0.1 In Verde Valley and Prescott Yavape, two dialects of northeastern Yavapai, there are a number of ways in which a speaker can indicate his attitude toward the information contained in a statement. Several of these devices fall under the rubric modality. Others do not, although, like modals, they are instances of a more general grammatical category exemplified by the irrealis construction.

By "irrealis" I mean something like "subjunctive," that a state is unrealized or is uncertain; this means that what is being talked about is counter to fact, or that it has not yet happened, or that it did not happen, or that it never will happen, or that speaker is not certain it happened or will happen. In many languages "irrealis" also includes verbs of wishing, dreaming, wanting, thinking, believing, and guessing, in addition to verbs or auxiliaries concerned with judgments of certainty or possibility.

The present study is concerned with the syntax and semantics of Yavape irrealis sentences—or rather, with the syntax and semantics of certain kinds of irrealis sentences in this dialect group. Since the irrealis construction is so widely used in Upland Yuman, any attempt to illustrate its full function in the space allotted would be futile. Therefore claims for comprehensiveness are not advanced and are in fact specifically eschewed. Still, the exercise is not without value or importance for the study of Northern Yuman, nor is it insignificant for Yuman studies in general.

In researching and writing this paper, I have profited greatly from conversations with Alan Shaterian, especially on questions of transcription. Several of the Yavape examples I elicited are from material he recorded in Prescott, summer 1975. In these cases the mnemonic (AS) follows the English gloss. I would like to thank Professor Shaterian for his kind assistance and advice. I would also like to acknowledge helpful suggestions from the participants in the Yuman workshop, with special thanks to Leanne Hinton, James Redden, and Margaret Langdon for their encouragement.

1.0 Irrealis Markers

In my doctoral dissertation (Kendall, 1972) and in subsequent publications, I identify the verbal affix /-ha/ as a future tense marker, distinguishing it from the future auxiliary /(o)no:/'. The auxiliary, I claimed, specified "immediate future" while the simple suffix marked all other instances of futurity. In retrospect this analysis is imprecise and misleading for the following reasons:
(1) not all occurrences of /-ha/ are clear examples of "future time" as the following example indicates:

(a) ṇa-c ṇ-vqi-k ṇ-yu-v-a hma:n oya:t-a ṇ-wiy-ha
   l-sbj l-woman-ego l-be-af-irr children many-tns l-have-irr

"If I had been a woman, I would have had many children."

(2) Both "immediate" and "non-immediate" future morphemes may—and frequently do—occur in the same verb phrase, e.g.

(b) ṇ-sma:-k ṇ-no:-ha
   l-sleep-ego l-fut-irr

"I'm about to go to sleep."

(3) The "non-immediate future" construction is in partial complementary distribution with at least two phonologically similar segments, /-h/ and /-a/, both of which appear in non-factive, counterfactual and negative factive sentences. y

In spite of these facts all Yavpe consultants claim on one occasion that /-ha/ means "future," whereas in general not one of them can supply a consistent meaning for /-h/ or /-a/. This suggests that /-ha/, which obviously includes irrealis /-h/ and/or irrealis /-a/, is developing into a tense marker. That Yavpe speakers classify the morpheme in this fashion, even in sentences such as (a) above, only adds to the seductiveness of the /-ha/ equals "future" analysis.

It is probably more accurate to say that /-ha/ is not yet a genuine tense indication, despite its ethno-linguistic categorization. It is still part of the modal system and, as such, must be considered in relationship to the other irrealis morphemes.

It is a simple task to discriminate between /-ha/, which is perceived [-ah] or [-aha], and these other two segments. However the distinction between /-h/ and /-a/ is slight, and not all speakers make it with equal clarity on every occasion. In lento speech Yavapais pronounce /-h/ as [-ah], and pronounce /-a/ as [-a] or [-a:]. In allegro speech the former deduces to a slightly breathy [-ah], very similar to, but nevertheless distinct from, the other segment (Shaterian, personal communication).

It appears that /-h/ (phonetic [-ah]) occurs on a verb whenever that verb precedes one of a set of modal auxiliaries or particles, or when it precedes the negation auxiliary /*om/ (/*um/ in Prescott Yavpe).

Irrealis /-ha/ appears on verbs that are semantically "future," including those which are "future" relative to some point in the past (see, for example, sentence (a) above). "Future" in this general sense also covers the hortatory constructions exemplified by
?-pe:m-ha "let's go!" and ?-ma-c-ha "let's eat!"

l-go-irr l-eat-pl-irr

The affix /-a/ is at the core of the analytic problem. It appears obligatorily in several non-factive or counterfactual constructions, most notably /?ika/ in order to and /yu:va/, /wi:va/ and /?i:va/ counterfactual. There is some question whether these are formal irrealis categories, though certainly they fit the semantic criteria for inclusion in an irrealis set.

