YUMA (KWTSAN) AFTER 40 YEARS

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In 1935, just over 40 years ago, A.M. Halpern began his field studies of the Yuma language which were to result in the first systematic description of a Yuman language (Halpern 1942, 1946 a-b, 1947). Not only was his work to serve as model for subsequent descriptions of other languages of the family and to provide basic insights into the structure of Yuman languages in general, but it now makes possible a comparison between the language as spoken when Halpern first started his fieldwork and the present time.

The main body of Halpern's data consists of traditional textual material obtained of necessity from the older and more knowledgeable speakers of the language (supplemented of course by intensive grammatical elicitation), while the present report is based on the speech of young adults serving as consultants in 1975 and consists of a variety of utterances elicited in the context of a field methods class at UCSD and other work sessions. It is therefore clear that the distance separating the two sets of data is equivalent to three generations.

To facilitate identification of the two sets of data, the earlier recordings (always in Halpern's notation unless otherwise specified) will be labeled Yuma (Yu), while the modern ones will be labeled Kwtsaan (Kw), i.e. the native designation of the tribal group and language. The Kwtsaan data are transcribed in a practical orthography developed with the help of our consultants in the field methods class. The two systems are roughly equivalent except as discussed below, but differ somewhat in analytical depth, since Halpern's transcription reflects a full-fledged phonemic analysis occasionally closer to the systematic phonemes of generative phonology than to, say, those of Bloch and Trager, while our orthography is closer to a broad phonetic transcription since in some cases it is not clear to us at this time what the underlying representation of some segments should be for the 1975 stage of the language. Some of the ways in which the two phonological systems differ are discussed below.

While this paper focuses on differences between the two stages of the language and their implications for the synchronic description of present-day Kwtsaan, this should not be construed to imply that a major disruption has occurred. On the contrary, as the discussion below will make clear, Kwtsaan is the same language as Yuma and there is no evidence whatsoever of a breakdown in communicative function.

Phonology

One of the most distinctive phonetic characteristics of Yuma/Kwtsaan is the very common occurrence of the phone [tʰ] where cognate forms in most other Yuman languages have [k]. For Halpern, [tʰ] and [k] are allophones of the phoneme /k/:

The dental pronunciation of k is the more frequent when k occurs in the initial or final position of the word, in the medial position followed by c, o, u or w, or as the initial member of a consonant cluster... The dental-alveolar pronunciation of k is the more frequent when k occurs in the medial position in the word followed by a, a', e, e', i, or i'... (Halpern 1946b:27)
In Kwtsaan, on the other hand, we consistently record [tʰ] for all instances of Yuma /a/. We interpret these facts to mean that in 1935 a sound change ȵ → tʰ was in progress and has now run its full course. Speakers of Kwtsaan are conscious of this difference between their language and other Yuman languages with which they have direct contact. We even venture the suggestion that the sound change, once begun, may have received reinforcement from this awareness since the use of the segment [tʰ] unambiguously identifies the speaker as Kwtsaan and not, e.g. Mojave, a neighboring language with which Kwtsaan shares many features.

A style of speech in which a number of instances of the older [ʈ] are used is still known and is associated with very formal occasions.

The phone [ʈ] itself does occur in the speech of our consultants, but in forms where Halpern records a phoneme /tʰ/. This is a very rare segment and in most cases is the result of the surface coalescence of the underlying sequence t + y. It is unambiguously attested only in the morpheme /tʰa/ 'completed action, universally true, obviously':

(1) Yu: 'avav-m-tək ?að-ʈYa 'I have arrived here' (Halpern 1947:156)
(2) Kw: 'adum 'adotkucha 'I did it (obviously, although I shouldn't have).'

In Kwtsaan, [ʈ] from /tʰ/ freely varies with [tʰ] and [tʰ], and so it seems that the completion of the change ȵ → tʰ has freed the phone [ʈ] for other uses and it is now on its way to overtaking [tʰ]. It is clear that these changes are of a purely phonetic nature and do not in any way affect the underlying system.

The rest of the consonantal system is as described by Halpern. One clarification may be useful: the segment Halpern transcribed /ʃ/ (transliterated sh in the practical orthography) is phonetically an apico-postalveolar fricative [ʃ] and patterns with /ʈ/ rather than with palatals.

