The Development of the Pai Vowel System
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0. The vowel systems of the various Yuman languages present a number of interesting and challenging problems in terms of their synchronic description and from an historical perspective as well. The thesis of this paper is to propose an historical explanation for the synchronic vowel system of the Pai subgroup of the Yuman language family. Specifically, the problem that will be addressed is the origin of the mid vowels in the Pai five-vowel system, given that Proto-Yuman had a three-vowel system (i, a, u). The direction of the investigation will be to consider the Pai vowel system and hypothesize as to its historical origins in Proto-Yuman and its relationship to the other contemporary Yuman vowel systems. ¹

1. Only stressed vowels will be considered, since the synchronic facts are the most straightforward for stressed vowels. Grounds for this selectivity lie in the nature of Yuman roots, which consist of one vowel nucleus (optionally preceded and/or followed by a single consonant); the root vowel is assigned the primary stress of the word.

1.1 A brief caveat is in order at this point regarding the problem of vowel length. Length is a difficult problem to treat adequately within Yuman for a number of reasons. It is clearly reconstructable as a feature of Proto-Yuman and minimal pairs exist for all languages. In addition, length is involved in morphological alternations to indicate plurality and related concepts.² However, for most of the languages length bears a relatively light functional load and is frequently variable. This is often the case for mid vowels and diphthongs in some of the languages. For instance, Tolkapaya has very few instances of long diphthongs and those that do exist appear to be mainly derived forms. Reconstructing length in particular cases is sometimes problematic due to the synchronic variation and the varying degrees of reliability for reported forms. However, both Cocopa and Diegueño forms are quite useful for comparative purposes as a diagnostic for original length, providing certain variables are taken into account. For Cocopa, what must be kept in mind is a process of final glide deletion after long vowels—this phenomenon has provided a number of forms with final long vowels in Cocopa that correspond to forms in the other Yuman languages that may vary in the length of the diphthong. The
Cocopa form is crucial in order to determine that the Proto-Yuman form was a long diphthong. Diegueño is quite similar to Cocopa in having best preserved the Proto-Yuman system, except for the fact that it has neutralized the length contrast for vowels in root-final position—a fact which is of no significance for determining length of diphthongs. I will attempt to deal with the question of length on a case by case basis as the paper progresses, since it appears to be a major factor in the development of the mid vowels in Pai.

1.2 The method to be employed here integrates structural evidence internal to the Pai vowel system with comparative evidence from the other Yuman subgroups. The inspiration for this paper lies in the landmark work on the Proto-Yuman vowel system by Margaret Langdon in which she reconstructs a three-vowel system (i, a, u) plus length and diphthongs (iy, iw, ay, aw, uy, uw, and their long counterparts). This basic configuration of the Proto-Yuman vowel system will be assumed here. Langdon’s approach relies most heavily on an internal analysis of the structure of the languages for which she had data (Yuma, Walapai, Paipai, Cocopa, and Diegueño), in order to reduce the need for cognates. At that time (1970), this was unquestionably the soundest methodology, given the limitations of the available data. In recent years, more complete descriptions of other Yuman languages have become available and will be brought to bear on the problem at hand. I will utilize synchronic alternations and dialect variation within Pai and comparative evidence from correspondences with the non-Pai languages. Since morphological alternations of vowel quality to indicate plurality are not productive in Pai, more attention to the comparative situation is required here than was necessary in Langdon’s analysis of the River vowel system.

In the process of demonstrating that Proto-Yuman had a three-vowel system, Langdon proposes a set of rules to account systematically for the five-vowel system found in the River languages. The analysis is primarily based on internal structural comparison of the synchronic vowel alternations found in Yuma, which has a highly developed system of morphological alternations to indicate plurality. Langdon suggests that these rules represent processes that reflect some of the tendencies of the Yuman languages and finds evidence for this in the limited data presented for Walapai and Paipai (Pai subgroup); Cocopa and Diegueño provide interesting counterparts as synchronic three-vowel systems (California-Delta subgroup). Langdon’s discussion, then, is oriented toward
the type of five-vowel system that is exemplified by the River languages. She states that, synchronically, the Yuman family exhibits three types of vowel systems: a three-vowel system \(i,a,u\) with length and numerous diphthongs—Cocopah and Diegueño; a five-vowel system \(i,e,a,u,o\) with length, numerous diphthongs and mid vowels and a prolific morphological process of vowel alternations—the River languages; and a five-vowel system plus length, having significantly fewer diphthongs and mid vowels and a mere handful of relic forms involving vowel alternations—the Pai languages.