This final segment, /-a/, is frequently the ending for modals and negative verbs themselves. Still, it appears in other grammatical patterns that cannot be considered examples of a common semantic or syntactic pattern. If this formative constitutes an irrealis morpheme, it is homophonous with the noun absolutive suffix /-a/ and with a segment that seems vaguely involved with "tense" or "emphasis" as well. The reader should keep in mind that any analysis of /-a/ is tentative; therefore, glosses for this segment must be evaluated with considerable wariness. If this proviso is kept in mind, confusion about what /-a/ "really" means, can be held to a minimum.

2.0 Modality

In both Prescott and Verde Valley Yavapai there is evidence that the modal system is undergoing re-analysis, proliferating categories not found in the other Northern Yuman dialects. Redden (1966) lists six modal suffixes for Hualapai, all of which Yavapai shares or has analogues for. In addition to these, northeastern Yavapai speakers have innovated, or are innovating, another three modals—four, if one counts the specialized meaning, "dubitative," created for the pan-Northern Yuman suffix /-mo:/.

I will discuss the innovated items after a brief review of the irrealis elements Upland Yuman dialects have in common.

2.1 /ma:t/ and /-o-/ 

Redden notes that Hualapai has a verbal affix /alma:t/ which indicates probable truth of a statement or probable realization of a situation described. Translations provided for this morpheme are "think so, believe probable, should/ought to by now, conclude, guess and estimate." The Yavap equivalent, /ma:t/, can just as well be translated "looks like," "seems" and "appears."

The judgements expressed in /ma:t/ sentences are based on intuition, hunch, past experience, probability or circumstantial evidence; hence they contrast formally and semantically with /-o-/ sentences expressing judgements with an evidentiary basis in sensory stimuli. More simply, modal /ma:t/ sentences are based on deduction whereas evidential /-o-/ sentences are based on induction.

Thus while both modal and evidential assertions freely translate into English with the glosses supplied above, they do not imply identical conditions in the universes they describe. In each of the following pairs
the first sentence represents an opinion based on guess, hunch, intuition, or probability, and the second represents an opinion based on sight, smell, or sound.

(1a) hipas-t-m k-hwi:w-c va-k ?aimc-h ma:t-kaN
night-tm-allo rel-smell-sbj here-at go-irr seem-cmp

(1b) hipas-t-m k-hwi:w-c va-k ?aimc-k yu-o-m-a
night-tm-allo rel-smell-sbj here-at go-irr be-evd-allo-tns

"There must have been a skunk here last night." "A skunk must have been here last night." "It looks like a skunk was here last night."

(2a) ?kwivo-h ma:t-kaN
rain-irr seem-inc

(2b) ?kwivo-k yu-o-kaN
rain-ego be-evd-cmp

"It probably rained." "It must have rained." "It seems like it rained."

(3a) ŋmi-v-c ?we:-ńu neh-h ma:t-m-a
cat-dem-sbj mice-dem kill-irr seem-allo-tns

(3b) ŋmi-v-c ?we:-ńu neh-k wi:o-m
cat-dem-sbj mice-dem kill-ego do-evd-allo

"It looks like the cat killed the mice." "The cat must have killed the mice."

Sentence (1a) is appropriate to situations where something indirectly suggests the presence of a skunk, e.g. one's garbage cans have been disturbed or one's chicken house raided. One consultant claimed he could say this when he detected a skunky odor lingering about, but another thought (1b) was better in that case. Both felt that (1b) was the best way to express an opinion on the probable presence of a skunk when the evidence was more direct, e.g. skunk tracks, skunk droppings, skunk fur, etc.

Similarly (2b) would be uttered when there is tangible evidence of rain, e.g. puddles on the ground, rain pocks in the dust. On the other hand (2a) might be offered if one's joints ached, or if one were guessing that it rained because it was the rainy season, and so forth.

Examples (3a) and (3b) contrast with two other possibilities, each of the four indicating something significant about the evidence upon which it is based. Sentence (3a) describes a situation where there is evidence—possibly negative evidence—that the mice are dead; for example the mice
are no longer around. Sentence (3b) suggests not only that the mice are
deaf, but that the cat is directly implicated—it has blood on its whisk-
ers, it is playing with mice corpses, there are bloody cat tracks near
the remains of the mice. Sentence (3c) below is more speculative. There
may be evidence that the mice are dead but there is little to indicate
what killed them. It is sheer allegation that the cat is implicated.
The last sentence, which is actually three sentences, asserts the fact
rather than opinion that the cat is responsible for the mice's death. It
is appropriate to use any of these versions when one actually sees the
cat dispatch the rodents in question.

(3c) Ńmi-v-c ʔwe:-ųu neh-mo:
cat-dem-sbj mice-dem kill-dubi

"Maybe the cat killed the mice."

(3d) Ńmi-v-c ʔwe:-ųu neh[-kŋ, -km, -m(a)]
cat-dem-sbj mice-dem kill-[cmp, inc, allo (tns)]

"The cat killed the mice."