Things are somewhat more complicated in the area of vowels. In Langdon (1976a) I have shown that the stressed vowels of Yuma (5 short and 5 long) can be derived from an earlier 3-vowel system (Short and 3 long) by a set of diachronic phonological rules, some of which still have synchronic validity, particularly in the verb system. One process, consisting of two rules, raises the short low vowel /a/ first to [ə] and then to [ɪ] as follows:

(3) Yuma vowel raising rules: 1. a → e / \{ [+pal] \} 1
2. e → i / \{ [+pal] \} 1
3. *if no boundary intervenes between the vowel and the conditioning environment; pal = c, k, r, l, v, y; lab = k, q, x, w.

There is now evidence in Kwtsaan that the environment conditioning the application of Rule 2 is being expanded in the direction of that of Rule 1. Some examples illustrating this tendency are as follows:

(4) 'red' /ə-xʷət/ Yu ʔəxʷət → Kw ʔaxwit
(5) 'bear' /ma-xʷət/ Yu ma-xʷət → Kw maxwit
(6) 'to cut' /a-kət/ Yu ʔakət → Kw ʔkyit
(7) 'me' Yu ʔənʷəp - ʔanʷep → Kw nyip

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If this trend were to become more general, it would lead to a collapsing of the two rules into one, taking a to i in one operation in the environment of rule 1, resulting in a simplification of the rule system. It is, however, very unlikely that this will be the future result, in view of the fact that we have recorded instances of raising of a to e in environments not covered by rule 1, but apparently more similar to rule 2. Thus

(8) 'that (obj)' Yu ava-nY → Kw ave-nY
(9) 'this (obj)' Yu vada-nY → Kw vade-nY
(10) 'this (sub)' Yu vada-c → Kw vade-ts

Note that there is a boundary between the vowel and the following palatal, which does not conform to rule 2. In fact, an alternative suggestion would be to consider these cases as extensions of rule 1, with v and ā added to the labial and palatal group respectively. This is even more intriguing when it is noted that v and ā are from earlier *w and *y. Some versions of generative phonology would attempt to build these facts into the rule system by applying first rule 1 to an underlying form in which w or y has been reinstated and ordering the rule producing v and ā after rule 1. This, however, would be wrong both synchronically, since there are no remaining alternations between w and v and y and ā, and diachronically since the change from w to v and from y to ā is obviously more ancient than the changes in 8-10, which we must assume to have happened since 1935.

The phenomena just discussed for vowels obviously produce a change in the phonemic representation (in the traditional sense) of these forms, but no change in their underlying representations, at least for those cases where related forms still have the underlying vowel. The word for 'bear' (5), however, may be on its way to being restructured with i rather than with a, since no alternate forms are available. On the other hand, the rules needed to account for these forms will be harder to state with the gradual incorporation of new environments.

There is in Kwtsaan a phone not specifically reported by Halpern for Yuma, namely a long very low front vowel æ, which I, for one, found distinctly startling since I had never heard it in any Yuman language. In most instances, it corresponds to Halpern's /æ/ which he likens to the vowel of German Weh, but for which his phonetic transcription is [ɛ:].

(11) 'tall' Yu lame xe → Kw lameæ æ
(12) 'increase' Yu ucape xe → Kw 'a lot' tsapeæ æ tm
(13) 'to miss' Yu ūame xe → Kw shameæ æ

In addition to the above, which are all instances of this vowel in stressed position, we also find it in unstressed position. It is clear from Halpern's description of Yuma long vowels that there are only three contrasting units in unstressed position, which he phonemicizes appropriately as /i, a, u/. Specifically: "When preceding an accented ē, ē', ō, or ō', i generally has the quality of accented ē, although in careful pronunciation it may be pronounced with the quality of ū..." (Halpern 1946b:31). In just these environments, we typically record unstressed æ :
(14) 'doctor' Yu $\text{kwa}\text{s\text{\'}i\text{\text{-}}\text{de}•}$. [k\text{\text{-}}\text{de}•] $\rightarrow$ Kw kwas\text{\text{-}}\text{de}•

(15) 'fierce' Yu mas\text{i\text{-}}\text{de}•v (presumably[m\text{\text{-}}\text{de}•v]) $\rightarrow$ Kw mash\text{\text{-}}\text{e}• \text{ae}•v

(16) 'foot' Yu i\text{\text{-}}\text{me} $\rightarrow$ Kw ææææææ

(17) 'belly' Yu i\text{\text{-}}\text{to} $\rightarrow$ Kw ææææææ

(18) 'face' Yu i\text{\text{-}}\text{do} $\rightarrow$ Kw ææææææ æædo [g\text{\text{-}}\text{d}•]

