

'How', and 'Thus' in UA: Cupan and Yuman:

A Case of Areal Influence

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Prefixation onto verbal roots is unusual in Cupan Luiseño². Excepting prefixes resulting from reduplication, Luiseño normally only allows pronominal prefixation onto verbs. Although the other Cupan languages, notably Cahuilla, allow some prefixation on verbs, there is within Cupan, and most notably in Luiseño, a general predilection for suffixation onto verbal roots. The Cupan verb *yáx-*, 'be, do, say' is unusual in that it allows the affixation of a number of prefixes. These prefixes include a proximal definite 'i-, a distal definite 'á-, and two indefinite prefixes *m-* and *h-*. In this paper we will see that both Yuman and Cupan show evidence of multiple prefixation onto a verb meaning 'be, do' in Yuman, and 'be, do, say' in Cupan. In particular, it will be demonstrated that the morphological analyses of the Cupan words for 'how' and 'thus' closely parallel those for Yuman Diegueño 'how' and 'thus'. In both Cupan and Yuman Diegueño, 'how' and 'thus' are derived from a verb meaning 'be, do' (or 'say' in the case of Cupan). It will then be shown that while prefixes 'á-, 'i- and *h-* are of family-internal UA origin, *m-* is an intrafamiliar areal phenomenon of Southern California, attested most strongly in Yuman Diegueño and UA Cupan.

In Section I of this paper, we will examine the prefixation processes possible in conjunction with the Cupan verb *yáx-*. We will then explain how the Cupan languages have developed causative verbs from *yáx-*. These derived causative verbs bear the meaning of 'do somehow', or 'do thus', and are used in forming the Cupan words for 'how' and 'thus' respectively.

In Section II we will discuss the interrogatives of a non-Cupan UA language, Serrano. It will here be shown that the common element in all Serrano interrogatives is the indefinite prefix *h-*.

In Section III we will discuss the interrogatives of the Cupan languages. Here we will see that both *m-* and *h-* are present.

In Section IV we will concentrate on Diegueño, Cupan's Yuman neighbor. It will be seen that Diegueño possesses an indefinite (interrogative) morpheme whose onset is /m/. Diegueño further possesses a verb *yuu*, 'be'. It will be shown that *yuu* is used in forming the Diegueño words for 'how' and 'thus'. A parallel development for 'how' and 'thus' may be observed between Yuman Diegueño and UA Cupan. Evidence from UA Serrano will be provided to demonstrate that this parallel development for 'how' and 'thus' may not be mirrored outside UA Cupan.

In Section V we will provide evidence from other Yuman languages to show that the pervasiveness of *m-* as an interrogative marker is unique to Diegueño within Yuman.

In Section VI we will draw our conclusions based on the evidence provided in Sections I through V.

Section I: Prefixation Onto *yáx-*

All three Cupan languages possess a verb *yáx-* with the meaning 'be, say, do'.

When unprefixated (except with pronominal prefixes), the verb *yáx-* generally means 'say':

- (1)
- | | |
|-----------|--|
| Luisefño: | <i>yáx-wun-pum</i>
be/say-PR:PL-3pl
They say |
| Cahuilla: | <i>hém-yax-we(n)</i>
3pl-be/say-PR:PL
They say |

Common to both surviving Cupan languages is a series of four verbs derived from *yáx-*. Note that Non-Cupan UA Serrano⁴ diverges from its Cupan relatives:

(2)		CUPAN		NON-CUPAN
		Cahuilla	Luisefño	Serrano
(A)	be, say	<i>yáx-</i>	<i>yáx-</i>	<i>ʔah, kiy</i>
(B)	be this way	<i>'iyax-</i>	<i>'iyx⁰-</i>	<i>pana' ʔah</i>
(C)	be that way	<i>'áyax-</i>	<i>'ááx⁰-</i>	<i>pana' ʔah</i>
(D)	be some way	<i>míyax-</i>	<i>míyx⁰-</i>	<i>hamin ʔah</i>
(E)	say what	<i>híyax-</i>	<i>hí(y)x-</i>	<i>kíy hiiti'</i>

The Cupan verbs (B) through (E) are all derived from verb (A). We will now examine more closely the morphology of the Cupan verbs (B) through (E), using Cahuilla examples as representative for Cupan in general.