1.3 I will provide new data in this paper that suggest a different characterization of this third type of vowel system exemplified by the Pai languages: that is, a five-vowel system with length, very few diphthongs (that are not involved in older alternations or in derived forms), a significant number of mid vowels (but few long ones) and a fair number of vowel alternations involving quality (as well as the length alternations that are common throughout Yuman). This characterization requires an analysis of the development of the Pai vowel system that is distinct from that of the River group, though certainly related to it.

1.4 We will be concentrating on the mid vowels in Pai, which will be shown to have been produced by two primary means—monophthongization and the raising or lowering of short vowels in Proto-Yuman. Fortunately, as I will show, the synchronic data that are relevant to the relationship between mid vowels and diphthongs account for many more forms than had previously been supposed. The comparative evidence, however, is essential to the task of relating the (non-alternating) mid vowels to diphthongs or to other Proto-Yuman vowels and for determining the processes that led to the creation of these relationships. We will be directing our attention, then, to three types of data: 1) synchronic (singular/plural) ablaut alternations within Pai (giving cognates elsewhere, when available) 2) non-alternating mid vowels in Pai corresponding to (high or low) monophthongs elsewhere 3) non-alternating mid vowels in Pai corresponding to (high or low) monophthongs elsewhere. Since our main concern is with Pai \(e\) and \(o\), we will only briefly mention the correspondences for \(i,a,u\) for the sake of completeness. For the most part, Pai \(i_1(1)\), \(a(a)\) and \(u(u)\) show an isomorphic relationship to their cognates in other Yuman languages and correspond directly to what must be established as \(\overline{i_1(1)}\), \(\overline{a(a)}\) and \(\overline{u(u)}\), respectively, although length, as mentioned, is often variable. Most cases of the non-mid vowels in Pai are identical to the corresponding vowels in Cocopa and Diegueño (the most conservative languages
with respect to vowels) and have not varied in quality from
the vowel that must be established for Proto-Yuman. Many
Proto-Yuman vowels developed mid vowel reflexes in Pai under
conditions that will be discussed later. These processes
primarily involved assimilation and, in conjunction with the
monophthongization of Proto-Yuman diphthongs, they account
for all the mid vowels in Pai for which available cognates
make an analysis possible.

2. We will now consider the relationship between mid vowels
in Pai and the Proto-Yuman diphthongs. The data that will be
presented include: 1) a set of forms with mid vowels in Pai
that do not have ablaut alternations, but that correspond to
cognates elsewhere having diphthongs and 2) a set of forms
showing synchronic morphological alternations (singular/plural)
between mid vowels and diphthongs that are much more prevalent
in Pai than had previously been thought.

2.1 Approximately thirty examples have been found which show
a relationship between (non-alternating) mid vowels in Pai
and diphthongs in either (or both) the California-Delta branch
and River. Of these thirty cases there are slightly more of
the type o corresponding to a(a)w than of the type e corre-
spanding to s(a)y. Consider the following examples showing
the relationship o(o); a(a)w.6

(1) EAT MEAT, TO
  P soo; Ya qoo; H qo;
  Ma soo; Mo iqoo; Yu soo;
  C qaa; Di saaw

(2) RABBIT
  Ya hlooo; H hloqo;
  Ma xalvqaw; Mo xalqaw; Yu xalqaw;
  C xalvqaw; Di hylaw

For all available examples, the Pai languages developed o(o)
wherever Cocopa and Diegueño have the long diphthong aaw. A
number of cases of o(o) in Pai can be assumed, then, to be
derived from *aaw; this conclusion also explains the few
examples of synchronic aw existing in the Pai languages, which
can be shown to correspond to short aw in the non-Pai languages.
The two cases of aw in Pai for which cognates are available
occur after *t—which is lost in the Pai languages. The crucial
cases are both verbs:

(3) CHILD, TO BEAR A
  P saw; Ya taw; H taw; W taw;
  Ma taw; Mo iQaw; Yu s?aw;
  C taw; Di taw; K s?au
SON'S CHILD, TO CALL
\[ P \text{ ?aw}; \ Yaw \text{?aw}; \ H \text{ ?aw}; \ W \text{ ?aw}; \]
\[ Ma \text{ ?aw}; \ Mo \text{ a?aw}; \ Yu \text{ ?aw}; \]
\[ C \text{ ?aw}; \ Di \text{ a?aw} \]

The latter example is particularly revealing when compared to the cognate set for FIRE, which has historically a long diphthong aaw.