For items 14-17, no variation was recorded, but 18 allowed two forms. In general, the lowest vowel is more generally present when the following stressed vowel is a front one. On the other hand, we have recorded some words which, in spite of the proper environment, never have ææ•:

(18) 'my belly' Yu ?i\text{\text{-}}\text{to} $\rightarrow$ Kw 'iito (*iææææææ)

(19) 'horn' Yu i\text{\text{-}}kææææææææ ææææææ

There are also some instances of stressed /ææ/ which are never pronounced ææ•:

(20) Kw aaxaakycee 'they have crossed'

(21) Kw aadeev 'to move aside'

The situation becomes even more complicated when we note sporadic instances of the phone [ææ•] in stressed position in forms where the expected vowel is i• or a•:

(22) 'regardless' Yu a\text{i\text{-}}\text{m} $\rightarrow$ Kw ææææææææ

(23) 'that' Yu n\text{\text{-}}\text{a}• $\rightarrow$ Kw ææææææææ

These facts point to yet a new round of the combined tendency (see Langdon 1976a) to raise low vowels and lower high vowels, this time with a target in the ææ• area. If this trend continues, this will lead to an additional contrastive vowel. The resulting very peculiar vowel system would result:

i  u  ii  uu  e  o  ææ  ææ  a

While the processes leading to the emergence of this new vowel have strong precedents in the history of the language, the oddness of the segment itself and its rarity in the Yuman family must again be noted. The only context in which I have ever been conscious of a similar sound is in some Yuman songs, a source which should not be discounted a priori (for an analysis of the language of Yuman songs, see Hinton 1976).

Morphosyntax

We first note some peculiarities of the use of demonstrative morphemes. Like all Yuman languages, Yuma/Kwatsaan demonstratives exist in both free and affixed form (see Langdon 1968 for the historical developments), the affixed ones being typically shorter and otherwise reduced under the loss of stress which accompanies (or causes) affixation. A very common suffix -\text{n}y (best translated 'the') is freely suffixed to nouns and may in turn be followed by the appropriate case marker:

(24) Yu -\text{n}y\text{\text{-}}\text{c} 'subject', -\text{n}y 'absolutive (object)', -\text{n}y\text{\text{-}}\text{k} 'locative', -\text{n}y\text{\text{-}}\text{am} 'ablative', -\text{n}y\text{\text{-}}\text{al} 'allative'

In Kwatsaan, demonstrative words would have been

(32) Kw
In Kwtsaan, we find in addition a suffix-nyiny, only before the subject marker, but of very common occurrence (the whole suffix complex is pronounced nyints), next to forms with only ny + ts (pronounced -ints). There is a statistical preference for the shorter suffix complex to be used after stems ending in consonants and the longer one after those ending in vowels and glides, but the two suffix complexes may also contrast on the same stem, with semantic differences hard to characterize but apparently involving varying degrees of definiteness or specificity. Thus

(25) After consonants: Kw siny'ak-ints 'the woman (sub)' poosh-ints 'the cat'

(26) After vowels and glides: Kw poosh kavtay-nyints 'the big cat'
               Kw 'iipaa-nyints 'the man'

(27) Contrastive: Kw 'itskurow-ints 'my car'
               Kw 'itskurow-nyints 'my (dear little) car'

The new suffix-nyiny undoubtedly derives from the free demonstrative nyaany 'that one' through a series of steps roughly as follows, each one of which is independently attested elsewhere in the language, and involving among other things, the operation of rules 1 and 2 discussed above:

(28) nyaany-ts → nyany-ts → nyény-ts → nyiny-ts → nyints → -nyints

We also record the pronominal form nyaanyints 'that one (sub)' which may conceivably be analyzes in two ways, but which in neither case shows no less than three instances of the demonstrative element ny:

(29) nyaanyints = nyaany-ints or nyaan-nyints

The restriction of the new suffix to the subject case may be due to the fact that subjects tend to be more specific and definite than other arguments.

Overlapping with the question of demonstratives is the use of a suffix -a (also a troublesome element in other Yuman languages, see e.g. Langdon 1976b) in a function not noted in Halpern's description. In Yuma, Halpern notes a vocative use of -a. We find this too:

(30) Kw 'antay-a kadiik 'Mother, come here!'

