Miwok Ablaut Grades
Catherine A. Callaghan
The Ohio State University

Miwok is a family of languages formerly spoken in Central California. Originally, 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:

I. Eastern Miwok (Mie)
   A. Sierra Miwok (Mie)
      1. Northern Sierra Miwok (Miba)
      2. Central Sierra Miwok (Mice)
      3. Southern Sierra Miwok (Misa)
   B. Plains Miwok (Mip)
   C. Saclan (Misac)

II. Western Miwok (Miw)
   A. Coast Miwok (Mic). Coast Miwok was probably a single language with various dialects.
      1. Bodega Miwok (Mib)
      2. Marin Miwok (Mic)
   B. Lake Miwok (Mil)

The Sierra Miwok languages were spoken on the western slopes of the Sierra Nevada Mountains from the Fresno River north to the Cosumnes River. Plains Miwok was once spoken in several dialects between Ione and Stockton. Lake Miwok was the language of a small group of Indians south of Clear Lake. Saclan, now extinct, might once have been spoken in a small area west of Mount Diablo.¹

Modern recordings exist for six Miwok languages; Southern Sierra Miwok, Central Sierra Miwok, Northern Sierra Miwok, Plains Miwok, Lake Miwok, and Bodega Miwok.² Reconstruction is possible at four levels; Proto Sierra Miwok (PMi), Proto Eastern Miwok (PMie), Proto Western Miwok (PMiw), and Proto Miwok (PMi).³

The Miwok family is in turn related to the Costanoan family of languages, formerly spoken from San Francisco south to Ewing.⁴ Miwok and Costanoan together comprise the Utian family (not to be confused with Ute). Any deeper genetic relationship is hypothetical at this point.

Freeland recognized the importance of stem alternations in Sierra Miwok.⁵ A schematic presentation of the principal alternations now follows. Examples are from Central Sierra Miwok.
<table>
<thead>
<tr>
<th>Stem 1</th>
<th>Stem 2</th>
<th>Stem 3</th>
<th>Stem 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>( C_{1}V_{1}C_{2}V_{2}C_{3} )</td>
<td>( C_{1}V_{1}C_{2}V_{2}C_{3} )</td>
<td>( C_{1}V_{1}C_{2}V_{2}C_{3} )</td>
<td>( C_{1}V_{1}C_{2}C_{3}V_{2} )</td>
</tr>
<tr>
<td>( t\dot{u}ja\text{\textperiodcentered}n- )</td>
<td>( t\dot{u}ja\text{-} )</td>
<td>( t\dot{u}ja\text{-} )</td>
<td>( t\dot{u}joa- )</td>
</tr>
<tr>
<td>'to jump'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_{1}V_{1}C_{2}C_{3}V_{2} )</td>
<td>( wyky- )</td>
<td>( wyk\dot{y}- )</td>
<td>( wykty- )</td>
</tr>
<tr>
<td>'to turn'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_{1}V_{1}C_{2}V_{2} )</td>
<td>( ham\text{-}e\text{-} )</td>
<td>( ham\text{-}e\text{-} )</td>
<td>( ham\text{-}e\text{-} )</td>
</tr>
<tr>
<td>'to bury'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( C_{1}V_{1}C_{2}Y- )</td>
<td>( ha\text{\textperiodcentered}-y\text{-} )</td>
<td>( ha\text{\textperiodcentered}-y\text{-} )</td>
<td>( ha\text{\textperiodcentered}-y\text{-} )</td>
</tr>
<tr>
<td>'to step on'</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We note that the canon of Stem 1 (the basic stem) is variable, while the other stems can be predicted if the primary stem is known. Also, the system usually assumes a triconsonantal stem, with \( y \) serving as a filler consonant if Stem 1 is ticonsonantal.