Verb (B) is analyzable as:

- (3) *'i-yax-*
PDEF-be
be this way

The prefix *'i-* is nearly identical with one form of the proximal demonstrative in Cahuilla:

- (4) *'i'*
this

Verb (C) is analyzable as:

- (5) 'á-yax-
DDEF1-be
be that way, seem, resemble

An independent distal demonstrative *'á' is not extant in Cupan. Serrano, however, has:

- | | | |
|-----|--------------------------|----------------------------|
| (6) | 'i-p
PDEF-LOC
here | 'a-p
DDEF1-LOC
there |
| | 'i-m
PDEF-PL
these | 'aa-m
DDEF1-PL
those |

Verb (D) is analyzable as:

- (7) mi-yax-
IND1-be
to be somehow

Prefix *m(i)-* is abundantly attested elsewhere in Cupan (see Section III below).

Verb (E) is analyzable as:

- (8) hí-yax-
IND2-be
say what

The indefinite prefix *h(i)-* is also well attested in other UA languages, including Cahuilla, Luiseño and Serrano (see Section II below).

Causatives of 'i-yax- and mi-yax-

Cupan Luiseño and Cahuilla have developed causative verbs 'cause to be' (= 'do') by affixing a causative suffix to a derivative of *yáx-*:

- | | | |
|-----|-----------------|--------------------------------|
| (9) | | |
| | <u>Cahuilla</u> | <u>Luiseño</u> |
| | 'éxan- | 'axán'i- |
| | do thus | do thus, cause to resemble |
| | | 'axán'a- |
| | | be done thus, be done likewise |

These causative verbs are analyzable as:

- (10) 'é-x-an- DDEF1-be-CAUS do thus
 'a-x-án-'i- DDEF1-be-CAUS-TRANS do thus, cause to resemble
 'a-x-án-'a- DDEF1-be-CAUS-INTR be done thus, be done likewise

Cahuilla 'éxan- is presumably from:

- (11) *'á-yax-an-
 *'á-yx-an-
 *'é-yx-an-
 'é-x-an-

Cahuilla further developed the following from yáx-:

- (12) mé-x-an- IND1-be-CAUS do somehow, do something ('cause to be like something').

Similarly, Luiseño developed from yáx-:

- (13) ma-x-án-'a- IND1-be-CAUS-INTR become, happen (i.e. 'be caused to be somehow')
 ma-x-án-'i- IND1-be-CAUS-TRANS bring, gather, get. (i.e. 'cause to be somehow')

Luiseño *maxán-'a-* and *maxán-'i-* presumably underwent historical changes something similar to:

- (14) *m-yax-án-
 *ma-yax-án-
 *ma-ax-án-
 ma-x-án-

The /a/ of *ma-* is epenthetic and may be harmonic with the /a/ of *yáx-*. Initial consonant clusters are almost non-existent in Luiseño.

Note that Luiseño *maxán'a/i-* have undergone considerable semantic shifts. Whereas a native speaker of Cahuilla would be prone to translate *méxan-* as 'do something' or 'do somehow', the native speaker of Luiseño would not at all be likely to translate *maxán'a-* as anything close to 'be somehow'. For the Luiseño speaker, *maxán'a-* simply means 'become' or 'happen', and *maxán'i-* 'bring', 'gather' or 'get'.

Although no longer common in everyday speech, Luiseño retains in archaic texts two words which are much closer in meaning and form to Cahuilla *méxan-* and *'éxan-*:

- (15) *mí-yx-an-*
 IND1-be-CAUS
 do somehow, do something
- 'i-x-án-'i-*
 PDEF-be-CAUS-TRANS
 say, do again

Returning to Cahuilla as the (in this instance) semantically more conservative Cupan language, we see that *méxan-* is analyzable as:

- (16) *mé-x-an-*
 IND1-be-CAUS
 do somehow, do something (cause to be like something),

Cahuilla *méxan-* may have undergone historical changes something like:

- (17) **m-yax-an-*
 **mí-yax-an-*
 **mí-ax-an-*
mé-x-an-

We see that from a base verb *yáx-*, Cahuilla has developed the following derived forms:

(18) BASE	BE THUS BE SOMEHOW	DO THUS DO SOMEHOW
<i>yáx-</i>	<i>'í-yax-</i>	<i>'é-x-an-</i>
	<i>mí-yax</i>	<i>mé-x-an-</i>

Section II: Serrano Interrogatives

Representative of the majority of UA languages⁶, the interrogatives of Serrano all begin with /h/:

(19)		
who	hami'	
what	hiit	
where	haayp	
when	haaypa'n	
which	hye'chat	
why	hamin ʔaawnk	
how	hamin	
how	hamya'qaT	
how much	hifiki'	

Serrano *hami'* and *hamin* may share a common base, **ami(')*:

(20)	h-ami'	h-ami-n
	IND2-?	IND2-?-INST
	who	how

This base **ami(')* may be related to the third person singular pronoun *'ama'*.

