The development of head marking in Eastern Miwokan: 
Implications for contact with Proto-Yokuts

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Introduction

In the Nichols typology of head and dependent marking, the modern Eastern Miwokan languages are considered to be double marked (Nichols 1992: 298). These languages use both noun cases, a dependent marking characteristic, and verbal inflection for subject and object, a head marking characteristic. Proto-Miwok appears to have been almost entirely dependent marked (Callaghan 1980), yet head marking characteristics began to develop in Proto-Eastern Miwok to the point where the modern Plains Miwok and Sierra Miwokan languages are double marked.

The Yokutsan languages are dependent marked. Dependent marking is rare in the languages of the western hemisphere, although it is common in California. The California Penutian languages, which include Yokutsan, are dependent marked. With the exception of Uitun (Costanoan and Miwokan), however, they are considered to be unrelated (Golla 1994). The similarities in dependent marking between Yokutsan and Proto-Eastern Miwok therefore are due either to chance or to contact. Proto-Yokuts has roughly the same time depth as the neighboring Proto-Eastern Miwok or early Proto-Sierra Miwok. Southern Sierra Miwok and the Yokutsan languages share a preference for nominalizations, significant in that Proto-Yokuts was most likely in contact with the southern perimeter of Proto-Eastern Miwok.

Both Eastern Miwokan, represented here primarily by Southern Sierra Miwok, and Yokutsan, represented by Yawelmani Yokuts, use nominalization constructions. Differences between their constructions, namely in case assignment for passives and the treatment of direct and indirect objects, can be accounted for by the development of head marking in Eastern Miwokan. The resulting similarities present an argument for contact between two unrelated neighboring languages.

Contact and typological similarity

Interpreting the typological similarity as due to contact is consistent with archaeological evidence which indicates that the Yokutsan people were immediate neighbors with speakers of Proto-Utian, the later Proto-Miwok, and ultimately Proto-Eastern Miwok and Proto-Sierra Miwok (Moratto 1984). They have been neighbors for 3500 years, with adult learners of the language in every community due to exogamy and slavery. There was a vigorous trade between the two groups, evidence of which suggests that the Miwok were the more prestigious people. Regarding lexical similarities, such long term contact could not help but contribute borrowings and re-borrowings from different dialects at different times. The earliest borrowings would be between pre-Proto-Yokuts and Proto-Utian, with the possibility that Yokuts words could end up in Costanoan. This is an explanation for at least some of the Yokuts-Utian resemblant sets assembled by Callaghan (this volume). Regarding phonological similarity, Yokutsan and Eastern Miwokan display templatic morphology, a rare feature also found in Semitic. Differences in their templates can be accounted for by simplification, possibly due to language shift (Kramer 1995). Regarding typological similarity due to contact, the already considerable contact was intensified during a climatological disaster in 400 A.D. Cold dry conditions in the Sierras forced the Yokuts to abandon their homeland and to either assimilate or engage in warfare with their neighbors, principally the Miwok. This time is known as the 'Yokuts bottleneck' since only one of the presumed many Yokutsan languages survived. That language was Proto-Yokuts. Both Proto-Yokuts and Proto-Sierra Miwok date from this time.
Semantic and syntactic roles in nominalized passives

The Eastern Miwokan inflectional system developed first by incorporation of independent pronominals by nominalizations (see Appendix for complete paradigms). These independent pronominals can be reconstructed in Proto-Miwok and are the origin of the possessive series (C 1980:34). The nominalizations eventually became finite and 'syntactically liberated' (Givón 1995:143) as main clauses. The verbal inflections developed by analogy to the finite nominal inflections. The nominal inflections reflect semantic role, with the more agentive pronominal inflection in the possessive series and the corresponding NP in the genitive case. Patient/theme or goal roles are filled by the more patientive nominal series, with NP in the accusative case. This can be seen in the nominalized passive, where the agent, as in the active, is in the possessive series, with genitive NP, and patient/theme or goal are in the nominal series, with NP in the nominative (Southern Sierra Miwok: Broadbent 1960, Central Sierra Miwok: Freeland 1951);

(1) yuww-ka-σ-ʔ-ḥii (stir-past-its-nom.-his) 'he stirred it (yesterday)' B.720
(2) šiye-ʔa-me-ʔ-mook (see-pass.-our-nom.-y'all's) 'we were seen by y'all' F.34.III

