final vowel in Juaneño makes that word less similar than either the Luiseño or the Cupeño.

Some Preliminary Conclusions Concerning the Nicoleño Song Texts

Hudson (1978, 1981) provides an extended discussion of two different songs (each in two versions) that Harrington reported were sung by Juana María. It is hard to identify the vocabulary in these songs with words from any Takic language — although the words of the songs look complex, and speakers early in this century reported translations to Harrington, it is probable that most of the words are simply "vocables" (what are known popularly as "nonsense words"), and that speakers presented the feelings that the song were supposed to express as translations.

The first song is tokitoki / yamymna / tokitoki / weleleshkima / yaamymina / weleleshkima / yaamymina / tokitoki (I write the line divisions of the original with "/"),

which we are told means "I leave contented, because I see the day when I want to get out of this island" (Hudson 1981:190-91). (The fact that Harrington's consultants were able to translate the song is an immediate indication that its words could not have been in an unrecognizable language.) A second version of the same song is given as *t+kit+ki / yaham+m+na t+kit+ki (repeated three times) / t+kit+ki weleleshkima / nishuyaham+m+na / t+kit+ki (Hudson 1981:191). (I have not reproduced breve (short) marks over a few of the vowels in the songs.)

Formally, this song looks appropriately Takic. Long words are common in these languages, and the CVCV-CVCV reduplicated pattern seen in words like *tokitoki* is common throughout this linguistic group. This form of reduplication often surfaces with the first vowel in the second CVCV element deleted: possibly the strange form *yamymna* illustrates such a derivation.

In terms of vocabulary, however, there are few Takic connections. I examined these words to see if they bore any resemblance to Gabrielino, since Nicoleño had been claimed to be most closely related to that language, and to Luiseño and Cupeño, the two Cupan languages to which the four Nicoleño words bear greatest resemblance.

The word weleleshkima contains an l, a sound that occurs in the Gabrielino corpus only in words identified as borrowings from Luiseño; the i that replaces o in the second version of this song is also not found in Gabrielino. A few words do exhibit parallels to Gabrielino: yamíinok means 'run, flow' in Gabrielino, and mii/myaa means 'go'; these words could well be part of yaamymina, and the translation leads us to expect such a concept to be included. The Gabrielino word for 'my heart' is *neshúun*, which might be part of nishuyaham+m+na: throughout Takic, 'my heart is good' is an idiomatic way to say 'I'm happy'. However, there are few resemblances between words in this song and other Gabrielino words that one would expect to see according to the translation, such as huutok 'see', taamet 'day', tehóovet 'good', kavúukar 'island', paríinok 'leave', 'wiishmenok 'want'.

Luiseño has *l* and sounds parallel to all the other sounds in the song text except, again, for *i*. Luiseño vocabulary parallels include *mon*- 'to go' and *nu\$úun* 'my heart'. (I have substituted the \$ for the slashed \$s\$ used in Luiseño and Cupeño practical orthography.) But Luiseño words that are missing from the song, if it has the meaning it is claimed to, include *loovi*- 'be good', *toow*- 'to see', *timét* 'day', *ngee*- 'to leave', and *ma'ma*- 'to want' or *-vichu* 'want to'.

Like Luiseño, Cupeño has all the sounds used in these songs except *i*, and Cupeño's schwa sound might have been confused with *i*. Vocabulary parallels in Cupeño include *ya'a* 'run' and *ne\$úun* 'my heart'; missing words include *achi'a* 'good', *tewa* 'see', *tamit* 'day', *ngiye* 'leave', and *-vichu* 'want to'.

This song may have been sung by a number of different southern California groups, incorporating elements from a number of different languages. 'Go' and 'my heart' seem

to reflect Takic. The repeated line weleleshkima recalls pelelelelele 'a cry or chant used (by women) to cheer people on', a word from the Mojave language of the Yuman family (Munro et al. 1992). Mojave songs (cf. Kroeber 1925: ch. 51) were influential throughout southern California and nearby culture areas (for example, Hinton (1984:111-13) discusses the use of songs with Mojave words by the Havasupai, another Yuman group, and Laird (1976: 16ff) describes similar songs sung by the Chemehuevi, a member of the Numic branch of Uto-Aztecan). In fact, Mojave also has a word for 'go' that is similar to the yamymna line of this song: (vi) iyamk 'to go around (this way)' — but the Yuman style of reduplication is very different from the Takic (Munro 1979); the form of this line does not look Mojave. As Hudson (1981:8191) describes, this song also has Chumash connections.