Serrano *haayp* probably contains the locative suffix *-p*:

(21)	h-aay-p
	IND2-?-LOC
	where

Serrano *hamin ʔaawnk*, 'why' translates literally as 'by means of doing what':

(22)	h-ami-n	ʔaa-wnk
	IND2-?-INST	do-SSP
	why ('by means of doing what')	

Serrano *hamya'qaT* 'how' contains both the prefix *h-* and probably the verb 'be' *qaT*:

(23)	h-amy-a'-qaT
	IND2-?-be
	how

Section III: Cupan Interrogatives

Like Serrano, the Cupan languages have interrogatives beginning with /h/:

(24)	Luiseño	Cahuilla	Cupeño
who	háx	háxi'	háx
what	híycha	hícha'	hish

Other Cupan interrogatives begin with *m-*:

(25)	Luiseño	Cahuilla	Cupeño
where	michá'	míva'	mívi'aw
when	míkinga	mípa'	mípa
why	(híyngay ¹⁰)	míyaxwe	mívingax ¹²
how	michá' 'axáninik	méxannuk ¹¹	míxanuk ¹²

Thus far, we have seen in Cupan examples of both the indefinite prefixes, *h-* and *m-*. In each instance, Luiseño and Cahuilla have concurred in their choice of either *h-* or *m-* for a given interrogative. For 'how much', however, we find in Luiseño and Cahuilla:

(26)	Luiseño	Cahuilla
how much	hík	mík

The existence of both *h-ík* and *m-ík* suggests that one of the two indefinite prefixes, *h-* or *m-*, is an innovation which partially supplanted the other, original indefinite prefix. As *h-* is almost universal elsewhere in UA, the innovation in Cupan is more likely to be *m-*.

Section IV: Mesa Grande Diegueño Interrogatives

Mesa Grande Diegueño possesses an indefinite (interrogative) morpheme whose onset is /m/.

Mesa Grande Diegueño (Couro: 1973) reveals the following set of interrogatives:

(27)	
who	maap
what	'uuch
where	maay ¹³
when	ma'yum
	kumyum
why	mu(u)yuu/mu'yuu ¹⁴
how	mu(u)yuu/mu'yuu ¹⁴
how much	muuyum/mu'yum

We see that Mesa Grande Diegueño interrogatives largely begin with /m/, the only exceptions being *'uuch* and *kumyum*.

Mesa Grande Diegueño *kumyum* may be composed of the common nominalizing prefix, *ku-*, added to a form beginning in *m-*. Langdon (PC) suggests for *kumyum* the following possible analysis:

- (28) *ku-m-yu-m*
 NOM-INDF2-be-DS?
 when

Mesa Grande Diegueño *'uuch* is closely related to the word for '(some)thing':

- (29) *'uuchuch*
 (some)thing

Langdon (PC) points out that most Mesa Grande Diegueño interrogatives may also be used as indefinites¹⁸.

Based on the evidence in (27), we can posit an indefinite prefix *m-* for Diegueño.

We see that Diegueño 'how' is *mu(u)yuu*. Compare:

- | | |
|----------------------|---------------|
| (30) <i>mu(u)yuu</i> | <i>puyuu</i> |
| (be, do) how | (be, do) thus |

Note that *mu(u)yuu* means both 'how' and 'be/do (some)how', and *puyuu* means both 'thus' and 'be/do thus'.

Langdon (1978:104) confirms that **yuu*, 'be', may also be reconstructed for Proto-Yuman.

The Diegueño verb *puyuu*, '(be, do) thus' is also prefixed with a reduced form of the independent demonstrative:

- (31) *p-uu*
 DEM-3sg
 that (he, she, it)

According to Langdon (PC), *mu(u)yuu* and *puyuu* may be analyzed as follows:

- | | |
|-----------------------------------|----------------|
| (32) <i>m-u-yuu</i> ¹⁸ | <i>p-u-yuu</i> |
| IND2-3sg-be/do | DEM-3sg-be/do |
| (be/do) somehow | (be, do) thus |

Besides both showing evidence of the prefix *m-*, Yuman Mesa Grande Diegueño and UA Cahuilla, representative of all Cupan, also show some morphological similarities in rendering 'how' ('what way') and 'thus' ('that way')¹⁷:

(33)	How:	Thus:
Diegueño	muyuu	puyuu
Cahuilla	méxannuk	'éxannuk

The initial morphemes of Cahuilla *méxannuk* and *'éxannuk* correspond nicely to the Diegueño *mu(u)yuu* and *puyuu* (with the exception of a third person marker, absent in Cahuilla, and present in Diegueño *-u-*):

(34)	Cahuilla:	Diegueño:
	<u>mé-x-an-nuk</u>	<u>m-u-yuu</u>
	<u>IND1-be-CAUS-SSP</u>	<u>IND1-3sg-be</u>
	how?	how?
	<u>'é-x-an-nuk</u>	<u>p-u-yuu</u>
	<u>DDEF1-be-CAUS-SSP</u>	<u>DEM-3sg-be</u>
	thus	thus