These data demonstrate that at least two criteria are relevant to
a decision among these grammatical choices: (1) degree of certainty,
(2) quality or source of evidence underlying the certainty. Sentences
with /-mo:/ are weak with respect to either criterion. Sentences with
/-ma:t/ are stronger with respect to the first standard but still relatively
weak with respect to the second. The /-o-/ construction indicates con-
 siderable strength on either scale relative to /-mo:/ or /-ma:t/, while
/-kŋ/, /-km/ and /-m(a)/ signal absolute conviction based on evidence from
one's own senses.

2.2 /yi:-θ/ and /hi:-θ/

The auxiliary /yi:-θ/ is a counterfactual marker signalling that the
conditions necessary for some event or phenomenon were in abeyance, that
some goal failed to be realized, that some state did not materialize or
that it materialized contrary to expectation. It is semantically negative,
and shares at least one property with the negation auxiliary /ʔom/, viz.
it requires irrealsis markings on the preceding verb.

/yi:-θ/ is quite obviously not monomorphemic, since /yi:/ occurs as
the main verb to think, believe, suppose, and is involved in stems built
from this root, e.g. /yi:te:/ but, and /k'ate:y'i/ to want, to wish for,
to long for. The interdental fricative /-θ-/ apparently has morphemic
status in its own right, as it shows up in /hi:-θ/ counterfactual and
/-kθ-θ-θ:/ conditional, constructions for which plausible morpheme-by-
morpheme glosses are available.

Still /yi:-θ/ and /hi:-θ/ have a kind of functional integrity as
counterfactual modals. They contrast in syntactic distribution and in
semantic impact with other morphemes built on the same stems. The follow-
ing sentences illustrate this with /yi:/ stems only: (4)-(6) are examples
of counterfactual modals, (7)-(9) of probability modals, (10)-(12) of asymmetrical conjunctions, and (13) of a delayed or postponed goal.

(4) ya-k m-yu-k m-yu:-v-a tso:o-m-a m-?u:-ŋ-h
here-at 2-be-ego 2-be-af-irr tug-of-war-abs 2-see-perf-irr
m-yi:-θ-a
2-mod-mod-tns

"If you had been here you would have seen the tug-of-war."

(5) ma:-c hma:ŋ m-wiy-ŋu ?payk pa:-m-spo:-o m-wi:-v-a,
2-sbj children 2-have-dem Yavapai obj-2-know-cause 2-do-af-irr
ʔha:n-h yi:-θ-a
good-irr mod-mod-tns

"If you had taught your children Yavapai, it would have been good."

(6) ?pa:hmi:-c ?-yu:-v-a ke hma:ŋ ?-wiy-h ?-ʔom-h
man-sbj 1-be-af-irr neg children 1-have-irr 1-nit-irr
ʔ-yi:-θ-a
1-mod-mod-tns

"If I had been a man, I would not have had children."

(7) hayko:-v-c ?ʔa v-li:-ŋ-k, pur pur-v-c-m-a,
white-dem-sbj 1 state-like-conj-ego hat hat-refl-pl-alloc-tns
mlqe:-c-c piːl-h yi-m-e:
neck-pl-sbj burn-irr mod-alloc-exist

"White people like me must wear hats or they'll probably get their necks sunburned."

(8) ŋye:kk0:ʔiː puk-a ?-ʔaːm-c-k ?-ʔoːŋ-ha ?ʔa:n-a
tomorrow rock foot-abs 1-go-pl-ego 1-fut-irr good-tns
gyat-h ma+ʔyiː-km
much-irr l-think-cmp

"Let's go to the Verde Valley tomorrow. It might be fun," "It might be good," "I think it would be fun."
(9) John-c vo:k-h ?om-a ma...yi:-km
John-sbj return-irr not-pls think-inc

"John probably won't come back." It isn't likely that John will
return." (? "John thinks he won't return."

(10) nūu-c-c haŋk+sav-c ke va:m hwa:v-h ?om-c-m
those-pl-sbj scorpion-sbj neg go+multi-irr not-pl-allo
yi:c-h yi:te: nū-c-c ca:m-c-km
think-pl-irr but that-pl-sbj miss-pl-cmp

"They think there aren't scorpions around here, but they're wrong."

(11) n-θa-c-c ke pa:-?m-kmwa:c-c-h m-?om-i ?i:c-h
dem-there-pl-sbj neg obj-1-2-kill-pl-irr 2-not-imp say-pl-irr
yi:te: pa:-?wi:-c-kn
but obj-1-do-pl-cmp

"They begged us not to kill them but we did it anyway."

paint brush have-abs house paint-dem 1-think-irr but
?sme:-km
1-misplace-cmp

"I wanted to use his paint brush but I misplaced it."

(13) kula-c ?iŋk əla kwe:+cvya:m-nū ?-yo:v-h yi:-t-yu-m
Kula-sbj say Thala car-dem 1-make-irr mod-temp-be-allo

"Kula promised Thala to fix the car sometime."

Related to /yi:-ə/ is another counter-expectancy or counterfactual
construction /hi:-ə/. It occurs in the same syntactic patterns as /yi:-ə/,
frequently alternating with it in subsequent repetitions of the same
elicited sentence.

