

## Miwok Cardinal Direction Terms

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The cardinal direction terms cannot be reconstructed to Proto Indo-European with specific directions as their basic meaning. Buck comments on this fact in "Spatial Relations: Place, Form, Size."<sup>1</sup>

"The majority of words for the main points of the compass are based either on the position of the sun at a given time of day ('sunrise, dawn, morning' = 'east'; 'sunset, evening' = 'west'; 'midday' = 'south') or on one's orientation, which among the IE-speaking peoples was usually facing the sunrise ('in front' = 'east'; 'behind' = 'west'; 'right' = 'south'; 'left' = 'north'), though there are also traces of orientations toward the north or south (the latter in the Avesta, where 'in front' = 'south'; 'behind' = 'north')... A few [direction terms] are from names of characteristic winds..."

After examining 127 globally distributed languages, Brown concludes that these types of derivations are common.<sup>2</sup> Forty-five percent of the languages surveyed relate terms for 'east' with the rising of the sun, and/or terms for 'west' with the setting of the sun.<sup>3</sup> In addition, some languages associate 'east' with 'front' and 'west' with 'back/behind', suggesting a canonical orientation toward the east.<sup>4</sup> Seventeen languages associate 'north' with the name of a wind.<sup>5</sup> The evidence indicates that terms meaning 'east/west' preceded those meaning 'north/south'. Terms for 'north' and 'south' are often related to terms for 'up' and 'down' respectively.<sup>6</sup> Specific terms for cardinal directions are relatively recent.

It is in order to investigate the history of cardinal direction terms in additional non-Western languages.

Miwok is a family of Indian languages formerly spoken in Central California. Aboriginally, it consisted of at least seven languages roughly at the time depth of the Germanic family. On the basis of lexical items, structural similarities, and sound correspondences, these may be grouped as follows:<sup>7</sup>

- I. Eastern Miwok (Mie)
  - A. Sierra Miwok (Mis)
    - 1. Northern Sierra Miwok (Mins)
    - 2. Central Sierra Miwok (Mics)
    - 3. Southern Sierra Miwok (Miss)
  - B. Plains Miwok (Mip)
  - C. Saclan (Misac)
- II. Western Miwok (Miw)
  - A. Lake Miwok (Mil)
  - B. Coast Miwok (Mic)<sup>8</sup>
    - 1. Bodega Miwok (Mib)
    - 2. Marin Miwok (Mim)

The Miwok family is in turn related to the Costanoan languages, once spoken from San Francisco south to Big Sur. The Costanoan languages can be subgrouped as follows:<sup>9</sup>

- I. Southern Costanoan
  - A. Mutsun (San Juan Bautista Costanoan) (Csjb)
  - B. Rumsen (Monterey Costanoan) (Cru)
- II. Northern Costanoan
  - A. Soledad (Csol)
  - B. Santa Cruz (Cscr)
  - C. Santa Clara (Cscl)
  - D. Bay Area
    - 1. San Jose (Csj)
    - 2. Chochenó (Ceb)
  - E. San Francisco (Csf)
- III. Karkin (Ckar)

Soledad is the southernmost of the Costanoan languages, but certain sound shifts and morphological features place it with Northern Costanoan languages. However, it has undergone an extensive lexical overlay from Southern Costanoan.

We have modern transcriptions of Mutsun, Rumsen, and Chochenó from the J. P. Harrington archives.