Stem 1 without suffixation (other than person markers) is the simple present tense. It also occurs before the perfect tense suffix and certain other derivational suffixes. For example, Mics \( t\dot{u}ja\text{-}n\text{-}y\text{-}m \) 'I'm jumping', \( t\dot{u}ja\text{-}n\text{-}ak \) 'I've jumped' and \( t\dot{u}ja\text{-}n\text{-}j\text{-}i\text{-}t \) 'I'm going to jump (somewhere)'. where \(-m\) and \(-t\) mark the first person singular, \(-ak\) is 'perfect tense', and \(-j\text{-}i\) is an andative suffix.

In like manner, Stem 2 is the base of past tenses, Stem 3 occurs in habitual constructions, and Stem 4 is often a noun or the base of an infinitive. Examples are Mics \( t\dot{u}ja\text{-}n\text{-}e\text{-}t \) 'I recently jumped' and Mins \( t\dot{u}ja\text{-}n\text{-}u\text{\textperiodcentered}w\text{-}t \) 'I never jump', where \(-e\text{-} \) is 'recent past' and \(-u\text{\textperiodcentered}w\text{-} \) is 'negative'. Note also Mics \( y\text{\textperiodcentered}w\text{-}y\text{-} \) 'to eat' (Stem 1) and \( y\text{\textperiodcentered}w\text{\textperiodcentered}y\text{-} \) 'food, to eat'. Each of the derived stems also occurs before a set of derivational suffixes.

Plains Miwok verbal stems closely resemble the Sierra Miwok system. The Western Miwok system is somewhat simpler. Verbs are commonly of the canon \( C_{1}V_{1}C_{2}V_{2}C_{3} \), which is automatically modified to a \( C_{1}V_{1}C_{2}C_{3}V_{2} \) stem before certain suffixes, such as \(-t\text{i}, \) a Lake Miwok semelfactive and a Eodega Miwok perfective suffix. An example is Mls \( tu\text{\textperiodcentered}ta\text{-}t\text{i} \) 'to twist, wind' and \( tut\text{\textperiodcentered}k\text{-}t\text{i} \) 'to twist something once'.
The most striking aspect of both Eastern and Western Miwok stem systems is the presence of metathesis as an active morphological process. Its activity is indicated by the fact that it involves loan words. Consider Miwok tawhal 'to work' (< Spanish trabaj & 'to work'), whose perfective is tawhla-ṭi.

Although metathesis is automatic before certain suffixes in all Miwok languages, there are other cases where it carries meaning alone:

Miit letō-j-pa 'to lap', letjo-pa 'to lap once', where -pa indicates directed action.

Mines hinc-w-u- 'to play the handgame' (<,*hinow), hinwo- 'handgame'?

This statement is equally true for Costanoan languages.

Ceb *irko 'to defecate', rirok 'excrement'.

The above discussion by no means exhausts the inventory of interrelated Miwok stems. As with Indo European languages, the irregular and non-automatic alternations are often more fruitful for historical purposes than stems that alternate automatically. In particular, some canonical variations of underlying stems consistently carry meaning, often apart from accompanying suffixes. Such canonical forms will be called ablaut grades. It is in order to investigate part of the Miwok ablaut system from a historical perspective.

Verbs that can be reconstructed to Proto Miwok fall into four basic stem types:

1. Light Stem (C₁V₁C₂V₂C₃)  PMi *nenut 'to know, to recognize'
2. Cluster Stem (C₁V₁C₂C₃V₂)  PMi *wel-kI 'to get' -ki 'transitive'?
3. Geminate Stem (C₁V₁C₂V₂)  PMi *myl-a 'to hit, to beat'
4. Long Stem (C₁V₁C₂V₂)  PMi *e-čy 'to sleep'

The final -CV of the Cluster Stem usually has meaning.