The verbal inflections reflect more the syntactic roles subject and object, with the subject NP in the nominative and object or indirect object NP in the accusative. This can be seen in the absence of a verbal passive construction. Since the verbal inflections are built on analogy to the nominal inflections, the agentive possessive series supplies the subjects and the patientive nominal series supplies the objects. Eastern Miwokan promotes the patient NP to nominative in the nominalized passive, and so would presumably have a promoted the patient in the verbal passive (G 1995:83). But the nominal series patient had been used as the source of the syntactic object. The prototypical Eastern Miwokan subject apparently has not completely grammaticalized the agent, retaining enough of an association with agentivity to block promotion of a patient NP corresponding to the patientive pronominal in the more transitive verbal construction while allowing it in the less transitive nominalization.

The Yokutsan verbal passive, including the passive gerundial, puts the agent in the genitive case. But the passive of the Yokuts verbal noun is agentless. The genitive case is the patient of the passive verbal noun (Yawelmani Yokuts: Newman 1944);

(3) šil'hin na 'amin 'ut'-a (saw I his stealing-acc.) 'I saw his stealing' N.20:5
(4) šil'hin na 'amin luk'ui-hanaa'-in (saw I his bury-pass.-acc.)
'I saw his being buried' N.20:7

Primary and secondary objects

The Yokutsan languages are typologically similar in many ways to Eastern Miwokan, including in the passive constructions. Generally in both active and passive, Yokutsan and Eastern Miwokan share the typology of treating the goal/indirect object of ditransitive clauses like the patient/direct object of monotransitives, or primary object patterning (Dryer 1986), putting the ditransitive P/DO in the oblique instrumental/dative. The functional motivation is that goals are almost always human, and therefore more topical than patients, allowing for a higher ranking than patients in the role hierarchy. This treatment is associated with subject/object in being linked to discourse pragmatics. On the other hand secondary object patterning, the treatment of direct objects the same in mono- or ditransitive clauses, is claimed to be associated with ergative/absolutive in that it is linked to semantic roles (D 1986:842). Verbs, as clause heads, are more likely to mark syntactic subject/object than nouns, which are more inclined towards marking semantic roles (Nichols 1992:90). It is not surprising, therefore, that Yokutsan
breaks with its subject/object inclination in the nominalized passive by treating patients the same in mono- and ditransitive clauses. The passive verbal noun uses genitive, and the passive gerundial uses nominative. Eastern Miwokan similarly breaks with subject/object in passive nominalizations, as already mentioned, by using genitive for the agent in passive as well as active. This can be summarized:

<table>
<thead>
<tr>
<th>Southern Sierra Miwok</th>
<th>Agent</th>
<th>Patient</th>
<th>Goal</th>
</tr>
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<tr>
<td>verbal active</td>
<td>nom</td>
<td>acc</td>
<td></td>
</tr>
<tr>
<td>nom</td>
<td>inst</td>
<td>acc</td>
<td></td>
</tr>
<tr>
<td>verbal passive</td>
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<td>acc</td>
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</tr>
<tr>
<td>nominalized active</td>
<td>gen</td>
<td>acc</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>inst</td>
<td>acc</td>
<td></td>
</tr>
<tr>
<td>nominalized passive</td>
<td>gen</td>
<td>nom</td>
<td>nom</td>
</tr>
<tr>
<td>gen</td>
<td>acc</td>
<td>nom</td>
<td>nom</td>
</tr>
<tr>
<td>Yawelmani Yokuts</td>
<td>nom</td>
<td>acc</td>
<td></td>
</tr>
<tr>
<td>verbal active</td>
<td>nom</td>
<td>dat</td>
<td>acc</td>
</tr>
<tr>
<td>nom</td>
<td>nom</td>
<td>acc</td>
<td></td>
</tr>
<tr>
<td>verbal passive</td>
<td>gen</td>
<td>nom</td>
<td>nom</td>
</tr>
<tr>
<td>gen</td>
<td>dat</td>
<td>nom</td>
<td></td>
</tr>
<tr>
<td>gerundial active</td>
<td>gen</td>
<td>acc</td>
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<tr>
<td>gen</td>
<td>?</td>
<td>acc?</td>
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<td>nom</td>
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<tr>
<td>gen</td>
<td>nom</td>
<td>acc</td>
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</tr>
<tr>
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<td>gen</td>
<td>acc</td>
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<td>acc</td>
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<td>verbal noun passive</td>
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<td>gen</td>
<td>acc</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>gen</td>
<td>acc</td>
</tr>
</tbody>
</table>