Sylvia Broadbent had considerable difficulty translating the Southern Sierra Miwok direction terms until she brought a compass and asked her respondents to point in the direction of each term, at which point she realized the orientation of the directional axes was parallel and perpendicular to the Sierra Nevada Mountain range.<sup>10</sup> I also obtained variable translations for some direction terms, but a compass did not help. To help clarify ambiguous cases, I have sometimes cited S. A. Barrett's translations, taken around the turn of the century.<sup>11</sup>

Proto Sierra Miwok \*hi·s-y- probably meant 'east, toward the High Sierras' (i.e., 'northeast; or 'east-northeast'.<sup>12</sup> Supportive evidence comes from Northern Sierra Miwok hy·sy-to-k 'Paiute; people to the northeast (across the Sierras)', where -to- marks the allative case and -k is a pluralizer.<sup>13</sup>

Proto Sierra Miwok \*hi·s-y- 'east, northeast' is related to Plains Miwok and Western Miwok words meaning 'sun, day'. Barrett gives Marin Miwok hīnhine as the word for 'East'. (-n marks the Marin Miwok possessive case, and -hine probably meant 'side', as in Bodega Miwok.) Consequently, we can reconstruct Proto Miwok \*hi·s with the probable meaning of 'sun, day', with secondary extensions to direction terms. Support for this reconstruction comes from Chocheño hišmen 'sun' and cognates in other Costanoan languages.

Miss	Mics	Mins	Mip	Mil	Mib	Mim	PMi
hi·h-y- 'east, toward the High Sierras'	hi·s-y- 'east'	hi·s-y- 'east'	hi-- 'sun, day'	hí· 'sun, day'	hí· 'sun, day'	Hi HWH 'sun, day' hlnhine 'east' SB	*hi·s 'sun, day'
kan·ym-a- 'wind'	kan·ym-y- 'gusts of wind'			kanín 'east (south- east?)', 'north' SB	kánin 'north'	kánwin 'north' SB 'north wind' JS	*kan·ym 'wind, north wind, gusts'
kanmy- 'to blow' (wind)	kanmy- 'to blow in gusts'			huk·e- 'east'	húk·e- 'front'	húk·e 'front (of a person)'	*huk·e 'front' <*hu·k 'nose'
?al·a- 'under- side'	?al·a- 'down, low' ?a·la- 'below'	?al·a-maṭy- 'under- neath'		?á·la 'east, south', 'east' SB	?á·la 'east, toward the land'	A-la 'east' HWH	*?al·a ~ *?a·la 'down, below'
cym·e- 'south'	cym·e-c 'in the south'	cym·y-c 'south'	(jak-wi-t) 'south' (J), SB, 'west' (L) (jak-ym·y) 'Southerner, Tuolumne Indian'				*jak- 'south- east'?
cy·my- 'to climb'	cy·my- 'to climb'	cy·my- 'to climb'					
?eca- 'hind, back, behind' ?ec·a- 'behind'	?eca- 'outside' ?e·ca- 'behind'	?ec·a- 'behind, back'	?eca- 'south, west' (J), 'south' (L)	?éc·a, ?éca 'foot, base'	?éc·a 'behind, the other side'		*?éç·a ~ *?éça 'back, behind'
?olo·wi-n 'west, toward the San Joaquin Valley	?olo·wi-n 'west'	?olo·wi-t(F) ?olo·wi-t(C) 'west, below'		?oló·m 'south, west'	?ólo-m 'south'	Â-lum 'south, south wind' HWH hélwa 'south- west, south'	*?olo- 'south west'?
						hélwa 'west' SB (hélwa-ja)	

Miss	Mics	Mins	Mip	Mil	Mib	Mim	PMi
tama·l-i-n 'north'	tama·l-i-n 'north'	taman 'north'	tala·wi-t (J), tala·t (L), 'north'	tamá·l 'north'	támál 'west, north- west'	tamal IK 'Bodega people (Coast people)'	*tamal 'north- west'?
tam·yle- 'north, northerner'	tam·yle- 'northerner'	tam·yle- 'northerner'					

Jimmy Knight gave 'east' or 'southeast' as the meaning of Lake Miwok kanín, saying it was where the sun comes up and the point of origin in traditional stories. Mrs. Grace claimed it means 'north' and Barrett also records it as 'north'. Miwok cognates mean 'north' or 'north wind'. Sierra Miwok cognates mean 'wind' or 'gusts'. We can tentatively reconstruct Proto Miwok \*kan·ym 'wind, north wind, gusts'. Possible support for this reconstruction comes from Chocheño kan·o 'north wind', but this word does not seem to have cognates in other Costanoan languages and might be ultimately from Miwok.