Juana María's second song (Hudson 1981:191) is hi(i)hihiyo'oo (repeated two times) / kachnaualanalna'al (with reported swinging in the dance as the song was sung) / hihihiyo'oo. Harrington's consultant did not understand the words of this song, but said he understood its meaning. Such American Indian "songs without words" are common (cf. Hinton 1984:107-13). In some cases, such songs once were understandable, but "the spoken language has changed so much that the older sung words are no longer recognizable" (Hinton 1984:107). In other cases, the words are derived from other languages (as with the Mojave word apparently incorporated into the first song discussed above). In still others, "there is something about the meaning...which has nothing to do with the words of the text", perhaps in some cases because the songs "contain spirit language" (Hinton 1984:107-08). Harrington reported the meaning of the song above as "I continue moving, swaying of the dance, I continue" (Hudson 1978:24; 1981:192); Hudson notes additionally that Gary Tegler, who catalogued Harrington's Chumash recordings, gives the meaning as "from here I go over to my place; I take steps and he who takes steps moves" (Hudson 1981:192). A second version of the same song is ihu'ihiyuhu (repeated two times) / hachunuwa la nal na'al /ihi'ihiyu. There seem to be no clear connections with Takic vocabulary in these songs: no known Takic word for 'I', 'continue', 'move', 'sway', 'dance', 'here', 'go', or 'step' (the main nonidiomatic chunks of meaning in these two translations) seems similar to these words. Perhaps the words of this song are Chumash (as suggested by Tegler's observation), or they may simply be vocables, "nonsense" words or syllables added to a song by speakers to fill out the metric line euphonically (as with English la la la or the like). (In Havasupai, Hinton claims, "songs without words can be seen as embodying the aesthetic ideal for sound" (Hinton 1984: 39).) Further comparison of this second song and the apparently more meaningful first one above with other examples of southern California musical texts may be productive.

DISCUSSION

In this section I return to the four recorded words of Nicoleño, since it seem unlikely that the songs just discussed will, as Hudson hoped, "expand this number [of Nicoleño vocabulary words] greatly" (Hudson 1978:27). First, I discuss the spellings of the Nicoleño words presented by Hardacre, and then I summarize my conclusions regarding the relationship of Nicoleño to the other Takic languages.

As I noted, I consider the Thompson and West spellings of the Nicoleño words to be (apparently) more reliable. It is only these spellings that were quoted and discussed by Kroeber and Harrington. These earlier scholars did not, however, give a reason for this preference, although surely Harrington, at least, realized the existence of Hardacre's variant report, since he had interviewed her (Hudson 1981). In this section, I will present some reasons why Hardacre's spellings appear questionable. (The problems I discuss here cannot be ascribed to Heizer and Elsasser's editing, but are also found in Hardacre's original. The only difference between it and the 1961 reprint is that in that version the italics (reproduced as underlining) on the "oo" of the parenthesized version of the fourth word are missing.) I will begin by discussing internal inconsistencies in these forms, in an effort to avoid the possible circularity of comparing Hardacre's forms to the Takic cognates that I have inferred from Thompson and West's recordings. Once I have established that Hardacre's forms have serious problems, though, I will compare them to the presumed cognates discussed above. However, I will show that in at least one case ('body/ wing') Hardacre's spelling may provide useful additional information about the Nicoleño form.

Initially, Hardacre's report might seem superior: in addition to "spellings," she gives a parenthesized representation of pronunciation, with stress marked. However, it is not clear how this should be interpreted. The spellings are not some official Nicoleño orthography, but must be someone's best attempt to set down a view of the sounds of the language (possibly, as we will see, with overlaid typographical errors). Thus, it seems almost impossible that the same person who recorded the words also provided the pronunciation guides, since the first person must have felt that his recordings were a correct way to write the words (or else why not provide only the parenthesized pronunciations?). If the first recording was by an observer who actually heard Juana María speak, or heard an oral report of this (to which document Hardacre somehow had access), then the parenthesized additions must have been made later, either by Hardacre or by her editors at *Scribner's Monthly*. The parenthesized pronunciations look like the work of the sort of English speakers untrained in phonetics who believe that ey, ay, ah, and oo are helpful ways to represent vowel pronunciations.