He also has a somewhat meaningless 'sentence final' marker -a, of which (31) may be a Kwtsaan example, although it is more likely to be the one to be described below:

(31) Kw 'an'ay-ints aviish tarxsaar-a (my=father-dem=sub finish work-a)
               'My father finished working.'

In Kwtsaan we often find -a on nominals functioning as objects, where Yuma would have ə or -n̪ as is to be expected in a system where the object case is unmarked. An example of three possible forms of a single sentence is

(32) Kw poosh
               poosh-a
               poosh-nya
               tsakyewsh 'He bit the cat.'

Object nominalized clauses typically take the full -nya as in the relative clause

(33) Kw kuskyii 'a-tsuumaly-nya 'a-taxaaw-sh (pot-I-drop-nya I-break-evid)
               'I broke the pot I dropped.'
Kwetsaan thus does not allow a bare -ny suffix on nouns, but allows it on
pronouns, both personal and demonstrative:

(34) Object pronouns: Kw maa-ny 'you', nyaa-ny 'that, him',
vade-ny 'this near', ve-ny 'this'

These pronouns may, in addition, take the suffix -a, but only in rather
emphatic contexts:

(35) Kw nyaa-ts maa-ny-a nyi-kasw-sh (I-sub you-dem-a I-you-hit-evid)
'I hit you.'

(36) Kw poosh-ints nyip-a tsakyew-sh (cat-dem-sub me-a bite-evid)
'The cat bit me.'

Note in (36) the irregular object pronoun for first person with final
-2 and no -ny.

It therefore appears that the suffix -a is on its way to becoming an
object marker. One result of this restructuring is the generalization
that demonstrative suffixes on object nouns now all have the shape CV.
Yuma had -sa, -va, and -ny, Kwetsaan has -sa, -va, -nya.

More drastic restructuring is affecting the oblique cases. For Yuma,
Halpern identifies the following case markers, to which should be added
a 'general locative' -i which may be used by itself or in addition to one
of the other cases:

(37) Yuma oblique cases: -m 'through, by means of'
-k 'at, from'
-1y 'into'

The Yuma system is similar to that found in other Yuman languages and
indeed instances of all these markers are found in Kwetsaan as well.
Simultaneously, however, we find evidence for a reshaping of oblique
case markings. First of all, we note that in many sentences case markers
are interchangeable or optional, probably with fine semantic distinctions
between the variants. This too is attested in other Yuman languages.

(38) Kw 'ava-ny-i-ly xav-ka  'He went into the house, He entered the house.
 'ava-ny-i
 'ava-ny-a

(39) Kw 'ava-ly kuuvaat-t 'Stay in the house.'
 'ava-k
 'ava

More importantly, there is a tendency to replace the use of local-instru-
mental cases by constructions where the noun expected to be marked for case
appears in the same form it would have if were the direct object. The
degree to which this process has progressed varies for each of the case
categories, the most eroded being the instrumental use of -m which is con-
tsistently replaced by other constructions in our data. The other cases of
-m, i.e. 'through, (together)with' are still fairly active, though the
comitative too is showing signs of erosion.

The typical Kwetsaan construction expressing the instrumental is
illustrated in (40):

(40) Kw xatm-

In other followed case marked
by

(41) Yu

(42) Kw

When presen-
teed 'u

awesome 'do',

(43) Kw

(44) Kw

It seems v

typically Y

means 'he

constructs
rather than
shows seri-
Slaterr 1977
indeed this
below. So
support its
awesome 'do' is
-m marked r
Secondly, if
instrumental
frozen rela-
have meant:
In support of
Mojave as we
instrumental

A parallel
and is used

(45) Kw xatm-

This form to
be explained
for case marker

(46) Kw xatm-


(40) Kw 'a'ii wiim mat-ily k- anyoor-k (stick ? ground-into imperative-write-tns) 'Write on the ground with a stick!'

In other words, the noun phrase denoting the instrument is unmarked and followed by wiim, translated 'with'. The expected construction with the case marker -m is illustrated for Yuma by (41) which is emphatically rejected by our consultants and paralleled by an equivalent construction (42)

(41) Yu 'u. ti. y-m ?i. pa-m a. k' e. tk 'He guides him with a bow and an arrow.'

(42) Kw 'uutilish 'iipa wiim kyeeh 'He shot with a bow and arrow.'

When pressed for a more precise translation of wiim, our consultants volunteered 'using' confirming our impression that wiim is a form of the verb awe 'do'. Variants of this sentence type where wiim is in fact inflected for person in true verb fashion are indeed possible, as in (43) and (44) with imperative and reflexive inflection respectively.