It is assumed that Marin Miwok kánwin 'north, north wind' incorporates -wi- 'directional' as in Plains Miwok tala·wit 'north'. It is also possible that the confusion of meanings for Lake Miwok kanín indicates an original meaning closer to 'northeast'.

Plains Miwok huk·e- 'east' probably also meant 'towards the High Sierras', since huke·m·y- from huke- plus -m·y- 'allative case', meant 'Easterners', or more specifically 'Moquelumne Indians' (Northern Sierra Miwok), who were to the northeast. Plains Miwok huk·e- 'east' is cognate with Western Miwok words meaning 'front', the probable meaning of Proto Miwok \*huk·e, from Proto Miwok \*hu·k 'nose' plus \*-e- 'noun-adjective formative', with automatic reduction of the long vowel before a long consonant.

Lake Miwok ?á·la was translated as 'east' or 'south' by my respondents, pointing to a possible original meaning of 'southeast'. (Barrett gives 'east', which is the meaning of the Coast Miwok cognates.) It appears to be cognate with Sierra Miwok words meaning 'down' or 'below'. We note that 'southeast' is the direction away from the Coast Range and toward lower territory from the perspective of Lake Miwok Indians, who lived a mountain valley south of Clear Lake.

Brown derives Sierra Miwok words for 'south' from the verb cy·my- 'to climb', which is probably the correct etymology.<sup>14</sup> We note the presence of -e- 'noun-adjective formative' in the Central Sierra and Southern Sierra Miwok words, and -c is an adverbial suffix.

Plains Miwok jak·wi-t, from jak- plus -wi- 'directional suffix' plus -t 'allative case', was translated as 'south' in the Jackson Valley dialect, which was the translation obtained by Barrett. Since the Tuolumne Indians were referred to as jak·ym·y-, from jak- plus -ym·y- 'ablative case'; 'southeast', or 'along the Sierras' might be a more

accurate translation, especially considering the fact that the Tuolumne were southeast of the Plains Miwok Indians. Apparently, the terms for 'south' and 'west' were interchanged in the Lockford dialect, at least in the speech of my respondent.

*jak-* has no cognates in other Miwok languages, but it is probably cognate with Mutsun *ja·k-mu-n* 'east' and Chocheño *jak-mu-j* 'east', both from Proto Costanoan *\*ja·k-mu-* 'east'.<sup>15</sup>

Plains Miwok *?eca-* and *?eca-wi-t* are both translated as 'south' and 'west' in the Jackson Valley dialect (Barrett gives 'west' for the second term). Most probably, it was 'southwest', or away from the Sierra Nevada Mountains. We note that *?eca-k* (L) and *?eca-m·y* (J) both mean 'Plains Miwok', from *?eca-* plus *-k* 'plural' or *-m·y* 'ablative case'.

Plains Miwok *?eca-* is cognate with words meaning 'back, behind' in other Miwok languages. We have already seen that Plains Miwok *huk·e-* 'east' is cognate with words meaning 'front'. These facts suggest a canonical orientation toward the east, or more precisely, toward the High Sierras.

Southern Sierra Miwok *?olo-wi-n* is translated as 'west' or more specifically, 'in the direction of the San Joaquin Valley' (i.e. 'southwest'). This translation is consistent with Northern Sierra Miwok 'west, below' for *?olo-wi-t* ~ *?olo-w·i-t*, and we can reconstruct Proto Sierra Miwok *\*?olo-wi-* 'southwest'.