UA Serrano also shows some evidence of alternating a demonstrative prefix (or root) with an indefinite prefix (or root):

(35)	<i>h-aay-p</i>	<i>'i-p</i>	<i>'a-p</i>
	IND2-?-LOC	PDEF-LOC	DDEF-LOC
	where	here	there

In set expressions, Serrano reveals a series of two-word constructions, the first indefinite, signalled by *h-*, the second definite, signalled by *'i-*. These set expressions all translate as 'some X or another'¹⁸:

(36)	<i>h-amyá'-qaT'</i>	<i>'iv-ya'-qaT</i>
	IND2-?-be	PDEF-?-be
	somehow or another	
	<i>h-ami'</i>	<i>'ivi'</i>
	IND2-?	PDEF=this
	someone or another	
	<i>h-aay-p</i>	<i>'i-p</i>
	IND2-?-LOC	PDEF-LOC=here
	somewhere or another	

The Serrano definite forms 'ivi' and 'ip may be used independently to translate 'this' and 'here' respectively. The native Serrano speaker is, however, adamant about 'ivya'qaT occurring only in this set expression following *hamya'qaT*. The form 'ivya'qaT cannot be used independently to express 'thus' or 'this way'.

Although we have some evidence of Serrano alternately prefixing an indefinite *h-* and a definite 'i- to the same base *qaT* ('be'), in the set expression 'somehow or another', there is no evidence in Serrano of prefixing a definite affix to the existential verb *qaT* to form 'thus'. Recall that Cahuilla (34) prefixes a definite affix and suffixes a causative affix to the existential verb *yáx* to form 'thus':

(37) 'é-x-an-nuk
DDEF1-be-CAUS-SSP
thus
'Thus' in Serrano is either an independent word, or a compound:

(38) t'ingik pana' ñaa-wnk
 thus thus be/do-SSP
 thus ('by being/doing thus')

There are further examples of indefinite Cupan *m-* alternating with a definite prefix 'i-. Note the Cahuilla:

(39) mi-ngki-sh 'i-ngki-sh
 IND1-kind-ABS PDEF-kind-ABS
 some kind this kind

In a few set expressions, Cahuilla even has forms which alternate between *m-* indefinite, and *p-* definite, reminiscent of the Diegueño *mu(u)yuu*, *puyuu* in form, and of the Serrano *hamya'qaT* 'ivya'qaT, 'somehow or another', in meaning:

(40) me-m-ik me-p-ék
 RDUP-IND1-amount IND1-DEM-amount
 a few (i.e. 'some amount or another')

mi-ñiki' pé-ñiki'
IND1-kind DEM-kind
some relative or another

Santa Ysabel Diegueño (Ponchetti: PC) also has a set expression reminiscent of Serrano *hamya'qaT* 'ivya'qaT, 'somehow or another':

(41) m-u-yuu p-u-yuu kinemi'
 IND1-3sg-be DEM-3sg-be perhaps
 somehow or another

The *p(i)-* of these Cahuilla set expressions (40) is probably related to the Cahuilla third person singular pronoun *pé'*, corresponding to Luiseño *pó'*.

In contrast to Cupan and Mesa Grande Diegueño, recall that Serrano reveals for 'how' and 'thus':

(42) Serrano	how:	thus:	
	h-ami-n	pana'	(ftaa-wnk)
	IND2-?-INST	thus	be/do-SSP
	how	thus	
	h-amyá'-qaT	tingik	
	IND2-?-be	thus	
	how	thus	

Section V: Yuman Interrogatives

We have seen that *m-* is absent (or at least marginal) in Serrano interrogatives, as well as being almost universally unattested in all other UA languages.

It is common knowledge that the indefinite prefix *h-* of Cupan and Serrano is of Proto-Uto-Aztecan origin. If the indefinite prefix *m-*, pervasive only in Cupan within UA, were universal in Yuman, the existence of *m-* in UA Cupan could be explained away as a borrowing from Yuman which would have entered Cupan through the Yuman language representative spoken directly adjacent to the Cupan-speaking territory. This Yuman language is Diegueño.