(43) Kw 'a'ii ka-wiim mat-nyi k- anyoor-k (stick imp-wiim ground-loc imp-write-tns) 'Write on the ground with a stick!'

(44) Kw xumarikaany-ints xa mat-swim vuunco-sh (children-sub water self-wiim be-around-pl-evid) 'The children are squirting themselves with water.'

It seems very likely then that this construction is an instance of the typically Yuman type of loose embedding of two clauses and that, e.g. (42) means 'he used a bow and arrow and shot'. The only problem is that this construction would require a suffix -k 'same subject' on the embedded verb rather than -m which normally signals 'different subject'. While Kwtsaan shows serious complications in the switch-reference system (but see now Slater 1977), still a typical construction of this type would show -k, and indeed this is the suffix found in other constructions to be described below. So why -m? As least two convergent factors may be at work to support its presence in the sentences in question. First of all, the verb awe 'do' is part of a class of verbs which, when used as main verbs, are -m marked rather than -k marked (a trait Kwtsaan shares with Mojave).

Secondly, it cannot be pure coincidence that -m is the form of the old instrumental case, suggesting that perhaps the wiim construction is a frozen relative clause in the instrumental case which would originally have meant something like 'he shot with the bow and arrow that he used.' (42).

In support of the antiquity of the construction, we may note it exists in Mojave as well, where it is a rare variant of the otherwise still vital instrumental -m (Munro, personal communication).

A parallel construction using the verb adii 'come' is translated 'from' and is used in constructions where the case marker -k would be expected.

(45) Kw xatmasiny-i adiik aalyaq-sh (horse-loc from fall-evid) 'He fell off the horse.'

This form too can be inflected for person and takes the suffix -k as expected for 'same subject', but note that -k also is the appropriate case marker 'from'.

(46) Kw xatmasiny-i m-adii-k m-aalyaq-sh (horse-loc you-from-k you- fall-evid) 'You fell off the horse.'
Interesting variants of this construction are as in (47) where the verb acquire a prefix n- which cannot be identified here as the second person prefix.

(47) Kw xatmasiny-i m-adiik aalyaqsh 'He fell off the horse.'

The only explanation for this prefix which seems at all motivated is to assume that it is in fact an instance of the -m case marker (presumably in its comitative meaning) originating on the preceding noun and transferred to the next word according to the tendency already noted by Halpern (1946b:151) for a final consonant to be pronounced as the initial of the following word if the latter begins in a vowel. That this process is now more than a phonologically predictable alternation and is fully reinterpreted as a prefix is shown in (48) where the m is preceded by a demonstrative and the whole complex could not be a suffix on the preceding noun which already has its own terminal suffix -a.

(48) Kw xatmasiny-a nyim-adiik aalyaq-sh 'He fell off the horse.'

Another verb conveying the meaning 'from' is kaman;

(49) Kw kuskyii-nyiits lamamn -i kaman-k naly-k (cup-sub table-loc from-k fall-tns) 'The cup fell off the table.'

This verb probably means something like 'originate from' as in

(50) Kw John-ts Yuma kaman-k 'John is from Yuma.'

It undoubtedly contains the root man 'rise' and it is not at all unlikely that the prefix k- is itself the result of the same transfer of a case suffix to prefix position on the next word, but at an earlier stage of the language. It too can be inflected for person:

(51) Kw avii-nya ma-kaman-k m-aalyaq-k (rock-loc you-from-k you-fall-Q) 'Did you fall off that rock?'

Other locational-directional notions for which no specific case markers exist are also conveyed by this type of construction:

(52) Kw xatmasiny-ts iipea-nya maayk pan-sh (horse-sub man-dim on-top fall-down-evid) 'The horse fell on top of the man.'

(53) Kw xatmasiny-a maayk ma-pam-k (horse-g on-top you-fall-Q) 'Did you fall on the horse?'

The maayk construction is also attested in Kumeayay (Southern Diegueño) and in both languages it is invariable, acting somewhat like a postposition, which may well become the fate of all these verbs, thus developing what could be considered a whole new case system.