Lexical integrity

The similarity between Eastern Miwokan and Yokutsan nominalized passives can be seen as a function of lexical integrity. As nouns, nominalized forms can be possessed. Possession of an active nominalization indicates the direction of transitivity is away from the possessor, and possession of a passive nominalization indicates the direction is toward the possessor. In Yokutsan, the possessed word is the nominalization and its case marking. In Eastern Miwokan, nominalizations may be possessed, but these nominalizations are more complex. They have inflections, namely patient coding, followed by case marking and the possessor itself. The possessor possesses the nominalization and its patient as one word under the scope of the case marker. Since the patient is included in the word, the possessor remains the agent, even in passives. For both Eastern Miwokan and Yokutsan nominalized passives it is their possession as words that is invariable, thus forcing the epiphenomenal typological variance.

As a consequence of the development of head marking, the possessed nominalized word in Eastern Miwokan is a VP. The possessor possesses, in a sense, the result of the interaction between the verb and its immediate constituent. The verbal preference for subject/object marking and the associated primary object pattern can prevail, since only the result is possessed. In Yokutsan, the possessed nominalized word has no bound constituent, the possessor essentially possesses the verb itself. In the active, the direction of transitivity is away from the possessor, allowing the verbal preference for primary object. But in the passive, the possessor is always the patient, precluding goal promotion, thereby forcing the nominal preference for
secondary object. The gerundials, which are not followed by case marking, appear to
straddle the difference between nominal and verbal.

The differences between Eastern Miwokan and Yokutsan regarding case
assignment and object patterning can be attributed entirely to the development of
head marking in Eastern Miwokan; an argument in favor of contact between two
unrelated neighboring speech communities.

The constraint of lexical integrity on case marking does not apply in the same way
in Lake Miwok (Callaghan 1963), a Western Miwokan language. The scope of the case
marking extends beyond the word to a clause;

(5) ma-hűn ʔiʔi wája-hinte-n (that-panther him give-rel.-nom.)
    'which the panther gives him'  C.330.2

Thus regarding the scope of case marking, Eastern Miwokan is more similar to
Yokutsan than it is to Western Miwokan; another argument favoring contact between
Eastern Miwokan and Yokutsan. This difference between Western and Eastern
Miwokan explains the incorporation of clitic pronouns in Eastern Miwokan resulting
in head marking in nominalizations.

Contact induced cliticization

'Clitic pronouns are the spontaneous response to language contact' (N 1992: 272).
The drift towards head marking in Proto-Eastern Miwok began with Proto-Miwok
cliticized pronouns (C 1980:36) and case markers. Cliticization is induced by contact
itself, not necessarily contact with head marking languages (N 1992: 273). Induced
cliticization is expected in areas of greatest diversity, namely residual zones and the
periphery of spread zones. This describes the Sacramento River Delta at the time it
was the homeland of Proto-Miwok and Proto-Eastern Miwok speakers. Additional
contact might be expected as well, since the Delta was a major trade route between the
Coast and the Sierras and beyond. There are still clitic pronominal and case markers
in Lake Miwok (C 1963).

Possessive (series 1)
The possessive series is the original series in Proto-Eastern Miwok, from Proto-
Miwok independent pronouns (C 1980:36). It now expresses possession of nouns and
the agent of nominalizations in the subjunctive or distant past; irrealis verb forms
low in transitivity (Hopper & Thompson 1980) and therefore likely to be nominalized.
Forms following case are from Proto-Miwok independent pronouns. Those preceding
case, which are not reconstructible in Proto-Miwok, are likely remnants of a series
of relationship possessives (Freeland 1951 §22.2). These forms are the 1st person sg.
-ni- and pl. -t:i-. As former relationship possessives, they would be more stative
than other possessives. As 1st person markers, they are so highly animate that as
statives they retained marking, whereas the 2nd and 3rd person markers were lost.
The more stative forms -nti- and -t:i- occur marking agents, as expected, only when
there is no overt patient marking. The more active markers -kan and -mahki are
adapted independent pronouns;