As far as I can tell /yi:-ə/ is concerned with frustrated intentions
and desires, whereas /hi:-ə/ is more indicative of frustrated opportunities
and capacities, a difference which can be illustrated with the following
contrastive pair from English:

(a) I would be an oceanographer but I'm afraid of fish (yi:-ə)
(b) I could be an oceanographer but I'm afraid of fish (hi:-ə)
The first sentence above presupposes that its speaker wishes to be involved in ocean study and asserts that this desire is thwarted. The second sentence makes no such presupposition although it does assert that something is thwarted: namely, an ability or capacity to study the ocean.

That the Yavapai examples below are entirely analogous is not surprising, given that /yi:-θ/ is built on a cognitive-emotional root /yi:/ and /hi:-θ/ is built (probably) on the irreals marker /-h/. It should be noted that free translations for these sentences were supplied by my consultants and not by me.

(13a) Rosie-c myal yo:v-h hi:-θ-m mwa:r-a pe:m-i
Rosie-sbj bread make-irr mod-mod-allo flour-tns gone-tns

"Rosie could make bread if she had flour." "Rosie could make bread but the flour is gone." "Rosie can't make bread because the flour is gone."

(13b) Rosie-c myal yo:v-h yi:-θ-m mwa:r-a pe:m-i
Rosie-sbj bread make-irr mod-mod-allo flour-abs gone-tns

"Rosie would make bread if the flour weren't gone." "Rosie would make bread but there's no flour."

(14a) ?ihmi:y-a ?-ca:m-h ?-hi:-θ-m, vka-c pa:-ñ-wa:m-h
acorn-abs 1-pick-irr 1-mod-mod-allo who-sbj obj-1-take along-irr
?om-i
not-tns

"I could pick acorns but there's no one to drive us (to the gathering place)." "I could pick acorns if someone would drive."

(14b) ?ihmi:y-a ?-ca:m-h ?-yi:-θ-m, vka-c pa:-ñ-wa:m-h
acorn-abs 1-pick-irr 1-mod-mod-allo who-sbj obj-1-take along-irr
?om-i
not-tns

"I would pick acorns but not one will drive us to (the gathering place)"

(15a) m-wivi m-askwi:l-h m-hi:-θ-m avo:n pe:m-i
2-clothes 2-wash-irr 2-mod-mod-allo soap gone-tns

"You could wash your clothes if you had soap." "You could wash your clothes if the soap weren't gone/but there's no soap."
(15b) m-wivi m-tski:1-h m-yi:-θ-m avo:n pe:m-i
2-clothes 2-wash-irr 2-mod-mod-allo soap gone-tns

"You would wash your clothes if the soap weren't gone."

2.3 /lwī/ (Prescott), /li:/ (Verde Valley)

The modal auxiliary /li:/ corresponds roughly to English should (have), although some sentences elicited with English should (have) constructions translate into Yavapai with auxiliary /no/ (Verde Valley), /nu/ (Prescott) instead. (See the following section.) Both of these modals appear to be Yavapai innovations, as they are absent from Hualapai and Havasupai—and in fact are identified as foreignisms by speakers of these dialects.

The auxiliary /lwī/ or /li:/ derives from the main verb /lwī:/ to be correct, proper, true; to fit, match, be similar to. In Yavapai these meanings have coalesced, the result being a distinct lexical item with auxiliary verb status, and the Verde Valley form of the auxiliary demonstrates that this is so. In Prescott dialect the modal aux is still pronounced [lawi], i.e., it is entirely homophonic with the main verb; however in the Verde Valley the auxiliary has lost its labialized segment and occurs as [li:], which makes it distinct phonetically and semantically from the main verb. In other words, the Verde Valley people have pushed their reanalysis of /lwī:/ all the way to its conclusion, through homophony to neologism. Examples of this modal from both dialects are presented below.

(16) hyako ḵ̡ye: m-ʔu:-h m-li:-a
white doctor 2-see-irr 2-mod-tns

"You should see a doctor."

(17) vke? ʔc-ʔma:-h ʔa-ʔum-a ʔ-lwī-a ʔ-yu-ma
neg dum-l-eat-irr l-ʔ-not-tns 1-mod-tns 1-be-allo

"I shouldn't eat." (AS)

(18) ʔpa sa:y-c myal myul ma:-h ?om-h li:-a yu-m
man fat+pl-sbj bread sugar eat-irr not-irr mod-tns be-allo

"Fat people shouldn't eat cakes."

(19) pa:-k-ta:y-ʔu ʔwaqta ma:-h hi:-ʔu m-ckyat-o
man-rel-old-dem meat eat-irr mod-dem(?) 2-cut-benef
m-lwī-a m-yu-ma
2-mod-tns 2-be-allo
"You should cut up the meat for the old (man) if he is to eat it."

