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<table>
<thead>
<tr>
<th>Articles</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>James L. Armogast</td>
<td>Comanche Narrative: Some General Remarks and a Selected Text</td>
</tr>
<tr>
<td>Yuwonne M. Hilbert</td>
<td>Noun and Verb in a Salishan Language</td>
</tr>
<tr>
<td>Kenneth J. Miner</td>
<td>Noun Stripping and Loose Incorporation in Zuni</td>
</tr>
<tr>
<td>David L. Shaull</td>
<td>The Position of Opata and Eudeve in Uto-Aztecan</td>
</tr>
<tr>
<td>Marie-Lucie Tantent</td>
<td>Morphophonemics of Nisga'a Plural Formation: A Step towards Proto-Tsimsian Reconstruction</td>
</tr>
<tr>
<td>Katherine Turner</td>
<td>Areal and Genetic Linguistic Affiliations of the Salinan</td>
</tr>
<tr>
<td>John E. McLaughlin</td>
<td>A Working Bibliography of the Languages of (Roughly) the Western United States ([-Athapaskan], [-Haida, Tsimsian, Makah])</td>
</tr>
<tr>
<td>Contents of Previous Volumes</td>
<td></td>
</tr>
</tbody>
</table>


Areal and Genetic Linguistic Affiliations of the Salinan

Katherine Turner
University of California, Berkeley

Students of American languages are well acquainted with the linguistic diversity of the Hokin stock, and there is dissatisfaction with currently available studies of its members. Reliable descriptions and internal reconstruction of individual families and isolates are needed for credibility of the view of a unified group. Included under the label 'Hokin' are the following: Karok, Palašimihan, Shasta, Yana, Pomoan, Wazho, Esselen, Salinan, Chumash, Yuman, Seri, Chontal (Tequêteatecan), Sothiaba–Tlapacoyan, and Jicacoa (Kroeber 1904, Dixon & Kroeber 1919, Sapir 1921). Since 1970 continuing exchanges among Hokinists have spurred further comparative Hokin studies beyond the binary comparison of vocabularies. Baas (1964) has demonstrated lexical similarities between Hokin and Penutian, Yukan, and Hituan, showing the need for areal studies as well.

In pre-contact times the Salinan language was spoken in the area of southern central California south of the present town of Monterey and north of Paso Robles. Further refinement of the area is still in progress (Gibson 1975, 1982); Robert L. Hoover’s continuing research at Mission San Antonio (CA-Net-100) is most promising, as well as the investigations of Chester King and Steven Craig of the mission registers.

The position of Salinan within the Hokin stock is uncertain, and it is presently considered an isolate. There are two dialects: Antonianño, spoken in the north; and Miguelaño, spoken in the south (Kroeber 1912, Mason 1912 & 1918, Shipley 1973, Gibson 1982). The Esselen, Soledad and Mutsum Coasthoan, Yokuts, and Chumash were their neighbors from north to south. There are no living speakers.

Classification of Salinan as a member of the Hokin stock (Sapir 1917, Dixon & Kroeber 1918) followed a preliminary period starting with Callarina (1848), during which classifications of the numerous languages of North America (and, specifically, California) were attempted (Lathem 1856, Catrachen 1877, Powell 1891, Dixon & Kroeber 1903, Kroeber 1910, Dixon & Kroeber 1916a & b, Dixon & Kroeber 1918).

In 1917 John Peabody Harrington (AA 19:134) wrote that Chumash and Yuman languages are genetically related, which, by inference, placed Salinan with the Hokin stock for the first time, since Dixon & Kroeber (1913b) had proposed that Chumash and Salinan be grouped together as Iskoman. All that appeared in the Harrington article was a brief paragraph with no justification or discussion.

Also in 1917, Edward Sapir published the first 202 cognate sets

Kawgo Working Papers in Linguistics, 1923, Volume 8/1, Pages 232-246
sets for HOKAN, including Salinan with Shasta-Achomawi, Chimariko, Karok, Yana, Pomo, Esselen, Yuman, Chumash, Seri, and Chontal. He wrote that 'Salinan and Chumash are at present of more doubtful inclusion than the others. I hope, however, to have helped to dispel this doubt by data presented in the course of the following pages' (1917:1-2). His Salinan data came from Kroebber (1904), and besides his frequent use of Salinan forms, he refers to Salinan specifically in his discussion of local suffixes (Chumash, Salinan and Yana use prepositions) and his reference to syncope of the second vowel of the stem. This was the first appearance of Proto-Hokan forms.

In 1919 Dixon and Kroebber accepted Salinan as part of Hokan on the basis of Harrington's and Sapir's statements and included Salinan forms in 10 of 60 cognate sets they presented for Washo's inclusion in Hokan. They also published Washo cognate sets prepared separately by Sapir, including 11 Salinan forms.

In 1920 Sapir published a ten-page article giving a comparative vocabulary of 114 items for HOKAN-Coahuiltecan languages, with 4 additional Chumash-Coahuiltecan forms (1920a). Salinan data is cited in footnotes to these sets, incorporating J. Alden Mason's Salinan data from his manuscript. Salinan appears in 8 footnotes.

The assumption of Salinan being a Hokan language is abundantly illustrated through Sapir's correspondence with J. Alden Mason and in two more papers published in 1920. In the correspondence of this period between Sapir and Mason, Mason sent Sapir a 'refined' phonetic list of Salinan forms that Sapir accepted as 'probably related to Yana' (July 26, 1916), and Sapir thanked him for the 'Salinan-Hokan cognates' (Aug. 25, 1916). Mason also commented on the vowel syncope phenomenon (sic) and gave examples of the verb 'to drink' icin', ecin, acin for illustration (July 26, 1916). Sapir's 1920 (b) article on Chimariko includes a comparison with pronominal segments in Salinan, assuming a genetic relationship.

In 1921 'A Supplementary Note on Salinan and Washo' Sapir added Salinan forms to numbered sets from the previous comparative article (1920a) and numbers 119-126 were added to the total comparative vocabulary, based on Mason's new Salinan data. Sapir states that 'Salinan is unmistakably Hokan in structural type and resemblances in morphology to Chimariko, Yana and other Hokan languages suggest themselves at every turn' (Ibid 68), and he gave 28 more sets based on 'a casual reading of Mason's paper' (Ibid 70) though they 'do not directly bear, for the present, on the Hokan relationship to the Coahuiltecan languages' (Ibid 70).

Sapir offered an explanation for Salinan's tardy inclusion in the Hokan stock. 'All in all, there can be no reasonable doubt that Salinan is a Hokan language, in all probability a more typical one than Yana. A somewhat involved morphology and the obscuring of a number of phonetic
laws had prevented its proper classification at the time the Hokan group was set up (Ibid 72). As well as Sapir’s final Hokan paper (1925), Salinan data has been used in more than 265 cognate sets with other Hokan languages, often questionably, and it was included in every article published after 1917 which examined the entire Hokin stock, as well as in many binary studies as supplementary forms.

Salinan has been subgrouped with Chumash as Iskoman (Dixon & Kroebbr 1913b), with Seri added (Sapir 1925), and there was a suggestion that it be examined in the light of Shasta data (Haas 1963). Possible ties with Seri have been dealt with by Bright (1956) and Haas (1964). Possible ties with Shasta are inferentially dealt with by Silver (1954). Chumash ties were generally assessed by Klar (1974).