Eastern Miwok languages tend to preserve the Proto Miwok basic stem, usually as Freeland's primary stem (i.e., Stem 1). In Western Miwok, both the Proto Miwok Light Stem verbs and Cluster Stem verbs are normally neutralized to a Light Grade (C₁V₁C₂V₂C₃).
PM1 *kīʃaw 'to bleed'
PM1 *mulak 'to wash the face'
PM1 *pičak 'to crush, mash'
PM1 *mičem 'to eat supper'
PM1 *hoj-tu 'to begin, start'
PM1 *'ek-Ču 'to dream'
PM1 *kyn-šy 'to defecate, fart noisily'
PM1 *'ot-šu 'to urinate'
PM1 *'up-šy 'to swim, bathe'
PM1 *mul-tu 'to eat breakfast'
PM1 *wel-ki 'to get'
PM1w *kīʃaw 'to bleed'
PM1w *mulak 'to wash the face'
PM1w *pičak 'to crush things quickly'
PM1w *mičem 'to sup, supper'
PM1w *hojút - *hojút 'to begin, start'
PM1w *'ukuc 'to dream'
PM1w *kunuš 'to defecate'
PM1w *'očoš 'to urinate'
PM1w *'upuš 'to swim, bathe'
PM1w *mulút 'to eat breakfast, breakfast'
PM1w *welik 'to get, to catch'

Lake Miwok Light Grade verbs may assume an iterative function if they contrast with an automatic cluster stem before the semelfactive suffix -ti.

PM1 *pol-ku 'to flood something'
PM1 *put-ku 'to slit open, to gut'
PM1w *poluk 'to flood things one at a time'
PM1w *putuk 'to slit several bellies'

Sometimes the Western Miwok Light Grade does not occur, but it may be inferred from the automatic cluster stem before -ti.

PM1 *koš-ku 'to break, break something in two'
PM1 *wytaš 'to scrape, to scratch'
PM1 *nenut 'to know, to recognize'
PM1 *šul-ka 'to have diarrhea'
Mib košku-ši 'to break, break something in two' (< *koš-ku-ši)
PM1w *wotaš-ši 'to scrape, to scratch hard'
PM1w *nenuts-ši 'to know, to realize'
PM1w *šul-ša 'to have diarrhea'

The Geminate Grade (G₁V₂G₂V₂G₃) is found in nouns associated with Light Stem and Cluster Stem verbs. It is interesting that verbs can often be reconstructed to a deeper level than the corresponding nouns.
FMi *čul-ka 'to have diarrhea'
FMi *kyn-sy 'to defecate, to fart noisily'
FMi ʔoč-šu 'to urinate'
FMi kiš-aw 'to bleed'
FMie *tōtu·j-u- 'to foam'
FMie *haki·s-y- 'to smoke (fire or stick)
FMie *hak-si-'to smoke, to get smoky'
FMie hono·j-u-'to kneel down'
FMie *kan·m-y- 'to blow in gusts'
FMi ?ek-šu 'to dream'
FMie *čul-ak 'diarrhea'
Mins kyn'ys-y- 'sound of a fart'
Mili ʔoč·o-n-jomi 'bladder: urine place'
FMi *kiš-aw 'blood'
Miss ʔoč·uŋ 'beer'
FMie *haki·s(-a-) 'smoke from fire, cigarette smoke'
FMie *hon·oj 'knee'
FMie *kan·ym(-a-) 'gusts'
FMie *ek·uč 'a dream'

The Lengthened Grade \( C_1 V_{1·1} C_2 V_{2·3} \) forms Eastern Miwok nouns and Western Miwok durative verbs from Light Stem and Cluster Stem verbs. Costanoan evidence indicates that the Lengthened Grade had both semantic functions in Proto Miwok. 9

FMi *hoj-tu 'to begin, start'
FMi *mul-tu 'to eat breakfast'
FMi *ek-šu 'to dream'
FMie *kyn-sy 'to defecate, to fart noisily'
FMi ʔoč-šu 'to urinate'
FMi *nenut 'to know, to recognize'
FMie *tōtu·j-u- 'to foam'
FMi *pičak 'to crush, mash'
FMie *omu·č-u- 'to go into winter' (<*omu·č-)

Mili hōj-ct - hō:jut 'to start, one by one'
Mili mu·lut 'to breakfast (pl.)'
Mili mu·lut 'breakfast'
Mili ʔu·kuš 'to dream repeatedly'
Mili ku·nuh 'to defecate repeatedly'
Mili ʔo·ch 'to urinate all the time'
Mili nē·nut 'to care, to know, to find out'
Mins ne·nut 'friend, acquaintance'? 
Mili pi·čak - phi·čak 'to crush things slowly'
FMie *o·muč - *u·muč '?year, winter'