We find, however, that *m-* as an indefinite marker is pervasive only within one sub-branch of Yuman²⁰, namely among the California (Diegueño) languages of Delta-California:

(43) Delta-California:

	. California				Delta
	M Grande	Barona	Jamul	Campo	Cocopa
who	maap	maap	ma'ap	ma'ap	lu:ny lu:p
what	'uuch	'uuch	maayiit	maalich	lu:ny lu:p
when	kumyum nyamu'yumchu what time is?	maayum nyakumyum	maayuum ma'yuum	nyimuulum	knyayúm
where	maay	maay	ma'ay	ma'ay	0
why	muuyuu mu'yuu	muuyuu	0	muluum	0
how	muuyuu mu'yuu	0	0	me-m-luu te-m-paa (how are you?)	km'ap (how can it be?)
which	maayvech maayvu	maay	0	ma'ay	0
h.much	muuyum mu'yum	muu'yum	chu'i	mu'lum	kla'ám

The River branch of Yuman languages shows evidence of both *m-* and *k-*²¹ as an indefinite prefix:

(44) River:

	Mojave	Yuma	Maricopa
who	maka-ch (SJ) maka-ny (OJ)	makvé-	mki-sh (SJ) ki-sh (SJ) mki-ny (OJ)
what	kuch	ka-	kawit-sh (SJ) kawish (OJ)
when	kanya:du:m	kanya:mathú:- cem (When- -does-he)	0
where	maki	0	mki-ly mki-ii
why	ka:du:k i-m	ka:thúntek (he-does-why)	0
how	0	ka:'étám (What-does-it say?) ka'athóm3k 'athúwú:m (How shall I do it?)	0
which	makapch	makyip	kip-sh (SJ) mkip-sh (SJ) mkip (SJ)
h.much	k+ly3vi	ka:lyaví:m (What-does- it-resemble)	0

Further to the north, we have the Pai branch of Yuman languages, in no known direct historic contact with UA Cupan. Here we find that Walapai, Yavapai, and Havasupai exhibit only *k-* as an interrogative prefix. Paipai, although a member of the Pai branch of Yuman, is now located directly south of the California-Delta branch of Yuman in Baja California and is known (Langdon: PC) to have borrowed a number of Diegueño traits. Paipai also exhibits both *k-* and *m-*. Note that Hualapai and Havasupai /g/ is an orthographic convention for an unaspirated [k]:

(45) Pai Branch:

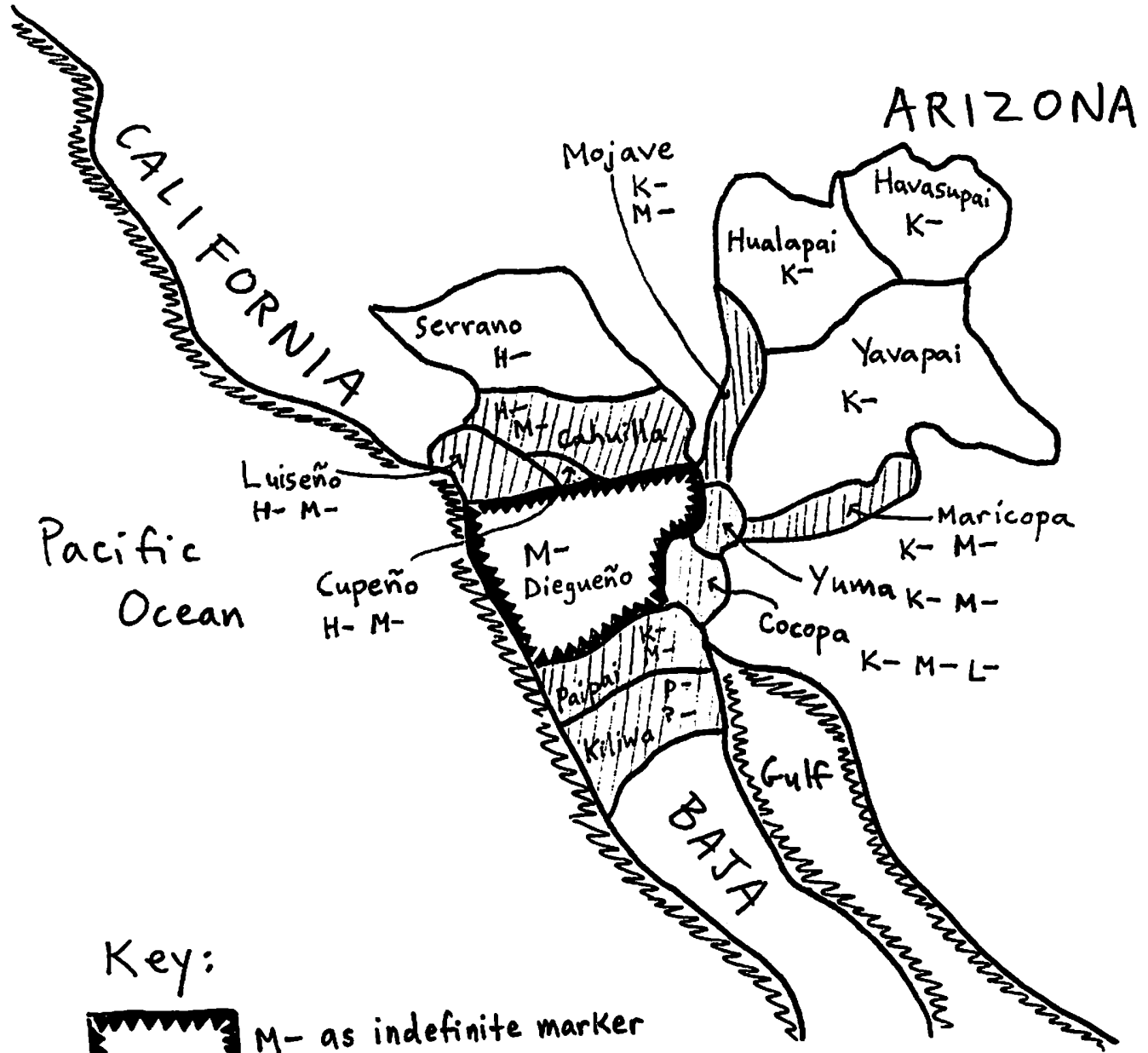
	Hualapai	Yavapai	Havasupai	Paipai
who	ga vga	vka	gaj ga'a	mka
what	gwègayu: gyu: gwègavyu:	kweθ	gwee'e	0
when	ganyúm	0	gaŋyum	qwas=ka-v l+wi-m-e
where	ge vge	vke	ge'e vge'e	mke
why	gavyu:im gavyu:yim gayu:im gayu:yim	kavyum	gavyuim gavyum	kavyuyum
how	ga ge gav	kavwik kavwim	ga'a	0
which	gayu:j (2 or more) gàv(gi)yu:j	kavkyuchiva	gavyuj gayuj	0
h.much	0	kavolik kavolim	gavlwim gavlwig	kablui