A comparison of Hardacre's spellings and their parenthesized pronunciations shows almost certainly that the spellings must have been altered, perhaps at several times in their history. First, it is almost impossible to assume that "to-kay" (presumably representing a pronunciation like

[toke]) would be assumed to be the correct pronunciation of a word written "toco" — almost certainly, "to-kay" must represent the pronunciation of a word spelled more like "toca". (I reject as extremely unlikely the idea that "to-kay" represents [tokay] and an original spelling like "toci": "ay" is certainly the conventional way to represent the sound [e] for English speakers. The English long i sound is seldom written after the letter c, and it seems most unlikely any earlier recorder would have chosen the spelling "toci" to represent the pronunciation [tosay].) Next, why would "pin-oo*chey*" (presumably representing something like [pinuc(e]) be the assumed pronunciation of a word spelled "pinche"? Almost certainly, a misinterpretation of the original occurred, leading to the omission of a vowel sound from a spelling like "pinuche". "Pinooche" is another possibility, certainly, but it seems less likely that two letters could be omitted typographically than one. Also, as I suggest below, Hardacre's recordings seem to show the influence of Spanish orthography, which would make the spelling "oo" less likely. (Note that here we have assumed that the author of the parentheses used both "ay" in 'hide' and "ey" in 'body' (as well as in 'man') to represent the same sound, [e]. This is another inconsistency, though a less confusing one, supporting the idea that this author had no special background in phonetics.)

At this point we can look back at the Thompson and West versions of the words. Their version of 'hide', "tocah," is consistent with the idea that Hardacre's "toco" is a misprint for an original spelling "toca." The original recording consulted by Hardacre must certainly have been handwritten, as may have been the manuscript submitted by Hardacre to Scribner's. Although o and a are not similar in most typefaces, they are easily confused in many people's handwriting. But the confusion of "toca" and "toco" must have occurred after the parenthesized pronunciations were added, since "tokay" represents an interpretation of "toca," not "toco." The evidence of the parenthesized representation of the pronunciation of 'hide' shows conclusively that the Thompson and West spelling is more accurate than Hardacre's in this case.

Thompson and West's spelling of 'body' (or, as I have argued, 'wing'), "puoochay", is very different even from the amended version of Hardacre's, "pinuche." It is certainly easy for a handwritten u to be confused with a handwritten n, and even possible that a handwritten u could be taken for u. In this case, unlike the last, however, there is no internal confirmation that the Thompson and West spelling is superior; our only evidence is that of the presumed cognates.

With this in mind, I considered possible cognates beginning with nu or with pinu with any meaning that might be confused with 'body'. I found no possibilities beginning with a sequence like nu in any language, but Kitanemuk ptna and Serrano $p\ddot{u}n$, both meaning 'naked', seem worth considering. (Kitanemuk t is a high back unrounded vowel that certainly might be confused with English short i; Serrano \ddot{u} is a pharyngealized and somewhat retroflexed version of the same vowel.) However, there appear to be no cognates to these words in other Takic branches, and we have not

previously seen any close relationship between Nicoleño and these two languages. Further, a connection with these words does not explain the final syllable of the Nicoleño words. Since a plausible etymology (from 'its wing') with connections throughout Takic is available if the word contains u rather than n, I assume that Thompson and West's version is more accurate in this regard. This means that Hardacre's original version may have been something like "puuche" — admittedly an awkward spelling, which a later reader could well have assumed to be incorrect.