Lake Miwok often interprets the Geminate Stem in an iterative sense, in which case a Reduced Grade \( C_1 V_{1·1} C_2 V_{2·3} \) is interpreted as a semelfactive, either alone or before the semelfactive suffix -ti.
PMiw *tûn-a 'to kick, stamp'

PM1 *tum-û 'to haul wood'

PM1 *loj-a 'to rub'

PM1 *myl-a 'to hit, beat'

Mil tûn-a 'to kick or stamp repeatedly'

Mil tum-û 'to kick once'

Mil tum-û 'to haul wood'

Mil loj-a 'to rub something fast'

Mil loj-û 'to rub once'

Mil mul-a 'to spank, to whip, to club'

Mil mula 'to hit once'

The Reduced Grade has the same canon as Freeland's Stem 2 without the -tû argument as a filler consonant. Stem 2 frequently occurs before Eastern Miwok past tense markers, and in Lake Miwok, the Reduced Grade occurs before -tû 'semelfactive suffix' < PMiw *-tû 'perfective', which often has the force of a past tense. These facts suggest reconstructing an unaugmented Stem 2 (CV CV CV-) for Proto Miwok biconsonantal stems.

Support for this hypothesis comes from the possibility of reconstructing PMi *-oni-n-u 'to bring' from Mil *oni-n-u-ka (irregular) 'to bring' and Mip *oni-nu-k(-)u- 'to bring'. (Note PMi *oni-ni 'to come' and PMi *-nHu 'causative'.) We also note that the Central and Southern Sierra Miwok causative (-nHu-k-u-) follows Stem 2.

A Simplex Grade (CV CV-) can be formed from any stem. A stem-formative suffixCV CV can be added, forming a new Cluster Stem.

PMie *hon-oj 'knee'

PM1 *nake(s) - *naki(s) 'end, edge'

Mics hoo-ta- 'to hit with the knee'

PM1 *myl-a 'to hit, beat'

PMie *nake(s) - *naki(s) 'end, edge'

PMi *wyke 'fire'

PM1 *haÔ-1 'to stand'

PMis *nak-pa- 'to catch up with someone'

The lengthened Simplex Grade (CV CV CV-) apparently forms new verbs, often transitive. This process is especially prominent in Sierra Miwok.

PM1 *myl-a 'to hit, beat'

PM1 *nake(s) - *naki(s) 'end, edge'

PMi *wyk 'fire'

PM1 *haÔ-1 'to stand'

PMis *my-ly- 'to hit with a blunt instrument'

PMis *nak-ky- 'to reach (a time or place)'

PMi *wy-ky 'to burn'

PMis *haÔ-çy- 'to halt or station someone'
Some Light Stem verbs are associated with Eastern Miwok Cluster Grade \( \text{C}_1 \text{V}_1 \text{C}_2 \text{C}_3 \text{V}_2 \) nouns and adjectives.

PM1 *mičem 'to eat supper'
Mins mīceme- 'supper, supper-time'

PMie *hinow'-u- 'to play the handgame, to gamble' (**hinow)
PMie *amta'-y- 'to play football' (**amta)

PMie *ute'-n-y- 'to relate myths' (**ute)
PMie *ute'-n-y- 'story, myth'

PMis *hi'me- 'sunny, light'
PMis *hi'me- 'to get sunny' (**hi'me)

We see that the non-automatic stem alternations in Miwok languages can be most fruitfully interpreted as the remnants of an ablaut system, which can, in part, be reconstructed to Proto Miwok.