Finally, the Kiliwa branch, represented historically only by Kiliwa in Baja California, shows evidence of *p-* and *?-* as interrogative prefixes:

(46)	Kiliwa
who	0
what	?+kwit
when	?+mat p+?im
where	?ap-
why	p+yu-m
how	p+yu-m
which	p+?kwiit ?apu-win
how much	p-?+yuu-(t)

Section VI: Conclusion

Note the following map charting the distribution of *k-*, *m-* and *h-* among Yuman and Takic (UA) in the Southwest:



The map reveals that the California sub-branch of Yuman is probably the epicenter of the *m-* indefinite morpheme. The California sub-branch of Yuman California-Delta is the only language group in either UA Cupan or Yuman where *m-* is the interrogative marker par excellence. From this epicenter, *m-* appears to have migrated out to both UA Cupan (Luiseño, Cupeño and Cahuilla), where it partially supplanted the UA indefinite marker *h-*, to fellow Yuman Mojave, Yuma, Cocopa and Paipai in adjacent areas, and perhaps into non-Cupan UA Serrano where we have some traces of an indefinite *m-*. The interrogative *m-* therefore most likely originated in the territory occupied by Diegueño speakers. The ultimate source of *m-* is still a mystery.

Further evidence of intra-familiar influence between Yuman Diegueño and UA Cupan is found in the parallel morphological analyses of Cupan and Diegueño 'how' and thus':

(47)

UA Cupan (Cahuilla): Yuman Diegueño:

mé-x-an-nuk
IND1-be-CAUS-SSP
how?

m-u-yuu
IND1-3sg-be
how?

'é-x-an-nuk
DDEF1-be-CAUS-SSP
thus

p-u-yuu
DEM-3sg-be
thus

Intra-familiar influence between UA Cupan and Yuman Diegueño is thus two-fold:

- 1) In the sharing of the indefinite morpheme *m-*
- 2) In the sharing of the concept of affixation of definite and indefinite prefixes onto a verb meaning 'be, do' (or in the case of Cupan, also 'say') to form words for 'thus' and 'how' respectively.

Notes:

1. The abbreviations used are the following:

CAUS	Causative
DDEF	Distal Definite
DEM	Demonstrative
DS	Different Subject
HAB	Habitual
IND1	Indefinite Type 1
IND2	Indefinite Type 2
INST	Instrumental
INTR	Intransitive
MC:PR	Modifying Clause Present
NOM	Nominalizer
OJ	Object
PC	Personal Communication
PDEF	Proximal Definite
PL	Plural
PR:PL	Present Plural
PR:SG	Present Singular
Q	Question Marker
RDUP	Reduplicated
SJ	Subject
SSP	Same Subject Participle
TRANS	Transitive
UA	Uto-Aztecan

The orthographic conventions for the Takic languages discussed in this paper are the following:

'ch' for /c/	'qw' for /q /
'kw' for /k /	'sh' for /s/
'll' for /l/	'\$' for /s/
'ng' for /n/	'T' for /c/
	'th' for / /

Long vowels are represented by two adjacent identical vowels. The acute accents signals primary stress.