FIRE, EMBERS
\[ P \text{ ?o?o}; \ Yaw \text{ ?o?o}; \ H \text{ ?o?o}; \ W \text{ ?o?o}; \]
\[ Ma \text{ ?aw}; \ Mo \text{ a?aw}; \ Yu \text{ ?aw}; \]
\[ C \text{ a?aa}; \ Di \text{ (?a)?aaw} \]

Throughout this discussion we have been assuming that the Diegueño and Cocopa forms reflect the original length of vowels in Proto-Yuman most accurately (keeping in mind the earlier discussion of loss of final glides after long vowels in Cocopa). The remaining few cases of aw in Pai have no cognates in California-Delta and are also assumed to derive from short aw.

2.2 We will now consider examples of the type e(e):a(a)y which are not involved in alternations in Pai. The following two examples are illustrative:

SAND
\[ P \text{ sle}; \ Yaw \text{sle}; \ H \text{sile}; \]
\[ Ma \text{ sly?ay}; \ Mo \text{ saly?ay}; \ Yu \text{ sily?ay}; \]
\[ C \text{ sly?qaa}; \ Di \text{ maal?yay} \ (Ca), \ matl?yiqay \ (LH) \]

DAUGHTER-IN-LAW, TO CALL
\[ Ya \text{ unye}; \ H \text{ ynee}; \]
\[ Ma \text{ unyi}; \ Mo \text{ unyi}; \ Yu \text{ unyi}; \]
\[ C \text{ unyi}; \ Di \text{ uny?aa} \]

In all of these cases the Pai vowel is always e (or more rarely ee).

Numerous cases of this thorough-going monophthongization process exist for forms that are long or short a(a)y diphthongs in Cocopa and Diegueño and were therefore presumably of both types in Proto-Yuman. How this developmental process might have occurred in Pai can be determined by considering the following facts: 1) most Pai verbs with root vowel e having cognates elsewhere with a(a)y show synchronic alternations in Pai of e (sg.)/ay (pl.); 2) all nouns in Pai with e (or ee) correspond to cognates with aay.

Let us then consider the Pai verbs with synchronic alternations of the type e/ay, which indicate the singular/plural forms of the verb. Of the approximately thirty verbs in Pai with such alternations, about half have been found to
have cognates in the non-Pai languages and the cognates in River or California-Delta show either ay or aay. The following examples are representative:

(8) COVER, TO

Ya ḵpe/খpay

(9) DIRTY, STICKY

TO BE

Ya qe/qay

(10) BIG, TO BE

P Bte, Btaiy; Ya vte/vtay; H vte, vtee;
W vte; Ma vətay/vta; Mo vəltay;
Yu vətay; C ptay; Di tay

The number of alternations of the type ə/ə is strikingly less than for e/ay—only three cases and only two of these with cognates. The examples are exhaustive: 7

(11) FIGHT, TO

Ya əo-(v)/əaw(v); H əo-(v)/əaw(v);
P əov/əaw

(12) RAIN, TO/

STORM (N)

Ya kwivo/kwivaw; P Bok; W kwivo;
Ma uvəaw; Mo kuəaw; Yu uuəaw;
C pəaa; Di kwiiy-pəaw

(13) TAKE, GRAB, TO

Ya yoo/yəaw; P yo; H yo;
Ma daaw; Mo iəaw; Yu yaa
Di yuəw/yəaw ə (MG)

An interesting observation can be made at this point that seems to warrant a slight digression from the main topic at hand. It is apparently the case that all Pai alternating verbs and forms that correspond to cognates with diphthongs outside of Pai occur only in roots with open syllables; that is, roots of the shape (C)V (C). For all these data, any consonants occurring post-stress are segmentable morphemes (e.g. the -v suffix found above in TO FIGHT). The basic structure of the Yuman root is always described as (C) V (C), where the stressed vowel can be short or long, but is usually unspecified as to whether it can include the complex vocalic peak VG. 8 The data here support a description which is restricted to exclude roots of the shape *CVGC.