In reviewing the evidence for Salinan’s inclusion in the Hokan stock, I conclude that if one accepts the evidence for a Hokan stock, one may as well accept Salinan’s inclusion in it. A closer look at Salinan’s ties with its geographically nearest Hokan neighbors, Chumash and Esselen shows that the evidence is equivocal regarding any distant genetic affiliations for Salinan. At present Salinan should continue to be considered an isolate.

Phonologically, Salinan and Proto-Chumash each have a two stop series, plain and glottalized, and this is the only feature only these two languages of the area share, e.g., Proto-Chumash shares a π with Takic, Mono and Hopi, 4 with Uto-Aztecan languages, and vowel harmony with Yokuts and Southern California Uto-Aztecan.

I examined the lexicons of all the languages in the area in a comparison with Salinan. The overwhelming number of look-alikes were between Salinan and Chumash: 67. It should be noted that these forms have not necessarily been used in published comparative work. 23 look-alikes were found between Salinan and Esselen. Salinan and Chumash share 38 look-alikes not found in the lexicons of the other languages of the area.

Salian and Uto-Aztecan languages had 25 look-alikes, 9 of them from just these two lexicons. Salinan and Costanoan languages share 16 look-alikes: 3 of them for these two only; Salinan and Yokuts 11, which also share 3 uniquely. The bar graph illustrates these numbers, and lexical sets of look-alikes involving Salinan and non-Hokan languages appear in the appendix.

Finding 67 look-alikes between Salinan and Chumash is relatively high. Finding as many as 23 look-alikes with Esselen may be more significant than the 25 found with Uto-Aztecan languages, since there are only about 300 Esselen words surviving. The remainder of the look-alikes are numerically insignificant.

The sets of shared forms between Salinan and Chumash fall into the following categories: body part terms, animals, birds, plants, kinship
terms, verbs, nouns, and modifiers. Sixteen of the Salinan forms have appeared in various Hokan cognate lists, including all six of the bird names, which could otherwise be argued for exclusion as wide-spread onomatopoeic forms (Turner 1975). In fact, bird names were the one category of words to which I gave only cursory attention, since previous studies and work in progress (Nichols) have studied onomatopoeic forms in detail, and since these forms cover a much wider geographical area than southern California.

Salian - Chumash forms

- In. kep 'to bathe'
- Bar. kep "
- Ven. kep "
- P. Cent. Chum. *kep " (root)
- Mig. kō'yē "
- Ant. kō'yayēk 'tirarle agua, means like bath

This verb has not been used in previously published cognate lists for Hokan or Iskoman. The Migueleño form is from Mason (1918) and is given in the infinitive. The corresponding form in Antomaño is from Harrington, the only form of this verb recorded in that dialect. The *tā? correspondence is regular. Most verbs in Salinan are prefixed with either k- or p-, which Mason (1918) labelled an intransitive-transitive distinction, and Sepir (1920c), a static-active. I favor the latter. So, this is either chance resemblance or a borrowing by Chumash.

- In. kla? 'to break off'
- Bar. kla? "
- Ven. kla? "broken in pieces"
- P. Cent. Chum. *kla? "
- Mig. la? 'broken'
- Ant. kla? "

Although 'broken' has not appeared on Hokan cognate lists, 'to break' has. In this case, Migueleño seems to have a different form from the other languages until the k- static prefix is recalled. It is likely that Mason (1918) removed a k- prefix from this stem (Turner 1980). What makes this look like a Chumash borrowing is that besides the near-identity of form, the k- is segmentable in Salinan, as in the previous example.

- In. xul'aa 'to cry (much)'
- Ven. xul'aa 'to belly ache'
- Mig. xā'ta 'crying'
- Ant. xā'ta 'to cry'

'Cry' has appeared in a cognate list (McLendon 1964) exactly as
the forms for Salinan given here, accompanied by XÁLA (pl.). This looks like a nearly one-to-one correspondence with the Inezéño and Ventureño forms, but I cannot judge the cognacy without better information about Chumash verb inflection. Kenneth Whistler (p.c.) informs me that the normal word for 'cry' in Central Chumash is miš.

Ob.  -qspa  'to be extinguished'
In.   -pša  'to fall, be extinguished'
Bar.  ṣpša  'to be extinguished'
Ven.  ṭipše  'to squeeze juice out by stripping through the fingers'
Mig.  ṣap  'extinguish'
Ant.  ṣap  "

'Extinguish' is another verb that has appeared on Hokan cognate lists (Crawford 1976) as Antoniaño ṣap 'extinguish, put out' from Mason (1918). It looks like a metathesized form of the Central Chumash words, but much closer to the Northern Chumash form.

In.  ox-loλm  'to snore'
Bar.  xox  'to snore'
Ven.  ox-ksenó  'to snore, grunt'
Mig.  oxom  'to snore'
Ant.  oxom  'to snore'

'To snore' has not appeared on Hokan cognate lists. These forms look similar, but the prefixed τ- of the Salinan forms throws the verbal translation into doubt, since τ- is usually a nominal prefix.

Ob.  -qsoʔ  -qšo  'to urinate'
In.  oxšol  'urine'
Cr.   oxšol  "
Bar.  oxšol  'urinate'  oxšoluš  'urine'
Ven.  oxšol  'to urinate'
Mig.  eššá-l  'urine'
Ant.  eššá-l  "

The cognacy looks good for these forms, if one accepts the x (q), a metathesis for either Salinan or Chumash. Since the Antoniaño form actually shows a vowel between the consonants, I would suggest that this is the more basic form. This has appeared on one cognate list (Gursky 1974).
In. alman  'to kill'
Ven. alwa  'to murder'
Mig. wé'le  'to kill'
Ant. wa'äl, wá'äl  'to kill'

In. takti?  'to kill'
Bar. takti, takti?1  'to beat up, hit'
Ven. takti  'to kill, slaughter; hunt, kill (an animal)'
P. Cent. Colm. *takti?

Mig. takti?  'te kill'
Ant. ůka  'to kill'

These final two verbs with the same gloss make an interesting set. Unfortunately, the semantic difference in the Salinan forms is not readily apparent from the few elicitations. The first set compares Ingeño and Venturaño with three Salinan forms, and the resemblance is obvious. The second form of 'to kill' appeared in Gursky's (1974) cognate list. The Migueño form is identical to the Central Chumash forms, except for the metathesized second syllable.

Ob. 'aqa, ñaxa  'bow'
In. 'ax  "
Bar. 'ax  "
Ven. 'ax  "
Ant. xal  "

This is one of two Chumash words for 'bow'. The other term is glossed 'sinew-backed bow', a more specialized term. Migueño has another form for this word which looks like ñasalen, but the Antonioño form is very similar to Central and Northern Chumash and suggests cognacy. The Antonioño form was used by Gursky (1974), and the forms xalco?, xal  'bow' (SHOOT), by Crawford (1976).

In. tiwālulay?  'flute'
Cr. -tiwollay  "
Bar. tiwulu?lay  "
Ven. oxtomalč  'to play the flute'

Mig. to-lo'le?  'flute'
Ant. tololš?  "

The word for 'flute' has not appeared on a Hokan cognate list. The Northern and Central Chumash forms have an extra syllable, but the labial component of that syllable may be responsible for the long back vowel of the first Migueño syllable. Otherwise, the forms are nearly identical. They may also be onomatopoetic. Kenneth Whistler informs me
(p.c.) that the form is also found in Patwin as loollOl, possibly from Nwok, and it has been 'borrowed around'.