2. Luiseño is a member of the Cupan branch of Uto-Aztecan. The Cupan languages are all indigenous to Southern California. There were originally three Cupan languages: Cupeño, Luiseño, and Cahuilla. Cupeño has recently become extinct. The Cupan languages are not the only Uto-Aztecan languages of Southern California; a higher sub-classification of Uto-Aztecan, Takic, includes other Uto-Aztecan languages of Southern California:

5. Whereas Cahuilla has maintained the more original meanings given for (A) through (D) above, the Luiseño counterparts have undergone semantic shifts.

In Luiseño, the form *'iyx-* is now most commonly used to translate '(be) also', as in:

Nóón kúp-lowut 'iyx-lowut.
 1sg sleep-gonna also-gonna
 I'm going to sleep too.

The form *'ááx-*, now normally means 'resemble', or 'seem that way', as in (note the deletion of /x/ before /q/, as described in Elliott (1993)):

Né-yk 'áá-qat 'áá-q.
 1sg-to seem-MC:PR seem-PR:SG
 It seems that way to me.

The form *míyx-* is now used most often in the copulative sense (note once again deletion of /x/ before /q/):

Nóónil soldado míy-qu\$.
 1sg soldier be-PAST
 I used to be a soldier.)

6. We saw above (2) that the verb *'á-yax-* is still attested in Cahuilla. In some instances the second /a/ of *'á-yax-* also deletes synchronically:

'á-yx-anuk
 DDEF-be-SSP
 being that way, resembling

The second syllable of **'á-yax-an-* was apparently also eliminated historically through the deletion of its nucleus /a/).

7. We posit an intermediate **'é-yx-an-*. There is at least one synchronic example where the Desert Cahuilla dialect has /ay/, and the Mountain Cahuilla dialect /ey/. Note:

Seiler (1979:250) gives *kút yáy'al*, 'whirlwind' for Desert Cahuilla. The Mountain Cahuilla equivalent is *kút yéy'al*.

8. Listed below are the UA interrogatives containing a bilabial (Langacker: PC):

	<u>WHAT</u>
Mono	pi'i
Hopi	pi
Hopi	himi
Tarahumara	piri
Kawaiisu	-(mi)yi'i
	<u>WHERE</u>
Papago	hibai
Tubatulabal	maa
Hopi	haqam
Tarahumara	kami, kabu, kumi, kamu, kabe
	<u>WHICH</u>
Northern Tepehuan	ma-kidi
Huichol	kee-mi-'aane
Tubatulabal	maa-l maa-t-wa-n
	<u>HOW MUCH</u>
Tarahumara	kipu, chu kipu, mapu kipu, kipu chi
Huichol	keepaime
Tubatulabal	manhigish
Pochula	kiskom
	<u>HOW</u>
Pochula	ke(m)
Aztec	keenin
	<u>WHY</u>
Tubatulabal	mash

Note the high frequency of a possible prefix *ma-* in Tubatulabal.

9. Some Serrano words expressing uncertainty do however have /m/ initially: *mit*, 'perhaps', *mermerher*, 'any (old) X', 'any X at all'. Serrano *mit* is probably analyzable as:

mi-t
INDI-Q
perhaps

Whether or not the /m/ of such words is related to the indefinite *m-* of Cupan cannot be determined yet.

Further note that the /m/ of *hami'*, *hamin*, and *hamya'qaT* is also reminiscent of the /m/ of the indefinite Cupan *m-*. Note that Cahuilla has *mi'*, 'which?'. If we accept the /m/ of the Serrano forms as related to the indefinite Cupan *m-*, we could analyze the three /m/-bearing Serrano interrogatives as:

ha-mi'	ha-mi-n	ha-m-ya'-qaT
IND2-IND1	IND2-IND1-INST	IND2-IND1-be-be
who	how	how

10. Luiseño *hiyngay* is analyzable as:

hiy-ngay
 what-ABL
 why (i.e. 'from what')

11. /nn/ of *méxannuk* reduces to /n/ in actual speech. We write /nn/ to stress the morphological make-up of *méxannuk*, for which see (34).

12. Cupeño has for both *mivíngax* and *míxanuk* the alternate *híngax* (Hill: 1973).

13. Compare with Serrano *h-aay-p*:

h-aay-p
 IND2-?-LOC
 where

14. Langdon (PC) notes that *mu(u)yuu* means 'how' when used with the same subject suffix, 'why' when used with the different subject suffix.