(A S)

The tense of these sentences is apparently determined by the form of the auxiliary following /lw/ or /l/. If there is an "applicative-evidential" /-o-/ affix included in this construction, past time is indicated; if no auxiliary occurs, or if one appears without /-o-/, either generic or non-past time is signalled. In the draft of this paper presented to the Yuman workshop, sentence #1 was incorrectly translated. The correct form would be either (20) or (21) below:

(20) = (1) ʔyaːm-c-h ʔliː-a ʔyu-c-m-a
    1-go-pl-irr 1-mod-tns 1-be-pl-allo-tns

"We should go."

(21) = (1) ʔyaːm-c-h ʔliː-a ʔyu-c-o-m-a
    1-go-pl-irr 1-mod-tns 1-be-pl-appli-allo-tns

"We should have gone."

The semantics of applicative /-o-/ constitutes an area ripe for investigation.

2.4 /no/ (Verde Valley), /nu/ (Prescott)

The development of modal functions for a main verb, /lw/, was illustrated in the preceding section. It is paralleled by similar expansion of function for the auxiliary /ono/, from /ono/ future to /no/ must. The semantic transition from "future" to "necessitative" or "obligatative" is not at all unnatural, and in fact has taken place in English for certain restricted domains, as in military instructions, advice or commands to children, e.g.

"A newly arrived officer will present his card to the colonel's lady." "Enlisted men will escort ladies to the tea room." "You will not get your pinafore dirty." "You will not chew gum in church."

Notice that most of the Yavapai sentences included in this section have semantic force analogous to that of the preceding English examples. The sense of (23) is advice rather than command however, whereas (24) is an assertion of certainty. Again, both Prescott and Verde Valley materials are presented, the former contributed by Alan Shaterian.

(22) ke m-ckwaːr-h m-ʔom-h m-no-m
    neg 2-laugh-irr 2-not-irr 2-mod allo

"You mustn't laugh." "You will not laugh."
(23) ?pa sa:y-c myal myul ma-h ?om-h no-m-a

man fat-sbj bread sugar eat-irr not-irr mod-allo-tns

"Fat people mustn't eat sweets."

(24) qwa0k?b1-l-c n-va-k voi-h nu:=ma

apple-sbj dem-here-at exist-irr mod-allo

"There must be apples here." "There will be apples here." (AS)

(25) vke? m-kci:c-v-h m-a?um-a m-nu:=ma

neg 2-steal-(?)-irr 2-Ø-not-tns 2-mod-allo

"You mustn't steal." "You will not steal." (AS)

Harold Sine, who produced both (18) in the preceding section and (23) in this, commented that the latter is "stronger," a judgement confirmed subsequently by Effie Starr. She also found sentence (22) more forceful than a simple negative imperative, "Don't laugh," which follows from the etymon of the auxiliary in question.

While there is ample comparative evidence that Yavapai is expanding its modal system relative to its sister dialects, there is little suggesting why this is the case. It may be a case of stimulus diffusion where modal categories from a contact language are incorporated into one's own speech (in which case English and Apache are logical source languages). On the other hand, it may be the natural drift of Upland Yuman. In any event, it is an important diagnostic trait for distinguishing among the dialects and an interesting example of language change as well.

3.0 Other Irrealis Constructions

So far, we have considered two kinds of irrealis structure although one, the weak hortatory, was mentioned only in passing. There are possibly five other syntactic and semantic topics germane to the present investigation, far too many to examine here; they are (a) future tense and conditional sentences, (b) counterfactual non-future conditionals, (c) negation, (d) purposive, (e) reportatives. Since I have discussed purposive sentences elsewhere (Kendall 1972, 1975) and since there is little data available to me on reportatives, I shall discuss in this paper only the first three topics, they being the most clear examples of irrealis syntax and semantics.

3.1 "Conditional" Sentences and Future Time Sentences

"Conditional" sentences, by which I mean utterances of the general form "if... then...," have quite distinctive morphology in Yavapai. Non-past conditionals normally include the sequence /-x-Ø-o/., same subject-modal-modal, on the "if clause" and the irrealis "future" morpheme /-ha/ on the "then clause." Past conditionals, considered in the following section, can similarly be characterized as unusual morphologically. Examples
of non-past conditionals are:

(26) ?haː-ŋuː-1 ṇ-m-yaːm-k-θ-o-i, ?ciː səw-c m-cckYoː:-c-haː
    water-dem-into tmp-2-go-ss-mod-mod fish baby-sbj 2-nip-pl-irr
    "If you go into the water, little fish will nip at you."

(27) voi hmaːŋ-c ŋmi vhe syoːm-k-θ-oː ŋmi-c ttmoː-haː
    woman child-sbj cat tail pull-ss-mod-mod cat-sbj scratch-irr
    "If the girl pulls the cat tail, it will scratch her."

(28) kópca-c-eː ??iː c-k'at-h ŋ-aʔum-k-θ-oː hamsiː-c
    Kopca-sbj-hesit wood caus-cut-irr when-3-not-ss-mod-mod Hamsi-sbj
    way+lay-ha
    angry-irr
    "If Kopca doesn't cut the wood, Hamsi will get angry." (AS)

(29) ke m-tʔol-k v-marmar-h ŋ-m-ʔom-k-θ-oː ?haːn-ha
    neg 2-cook-ss stative-long-irr tmp-2-not-ss-mod-mod good-irr
    "If you don't cook it too long, it will be good."