Lake Miwok *?ol6·m*, from *?ol6-* plus *-m* 'locative case' was translated as 'west' or 'south' by my respondents. Barrett gives *ol6m-wali* 'south' and *ol6m* 'west?', where *wali* means 'area, world'. I would postulate 'southwest' or 'toward the Coast Range' as the most probable original meaning of the Lake Miwok term. We can reconstruct Proto Miwok *\*?olo-* with the tentative meaning of 'southwest'. This might be cognate with Rumsen *?orpeṭen* 'to become night time'.

Coast Miwok *hélwa* may originally have referred to a wind. My Bodega Miwok respondent translated *hélwan kíwel* as 'south or west wind' and added that it was very dangerous. Marin Miwok *Hél-wa* (HWH) was translated as 'west wind', and Henshaw also gives *Hél-u-wa* (probably the same word) with the meaning 'west'. Barrett gives *helwaia* (*hélwa-ja*) as 'west', possibly from *hélwa* plus *-ja* 'impersonal agentive'. These words do not appear to have cognates in other Miwok or Costanoan languages.

Southern Sierra Miwok *tama·l-i-n*, 'north' meant 'along the Sierras' or 'northwest', the probably meaning of the other Sierra Miwok cognates. There has been metathesis and reformation in Plains Miwok.

Lake Miwok *tamá·l* was translated as 'north' or 'west'. 'Northwest' is the most probable meaning, in view of the fact that 'Upper Lake People' (Eastern Pomo) were called *tamá-l-jomi*, where *-jomi* means 'place', and Upper Lake is northwest of Lake Miwok territory. We note that the general orientation of Clear Lake and the nearby coast Range is northwest to southeast.

It is in order to examine the direction terms that can be reconstructed as a set. The most consistent interpretation places them on axes oriented roughly northwest to southeast and northeast to southwest, although the directions indicated were rather general. We note that both the Sierra Nevada Mountains in Sierra Miwok territory and the Coast Range in Western Miwok territory had a general northwest to southeast orientation. If the Proto Miwok homeland was in or near historical Lake Miwok territory, as James Bennyhoff has suggested,<sup>16</sup> the reconstructed meanings are appropriate.

Bodega Miwok Indians seem to have reoriented the system according to the coastline, judging from *támal*, which means both 'west' and 'coast'; and *ʔá·la*, which means 'east, toward the land'. By coincidence, the coastline is almost due north-to-south in Bodega Miwok territory. Marin Miwok *tamal* became a general term for the coast and its inhabitants.

The reconstructed set is surprising in that a specific term for 'east' (or 'northeast') is missing, since a term for 'east' is supposed to be the first to enter a directional system. The other three Proto Miwok terms, *\*jak-* 'southeast?', *\*ʔolo-* 'southwest?', and *\*tamal* 'northwest'? do not appear to be derived from non-directional sources, except that *\*ʔolo-* may be cognate with a Rumsen word pertaining to nightfall. However, the association with specific directions is loose in the daughter languages, and other Miwok direction terms follow the patterns suggested by Brown.

#### Footnotes

1. Buck (1949), p. 870.
2. Brown (1983).
3. Brown, *op. cit.*, p. 130.
4. Brown, *op. cit.*, p. 136. East is commoner as a canonical orientation than any other direction.
5. Brown, *op. cit.*, pp. 132-33.
6. Brown, *op. cit.*, p. 135.
7. Southern Sierra Miwok items were taken from Broadbent (1964). Central Sierra Miwok is from Freeland and Broadbent (1960). Lake Miwok forms are from Callaghan (1965) and my field notes; Bodega Miwok material is from *ibid.* (1970); Plains Miwok items are from *ibid.*, (1984); and Northern Sierra forms are from *ibid.*, unpublished (1984).  
See Callaghan (1971) for the principal correspondences justifying the subdivision within Miwok and linking the Miwok and Costanoan families. A Proto Sierra Miwok form (PMis) can be reconstructed from two Sierra Miwok cognates. Plains and Sierra Miwok cognates lead to Proto Eastern Miwok (PMie) reconstructions. Lake Miwok and Coast Miwok cognates result in the reconstruction of a Proto Western Miwok item, and Eastern and Western Miwok cognates are necessary for a Proto Miwok reconstruction.