We have assumed so far that the "i" of Hardacre's form was simply inserted by a copyist, but there is another less ad hoc explanation that is still consistent with Thompson and West's spelling. While English u can certainly represent [u], it can also represent [yu] — so although the initial pu of Thompson and West's form might represent [pu], as we have assumed, it could just as easily represent [pyu], as in *pure*. We assumed earlier that Hardacre's "pin[u]che" reflected a misreading of "puuche," but it could just as easily reflect "*piuuche*, " suggesting a first syllable like [pyuw]. While this is less similar to the Luiseño 'its wing' we compared the Nicoleño too earlier, it is a plausible Takic form. In Gabrielino, for example, the stem for 'mother' is -ok, combining with the third-person singular possessive prefix 'a- to give 'aawk 'his mother'. When the first-person singular possessive prefix ne-combines with this stem, the result is nyook 'my mother'. Thus, a possessive prefix like pe-(like the comparable Cupeño prefix) could become py- before a vowel. If this analysis is correct, we have additional grammatical information about how Nicoleño possessive prefixes interacted with vowel-initial noun stems.

Several other points about Hardacre's version of Juana María's vocabulary remain to be discussed. If my analyses of the "ch"'s in Thompson and West's recordings of 'man' and 'body / wing' above are correct, one "ch" indicates [x] while the other indicates [k]. The coincidence that Hardacre's forms would both independently have been recorded with "ch" is indeed remarkable. Once more, though, the fact that both of these are indicated to have the pronunciation "ch" (presumably as in English church) again supports the notion that the parentheses were added later to Hardacre's version.

The final important difference, in 'sky', which Thompson and West represent as "toygwah", in contrast to Hardacre's "te-gua" or "tay-gwah," is the hardest of all to explain. Since the quite similar words for 'sky' in most other languages contain u, the Thompson and West version looks (once again) more plausible. (Only Serrano has a word with o, and Miller's cognates show u is the historical source of the first vowel in this case. This point is important, because in Luiseño some etymological *o's surface as e (as is well known; cf. e.g. Miller 1967:7).) I will consider two possible explanations for the discrepancy, neither of which is fully satisfying.

One possibility is that the beginning of this word contained the diphthongal sequence [tui], which was heard by Thompson and West's recorder as [tuy] or [toy] (and

written "toy"), but heard by Hardacre's recorder as [twi]. Possibly the initial [tw] sequence was assumed to be simply an odd sort of [t], so the recorder represented [ti] as "te," with the e pronounced as in normal English spelling, a sequence later interpreted as representing the sound [te]. Again, Gabrielino shows that such alternations can occur in Takic — there are many words in Gabrielino in which either of two adjacent vowels may glide: e.g., the Gabrielino 'price' is recorded as both -hwiit and -huuyt.

The second possibility is more complicated. We have seen already (with regard to 'hide') that confusions of a and o can occur, so "taygwah" seems like a reasonable misinterpretation of handwritten "toygwah." And indeed, this is exactly the form of Hardacre's pronunciation - but not of her spelling, which contains "e," not "ay," and "gua,", not "gwah". Both of the forms that appear in the spelling have a somewhat exotic Hispanic feel to them — in Spanish, as in normal linguistic transcription, "e" is the representation of what is often written "ay" in English, and "gua" is a typical Spanish way to represent the sound sequence [gwa]. We have also seen that the writer of Hardacre's version probably wrote a more Spanish *piuu* rather than the more English *pu-oo* at the beginning of 'body / wing'. It is disturbing, however, that in this one case it is Hardacre's pronunciation rather than her spelling that appears more accurate — we can assume that "toy" could have been misread as "tay" and then rewritten "te", but it's less clear how a sound like [toy] could have been originally written as "te". Perhaps following an initial misinterpretation of original "toygua" as "taygua", the spelling was changed from "taygua" to "tegua" after the pronunciation had been written down (incorrectly, as we assume) as "taygwah" by someone who noticed that "taygua" looked inconsistently Spanish-like. It is not clear how a decision could be made as to which of these two theories was more likely to be correct.