(6) cuku-nti-ʔ (dog-my-nom.) '(it is) my dog'  B.314
(7) wíksiʔa-y-hii (going-acc.-his) '(it is) his going'  B.314
(8) ʔenpu-ni-niʔ-kan (chase-can-your-nom.-my) 'I can chase you.'  B.314

Nominal (series 2)
This series may have replaced the older stative possessive series. This series occurs
with nouns and nominalizations of the low transitivity continuative and future, as
well as recent past, and is followed by case. For nouns it is interpreted predicatively as theme:

(9) hayaapu-ni-ʔ (chief-your-nom.) 'you are a chief'  B.314
(10) wiksi-y-ni-ʔ (going-fut.-your-nom.) 'you will go'  B.314

In passives, the nominal series is interpreted as marking patients;

(11) šiyyičē-šak-koo-ə (watch-cont.-their-nom.) 'they were watching'  F.33.1.3
(12) šiy-ŋe-ʔaa-m-ə (watch-pass.-past-our-nom.) 'we were seen'  F.34.11

In transitives, the nominal series marks patient in the possessive series;

(13) mickna-ʔa-tte-y-hiː (do what-inf.-my-acc.-his) 'what he does to me'  B.751

Nominal possessives mark both agent and patient in the nominal series. The agent follows the patient, as in the possessive series, but precedes case as might be expected from its more stative nature. Assuming Givón's adjacency principle; 'Spatio-temporal distance in the stream of speech tends to reflect conceptual distance' (G 1995:179), the nominal series agent can be seen not so much as possessing the result of the verb phrase interaction like the possessive series agent, but more as a participator or experiencer. This may explain why the nominal series markers occur exclusively as patient markers in the other series. Nominal series markers are agentive only in the nominal series;

(14) ŋenup-e-nii-te-ʔ (chase-past-your-my-nom.) 'I chased you'  B.314

With intransitives of series 2 and active transitives and passives of series 1 the nominal series patient/theme markers form an absolutive pattern, which is consistent with the lower transitivity of nominalizations (H & T: 254). In both active and passive the series 2 pronominal is in immediate constituency with the verb. This is not true, as already mentioned, of series 1, which is in immediate constituency with the nominalization. Example (9) with series 1 would be: hayaapu-ʔ-niː (chief-nom.-your) 'he is your chief'.

Case marking as predictor

Nominal series nominalizations in subordination use case marking to indicate relative tense;

(15) heniss-e-me-ʔ (rest-past-our-acc.) 'after we rested'  B.322
(16) kawl-i-pa-ə-y (dark-agt.'char.by'-its-acc.) '(it was) during the morning' B.322
(17) cilen-n-e-ko-n (eat lunch-past-their-gen.) 'after they ate lunch'  B.325

There is a tendency in Eastern Miwokan to apply techniques of subordination to independent clauses, including the use of case marking for tense (F.§28). This may have been to avoid backgrounding while favoring nominalizations (H & T: 284) possibly involving indirect speech acts (G 1995:143). On the analogy of the other case marked tenses, nominalizations in the present were marked by ʔ, perhaps iconically as a presentational device. Further analogy extended the ʔ to nouns as a present tense predictor and marked nominative;

(18) weltu-ə-ʔ (come from getting it-his-nom.) 'he is coming from getting it'  F.15.B.3
(19) weltuu-ə-ŋ (come from getting it-his-gen.)
  'he was coming from getting it'  F.15.B.3
(20) ye\`ii\`ee-s-? (speaker-his-nom.) 'he is the speaker'  F.15.B.3
(21) ye\`ii\`ee-\-s-\-\- (speaker-his-gen.) 'he was the speaker'  F.15.B.3

The nominative ? was extended as a predicator to possessive series nouns parallel to
the other cases, and to nominalizations, e.g. in the 'subjective absolute' (F.§28.2).

(22) \`oll\`uku-\-m\=aa\`\- (bow-nom.-our) '(it is) our bow'  F.23.3.A.I
(23) kala\`anti-\-ni-\-nti-\- (dance-pot.-my-nom.) 'I can dance'  B.732

**Subject marking on verbs**
Nominalizations are seen to be independent finite clauses with bound pronominal
marking, coding agent and patient. Finite verbs developed indexing as well by
analogy to the nominalization coding. For non-passives, agentive marking on
nominalizations would look like subject marking to verbs, since verbs, as clause
heads, are more likely to mark syntactic subject/object than nouns (Nichols 1992:90).
The resulting verbal inflections are the declarative series (series 3) and volitional
series (series 4) subject markers, which can be reconstructed in Proto-Eastern Miwok
(C 1980:37). It cannot be determined that in the absence of case marking they were
not clitics or may not have been used anaphorically.