<table>
<thead>
<tr>
<th>Cr.</th>
<th>tgree</th>
<th>'arrowhead'</th>
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</thead>
<tbody>
<tr>
<td>In.</td>
<td>griu</td>
<td>'arrowhead'</td>
</tr>
<tr>
<td>Bar.</td>
<td>griu</td>
<td>'arrowhead'</td>
</tr>
<tr>
<td>Ven.</td>
<td>gis’as’as</td>
<td>'its tooth' &gt; 'fishhook' &gt; 'arrowhead'</td>
</tr>
<tr>
<td>Mig.</td>
<td>tErik</td>
<td>'knife'</td>
</tr>
<tr>
<td>Ant.</td>
<td>tElik</td>
<td>'knife'</td>
</tr>
<tr>
<td></td>
<td>dEliak</td>
<td>'flint'</td>
</tr>
<tr>
<td></td>
<td>?Eliak</td>
<td>'arrowpoint'</td>
</tr>
</tbody>
</table>

'Flint' or 'arrowpoint' has appeared as li поя, (t)li поя? 'knife, stone' (Greenberg & Swadesh 1953 and Crawford 1976) and teşak, tErik 'knife' (Gursky 1974).

<table>
<thead>
<tr>
<th>In.</th>
<th>squntaw</th>
<th>'lightning'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bar.</td>
<td>squntaw</td>
<td>''</td>
</tr>
<tr>
<td>Ven.</td>
<td>squntaw</td>
<td>''</td>
</tr>
<tr>
<td>Ant.</td>
<td>nEko tiEtloko</td>
<td>'lightning'</td>
</tr>
</tbody>
</table>

'Lightning' is an interesting example of a borrowing by Chumash from Salinan, since the Antoniaño form 'lightning' means, literally, 'its-eye thunder' and the Central Chumash words for 'lightning' are the Antoniaño words for 'its-eye'. This example is a helpful reminder that look-alikes are not necessarily cognates, especially in geographically contiguous languages.

<table>
<thead>
<tr>
<th>Bar.</th>
<th>sxal</th>
<th>'snow'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mig.</td>
<td>cEitol</td>
<td>''</td>
</tr>
<tr>
<td>Ant.</td>
<td>cEitol</td>
<td>''</td>
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</tbody>
</table>

'Snow' is a short but suggestive set.

<table>
<thead>
<tr>
<th>In.</th>
<th>sxsułen</th>
<th>'ocean'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bar.</td>
<td>sxn’min</td>
<td>''</td>
</tr>
<tr>
<td>Ant.</td>
<td>xEken</td>
<td>''</td>
</tr>
</tbody>
</table>

'Ocean' was used by Gursky (1974) in a Hukan cognate list with Purisimeño and Inupiaq Chumash, in a somewhat modified form from Mason (1918), xEken.

<table>
<thead>
<tr>
<th>In.</th>
<th>ku</th>
<th>'person, people'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bar.</td>
<td>ku</td>
<td>''</td>
</tr>
<tr>
<td>Ven</td>
<td>ku</td>
<td>''</td>
</tr>
<tr>
<td>P. Cent. Chum.</td>
<td>ku</td>
<td></td>
</tr>
</tbody>
</table>
Mich.  Kwal  'person'
Ant.  Kwal

'Person' is given by Gursky (1974) as the gloss for a cognate ser,
but he uses the form la for Antonioño, laN for Migueleño, 'husband'.
The form given in this set is glossed 'person, people' by Harrington in
several places and it appears to be a good candidate for cognacy or
borrowing with the Central Chumash forms.

In.  më§  'sack, bag'
Bar.  më§  
Ven.  më§  

Mich.  mœ:xët  'sack'
Ant.  mœ:nöt  

'Sack, bag' has not appeared on a Hokan cognate list either. If
the Chumash -ë- to Salinan -x- correspondence is valid these may be
considered cognates rather than borrowings.

In.  mëluët  'soft tar'
Bar.  mëlaq  
Ven.  mëlaq  

Mich.  mœ:kë  'tar'
Ant.  mœ:kë  

The words for 'tar' also look a lot alike. The s- prefix in the
Salinan forms is very common in nouns. It has not been used in
cognate lists.

In.  saxkit  'wind' (noun)
Bar.  saxkit  'wind to blow'
Ven.  (ʔuqtiwë)  

Mich.  ãŋ:këy  'wind' (noun)
Ant.  ãŋ:këy  

This word has not appeared on a Hokan cognate list either. Perhaps
the Salinan form should be t-sa:këy, since some of the Central Chumash
forms have an s- initial.

In.  s-wënë-wës  'halt'
Bar.  ñwëni  'the other side'
Ant.  ñwëni(ʔ)  'halt'
The evidence for 'half', Incrzeño, Barbacoño and Antoniaño, is as sparse as 'snow' or 'ocean', but it is suggestive.

Cr. kahum 'near'
Ven. kane'ec 'it is close'
Mig. skam 'close'
Ant. skam

Although this qualifies as a sparse set too, the s- prefix of the Salinan forms shows the stem as Migueleño -kam, looking very much like Cruseño.

In. kilamu 'stupid'
Bar. kilamu 'to be stupid'
Ven. kilamu 'crazy'
Mig. kolo'n 'stupid'
Ant. kolo'n

The Salinan forms for 'stupid' show the verbal prefix k- and the stem is therefore -olo'n. Perhaps the kilamu forms in Central Chumash are loans from Salinan.

Ob. sol-o? 'ankle'
In. bow "
Bar. bow "
Ven. bow "
P. Cent. Chum. *bow "
Mig. bō-wa'un' "
Ant. bō-wa'un' "

If the Obispeño 1 to Central Chumash w is regular, these must be cognates. If not, it looks like the Obispeño borrowed from Antoniaño.

In. to? 'brother-in-law'
Cr. -to? " " "
Bar. to? " " "
Ven. to 'a man's brother-in-law'
P. Cent. Chum. *to? 'brother-in-law'
Ant. to's 'younger brother'
Mig. (toma?) " "

This term has not been used in a Kekan cognate list. The Northern and Central Chumash forms match the Antoniaño form rather well.
In.  \( ?\text{usu}\)  'chest' (body part)
Par.  \( ?\text{usu}\)  "
Mig.  \( ?\text{eso}\)  'my chest'
Ant.  \( ?\text{eso}\)  'my chest'

The words for 'chest' look a lot more like cognates. The Salinan forms \( \text{t-elor}\), \( \text{t-leetlo}\) 'breast' were used by Sapir (1917, 1921), \( \text{t}\text{lo}\) by Jacobsen (1958) and Carsky (1974), and \( \text{e-ts}\)-\( \text{oo}\), \( \text{t}\text{oo}\) 'breast, bosom, chest' (to S\( \text{UNO}\) in Crawford (1976).

Bar.  \( ?\text{al-i\text{e}\text{x}ey}\)  'cousin'
Ven.  \( ?\text{a-l-	ext{e}\text{x}ey}\)  'the elder sister of a man (after she is married) and her children'
Mig.  \( ?\text{um-as\text{a}\text{x}a}\)  'cousin'
Ant.  \( ?\text{a\text{a}\text{x}a}\)  "

The two Central Chumash stem forms for 'cousin' are nearly identical with the Salinan.

In.  \( ?\text{a\text{a}\text{x}a}\)  'tuch\(e\)'
Bar.  \( ?\text{a\text{a}\text{x}a}\)  'clever'
Mig.  \( ?\text{p\text{k}(?)at}\)  "
Ant.  \( ?\text{p\text{k}}\)  "

Except for the elided vowel in the Salinan forms, these are nearly identical, arguing borrowing.