The Proto Miwok Geminate Grade is canonically identical to Freeland’s Stem 3, which in Eastern Miwok occurs before iterative suffixes. But the Geminate Grade is associated with nouns. The Proto Miwok Lengthened Grade probably formed durative verbs as well as nouns (i.e., very durative verbs). The Lake Miwok Reduced Grade is evidence for reconstructing an unaugmented Proto Miwok Stem 2.11

The Western Miwok Light Grade represents a neutralization of Light Stem and Cluster Stem verbs, and in Lake Miwok, it can have iterative force. An Eastern Miwok Cluster Grade forms nouns from underlying Light Stem verbs, the opposite of the Costanoan process. (Note again Ceb *irko 'to defecate', *irok 'excrement'.) Certain stems and grades are interrelated through metathesis.

Simple Miwok verb stems are bi- or triconsonantal, but any stem can be reduced to a Sierra Miwok Simplex Grade, which serves as the base of new Sierra Miwok verbs.
Footnotes

1. M. S. Beeler, 1955; ibid., 1959. James A. Bennyhoff (1977) suggests on the basis of place names that Saclar was a dialect of Bay Miwok, a speech area including much of the territory south of the Delta Estuary. Analysis of Indian proper names recorded at the Mission San Jose supports Bennyhoff's hypothesis.

2. Southern Sierra Miwok items were taken from Sylvia M. Broadbent, 1964. Central Sierra Miwok is from L. S. Freeland, 1951, and from L. S. Freeland and Sylvia M. Broadbent, 1960. Lake Miwok forms are from Catherine A. Callaghan, 1965; Bodega Miwok material is from ibid., 1970, and Plains Miwok items are from ibid., 1984. Northern Sierra Miwok items are from my field notes and from Freeland, 1951.

3. See Catherine A. Callaghan, 1971, for cognate sets and the principal sound correspondences linking the Miwok languages. A Proto Miwok reconstruction is possible where there is an Eastern and a Western Miwok cognate. For example, PM *mul-tu- 'to eat breakfast' was reconstructed from Mip mul-tu- and Mil mülut, both meaning 'to eat breakfast'. In like manner, a Proto Eastern Miwok reconstruction implies a Sierra Miwok and a Plains Miwok (or Saclar) cognate; a Proto Sierra Miwok reconstruction is based on at least two Sierra Miwok languages, and a Proto Western Miwok form can be reconstructed from Lake Miwok and Coast Miwok cognates.


5. The chart was compiled with slight modifications from Freeland (1951), p. 94-95. I use the following orthographic conventions: c is [k] in Sierra Miwok and Bodega Miwok, [ts] in Lake Miwok, and [s] - [t] - [s] in Plains Miwok. y is [j]. Y is /u/ - /v/ after stems whose last vowel is /u/ or /v/, and Y is /y/ elsewhere. In Plains Miwok, Y is /a/ after stems whose last vowel is /a/. C is any consonant and V is any vowel. C1 represents the first consonant, V1 represents the first vowel, etc. H is length where canonically permissible (i.e., -nHu- is -n·u- after vowels and -nu- after consonants).

6. Although the -Y- following Eastern Miwok consonantal vert stems can be considered automatic from a synchronic standpoint, it is historically a verbalizing suffix, and a Stem 1 vert of the canon CVCV.C- is underlingly CVCVC-. /CVGVC-Y-// > CVGVC-C-Y- by a morphophonemic rule.
7. Aspiration and glottalization are secondary in Lake Miwok.

8. Probable meanings for Proto Miwok stem-formative suffixes in the Cluster Stems under consideration now follow: *-tu 'intransitive' (may also be the meaning of Proto Miwok *-šu), *-šy *-šu 'bodily activity', *-ku 'deliberate action', *-ka 'semi-accidental', *-wa (uncertain, usually destructive in Eastern Miwok), -j is an Eastern Miwok verbalizer, Mie -pa- indicates directed action, and Mie -ta- occurs in verbs of iterative impact.

9. Note Mutsun pakšu 'to play ball', pa·kuš 'ball' mas·a 'to cover something', ma·sa 'to cover (many things)'. (See Marc Okrand, 1977, p. 117 and 195.)

10. -tš is here an andative suffix.