(24) cili\`ili-\-si\`i (weave-you) 'you're weaving'  B.314
(25) teepa-\-\- (cut-it-he) 'he cut it'  B.314

**Object marking on verbs**
Verbal pronominal inflection is based partially on analogy to nominalizations.
Object marking is drawn from series 2 patient markers except where -\-mu-, '1st sg.
and 2nd person involved' is used. The characteristic ? nominative case marker
follows the series 2 marker except after -\-mu- or -\-muh-, '1st obj pl. and 2nd person
involved' in the declarative series, and in the corresponding places in the volitional
paradigm. The ? does not occur with plural markers.

**SSM Declarative (series 3) (based on B 1960:312-314)**

<table>
<thead>
<tr>
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<th>Obj.</th>
</tr>
</thead>
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<td>1s</td>
<td>2s</td>
</tr>
<tr>
<td>3s = (\emptyset)</td>
<td>1pl</td>
</tr>
<tr>
<td>2pl</td>
<td>3pl = (\emptyset)</td>
</tr>
<tr>
<td>1s</td>
<td>-mu-3ob</td>
</tr>
<tr>
<td>2s</td>
<td>---</td>
</tr>
<tr>
<td>3s</td>
<td>3sb-2ob-</td>
</tr>
<tr>
<td>1pl inc</td>
<td>---</td>
</tr>
<tr>
<td>1pl exc</td>
<td>---</td>
</tr>
<tr>
<td>2pl</td>
<td>mu-pl</td>
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<tr>
<td>3pl</td>
<td>3sb-2ob-</td>
</tr>
</tbody>
</table>

**SSM Volitional (series 4) (based on B 1960:312-314)**

<table>
<thead>
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<th>Subj.</th>
<th>Obj.</th>
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</thead>
<tbody>
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<tr>
<td>3s = (\emptyset)</td>
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</tr>
<tr>
<td>2pl</td>
<td>3pl = (\emptyset)</td>
</tr>
<tr>
<td>1s</td>
<td>---</td>
</tr>
<tr>
<td>2s</td>
<td>4sb/4du inc</td>
</tr>
<tr>
<td>3s</td>
<td>4sb-2ob-</td>
</tr>
<tr>
<td>1pl inc</td>
<td>---</td>
</tr>
<tr>
<td>1pl exc</td>
<td>---</td>
</tr>
<tr>
<td>2pl</td>
<td>4 du inc-pl</td>
</tr>
<tr>
<td>3pl</td>
<td>4sb-2ob-pl</td>
</tr>
</tbody>
</table>
Assuming that the order of morphemes represents the order of historical development, 3rd person subj. confirms Callaghan (1980:37) that subject preceded object marking. 1st and 2nd person involve an inverse marking morpheme -mu-, where 2nd outranks 1st in animacy, as opposed to series 1. For 2nd subj.-1st obj. in the declarative series, the direction of transitivity is correct, expressed by -mu- for the unmarked singular object, and using the expected series 2 for plural. For 1st subj.-2nd obj. however, the direction of transitivity goes against the hierarchy. This is conveyed for 1st sg. by using a series 3 object marker, perhaps because series 3 is less closely associated with patient than series 2. For 1st pl. the order of subject and object markers is reversed, iconically promoting the higher ranking 2nd person by placing it in subject position.

Double marking in Eastern Miwokan is reflected in the analysis of its pronominal inflection. The nominal marking is concerned with semantic roles, which the verbal marking has begun to grammaticalize into syntactic roles.