Ob.  \( ?\text{a\text{a}\text{x}a}\)  'hat'
In.  \( ?\text{a\text{a}\text{x}a}\)  "
Bar.  \( ?\text{a\text{a}\text{x}a}\)  "
Ven.  \( ?\text{a\text{a}\text{x}a}\)  "
Mig.  \( ?\text{a\text{a}\text{x}a}\)  "
Ant.  \( ?\text{a\text{a}\text{x}a}\)  "

There are six animal terms, four of which have been used in H\( \text{O\text{k}an}\) cognate lists, but which may also have an extensive areal distribution (Nichols p.c.). For instance, although the forms for 'hat' look like good candidates for cognacy between Chumash and, at least, Antoniaño, compare the word for 'rat' (appendix), which not only bears a more than superficial resemblance to these forms, but shares it with Uto-Aztecan. Of course, these may be H\( \text{O\text{k}an}\) cognates, borrowed by Uto-Aztecan, but they may also be borrowed between H\( \text{O\text{k}an}\) languages, but it is impossible to judge. The Antoniaño form for 'rat' was used by Carsky (1974).

P. Cent. Chum.  \( ?\text{xus}\)  'bear'
Nig.  ʔax̌aʔ  'bear'
Ant.  ʔax̌aʔ  "

'Bear' has not appeared on Hokan cognate lists and may not be an appropriate candidate, but the x is suggestive, at least.

Ob.  č-kuwa  'Pismo clan'
Mig.  čójyaʔm  "  "
Ant.  kojyaʔm  "  "

The Obispeño form for 'clan' has almost certainly been borrowed by Salinan via Miguéleño as the č- initial, segmentally in Obispeño, shows.

Ob.  t-maʔ  'jackrabbit'
In.  maʔ  "
Cr.  maʔ  "
Bar.  maʔ  "
Ven.  vaʔ  "
P. Chum.  *maʔ  "

Mig.  nuwʔ  'cottontail rabbit'
Ant.  nuwʔ  "

'Jackrabbit' is so obviously a shared form that it appeared on the Iskoman cognate list (Pixon & Kroeber 1903). The unusual feature of this form is the final -ʔ in Antoniano suggesting a borrowing from Miguéleño.

Ir.  kún  'rabbit'
Cr.  kún  "
Bar.  kuʔm  "
Ven.  kuʔm  "
P. Chum.  *kuʔm(V)? (ʔ)  "

Ant.  kolt(ʔ)  'jackrabbit'

In 'cry' there was a medial -t- in Salinan corresponding to a Chumash -ʔ- and another example will be seen in the words for 'pigeon'. This set shows final -ʔ and -ʔʔ, hampering a conclusion.

In.  naθ  'rat'
Bar.  naθ  "
Ven.  naθ  "
P. Cent. Chum.  *naθ  Dipodomys agilis, Pacific kangaroo rat

Mig.  s-naʔk  'kangaroo rat'
Ant.  s-naʔk  "

Although the form may be more wide-spread than comparison with these two groups of languages shows, Gursky (1974) used this form in his Sikan cognate list.

The last group are the words for birds, notoriously liable to onomatopoeia (Turner 1975) and may shorten the list of Chumash – Salinan look-alikes to 33. The forms are 'blackbird', 'bluejay', 'dove', 'killdeer', 'pelican', and 'pigeon'.

<table>
<thead>
<tr>
<th></th>
<th>Bar.</th>
<th>Ven.</th>
<th>Ant.</th>
<th>Mig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ʔʔoʔ</td>
<td>ʔʔq</td>
<td>ʔʔq</td>
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<tr>
<td>'blackbird'</td>
<td>'blackbird'</td>
<td>'blackbird'</td>
<td>'blackbird'</td>
<td>'blackbird'</td>
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<tr>
<td></td>
<td>ʔʔaʔy</td>
<td>ʔʔay</td>
<td>ʔʔay</td>
<td>ʔʔay</td>
</tr>
<tr>
<td>'bluejay'</td>
<td>'bluejay'</td>
<td>'bluejay'</td>
<td>'bluejay'</td>
<td>'bluejay'</td>
</tr>
</tbody>
</table>

Ob.  tompoloqlo 'dove'
Bar.  tukutuk
Ven.  ḥuqṣuq
Mig.  ṭaʔwew
Ant.  ṭaʔwew

In.  ciyiçiwy 'killdeer'
Ven.  ciyiçiwy |
Mig.  čiyásta 'Bar. stuff, ctuf'
Ant.  čiyásta 'Ant. storf'

Ob.  sawency 'pelican'
In.  hew
Cr.  hew
Bar.  xew |
Ven.  hew, wow |
Mig.  teʔw |
Ant.  teʔw |
In. wele-we'l 'pigeon'
Bar. wele-wel 'band-tailed pigeon'
Mig. (tokmô) klê'wet 'pigeon'
Ant. klê'wet 'pigeon'

There are twelve possibly shared forms between Salinan and only Esselen.

Ant. skô?m 'winnowing basket'
Ess. co'k-a, ku'-uh, ku'-uhk 'basket' (Henshaw)

The s- in the Antoniaño may be segmentable, making these look more comparable.

Mig. Sâ'xe 'bird' (generic)
Ant. Sâ'xeq? '"
Ess. tca'p-his 'birds' (Henshaw)

As a possible cognate set, the Salinan forms, at least, have appeared in McLendon’s (1966) and Crawford’s (1976) cognate lists with other Hokan languages.

Mig. pûse 'to give birth'
Ant. tsepôx 'to give birth' (Mason 1918)
Ess. këséy 'to give birth' (Harrington 1932)

This form appeared on Gursky's (1974) cognate list as the first (Mason) Antoniaño form. The Migueleño form and the second Antoniaño form look quite different until they are segmented.

Mig. kë'sêy 'muy tomador' (Harrington)
Ant. -oche- 'to drink' (stem)
Ess. cë'së 'I drink' (P)

This form has not appeared on cognate lists, but it looks like a good candidate.

Mig. nôkenet 'eyes'
Ant. nôkenet 'eye'
Ess. cë, a'ha, hî'k-ë 'eye' (Henshaw)
sixë 'eye' (Ga)
'Eye' was used by Crawford (1976) in its Antoniaño form. It is the second syllable of the Salinan forms that may resemble the Esselen. However, Kenneth Whistler (p.c.) has pointed out that the resemblance between the last two Esselen forms and the Ventureño tiq 'face', as well.

Mig.  ū'n  'face'
Ant.  ū'w  "
Ess.  õw'  " (Ga)

The Antoniaño form for 'face' has appeared on several Hokan cognate lists (Swan 1917:128, 1925:9; Greenberg & Swadesh 1953; Gurkay 1974). The resemblance with Esselen is clear once the initial ū- prefix is segmented from the Salinan.

Ant.  ŵ̄mp  'to finish' (Mason)
        k-bmp-loʔ  'he finished' (Harrington, Wh.)
Ess.  mwnufths  'it is finished' (A)

'To finish' has not appeared on cognate lists. It is the second syllable of the Esselen form which is being compared to the Salinan stem.

Mig.  õ̑b̍eʔ  'to hunt'
Ant.  k-ám-čęʔ  'he hunted' (Jacobsen)
Ess.  takumpa  'to hunt' (Ga)

'To hunt' appeared on Gurkay's (1974) cognate list. It is a highly metathesized version of a comparison, if it is valid.