Notice that the "then" clauses are all in future tense and are marked accordingly with irrealis "future" /-ha/. It is possible to indicate futurity in simple sentences with this morpheme, just as it is possible to use the more complex "future" auxiliary /(o)no:/ (or /(u)nu:/, Prescott dialect). Even this auxiliary construction takes irrealis markers occasionally however.

(30) kavʔicm ?waʔ haːn-l ?-waː-1a
    someday house good-in 1-live-irr
    "Someday I'll live in a nice house."

(31) ke ŋwa-k m-voiːk-h m-ʔom-h m-noː:-m-a
    neg here-at 2-return-irr 2-not-irr 2-fut-alloc-tns
    "You'll never come back."

(32) kweː skwiskwiː-y-ŋu m-ʔeː-ha
    dum stripe-dem 1/2-give-irr
    "I'll give you that candy."
These are not the only possibilities. The complex future construction may also occur without irrealis marking on the preceding verb, in which case that verb will take referent switching \(-k/\) instead, e.g.

\[(34a)\] k\textit{wivo:-k} (o)\textit{no:-km}

\begin{tabular}{ll}
\text{rain-ss} & \text{fut-inc} \\
\end{tabular}

"It's going to rain."

\[(34b)\] k\textit{wivo:-h} (o)\textit{no:-km}

\begin{tabular}{ll}
\text{rain-irr} & \text{fut-inc} \\
\end{tabular}

"It's going to rain."

The existence of this variability is not surprising, given that the tense-aspect system is undergoing re-analysis, and given that a complex modal system is developing.

Apparently same subject \(-k/\) is replacing the older Northern Yuman \(-h/\) in this construction, a change that has been almost completely effected. Still the future auxiliary bears the mark of the older form in its initial breathy vocalic onset for third person [\textit{ono:}], and the \(-h/\) plus auxiliary form still shows up once in awhile in sentences such as (31), (33), and (34b). If Yavapai were to survive another century, examples like these would be impossible anachronisms.

3.2 "Counterfactual-conditional" Sentences

The auxiliaries /\textit{wi}/ and /\textit{yu}/ participate in a number of different constructions, two of which fall within the scope of this paper: evidentials and counterfactual conditionals. The former were discussed earlier in section 2.1, and contrasted with the modal /\textit{ma:ti}/. The latter are important here. In counterfactual conditionals, some state of affairs or some event failed to materialize or was rendered impossible by a countervailing state or event, in consequence of which a dependent condition was thwarted. This dependent condition follows from, or rather fails to follow from, antecedent and necessary conditions enumerated in an if clause.

Sentences that are past conditional, or counterfactual conditional, appear in two forms in Yavpe, either with irrealis modals in the then clause or with the irrealis future suffix \(-ha/\) on the then clause. Both possibilities are acceptable and grammatical, consultants showing individual (and characteristic) preferences for one over another. Examples of each type are provided for contrast.

\[(35)\] m-t\textit{?ol-k} m-rav\textit{-h} m-\textit{?om-k} m-wi\textit{-v-a} ?han\textit{-ha}

\begin{tabular}{llllll}
2-cook-ss & 2-much-irr & 2-not-ss & 2-do-of-irr & good-irr \\
\end{tabular}

"If you hadn't cooked it so much, it would have been good."
(36) hma:ñ-m-wi:y-ñu  ?pa:iy  pa:-m-wi(-w)-o-k  m-yu:-v-a
children-2-have-dem Yavpe  obj-2-do-(af)-bene-ss  2-be-af-irr
?han-ha
good-irr

"If you had taught your kids Yavapai, it would have been good." (AS)

(37) pa:hmii:-c  ?-yu:-v-a  ke  hma:ñ  ?-wi:y-h  ?-?om-h
man-sbj  1-be-af-irr  neg  children  1-have-irr  1-not-irr
?-yi:-?a
1-mod-mod-tns

"If I had been a man I would not have had children."

(38) ?ña-c  ?-ya:m-h  ?-yi:-?a  ?c-?-rav-h  ?-?om-k
1-sbj  1-go-irr  1-mod-mod-tns  dum-1-sick-irr  1-not-ss
?-yu:-v-a
1-be-af-tns

"I would have gone had I not been sick."

(39) va-k  m-yu-k  m-yu:-v-a  tsyom-v-a  m-?u:-ñ-h
here-at  2-be-ss  2-be-af-tns  pull-pass-abs  2-see-perf-irr
m-hi:-?a
2-mod-mod-tns

"If you had been here, you could have seen the tug-of-war."

In an earlier version of this paper, I called the form of the if-clause auxiliary a "past conditional" construction. More recent field work reveals that it is not restricted to past time sentences, but appears in at least one other semantically irrealis sentence type, a kind of subjunctive.