2.3 We have now seen examples with mid vowels in Pai—both non-alternating and those that alternate with diphthongs—that correspond to diphthongs in the other languages. I propose the following explanation for the distribution of forms containing e(e), a(a)y, o(o) and a(a)w across Yuman.
Let us start by assuming that vowel alternations to indicate plural and related notions can be reconstructed as a characteristic of Proto-Yuman. All the daughter languages show such alternations to some degree. It appears that Proto-Yuman must have had as a regular type of verb alternation the forms *aay(sg.)/aay(pl.) and *aaw/aw. Some alternations of the type *V/VV and *aay/aay probably also existed; the former, in particular, is a preferred alternation for some of the modern languages. Reflexes of the alternation *VVG/VG still flourish in some of the languages. Consider, for instance, the following examples from Cocopa:

(14) EAT MEAT, TO C şaa/saw

(15) BE AFRAID, TO C mšyaa/máʔyay

These examples demonstrate the alternations aaw/aw and aay/ay (keeping in mind the Cocopa glide deletion rule).

I propose, then, a set of events involving monophthongization of long diphthongs to mid vowels, which, in conjunction with analogical levelling, resulted in the present Pai vowel correspondences and accounts in part for the differences between Pai and River with respect to their vowel systems. Perhaps because of their length, long diphthongs were unstable, subject to variation and tended to be reduced to e or o. The short diphthong for the plural remained, producing the present alternation for Pai alternating verbs. This process also affected nouns with long diphthongs by reducing their diphthongs to e or o. Examples of nouns affected in this way include the following:

(16) DOCTOR Ya kʔye; H kʔyeʔe; W kiʔie;
     Ma kʷisíde; Mo kʷaʔiidee; Yu kʷasʔiidee;
     C škʷi iyee; Di kušʰyaay

(17) WILLOW P (?)yo; Ya ?yo(o); H ?yoʔo; W ?iyoʔo;
     Ma ?ido; Mo ?iido; Yu ?iido;
     C ?aya, ?aayaaw; Di ?yaaw; K ?yaaw

In addition, there is a set of verbs of the type e/ay in Pai that correspond to verbs with short diphthongs in River and either short or long diphthongs in Cocopa and Diegueño. Some of these are derived by the addition of the -y suffix postulated by Langdon as a suffix in Proto-Yuman which derives verbs from nouns. The rest of this set of verbs (if, in fact, they are not all derived) probably had the Proto-Yuman alternation ay/aay. These two types of alternation
patterns (aay/ay and aya/say) resulted in a situation which apparently inspired regularization in Pai. Long diphthongs were regularly reduced to e and came to be reinterpreted, for these forms, as the singular; short diphthongs were regularly associated with the plural, as was the case with the aay/aw diphthong alternations. Examples from this set of verbs include the following:

(10) BIG, TO BE (see page)

(18) FAT, TO BE
Ya se/say; H se; W se/saay;
Ma ąay/ąaa; Mo ąisay/uusaa; Yu aňay;
C say; Di ąay

(19) LIVE, INHABIT TO
Ya nywev (Tolk.), nywayv (Pres.);
H nywev; Ma nyvay; Mo nyvay;
Yu nyvay; Di nywaay

Under the above interpretation, one would expect nouns with short diphthongs to have been unaffected by this process, since no alternation patterns exist for nouns to set the stage for analogical levelling to take place. This is in fact the case and such nouns are included in a small set of lexical items having -ay for a root vowel in Pai. The list here is exhaustive; the Cocopa and Diegueño forms are indeed short and the River vowels show an unexpected -aa in 20, 21, and 22.

(20) BREASTS
Ya nymay; H nymay; W nymay;
Ma maa; Mo nymaa; Yu nymaa;
C nymay; Di nymay; K, nymayu

(21) HEART
P yiway; Ya iway; H iway; W yiway
Ma iway; Mo iway; Yu iway;
C [iway]; Di [way] (SJ), [eyay] (MG)

(22) SMOKE
P oxway; Ya ozhway; H ozhway; W ozhway;
Ma oxaa; Mo ozhwa; Yu ozhwa;
C [xway]; Di oshuxuy, iixuy

(23) FAT, GREASE
P say; Ya say; H say'ą; W say;
Ma (ʔ) ſay; Mo (ʔiʔ)isay; Yu say;
C say; Di say

There are approximately five verbs in Pai that contain roots with ay that were not regularized by this process. Most of these are derived forms and apparently do not have cognates outside of Pai (and River).
To recapitulate, the claim is that the regular pattern for Proto-Yuman verb alternations with low vowel diphthongs was *aay/ay* (and some *ay/aay*) and *aaw/aw*. The long diphthongs were monophthongized to ē and o̞ respectively, in Pai in all cases; in the River languages, about half the diphthongs became ē and o̞, about half of them not. This diversified situation necessitated the set of rules postulated by Langdon to account for the Yuma vowel system.  