Mig.  x comboes  'beads'
Ant.  x̌ďə̌es  "
Ess.  am-∅-n-nil  'necklace of beads' (Monshaw)

'Beads' has not appeared on cognate lists and looks very much like the second and third syllables of the Esselen form.

Mig.  sa-mōʔ  'bush rabbit'
Ant.  sa-m̃ōʔ  "  "
Ess.  samēs  'rabbit' (Ga)

'Bush rabbit' has not appeared on cognate lists, either. The -s may be segmentable from the Esselen.
Mig. māta-l 'white'
Ant. māta-l "
Ess. mats-la'-la 'gente de razón'

This form is another example of a word which has not appeared on Hohokan cognate lists but links Salinan with Esselen.

Mig. pāręcz? 'bow'
Ess. pāwi 'arrow' (Henshaw)
pāw-nax (Gursky, from payunaj, G. and pagounach, Lg.)

'bow' appeared on Gursky's (1974) cognate list. Again, it is only one of the dialects of Salinan which appears to resemble the Esselen, but this time it is the southern one.

There are three words which all three contiguous Hohokan groups share. This is not a significant number, but they make interesting sets.

P. Chum. "ta? 'valley oak'
Mig. pat 'oak sp., roble'
Ant. 'at 'white oak'
Ess. pā-ืน-tsá 'acorn' (Henshaw)

The Salinan forms look like metathesized versions of the Proto-Chumash form, bearing in mind the pl?: correspondence. It is the second syllable of the Esselen form which is being compared.

In. 'aunlis 'blood'
Cr. axolís "
Bar. ?aun?lla? "
Mig. ḳōkata? "
Ant. ḳōkata? "
Ess. màx'ana " (Plnart)

'blood' has appeared on many Hohokan cognate lists (Sapir 1917:137, 1925:3; Greenberg & Swadesh 1953; Bright 1956; Gursky 1974; and Crawford 1976).

In. ikh?i-us 'to go'
Bar. ikhät "to fetch, bring (for)"
Ven. ikh?i-il 'to go after'

"to go get"
Mig. ke', o'  
Ant. ko'  
Ess. ol'-lo'po mak'-ke  'I'm going'  
li'-kan-mak'ke  
boo'-lin  'you will come back again'

'To go' has appeared on Hakan cognate lists in this form. The Esselen form that is being compared is the -ke.

In addition to these lexical sets, Klar (1933a, 1974) has pointed out several features Chumash languages share with Salinan. Northern and Central Chumash is VOS as is Salinan. Klar posits a non-etymological dental prefix for Northern Chumash, Obispeño, which has spread to this one Chumash language from Salinan. According to Sapir, however, Central Chumash and Salinan Chumash languages have lost this Hakan feature, while Northern Chumash has retained it. Phonomically, a two step series, as mentioned before, is the only feature shared by Salinan and Proto-Chumash exclusive of the neighboring languages.

Klar (1974) mentions the similarities between what Boeker refers to as 'locators' in Central Chumash, Obispeño demonstrative particles, and Salinan demonstrative particles. Obispeño and Salinan also share the use of an articular prefix, or definite article. Pronouns, possession markers, numerals, etc., offer no further clues. Unfortunately, not enough is known yet about Esselen details for comparisons to be drawn, despite Shaul's recent work (1982a, b, and in press).

After taking into account the evidence for borrowing and the evidence for Salinan's genetic affiliations, I must conclude that Salinan should still be classified as an isolate. Although there are some lexical similarities, they are comparatively few, though relatively numerous considering the size of the Esselen lexicon: approximately 300 words. What resemblances there are among the three contiguous Hakan groups may just as well be due to creol diffusion, chance similarity, or borrowing among them, as to genetic relationship.

Taken as a whole, the evidence suggests Salinan as the oldest population in this area of California with, possibly, a more eastern and southern extent than historically. Contact with all of the present languages of the area is certain, as well as contacts with Miwok and Uto-Aztecan before the differentiation of the latter. The resemblances with Taktic, Numic, and Miwok lend support to Whistler's hypothesis of a movement of Chumash-speakers from the interior (p.c.). The Chumash would be the first intrusive peoples between the Salinan-speakers and Uto-Aztecan-speaking peoples, later pushed further south and west by Yokuts intrusion from the north into the Central Valley. Contact between Salinan and Miwok-speakers would have been broken as well. Ancient and long-term contact is shown for Salinan and Uto-Aztecan, with contact continuing with several Uto-Aztecan languages after their differentiation.
Appendix

Please note that in almost as many of these areally shared forms, the Salinan form appeared in a Hokan cognate set as in the Chumash - Salinan and Salinan - Esselen sets of look-alikes just given. One must take into account the possibility of chance similarity in looking over these sets, e.g., Alice Schlichter (p.c.) noted 11 look-alikes between Yuki and Esselen and 13 between Wintu and Esselen, and, as far as I know, no one has suggested that those three have a genetic relationship.

The dates after the Salinan forms indicate their inclusion in a Hokan cognate set.

<table>
<thead>
<tr>
<th>Salinan</th>
<th>Chumash</th>
<th>Uto-Aztecan</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ob.</td>
<td>ʔchʔ</td>
<td>'to be afraid'</td>
</tr>
<tr>
<td>In.</td>
<td>xuxaw</td>
<td>'coyote'</td>
</tr>
<tr>
<td>Ven.</td>
<td>xuxa</td>
<td>'to be fearful, cowardly'</td>
</tr>
<tr>
<td>Lu.</td>
<td>xuxa</td>
<td>'coward'</td>
</tr>
<tr>
<td>Hopi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mig.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ant.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ob.</td>
<td>tata</td>
<td>'older brother'</td>
</tr>
<tr>
<td>In.</td>
<td>tata</td>
<td>'maternal uncle'</td>
</tr>
<tr>
<td>Ven.</td>
<td>tata</td>
<td>'mother's brother'</td>
</tr>
<tr>
<td>Hopi</td>
<td>tąʔta</td>
<td>'brother'</td>
</tr>
<tr>
<td>pő-A</td>
<td>tata, tata</td>
<td></td>
</tr>
<tr>
<td>Ant.</td>
<td>ta?</td>
<td>'father's younger brother'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1916, 1974 'mother's brother'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>tata 'father' 1974 (2)</td>
</tr>
<tr>
<td>(3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ob.</td>
<td>ʔipj</td>
<td>'chia' (sage)</td>
</tr>
<tr>
<td>In.</td>
<td>ʔileneʔ</td>
<td></td>
</tr>
<tr>
<td>Bar.</td>
<td>ʔileneʔ</td>
<td></td>
</tr>
<tr>
<td>Ven.</td>
<td>ʔileneʔ</td>
<td></td>
</tr>
<tr>
<td>Lu.</td>
<td>ʔileneʔ</td>
<td></td>
</tr>
<tr>
<td>p-Cupan</td>
<td>ʔileneʔ</td>
<td></td>
</tr>
<tr>
<td>Mig.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ant.</td>
<td>pásol</td>
<td></td>
</tr>
</tbody>
</table>
(4) Ob. -qBillyho? 'cold'
In. ?oxtokow "
Bar. saxfatax "
Ven. aqtaha "
Lu. ?i'ta- 'to be cold weather'
Mig. ep'ga 'to be cold'
Ant. ep'ga " " " (1956)

(5) Ob. suqam? 'child'
In. šay "
Bar. ša'ay "
Ven. ša'ayy 'daughter'
Lu. -šawéš-may 'child'
Ant. t-ëxol "
Soledad (suris) "
Bar. suwa 'bear cub'
Lu. šu-ka-t 'deer'
Hopi šopic "
p-ùpan *ṣuqat *su, *suka
Gen. Yokuts xoy 'deer'
Mig. soxá? 'fawn'
Ant. soxox? " "