15. Luiseño *hiycha* also does double duty as 'what' and '(some)thing': in fact, like Mesa Grande Diegueño, all Luiseño interrogatives double as indefinites: *michá'*, 'where?', 'somewhere' etc.

16. Langdon (PC) notes that *mu(u)yuu* is a full-fledged verb which can be inflected for person:

me-me-yuu te-me-waa?
 IND2-2-be AUX-2-sit
 How are you?

17. Such morphologically related pairs for 'how' and 'thus' are by no means rare in other languages, for example Russian *kak* and *tak*.

18. Compare this construction to Cahuilla *mífikí' péfikí'* below in (40).

19. Recall from Note 9 the alternative analysis of hamya'qaT:

ha-m-ya'-qaT
 IND2-IND1-be-be
 somehow

In this analysis, we would accept the sequence /ya'/ as a vestige of the verb *yah hypothesized above in Note 4, to which both the indefinites *m-* and *h-* would have been prefixed.

20. For all Yuman data I have used the source orthography.

21. Cahuilla also has an indefinite prefix *qa-* used in forming indirect questions, such as:

Kill	pen'é'nanqa	qa-méxannuk	pish	pe'kúlve'.
not	I:know	indirect-how	that	you:did:it
I don't know how you did it.				

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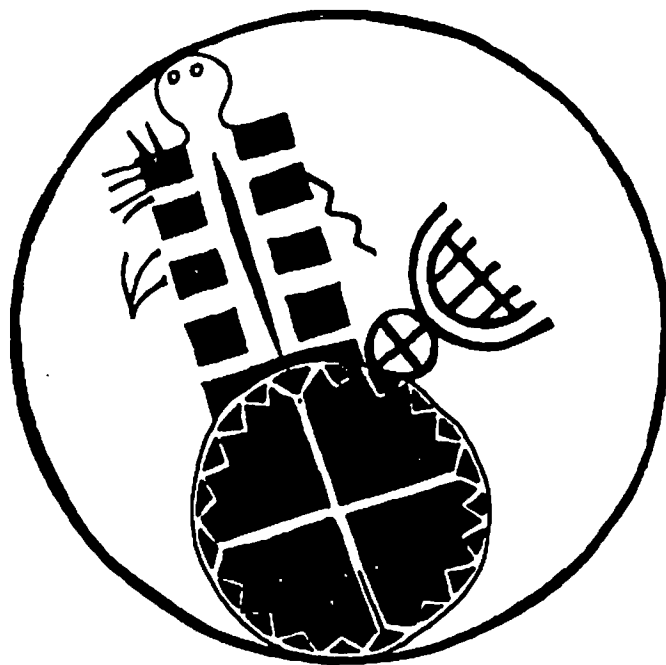
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REPORT 8

SURVEY OF CALIFORNIA AND OTHER INDIAN LANGUAGES



**Proceedings of the Meeting of
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**This volume is dedicated to
JAMES E. REDDEN
on the occasion of his retirement
for his enduring commitment to the publication
of the results of research on Yuman, Hokan, Penutian and
other American Indian languages
and also
for his contributions to the
documentation of the Hualapai language**

INTRODUCTION

This volume includes a number of papers presented in conjunction with the 1993 Linguistic Institute at Ohio State University in Columbus, Ohio, at two conferences on American Indian Languages: the meeting of the Society for the Study of the Indigenous languages of the Americas, held July 2-4, 1993, and the meeting of the Hokan-Penutian Workshop, held on the morning of July 3, 1993.

This continues a tradition initiated during the Linguistic Institute at the University of Arizona in 1988, of offering conferences on American Indian languages during the summer Linguistic Institute of the Linguistic Society of America, which is held every two years on the campus of the host institution. The interaction thus afforded between students and faculty of the Institute and specialists in American Indian languages has proved mutually profitable.

We gratefully acknowledge the dedication of Catherine Callaghan in making these meetings thoroughly enjoyable, as well as the hospitality of Ohio State University.

The Hokan-Penutian Conference has a tradition of meetings dating as far back as 1970, when the first Hokan Conference was hosted by Margaret Langdon at UCSD. Since 1976, the Hokan (and later Hokan-Penutian) Conference proceedings were published most years by James Redden, as part of the series *Occasional Papers on Linguistics*, out of the department of Linguistics at Southern Illinois University at Carbondale. Beginning this year, with James Redden's retirement, the reports of these conferences are being published as part of the *Survey Reports* out of the Survey of California and Other Indian Languages at the University of California at Berkeley.

Margaret Langdon
Volume Editor

Leanne Hinton
Series Editor

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