**Double marking and agreement**

Subject and object pronominal inflection on the verb may be seen as the arguments, relegating nouns, nominalizations and independent pronouns to adjunct status (Jelinek 1984). Nouns and nominalizations, on the other hand, may be seen as clauses with tense and pronominal inflection, using case marking as predicators;

(26) hayaapu-hhu-niʔ (chief-past-your-nom.) 'you were a chief'
(27) leeci-hhi-ntiʔ (cow-past-my-nom.) 'it used to be my cow'

In spite of the head marking feature of pronominal inflection, the agreement and case assignment expected in dependent marking remains;

(28) nαnnaʔ-ʔ ciiʔ-ʔ (man-nom. good-nom.) 'the man is good', 'the good man'
(29) miwwe-ʔ ?iwi-hhiʔ-koo (Indian-gen. food-past-nom.-their')

'The Indians' food'

This might be translated: 'there is a man, he is good.'

This might be translated: 'it is of the Indians, it was their food.'

(30) ʔenih-na-maa yawwe-s hayaapu-y (make-ben.-I bow-inst. chief-acc.)

'I am making a bow for the chief.'

This might be translated: 'I am making it for him, it is with a bow, it is for the chief'

This concord is governed not by noun class but by case marking, which relates backgrounded low transitivity clauses to foregrounded higher transitivity clauses. Thus dependent marking case marking continues to function along with head marking pronominal inflection.

**The similarity of Proto-Eastern Miwok and Proto-Yokuts**

If the development of head marking characteristics in Eastern Miwokan can be accounted for, then 1) the claims of Callaghan (1980) are supported that head marking was innovated in Eastern Miwokan rather than inherited from Proto-Miwo, and 2) the unrelated Proto-Eastern Miwok and Proto-Yokuts are seen to be similar in ways that are suggestive of contact.
### Appendix: The pronominal system of Southern Sierra Miwok (B 1960, table 6).

<table>
<thead>
<tr>
<th>Sbj.</th>
<th>Obj.</th>
<th>Series 1</th>
<th>Series 2</th>
<th>Series 3</th>
<th>Series 4</th>
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<td>-rå-</td>
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<td>-nih</td>
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<td>1p</td>
<td>-t:i/-mah:i:</td>
<td>-me-</td>
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<tr>
<td>1p inc.</td>
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<td>-tic:i:</td>
<td>-tic:i:</td>
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</tr>
<tr>
<td>1p exc.</td>
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<td>-mah:i:</td>
<td>-mah:i:</td>
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</tr>
<tr>
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<td>-MYko:</td>
<td>-tokni-</td>
<td>-toksu:</td>
<td>-ci:</td>
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</tr>
<tr>
<td>3p</td>
<td>-ko:</td>
<td>-ko:</td>
<td>-p:i:</td>
<td>-nihko:</td>
<td></td>
</tr>
<tr>
<td>1s 2s</td>
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<td>-te:nI-</td>
<td>-mu:</td>
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REPORT 9

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PROCEEDINGS OF THE HOKAN-PENUTIAN WORKSHOP

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cover design by Leanne Hinton (Santa Barbara Chumash rock painting)
INTRODUCTION

The papers in this volume were originally presented at the meetings of the Hokan-Penutian Workshops in Eugene, Oregon, July 8-9, 1994, and in Albuquerque, New Mexico, July 5-6, 1995. The 1994 Workshop was held in conjunction with a two-week invitational conference on Comparative Penutian Linguistics (the proceedings of which will be published in a forthcoming issue of the International Journal of American Linguistics) and was organized by the coordinators of that conference, Scott DeLancey and Victor Golla. The 1995 Workshop was one of a series of meetings on Americanist linguistics that formed part of the 1995 Linguistic Institute at the University of New Mexico, and was organized by Victor Golla under the auspices of SSILA.

A special feature of the 1995 Hokan-Penutian Workshop was a half-day session on the Present Status of Hokan Linguistics specially organized by Margaret Langdon and William H. Jacobsen, Jr. A substantial part of the present volume is given over to Appendices containing the bibliographies and short summaries of pronominal reference and case systems that were prepared for this session. Also included is the draft of a lexicon of Seri, prepared by Stephen A. Marlett and Mary B. Moser for Mary Ritchie Key's "Intercontinental Dictionary Series," a lexical database designed to facilitate crosslinguistic research. The format of this database is derived from Carl Darling Buck's Dictionary of Selected Synonyms in the Principal Indo-European Languages.

This is the second volume of Hokan-Penutian Workshop Proceedings to be published by the Department of Linguistics, University of California, Berkeley, as one of the Reports of the Survey of California and Other Indian Languages, under the general editorship of Leanne Hinton.

Victor Golla
Volume Editor
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