(6) Ob. kič 'to be like'
Bar. kañneč " " "
Ven. kañnehet 'like, to be like' (root: nehet)
Lu. ?š-n-ki-š 'like, resemble' (root: an)
Hopi (soniwa) " "
Mig. keš 'like, resembling'
Ant. keš " "

(7) In. peye 'elder sister'
Bar. (?a'mi) 'elder sibling'
Ven. (?ami) " "
Lu. -pè't 'younger brother'
<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salinan - Uto-Aztecan</td>
<td>'ama-t</td>
<td>'ant'</td>
</tr>
<tr>
<td>Hopi</td>
<td>aamu</td>
<td>'ant'</td>
</tr>
<tr>
<td>p-U-A</td>
<td>*ane</td>
<td>&quot;</td>
</tr>
<tr>
<td>Mig.</td>
<td>hel-kä'-t</td>
<td>&quot;</td>
</tr>
<tr>
<td>Ant.</td>
<td>le-kä'-t</td>
<td>&quot;</td>
</tr>
<tr>
<td>Hopi</td>
<td>nōhwi</td>
<td>'paternal aunt'</td>
</tr>
<tr>
<td>p-U-A</td>
<td>*mona</td>
<td>'affinal relative'</td>
</tr>
<tr>
<td>Mig.</td>
<td>nomá?</td>
<td>'my mother’s younger sister'</td>
</tr>
<tr>
<td>Ant.</td>
<td>noéd</td>
<td>&quot;</td>
</tr>
<tr>
<td>Lu.</td>
<td>-yá'-may</td>
<td>'paternal aunt'</td>
</tr>
<tr>
<td>p-U-A</td>
<td>*pa</td>
<td>'aunt'</td>
</tr>
<tr>
<td>Mig.</td>
<td>ayáš</td>
<td>'father’s younger sister'</td>
</tr>
<tr>
<td>Ant.</td>
<td>yás</td>
<td>'child' (see: 'brother')</td>
</tr>
<tr>
<td>Lu.</td>
<td>-tá-xaw</td>
<td>'child'</td>
</tr>
<tr>
<td>Hopi</td>
<td>(toko)</td>
<td>&quot;</td>
</tr>
<tr>
<td>p-U-A</td>
<td>*tá-xawí-</td>
<td>&quot;</td>
</tr>
<tr>
<td>Mig.</td>
<td>t'-ékwí</td>
<td>&quot;</td>
</tr>
<tr>
<td>Ant.</td>
<td>t'-ékwí</td>
<td>&quot;</td>
</tr>
<tr>
<td>Mono</td>
<td>?ohó</td>
<td>'bone'</td>
</tr>
<tr>
<td>Kawaiisu</td>
<td>?choo-hy</td>
<td>&quot;</td>
</tr>
<tr>
<td>p-U-A</td>
<td>*hyó,</td>
<td>&quot;ohó</td>
</tr>
<tr>
<td>Mig.</td>
<td>?axa'-k</td>
<td>&quot;</td>
</tr>
<tr>
<td>Ant.</td>
<td>?axa'-k</td>
<td>&quot;axa'-k 'bone', 1917:57, 1925:4, 1953, 1974, 1976</td>
</tr>
<tr>
<td>Lu.</td>
<td>hâkwás-</td>
<td>'to breathe'</td>
</tr>
<tr>
<td>Mono</td>
<td>súwáh-ka</td>
<td>'to breathe'</td>
</tr>
<tr>
<td>Kawaiisu</td>
<td>soo-kwá-dy</td>
<td>'to breathe'</td>
</tr>
</tbody>
</table>
Ant. xó(*)weyf 'breath'
(14) Lu. 73-yi-l 'chin'
   Hopi Myi 'chin, jaw'
   pO-A *73-yi-l 'chin'
   Mig. 73-Koyf 'my chin'
   Ant. 73-Koyf " "
(15) Lu. pásaht 'six'
   Serrano pauvheii? "
   Mig. pásahtel "
   Ant. payv-hei "
(16) Lu. kín- 'to sleep'
   Hopi yâwi " "
   Om -kupa- 'kill'
   p-Cupan *Kîn- 'to sleep'
   pO-A *kuf, *kup " "
   Mig. k-aw " "
   Ant. k-aw " "
Saliaan - Chumash - Esselen - Uto-Aztecan
(17) In. yiti 'to come' (back from)
   Cr. yît 'to come'
   Bar. yîti 'to come'
   Ven. vit 'to come'
   P. Cent. Chum. *yit 'to come' (root)
   pO-A *yî 'to come' (sg.)
   Mig. ya 'to come/go'
   Ant. ya " "
   1910, 1921:20, 1974, 1976
   Ess. i-ya', i'-yu 'to come/go' (Henshaw)
(18) Cr. waštánš 'sun'
   Bar. ?al-išaw "
   Ven. išaw 'to be warm, feverish'
   pO-A išaw 'day, the sun'
   Lu. ?am-?éxqay 'morning' (lit.: 'formerly-tomorrow')
   Mig. éxqay 'morning, day'
   Ant. K-éxqay 'morning, the dawn'
   1917:54, 1953, 1974
   Ess. asi, aši 'sun'
<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salinan</td>
<td>asa-tsa</td>
<td>'day'</td>
</tr>
<tr>
<td>Uto-Aztecan</td>
<td>pahbi, pahbi</td>
<td>'three'</td>
</tr>
<tr>
<td>Costanoan</td>
<td>tubi</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lapay</td>
<td>'lapai' 'three'</td>
</tr>
<tr>
<td></td>
<td>k-lapay</td>
<td>1919, 1925:102,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1974</td>
</tr>
<tr>
<td>Matsun</td>
<td>kappan</td>
<td></td>
</tr>
<tr>
<td>Soledad</td>
<td>kappes</td>
<td></td>
</tr>
<tr>
<td>Runessen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ess.</td>
<td>xulep</td>
<td>{'with infixed -l-' Sapiir 1925: 102}</td>
</tr>
</tbody>
</table>

Salinan - Chumash - Uto-Aztecan - Yokuts - Miwok - Costanoan

<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ob.</td>
<td>-sapi</td>
<td>'brother'</td>
</tr>
<tr>
<td>Lu.</td>
<td>-p'atag</td>
<td>'elder brother'</td>
</tr>
<tr>
<td>Hopi</td>
<td>paavpa</td>
<td>'older brother'</td>
</tr>
<tr>
<td>p-Opun</td>
<td>*paq (?)</td>
<td></td>
</tr>
<tr>
<td>p-A</td>
<td>*pa</td>
<td>'older brother'</td>
</tr>
<tr>
<td>Gen. Yokuts</td>
<td>waykup</td>
<td>'father'</td>
</tr>
<tr>
<td>Mig.</td>
<td>syqaxa</td>
<td>'child'</td>
</tr>
<tr>
<td>Ant.</td>
<td>pas</td>
<td></td>
</tr>
<tr>
<td>Soledad</td>
<td>hapgas, hapa</td>
<td>'father, your father'</td>
</tr>
<tr>
<td>Runessen</td>
<td>ca-appan, apa</td>
<td>'father'</td>
</tr>
<tr>
<td>p-Miwha</td>
<td>*pah-qa</td>
<td>'grandfather'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ob.</td>
<td>waqaq</td>
<td>'frog'</td>
</tr>
<tr>
<td>In.</td>
<td>waqaq</td>
<td></td>
</tr>
<tr>
<td>Bar.</td>
<td>waqaq</td>
<td>'frog'</td>
</tr>
<tr>
<td>Ven.</td>
<td>waqaq</td>
<td>'frog'</td>
</tr>
<tr>
<td>Lu.</td>
<td>waax-wet</td>
<td></td>
</tr>
<tr>
<td>Hopi</td>
<td>waax-wet</td>
<td>'frog'</td>
</tr>
<tr>
<td>p-Opun</td>
<td>*waax-</td>
<td></td>
</tr>
<tr>
<td>p-A</td>
<td>*waax-</td>
<td></td>
</tr>
<tr>
<td>Mig.</td>
<td>waax-wet</td>
<td></td>
</tr>
<tr>
<td>Ant.</td>
<td>waax-wet</td>
<td>'wakita, wakita'</td>
</tr>
</tbody>
</table>