Unlike Thompson and West's, Hardacre's words also indicate stress. In three of the forms, this is in the parenthesized pronunciation, which we have seen in almost every case to be less accurate than the spelling. In one case, however, stress is marked on the first version, and there is no reason why the person who added the pronunciations might not have decided that stress marking that originally appeared on the spelling should more properly appear within parentheses, and have moved it accordingly. In 'man' and 'sky' stress is marked on exactly the same syllable as in all close cognates (those in which the second vowel of the proto-form is deleted), and if we interpret the marked accent on 'body / wing' as indicating first-syllable stress, that is probably expected too. (In the original Scribner's version of Hardacre's report, the parenthesized pronunciation of 'body / wing' has its oo portion italicized. This may indicate that the original piuuche we have hypothesized may have included a marked stress like *piúuche* or *piuúche*.) The marked second-syllable stress in 'hide' (a stem with only short vowels in all languages) correlates exactly with the comparable Luiseño form, and this pattern is sufficiently rare, occurring within Cupan proper only in Luiseño and Juaneño (Munro 1990), that it most likely is also correct. Thus, the marked stresses probably date from the original recording rather than being added by a copyist.

Despite the problems with Thompson and West's recordings, then, these appear more internally consistent and free from copying errors than Hardacre's, which validates Kroeber and Harrington's decision to cite only these. However, as we have seen, Hardacre's version of 'body / wing' may clarify the pronunciation of the Nicoleño form, and the marked stresses in her versions of the words (which probably appeared in the original data she consulted) help to confirm the classification of the language.

We can now summarize what we have concluded about the Nicoleño words recorded from Juana María, and examine our conclusions about the language.

The Nicoleño word for 'man' was either náxe or náxi. (We do not know what the final vowel was, and it may be that Nicoleño, like such Takic languages as Luiseño and Gabrielino, had a rule neutralizing unstressed non-low vowels — which means that this question may not be too important.) The Nicoleño word for 'sky' was tóykwa or perhaps twíkwa. The intervocalic kw in this word was lenited, and may have sounded more like [gw]. The Nicoleño word for 'hide' (presumably a treated skin used as a garment) was toká. Finally, the Nicoleño word for 'its wing' may have been pyúwke or pyúwki, or perhaps was púwke or púwki. If one of the first two forms is correct, Nicoleño may have had a third-person singular prefix whose shape was more like pe- or pi- (comparable to Cupeño pe-) than like pu- or po-(comparable to Luiseño pu- or Juaneño po-). If the second form is correct, the prefix might have been more like that of Luiseño or Juaneño.

This short vocabulary reveals nothing about some phonological features of the language, such as vowel length, though it does suggest that stress in Nicoleño was an unpredictable lexical feature (as it is today in all Takic languages except Cahuilla) most like that seen in Luiseño and Juaneño.. The Nicoleño words are not particularly similar to Serrano or Kitanemuk, and less similar in general to Gabrielino than to the Cupan languages, particularly Luiseño and Cupeño. This is, interestingly, consistent with Kroeber's observation that Juana María probably did not have the opportunity to converse with Luiseño speakers, who might well have been able to understand some of her speech — though there are certainly differences between the Luiseño and Cupeño forms and Juana María's.

According to the available documentation, then, Nicoleño, the language of Juana María, the last indigenous resident of San Nicolas Island, certainly belonged to the Takic branch of the Uto-Aztecan family of languages, and it seems most likely that the language belonged to the Cupan subgroup of Takic, perhaps to a subgroup within Cupan for which we have no other surviving documentation, since the language shows some similarity both to the Cupeño-Cahuilla subgroup of Cupan and to the Luiseño-Juaneño subgroup.

ACKNOWLEDGMENT

I am grateful to Dr. John Johnson of the Santa Barbara Museum of Natural History for stimulating my research on Nicoleño and making a number of references available to me.