As noted by Langdon, these rules leave a number of forms unaccounted for, particularly those forms with o̞(o̞). Fortunately, it is not my task here to explain why the River languages did not carry the monophthongization process to its extreme. As for Cocopa and Diegueño, they seem to have been exempt from these particular mechanisms of language change and still evince some of the original alternations.

The alternation type i/uy will not be discussed here, since too few cases exist to allow anything conclusive to be said about the relationship of i to uy.

The only quality alternation that remains to any degree in Pai as a remnant of the older morphological process of pluralizing through vowel ablaut is the alternation e/ey. The only productive means of indicating plurality by altering vowels in Pai is an alteration in quantity (i.e. a vowel is lengthened to indicate plural). The Pai languages are continuing to regularize the system to the degree that, more often than not, the θ plural suffix is the only mark of plurality on verbs. The River languages, however, still show a preponderance of quality alternations and pure length alternations are in fact rare—a factor which certainly contributed to their divergence from Pai with respect to the development of the vowel system.

3.

Processes other than monophthongization account for a number of forms with mid vowels in Pai. These will only be briefly mentioned without exemplification due to lack of space. These are phonological processes of assimilation—the main type being that of lowering high vowels in certain environments. Some instances of raising (a→e) do exist as well. Based on the correspondences I have found, the most general statement that can be made regarding the lowering process is that short high vowels were lowered in the presence of a typical lowering environment; that is, following *x or *q or preceding *q or *x (or both). These processes cannot be demonstrated to be synchronic in such a way as to eliminate the need for establishing a phonemic five-vowel system. To illustrate the problem, I have compiled a list of approximately fifty examples with mid vowels in Yavapai alone.
(which is certainly not exhaustive) for which I am unable to find cognates and for which no alternations exist. As in the River languages, a fair number of mid vowels have derived from the lowering of high vowels.

Instances of sporadic raising of short vowels after a palatal occur in various of the Pai languages. Compared to the raising process in River, which is very regular and thorough-going, the Pai process appears random and spotty indeed.

In summary, the greater number of mid vowels in Pai created through monophthongization is counterbalanced in the River languages by much more generalized and productive raising and lowering rules. Since some degree of application of both phonological mechanisms is apparent for each group, the typological difference between the two types of five-vowel systems must be explained by considering the extent to which the processes were implemented. The Pai languages levelled most of the diphthongs, retaining only a few short ones and these mostly involved in older verb alternations. This process, in addition to some lowering operations, produced the present set of mid vowels and was responsible for the present-day scarcity of diphthongs in Pai. The River languages, under conditions that are not completely clear, selectively monophthongized diphthongs to mid vowels. Retaining quite a few, however, and continuing to use morphological alternations of vowels, the River languages derived the bulk of their mid vowels through generalized lowering and raising rules. This description of the development of the Pai vowel system in the context of the evolution of the other Yuman vowel systems accounts for a number of what would otherwise appear to be odd and disparate facts about the respective developments of two types of five-vowel systems in Yuman.
Notes

1  Yuman has four main branches: Pai (Yavapai (Ya), Havasupai (H), Walapai (W), Paipai (P)), River (Maricopa (Ma), Mojave (Mo), Yuma (Yu)), California-Delta (Cocopah (C), Diegueno (D)) and an isolate, Kiliwa (K). The primary source for the Pai data is from Yavapai (largely Tolkapaya, the western dialect)—the language with which I am most familiar—but include data from most available sources for Havasupai, Paipai and Walapai. This reliance on Yavapai is necessitated by the greater accessibility of the data and is facilitated by the fact that the vowel system is largely homogeneous throughout Pai. Where there is any significant difference among the Pai languages with respect to the vowels in a particular form, the facts will be noted.

   My knowledge of Tolkapaya Yavapai is based on extensive work with a speaker, Ms. Molly Starr Fasthorse, to whom I am deeply indebted. Most of the information for Maricopa cited here comes from work done with Ms. Pollyanna Heath by myself and Lynn Gordon, Pamela Munro and Bonnie Clover. Much thanks goes to Pamela Munro for her help and to Margaret Langdon, Alan Timberlake and Lynn Gordon for their comments and discussion.