References: 1974 (2)
<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMMIu</td>
<td>*waṭ(ar)aki</td>
<td>'frog'</td>
</tr>
<tr>
<td>Ob.</td>
<td>lele, leolele</td>
<td>'goose'</td>
</tr>
<tr>
<td>Ven.</td>
<td>leʔle</td>
<td>'Canada goose'</td>
</tr>
<tr>
<td>Pur.</td>
<td>lele, aolele</td>
<td>'wild swan'</td>
</tr>
<tr>
<td>Lu.</td>
<td>lāʔala</td>
<td>'wild goose'</td>
</tr>
<tr>
<td>P-Cupan</td>
<td>lāʔala (?)</td>
<td></td>
</tr>
<tr>
<td>Gen. Yokuts</td>
<td>lāʔaʔa</td>
<td>'goose'</td>
</tr>
<tr>
<td>Mig.</td>
<td>kalak</td>
<td>&quot;</td>
</tr>
<tr>
<td>Ant.</td>
<td>kalak</td>
<td>1964M, 1964S, 1974</td>
</tr>
<tr>
<td>Mutsun</td>
<td>lāʔalak</td>
<td>&quot;</td>
</tr>
<tr>
<td>L. Miwok</td>
<td>(lāʔel)ook</td>
<td>'madhen'</td>
</tr>
<tr>
<td></td>
<td>lāka</td>
<td>'goose'</td>
</tr>
<tr>
<td>PMMIu</td>
<td>*ia</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

**Salinan - Esselen - Costanoan**

(25) Mig. | nāyıʔ | 'black mussel' |
| Ant. | hayęʔ | " |
| Ess. | ha-laʔk-la | 'mussel' (Henshaw) |

| Rasona | akku, xoʔkam | 'mussel' |

**Salinan - Esselen - Uto-Aztecan**

(24) Lu. | páʔumbkal | 'mole' |
| TUB. | maʔgula-t | 'weasel-skin purse' |
| Mig. | mākel | 'rat' |
| Ant. | mākēl | 1974 (1) |
| Ess. | maʔ-kēl | " |

**Salinan - Ch'umash - Esselen - Costanoan**

(25) Ob. | -ʔaw | 'to eat' |
| Ber. | ʔaw, ʔaw | " |
| Ven. | ʔaw | " |
| Mig. | laʔm | 'come eat' |
| Ess. | amphə, ammu, a'-ma, am, am- 'to eat' |
| Mutsum | ?ammu | 'eats' |
| Russem | xamp | 'to eat' |

Salinan - Chamush - Costanoan - Miwok

(26) Ob. | (saʔ, ?em) 'grandmother' |
In. | nemoʔ | 'maternal grandmother' |
Bar. | neʔneʔ | '(any) grandmother' |
Ven. | nemo, nomawəʔ 'man's grandmother' |
P. Cent. Chum. | *nemoʔ |
Mig. | neʔn积极推进 'grandmother' |
Ant. | neʔ(n)əʔ | 'maternal grandmother' |

(27) Ob. | (-wala) | 'hole' |
In. | loq | " |
Cr. | loq | 'hole, ribs (?)' |
Bar. | loq | 'to have a hole in' |
Ven. | (val) | 'hole' ('-wala 'a hole') |
Mig. | ʔfeloke | 'cueva chiquita' |
Ant. | ʔfeloʔ | 'a hole' |

pE.Miwok | #6l-a | 'hole' |

(28) Ob. | (tasitʔyuʔu) | 'woman' |
In. | ʔeneq | 'female' |
Cr. | enexmə | 'old woman' |
Bar. | ʔeneq | 'woman' |
Ven. | (ʔamua) | " |
Mig. | t-énexa | 'relative' |
Ant. | t-emax | " |

Russem | lessexm | 'old woman' |
Mig. | leʔʔʔ | 'woman' |
Ant. | leʔʔʔ | " |

(29) Bar. | ?agʔaʔ | 'magpie' |
Ven. | ?aʔaʔ | " |
Mig. | xaʔerʔ | " |
Ant. | ?atəʔ | " |
(30) Ven. kamo1 'bad'
Mig. kamo "
Ant. somo? "
B. Miwok ?ōmu "
Matsun umulu 'filthy, vile'
(MiP) "Mūnu 'bad'

Salinan - Costanoan - Miwok

(31) Mig. t-a-kay, t-a'kay  'salt'
Ant. t-a'kay "
(MiP) tâkkës (7)

(32) Mig. ?ahô(?)'l  'tule'
Ant. ?axô'1 "
L. Miwok kô'1 "
Matsun xale "
(MiP) xô'1 "

Salinan - Yokuts - Costanoan

(33) Gen. Yokuts tuyoš  'arrow'
Mig. t-efer'na? "
Ant. t-efer(?)'yöyn "
Matsun tuyos "
Soledad tohiös "