One more instance of the reanalysis induced by the tendency for a suffix to become a prefix on the next word is the appearance of a new set of auxiliaries with a prefix k-, probably a reshaping of the older and pan-Yuman construction illustrated in (54), where the suffix -k is the 'same subject' marker:

(54) Kw ame-k uunoo-sh (cry-same-sub be-around-evid) 'He's crying.'
(55) then could be nothing more than a phonologically conditioned variant: 
(55) Kw xaly'up k-uuvaa-sh (bathe k-be-there-evid) 'She's taking a shower.' 
That this is no longer the case is shown in (56) where the underlying 
presence of a -k suffix on the preceding verb as origin for the prefix cannot 
be defended, since the preceding verb has -m which is mutually exclusive 
with -k.

(56) Kw makyits amii-m k-uunoo-m (who cry-m ?-be-around-Q) 'Who's crying?' 
It is of interest to note that exactly the same kind of reshaping is taking 
place in Paipai (Joél, personal communication).

Another example is (57) with a -k suffix on the preceding verb and a k-
prefix on the following auxiliary.

(57) Kw 'istuuuuvu-nyil k-uvaa-sh (garden-in work-same-sub 
k-be-there-evid) 'He's working in the garden.'

It should by now be obvious that the differences noted between the two 
stages of the language reflect tendencies which are known to have been at 
work in Yuman languages at various stages of their history and not, as 
might be hypothesized, interference from English in the by now fully 
bilingual context. While these changes are therefore not unexpected, 
their repercussions for the synchronic analysis of Kwtsaan may be far-
reaching, demonstrating among other things that syntactic change can be 
simultaneously drastic and rapid. Whether this kind of change as opposed 
to the more obvious kinds of interference across languages tends to be 
hastened by the bilingual context is an intriguing question which can of 
course not be answered here. Be that as it may, we are glad to report that 
Kwtsaan is alive and well and is vigorously pursuing a very Yuman course.

Footnotes
1 This is a revised version of a paper read at the 1975 meeting of the 
American Anthropological Association. I have benefited greatly from comments 
on the earlier version by Abraham Halpern. I also wish to thank Don Crook 
and Sue Norwood for many insightful discussions of the Kwtsaan data. My 
research has been supported by the National Science Foundation and the 
University of California, San Diego.
2 Our consultants, Christine Emerson and Cynthia Wilson, deserve credit 
for whatever insights we gained into the structure of their language.
3 In the practical orthography, the following symbols are the same as 
Halpern's: p t k q v s x m n l w y r i e a o u; long vowels are written 
double; in addition, the following equivalences hold (the first symbol 
of each pair is Halpern's, the second that of the practical orthography): 
\( t \)\( : \)ch, \( s \)\( : \)t, \( k \)\( : \)ky, \( k \)\( : \)kw, \( q \)\( : \)qw, \( o \)\( : \)'c, t:s, a:d, s:sh, x\( ^{\prime} \)\( : \)xw, n\( ^{\prime} \)\( : \)ny, 
\( i \)\( ^{\prime} \)\( : \)ly.
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PREFACE

In 1970 numerous linguists working on Hokan and Yuman languages were invited by Margaret Langdon to attend a conference at the University of California, San Diego. This made it possible for specialist to get to know each other and to learn in detail what each other was doing. The meeting was so successful that participants soon began asking when we would meet again. In 1975 Margaret Langdon invited the Yumanists to a workshop in conjunction with the research being done at the Yuman Languages Archives which she had established with the aid of a National Science Foundation grant. Again, the participants felt that the workshop was so successful that we ought to meet every year if possible. In 1976 another workshop was held at UCSD to which both Hokanists and Yumanists were invited. These proceedings are the result of that workshop. It is now expected that Hokanists and Yumanists will meet every year. The 1977 meeting will be at the University of Utah in Salt Lake City.

The participants of the 1976 Hokan-Yuman Languages Workshop gratefully acknowledge all the work that Sandra Chung and Pamela Munro did in organizing and running the workshop. Thanks are also due to Donald Crook and Susan Norwood for looking after the many details that helped make the workshop run smoothly.

Unfortunately, everyone who presented a paper at the 1976 Hokan-Yuman Languages Workshop was not able to prepare a final version for inclusion in this volume before it went to press. All the papers in this volume were presented in an earlier version at the 1976 workshop except the ones by Langdon and Webb, which were not ready in time for presentation for the workshop. However, since many of the points they contain were discussed at the workshop, they are included here.

The papers are presented according to the groups of languages presented at the workshop. Since there were some last minute changes in the program, I must plead faulty memory if I inadvertently placed some papers in an order different from that of the workshop presentation. The Langdon and Webb papers are included in the appropriate groups.

James E. Redden
Carbondale, May 1977