(40) yya  ?-ma:-k  ?-yu:-v-a  pe:
this 1-eat-ss  1-be-af-irr  conj

"What would happen if I ate this?" "And as for this, what would happen if I ate it?"
(41) c?al-k yu:-v-a pe:
go out-ss be-aff-irr conj

"What would happen if he left?" "And if he left...?"

Just what makes this construction counterfactual is not immediately obvious. The presence of "irrealis" /-a/ alone could not be responsible since: (a) this segment does not have sufficient semantic force by itself to bear the entire load of counterfactual and conditional meanings, (b) this segment is absent in Havasupai and Hualapai versions of the construction.

The /-v-/ is a likely candidate for these meanings although one then strains one's analytic imagination trying to relate "counterfactual" to any of the other meanings of /-v-/: medio-passive, causative, demonstrative.

The most plausible analysis I can come up with, without positing a whole set of homophonous morphemes, is this: /-v-/ is a demonstrative and the /-a/ is an irrealis marker or a non-present, i.e. non-manifest, tense marker, equivalent in every way to the /-a/ that appears with non-present relative clauses such as

qwa?k?ol ?-ma:-v-a
apple l-eat-dem-tns

"the apple I ate"

If this is so, then the counterfactual reading comes not from the auxiliary but from something with which it patterns in the sentence. In other words, the auxiliary is nothing but a nominalizing device. Looking at it this way, we might re-gloss (35)-(37) in the following fashions, respectively:

(35a) "Your not having done the overcooking of it would be good."

(36b) "Your having taught your children Yavapai would be good."

(37b) "My being a man having happened, I would not have had the children I did."

These translations, albeit clumsy, are equivalent to the more elegant "if... then" forms they were originally couched in.

In examples (40) and (41) moreover, we find additional support for this premise. We know that the conjunction pe: literally means "and as for." Therefore (40) can be glossed (40a) "And as for my having eaten...?" "And what about my eating this apple?" "Given my eating of the apple, so what?" This way of looking at things at least has the virtue of relating (40) and (41) to the rest of the so-called counterfactual-conditionals. In other words, there is no need to posit a separate subjunctive auxiliary for (40) and (41) separate and distinct from, yet
at the same time formally identical with, the counterfactual ones. A
nominalization hypothesis simplifies the situation enormously.

If these are in fact nominalizations however, they should take case
markers, as relative clauses do in sentences like

\[\text{qwaq} \text{ʔol} \text{ʔ-ma:-v-a-c} \text{ʔhan-k̃} \]

apple 1-eat-dem-tns-sbj good-cmp

"The apple I ate was a good one."

As far as I can tell, these counterfactual-conditionals or past condi-
tionals do not take case markers, not even where they would be subject
nominalizations. Unless one can justify a claim that they are object
nominalizations, and consequently always unmarked, or in some other way
explain the absence of case markers, the appeal of the nominalization
hypothesis is considerably reduced.

In Havasupal, sentences of this type have the "if clauses" marked
as verbs rather than nominalizations, e.g.

\[\text{(42) va-k m-yu-k m-yu:-v-k tug-o-war m-tye:v-ʔ-h} \]

here-at 2-be-ss 2-be-af-ss 2-mix-conj-irr

"If you had been here, you could have joined in the tug-o'-war."

\[\text{(43) ?pa-v-c ?-yu-ha ?-yu-v-k vkaŋ hma:ʔ} \text{ʔ-wiy-ha} \]

man-dem-sbj 1-be-irr 1-be-af-ss neg children 1-have-irr

\[\text{ʔ-tʔop-k} \]

1-not-nonfactive (?)

"If I had been a man, I would not have had children."

It is still possible to look at these "if clauses" as nominals if
one is willing to analyze them as partitives or partitive-like structures.
I cannot conceive of how to motivate such an analysis, but assuming that
one could, then perhaps (42) could be rendered "Of your having been here,
you could have joined in the tug-of-war," with the irrealis /-h/ on
/m-tye:v-ʔ-h/ indicating that in fact you could not have participated
because you were not here. Sentence (43), with irrealis markers in both
"if" and "then" clauses, is easier to fit into this schema; it would
translate, "Of my having been a man/were it that I had been a man... I
would not have had the children I had." The irrealis marker on /ʔ-yu-ha/
signals that speaker is not a man, but is merely talking about the
possibility, and the irrealis marker on /ʔ-wiy-ha ʔ-tʔop-k/ indicates the
opposite of /ʔ-wiy ʔ-tʔop-k/ I don't have children. Thus, (43) pre-
supposes both femaleness and children, implies that one follows from the
other, and asserts that the dependent condition could have been altered
by a change in the antecedent situation.
This Havasupai evidence lends support to the argument that counterfactual readings are imposed on "if clauses" from elsewhere in the sentence, i.e. that such readings are not necessarily properties of the clauses themselves. It does not help us decide upon a structural analysis for these utterance types however, offering instead yet another possibility for characterizing them. In the absence of decisive evidence, the precise structure of these constructions is a moot issue. This being the case, further discussion of them should properly follow further field work.