Saclan was a dialect of Bay Miwok, probably once spoken around the Lafayette-Walnut Creek area. We have only a short word list taken by Fray Felipe Arroyo de la Cuesta in 1821 (Beeler, 1955 and 1959).

Entries in parentheses are judged not to be cognate with other Miwok forms. My interpretations of S. A. Barrett are also in parentheses.

8. Coast Miwok probably was a single language with divergent dialects.

9. Schambach (1977) and Levy (1976).

10. Personal communication.

11. Barrett (1908), p. 366.

12. The following orthographic conventions have been used: j is [y] and y is [ɨ]. c is [č] in Sierra Miwok, [č ~ ts] in Plains Miwok and [ts ~ s] in Lake Miwok. We will also use the following abbreviations: (J), Jackson Valley dialect of Plains Miwok; (L), Lockford dialect of Plains Miwok; (C) Camanche dialect of Northern Sierra Miwok; (F) Fiddletown dialect of Northern Sierra Miwok; SB, recorded by S. A. Barrett; HWH, recorded by H. W. Henshaw; IK, recorded by Isabel Kelly; JS, recorded by Jesse Sawyer.

13. hi·sytok also refers to 'Maidu' who might recently have come from across the Sierras (William Shipley, personal communication). But hy·symyk 'Fiddletown' (also based on hy·sy-), refers to speakers of Northern Sierra Miwok, just south of the Nisenan (Maidun) speech area.

14. Brown, op. cit., p. 131.

15. -mu- is the Costanoan locative case. Mutsun -n is a nominal suffix, and Chocheño -j is an adverbial marker.

16. Personal communication.

17. Brown, op. cit., p. 145.

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Number 13

# Occasional Papers On Linguistics

Papers from the 1983, 1984, and 1985  
Hokan-Penutian Languages Conferences



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OCCASIONAL PAPERS ON LINGUISTICS

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PAPERS

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PREFACE

In 1981 the Hokan-Yuman Languages Workshop began meeting jointly with the Penutian Languages Conference. In 1982 the Hokan-Penutian Languages Conference began meeting with specialists from other disciplines, anthropologists, archeologists, geographers, and others. Because of the very diverse nature of such a group, various specialists desired to publish their papers in a variety of places in order for specialists in their disciplines to have ready access to them. This meant that there were no proceedings for the 1983, 1984, and 1985 Hokan-Penutian Languages Conferences. Papers from linguists who gave papers at these three meetings have been assembled in this volume.

The papers are presented in the order in which they were read at the meetings except the Callaghan paper on patridominance and Proto-Utian, which was discussed at length at the 1984 meeting, though it was not formally presented.

The 1983 Hokan-Penutian Languages Conference met at the University of California, San Diego, June 16-18, 1983. We greatly acknowledge all the work done by Margaret Langdon and others in the Department of Linguistics at UCSD, which made the meeting so enjoyable and useful.

The 1984 Hokan-Penutian Languages Conference met at the University of California, Berkeley, June 22-24, 1984, and was held in honor of Abraham Halpern. Our thanks go to Leanne Hinton and others in the Department of Linguistics at UCB for all they did to make the meeting enjoyable and productive.

The 1985 Hokan-Penutian Languages Conference met at the University of California, San Diego, June 19-21, 1985. We are again indebted to Margaret Langdon and the Department of Linguistics at UCSD for all the work they did in hosting another pleasant and useful meeting.

The 1986 Hokan-Penutian Languages Conference will be held at the University of California, Santa Cruz, June 23-27, 1986, as part of the Mary Haas Festival Conference.

Only a very few copies of the proceedings of earlier meetings are still available from the Department of Linguistics, Southern Illinois University, Carbondale, IL 62901. We are endeavoring to have the ERIC Clearing House on Languages and Linguistics offer these publications in some demand form.

James E. Redden

Carbondale, May 1986

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