11. Evidence for a Proto Miwok triconsonantal Stem 2 comes from PMi ꞌošu-pa 'to wet (a diaper), to spray something (dog)', from MiL ꞌoosh-pa 'to spray several things (dog)' and Mip ꞌooh-pa- 'to wet, urinate on something'. Note PMi ꞌoš-šu 'to urinate'.
Bibliography


James A. Bentlyhoff, Ethnography of the Plains Miwok,
Center for Archeological Research at Davis Publica-
tion Number 5, University of California, Davis (1977).

Sylvia M. Broadbent, The Southern Sierra Miwok Language,
UCPL 38 (1964).

Catherine A. Callaghan, Lake Miwok Dictionary, UCPL 39
(1965).


_______, "Proto Miwok Phonology," General Linguistics

_______, "Proto Utian Derivational Verb Morphology,"
Occasional Papers on Linguistics (Number 11), Carbondale,


L. S. Freeland, Language of the Sierra Miwok, IUPAL, IJAL
Memoir 6 (1951).

L. S. Freeland and Sylvia M. Broadbent, Central Sierra

manuscript, 82 pages.

Marc Okrand, Mutsun Grammar, unpublished Ph. D. disserta-
tion, University of California, Berkeley (1977),
350 pp.
Occasional Papers On Linguistics

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

Department of Linguistics
Southern Illinois University
Carbondale, Illinois
OCCASIONAL PAPERS ON LINGUISTICS

Number 13

PAPERS
HOKAN-PENUTIAN LANGUAGES CONFERENCES

James E. Redden, Editor

The papers are presented in the order in which they were read at the meetings among the Native American and indigenous peoples which were assembled at various locations throughout the United States despite the fact that they were not officially presented.

The 1983 HOKAN-PENUTIAN LANGUAGES Conference was held at the University of California, Berkeley, June 10-12, 1983. We greatly acknowledge all the work done by National Science and others in the Department of Education in UNESCO, which made the meeting so enjoyable and rewarding.

The 1984 HOKAN-PENUTIAN LANGUAGES Conference was held at the University of California, Berkeley, June 22-24, 1984. We extend our thanks to James Redden and others in the Department of Language and Philosophy for all the work they did in making the meeting enjoyable and productive.

The 1985 HOKAN-PENUTIAN LANGUAGES Conference was held at the University of California, Berkeley, June 18-20, 1985. We are again indebted to National Science and the Department of Education at UNESCO for all the work they did in making the meeting enjoyable and productive.

The 1986 HOKAN-PENUTIAN LANGUAGES Conference will be held at the University of California, Santa Cruz, June 23-25, 1986, as part of the Mary Jane Sewell Conference.

Only a very few copies of the proceedings of earlier hearings are available from the Department of Language, Southern Illinois University, Carbondale, Illinois. We are considering to make an index of the papers on Languages and Culture in some annual form.

Department of Linguistics
Southern Illinois University
Carbondale, Illinois

Library of Congress Catalog

Number 85-063632
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 patrigominac 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 USCD, 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 USCD 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
CONTENTS

Papers from the 1983 Conference

The Hualapai Auxiliary /-i/, say
James E. Redden 1

Myth and Reality: The Antiquity of the Kumeyaay
Florence C. Shipke 4

Proto Utian Independent Pronouns
Catherine A. Callaghan 12

Papers from the 1984 Conference

Miwok Cardinal Direction Terms
Catherine A. Callaghan 25

Wesha Linguistics Prehistory
William H. Jacobsen, Jr. 33

Two Kinds of Bound Anaphora in Northern Pomo: Are They Logophoric?
Mary Catherine O'Connor 59

More on the Hualapai Auxiliaries /-yu/, be, and /-wi/, do
James E. Redden 70

Interrogative Sentences
Lucille J. Wathomigie and Akira Y. Yamamoto 75

Patridominance and Proto Utian Words for 'Man', 'Woman', and 'Person'
Catherine A. Callaghan 90

Papers from the 1985 Conference

The Walapai Verbs /é/
James E. Redden 101

Miwok Ablaut Grades
Catherine A. Callaghan 105