Salinan - Esselen - Yokuts

(34) Gen. Yokuts no'ëhi  'friend'
Mig. t-e'no'co? "
Ant. t-e'no'co? "
(Bess.) nisienoje " (A) (mish-fë) " (Ga)
nic-fë, nic'-fë, nic'-wis (Henshaw)
nigeoñ'coh 'friend' (LaP)
<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salinan</td>
<td>?oqeq</td>
<td>'hair (of head)'</td>
</tr>
<tr>
<td></td>
<td>?-aK</td>
<td>'head'</td>
</tr>
<tr>
<td></td>
<td>ka'-ta</td>
<td>(Henshaw)</td>
</tr>
<tr>
<td></td>
<td>bataxeq</td>
<td>(Ca)</td>
</tr>
<tr>
<td></td>
<td>kayattasax</td>
<td>(P)</td>
</tr>
<tr>
<td>Valley Yokus</td>
<td>?ofon</td>
<td>'head'</td>
</tr>
<tr>
<td></td>
<td>#kata</td>
<td>'nape, occiput'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salinan</td>
<td>mi-polomol, mi-limol</td>
<td>'north'</td>
</tr>
<tr>
<td></td>
<td>ni-polomol</td>
<td>'mountain'</td>
</tr>
<tr>
<td></td>
<td>mi-limol</td>
<td>'the country up by Tejon'</td>
</tr>
<tr>
<td></td>
<td>ni-limol</td>
<td>'north'</td>
</tr>
<tr>
<td></td>
<td>mi-limol(?)</td>
<td>'north'</td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1wami1th</td>
<td>'mountain'</td>
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<td></td>
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<td></td>
<td>9t-9p6-</td>
<td>'mountain'</td>
</tr>
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<td></td>
<td>9(9)-p6(9)</td>
<td>'mountain'</td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>polomo</td>
<td>'mountain'</td>
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<tr>
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<tr>
<td>Salinan</td>
<td>tu?</td>
<td>'ear'</td>
</tr>
<tr>
<td></td>
<td>P. Cent. Cham.</td>
<td>#tu?</td>
</tr>
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<td></td>
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<td></td>
<td>t6uk</td>
<td>''</td>
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<td></td>
<td></td>
<td>1963, 1964H, 1974 (1)</td>
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<tr>
<td></td>
<td>tu85</td>
<td>''</td>
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<td>tukasus</td>
<td>''</td>
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<td></td>
<td></td>
<td>(Shaul reconstitution 1983)</td>
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<td></td>
</tr>
<tr>
<td>P. Sierra Miwok</td>
<td>#fo/-1kos</td>
<td>''</td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salinan</td>
<td>#pu</td>
<td>'arm, hand'</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td>Language</td>
<td>Translation</td>
<td>Notes</td>
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<tr>
<td>-----------</td>
<td>-------------</td>
<td>-------</td>
</tr>
<tr>
<td>Hill Yokuts</td>
<td>pʰuyʰbn</td>
<td>'arm, hand'</td>
</tr>
<tr>
<td>Mig.</td>
<td>tʰ-noyolk</td>
<td>'arm'</td>
</tr>
<tr>
<td>Ant.</td>
<td>tʰ-šepok</td>
<td>&quot; 1956, 1974</td>
</tr>
<tr>
<td>(39) In.</td>
<td>xoʊx</td>
<td>'crane'</td>
</tr>
<tr>
<td>Bar.</td>
<td>xʰox, xoʊx</td>
<td>&quot;</td>
</tr>
<tr>
<td>Ven.</td>
<td>xʰox</td>
<td>'night bird' (generic)</td>
</tr>
<tr>
<td>Gen. Yokuts</td>
<td>wa⁻xar'</td>
<td>'crane'</td>
</tr>
<tr>
<td>Mig.</td>
<td>ta⁻'[i]waʃ</td>
<td>'crane, heron'</td>
</tr>
<tr>
<td>Ant.</td>
<td>xalow</td>
<td>'crane'</td>
</tr>
<tr>
<td>(40) Ob.</td>
<td>t⁻pilaʔa</td>
<td>'woodpecker'</td>
</tr>
<tr>
<td>In.</td>
<td>pilaʔaʔ, pilaʔaq</td>
<td>'woodpecker'</td>
</tr>
<tr>
<td>Bar.</td>
<td>pilaʔaʔ</td>
<td>'woodpecker'</td>
</tr>
<tr>
<td>Ven.</td>
<td>čulaʔak</td>
<td>'flicker'</td>
</tr>
<tr>
<td>Gen. Yokuts</td>
<td>pala⁻tat</td>
<td>'woodpecker'</td>
</tr>
<tr>
<td>Yvairiani</td>
<td>pala⁻'kaʔ</td>
<td>&quot;</td>
</tr>
<tr>
<td>Mig.</td>
<td>palaʔaʔ</td>
<td>&quot;</td>
</tr>
<tr>
<td>Ant.</td>
<td>pala⁻'kaʔ</td>
<td>&quot;</td>
</tr>
<tr>
<td>Salinan - Yokuts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(41) Gen. Yokuts</td>
<td>tʰuŋik</td>
<td>'nose'</td>
</tr>
<tr>
<td>Mig.</td>
<td>t⁻-əmešet</td>
<td>&quot;</td>
</tr>
<tr>
<td>Ant.</td>
<td>t⁻-enʃ</td>
<td>&quot;</td>
</tr>
<tr>
<td>(42) Gen. Yokuts</td>
<td>tʰipʰnaʔ</td>
<td>'supernatural power'</td>
</tr>
<tr>
<td>tʰipʰi</td>
<td>'powerful being, person'</td>
<td></td>
</tr>
<tr>
<td>Mig.</td>
<td>sʰotepen</td>
<td>'dream-helper, pet'</td>
</tr>
<tr>
<td>Ant.</td>
<td>sʰotepen</td>
<td>&quot;</td>
</tr>
<tr>
<td>téneʔ</td>
<td>'pain'</td>
<td></td>
</tr>
<tr>
<td>(43) Tachi</td>
<td>peni ɪlk</td>
<td>'ocean'</td>
</tr>
<tr>
<td>Mig.</td>
<td>ləŋk̩</td>
<td>&quot;</td>
</tr>
<tr>
<td>Miguelito - Soledad</td>
<td></td>
<td></td>
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<tr>
<td>(44) Mig.</td>
<td>ʔaʔaʔ</td>
<td>'brother'</td>
</tr>
<tr>
<td>Soledad</td>
<td>təɡaʔ</td>
<td>'older brother'</td>
</tr>
</tbody>
</table>
NOTES

1. I would like to thank the following people: Kathryn Klar Mealiffe, Michael J.P. Nichols, David Shaul, Kenneth Whistler, and Alice Schlichter. None of these people are responsible for the conclusions I have drawn from their data, advice, and ideas.

2. Sources and abbreviations:
O. = Obispeño Chumash from Kathryn Klar's unpublished Obispeño Chumash Dictionary and cognate sets for Chumash.
In. = Inezeno Chumash from Richard Applegate's Inezeno Chumash Dictionary, Kenneth Whistler (p.c.), and Kathryn Klar's cognate sets.
Cr. = Cuceno Chumash from Beeler and Klar's unpublished manuscript and Kathryn Klar's cognate sets.
Ba. = Barbareño Chumash from class notes Linguistics 230 with Madison S. Beeler at the University of California, Berkeley; Kenneth Whistler's Barbareño Chumash Dictionary (manuscript); and Kenneth Whistler (p.c.).
Ve. = Venturero Chumash from Kathryn Klar's cognate sets and Kenneth Whistler (p.c.).
Pur. = Purisimeño Chumash from Kathryn Klar's cognate sets and Kenneth Whistler (p.c.).
P. Cent. Chum. = proto-Central Chumash from Kenneth Whistler (p.c.).
P. Chum. = proto-Chumash from Kenneth Whistler (p.c.).
Mig. = Migueleno Salinan from Mason (1918), phonemically reconstituted; J.P. Harrington's field notes; and William Jacobsen's field notes.
Ant. = Antonioño Salinan from Mason (1918), phonemically reconstituted (Turner 1981); J.P. Harrington's field notes; and William H. Jacobsen's field notes.

3. Sources and abbreviations:
FN = proto-Memic from Michael J.P. Nichols (p.c.).
NP = Northern Paiute from Nichols (p.c.).
Lu. = Luiseño from Bright's Luiseño Dictionary and Bright & Hill's "The Linguistic History of the Cucapah."

Hopi is from David Shaul (p.c.).
p-Cupán = proto-Cupán from Bright & Hill, above.
pl-A = proto-Oto-Astecan from Miller's "Oto-Astecan Cognate Sets"
Tub. = Tübatulabal from Mace & Muro's manuscript dictionary.

None is from Klein (1959).
Kawatsis is from Klein (1959).
Serrano is from Bright & Hill, above.

USA is from David Shaul (p.c.).
Yokuts is from Kroeber (1963).
Mutsee is from Okrand (1977) and Callaghan (1962).

Soledad is from Heizer (1952).
Rumax is from Heizer (1952) and Callaghan (1962).
All other Coyotam is from Callaghan (1962).
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