   Other sources of Yavapai data include primarily the dictionary section from Alan Shaterian, "Yavapai Phonology", unpublished ms. (which was immensely useful) and some work I did with a speaker of the Prescott dialect, Ms. Winona Russell Durant. All sources were supplemented by material from the Yuman archives at UCSD and the use of the comparative Yuman 100 word list prepared by Pamela Munro—these were the primary sources for the Walapai data. Contributors to the Yuman word list include: S. Chung (Yavapai); J. Redden, A. Yamanoto, and R. Lieber (Walapai); E. Kozlowski (Havasupai); J. Joel (Paipai); P. Munro (Mojave); H. Harwell (Maricopa); C. Slater, A. Halpern, and D. Crook and S. Norwood (Yuma); J. Crawford, and T. Nevers and C. Nevers (Cocopah); M. Langdon (Diegueno—Hesa Grande, Campo, San Jose and La Huerta) and M. Mixco (Kiliwa).


3  Langdon (1977).
Langdon (1976).

I will use the abbreviation V(V) to indicate a short or long vowel (VV = long, V = short).

In the examples that follow citations represented in brackets cannot strictly be judged to be cognate, but appear to bear some relationship to the other members of the set. Cognate judgments for the words from the Yuman 100 word list are from Pamela Munro. Where two forms are given for a particular language, either both variants are possible or different forms were given by two distinct sources. Words in parentheses are from Wares (1968) and have no independent verification from a more current source. In a few cases, more than one dialect of Diegueño and Yavapai are cited separately and designated by the appropriate abbreviation where a comparison of the forms might be revealing. In most cases, the Diegueño form will be from the Mesa Grande dialect, the Yavapai from the Tolkepania dialect. In all cases, the cited form will be the singular unless the plural is available (and is formed by vowel quality ablaut).

Actually, in example 12, the relationship between TO RAIN and STORM might just as appropriately be viewed as another instance of singular/plural—considering "storm" to be a distributed, intensified function of "rain".

For example, see Langdon (1968), Langdon (1976), and Langdon (1977). Margaret Langdon has pointed out to me that the vocalic peak has not actually been assumed to include diphthongs, however.


This -y suffix was first identified by A.M. Halpern for Yuma.

Compare this example to the derivationally related set for the noun (23) FAT, GREASE.


12  \( n^y \text{wayy} = \text{LIVE, INHABIT consists of the morphemes} \)
13  \( n^y + \text{wa} + y + v = \text{Possessive + house + -y suffix + stative -v.} \)
14  Margaret Langdon has suggested to me that some of
15  these nouns may in fact be derived, a fact which would, in
16  itself, be some motivation for preserving the diphthong.
17  Langdon (1976).
19  For a discussion of this problem as it pertains to
20  Yavapai see Shaterian, n.d.
21  Also, Shaterian mentions some free variation between
22  \( _a \) and \( _e \) for some words, following a palatal. Paipai and
23  Walapai have \( _e \) where Yavapai has \( _a \) following a palatal in a
24  few words (e.g. CUT and SHOOT).
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PREFACE

Unfortunately, everyone who presented a paper at the 1978 Hokan Languages Workshop was not able to prepare a final version for inclusion in this volume. All the papers in this volume were presented in an earlier version at the 1978 workshop. The papers are arranged in the order that they appeared on the program at the workshop.

The participants of the 1978 Hokan Languages Workshop gratefully acknowledge all the work done by Professor Carol Baker Slater and the students at the University of California, San Diego, which made the workshop run so smoothly and enjoyably.

Copies of the 1977 workshop are still available from the Department of Linguistics, Southern Illinois University, Carbondale, IL 62901. The volumes for the 1975 and 1976 workshops, which appeared in the SIU-C University Museum Studies, are now out of print, but copies may be obtained in microfiche or hard-bound copies from ERIC Clearinghouse on Languages and Linguistics, Center for Applied Linguistics, 1611 N. Kent Street, Arlington, VA 22209.

The 1979 Hokan Languages Workshop will be held at the University of California, Los Angeles, June 26-28. The proceedings of the 1979 workshop will appear in Occasional Papers On Linguistics in late spring 1980. Copies may be ordered from the Department of Linguistics, Southern Illinois University, Carbondale, IL 62901.

James E. Redden
Carbondale, May 1979
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