LITERATURE CITED

- Bright, W. 1968. A Luiseño dictionary. University of California Publications in Linguistics 51.
- Bright, W. 1974. Three extinct American Indian languages of southern California. American Philosophical Society Year Book, pp. 573-74.
- Daily, M. 1989. The Lone Woman of San Nicolas Island: A new hypothesis on her origin. California History Spring-Summer 1989: 36-41 and 65.
- Dittman, C. 1961. Narrative of a seafaring life on the coast of California. Pages 5-11 *in* Heizer and Elsasser (eds.), Original accounts of the Lone Woman of San Nicolas Island. University of California Archaeological Survey 55. Department of Anthropology, University of California, Berkeley, CA.
- Hardacre, E. 1880. Eighteen years alone: A tale of the Pacific. Scribner's Monthly 20 (May-Oct. 1880):657-64.
 Reprinted in Heizer and Elsasser (eds.), Original accounts of the Lone Woman of San Nicolas Island. University of California Archaeological Survey 55. Department of Anthropology, University of California, Berkeley, CA.
- Heizer, R. F., and A. B. Elsasser (eds.). 1961. Original accounts of the Lone Woman of San Nicolas Island. University of California Archaeological Survey 55. Department of Anthropology, University of California, Berkeley, CA.
- Hill, J. H., and R. Nolasquez (eds.). 1973. Mulu'wetam: The First People. Malki Museum Press, Banning, CA.
- Hinton, L. 1984. Havasupai Songs: A Linguistic Perspective. Tübingen: Gunter Narr Verlag.
- Hudson, T. 1978. Some J. P. Harrington notes on the "Lone Woman" of San Nicolas. The Masterkey 52:23-28.
- Hudson, T. 1980. Additional Harrington notes on the "Lone Woman." The Masterkey 52:109-12.
- Hudson, T. 1981. Recently discovered accounts concerning the "Lone Woman" of San Nicolas Island. Journal of California and Great Basin Anthropology 3:187-99.
- Hyde, V. 1971. An introduction to the Luiseño language, R.W. Langacker (ed.) (with co-editors). Malki Museum Press. Banning, CA.
- Kroeber, A. L. 1907. Shoshonean dialects of California. University of California Publications in American Archaeology and Ethnology 4, 3.
- Kroeber, A. L. 1925. Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78.
- Laird, C. 1976. The Chemehuevis. Malki Museum Press. Banning, CA.
- Miller, W. R. 1967. Uto-Aztecan cognate sets. University of California Publications in Linguistics 48.

- Munro, P. 1979. Reduplication in Mojave and Yuman. *In* J. E. Redden (ed.): Proceedings of the 1978 Hokan-Yuman Languages Workshop, Occasional Papers on Linguistics: University of Southern Illinois, Carbondale.
- Munro, P. 1990. Stress and vowel length in Cupan absolute nominals. International Journal of American Linguistics 56:217-50.
- Munro, P, N. Brown, and J. G. Crawford. 1992. A Mojave dictionary. UCLA Occasional Papers in Linguistics 10.
- Nidever, G. 1961. The life and adventures of a pioneer of California since 1834. Pages 12-21 *in* Heizer and Elsasser (eds.), Original accounts of the Lone Woman of San Nicolas Island. University of California Archaeological Survey 55. Department of Anthropology, University of California, Berkeley, CA.
- Sauvel, K. S., and P. Munro. 1981. Chem'ivillu' (Let's speak Cahuilla). Malki Museum Press, Banning, CA and American Indian Studies Center, Los Angeles, CA.
- Seiler, H., and K. Hioki. 1979. Cahuilla Dictionary. Malki Museum Press. Banning, CA.
- Thompson [first name unknown] and West [first name unknown]. 1961. History of Santa Barbara County. Pages 37-46 *in* Heizer and Elsasser (eds.), Original accounts of

the Lone Woman of San Nicolas Island. University of California Archaeological Survey 55. Department of Anthropology, University of California, Berkeley, CA.

SOURCES OF UNPUBLISHED MATERIALS

- Anderton, A. 1988. The language of the Kitanemuks of California. UCLA Ph.D. dissertation.
- Bright, W. 1994. Preliminary Juaneño Vocabulary. Ms., University of Colorado, Boulder, CO.
- Munro, P. In Progress. Gabrielino Dictionary. [Based on J. P. Harrington's field notes with analytical input from G. Anderson and W. Bright.] Ms., University of California, Los Angeles, CA.
- Harrington, J. P. N.d. [Comments on Nicoleño data, analyzed with the assistance of Gabrielino consultant Adán Castillo.] Smithsonian Institution microfilm, Pt. 3, R1. 181, Fr. 56-58, 62-65, 67-68.
- Hill, K. C. 1967. A Grammar of the Serrano Language. UCLA Ph.D. dissertation.
- Hill, K. C. 1988. Serrano Dictionary. Ms., University of Arizona, AZ.