3.3 Negation

Negation is a complicated topic in Upland Yuman, and anything like a full account of it is missing from the literature. Consequently, this section contains only the most rudimentary comments on negated sentences, the point being to demonstrate that they are examples of the irrealis category, not to make sophisticated observations about the intricacies of negation.

Sentences are negated in Verde Valley Yavapai by a negative verb /ʔom/ accompanied by an optional particle /ke/. The negating verb follows the verb it negates, which is marked by irrealis /-h/. The negated verb agrees in person, and optionally in number, with its auxiliary, e.g.

(44) ʔha-c ke tyac ʔ-ma:-h ʔ-ʔom-km
     1-sbj neg corn 1-eat-IRR 1-not-inc
     "I wasn't eating corn."

(45) ʔala-c hamsi: ??i: ckYat-o-h ʔom-k-ʔ-o: ke ʔha:n-h
     Thala-sbj Hamsi wood cut-bene-IRR not-ss-mod-mod neg good-IRR
     no:
     fut
     "If Thala doesn't cut wood for Hamsi, it isn't going to be good."

(46) kavyu-m haŋko-ʔu m-ma:-h m-ʔom-e?
    why-ALLO frog-dem 2-eat-IRR 2-not-Q
    "Why don't you eat frogs?"

(47) Maria-c ?sit-k va:/-kã tuwiː-k ʔom-c-kã
    Maria-sbj one-ss come-cmp rest-ss not-pl-cmp
    "Mary came by herself, the others didn't (come)."

(48) ňu k8ar ke gec-h ʔom-c yu-m
    that dog neg small-IRR not-sbj be-ALLO
"That is not a small dog."

(50) way+?-laiy-c-kñ kula ?c ma:-h ?om-m
l-angry-pl-comp Kula dum eat-irr not-allo

"We were angry at Kula for not eating."

(51) ke way+?-la:yi-c-h ?-?om-kñ kula ?c mai-m
neg l-angry-pl-irr l-not-comp Kula dum eat-allo

"We were not angry at Kula for eating."

(52) ŋũu-c-c hanksav-c ke va:m hwa:v-h ?om-c-km
that-pl-sbj scorpion-sbj neg here go+multi-irr not-pl-inc
yi:-c-h yi:te: ŋũu-c-c ca:m-c-km
think-pl-irr but that-pl-sbj miss-pl-inc

"They think there are no scorpions here but they're mistaken."

(53) ŋũu-c-c ke ya?pa:-c-h ?om-i hanksav va:m
that-pl-sbj neg believe-pl-irr not-tns scorpions here
hwa:v-km yi:-c-h yi:te:
go+multi-inc think-pl-irr but

"They don't believe that scorpions live here but they're wrong."

The last two examples demonstrate that the negation auxiliary /?om/
moves freely, even in so-called non-factive sentences. In (52) it negates
the clause "scorpions go around (multiply) here." At the same time the
verb "to think" receives its irrealis marking by being within the scope of
/yi:te/. In (53) /?om/ negates the clause "they believe" while /yi:te/
still has scope over "think," here used as part of the verb "to believe."

It is a fact of Yavapai that "cognitive" verbs like believe and
dream incorporate the verb "to think: in their syntactic pattern. Their
complements normally follow them (i.e., they are embedded below them in
right-branching structures), and these complements are in turn followed by
fully inflected forms of the verb "to think." Actually, given that Yava-
pai is an SOV language, it is probably more accurate to say that the verb
"to think" is the highest verb, that its complement is below and to its
left, and that the verbs to dream and believe are incorporated by it,
merely specifying the nature of the cognitive process. (A similar argument
could be made for the so-called vocal behavior verbs.)

Given only surface structure patterns to go on, however, we can still
see differences in the messages of (52) and (53). The former asserts that
there is a group of individuals who believe, mistakenly, that scorpions do not live in a particular place. On the other hand, (53) asserts that there is a group of individuals who do not believe that scorpions exist in that place and in disbelieving this, are mistaken. It is not clear whether these sentences are exact paraphrases of each other, but they have at least this much in common: they both assert the existence of a group of people who hold certain beliefs about scorpions and they both assert that these beliefs are contrary to fact. It is important to note that this second assertion is made by the verbal /yi:te:/ and would be so made even if /yi:te:/ were not followed by other verbs such as /ca:m/ to miss the mark, to be mistaken.

4.0 Summary and Conclusions

This survey is not complete without mention of certain grammatical phenomena not formally included in Yave's irrealis category. For if "irrealis" means "unrealized" there is no explanation of the fact that certain verbs like think, want, dream, pretend, say, and promise do not fit this pattern. If there are no criteria for distinguishing the formally irrealis from the other "subjunctive" verbs, then our definition of the category is tautological: irrealis verbs are those marked with the affixes /-h/,-/a/ or /-ha/, irrealis markers. Irrealis markers are suffixes conditioned by irrealis verbs. It is completely circular. And it is no more revealing or no less arbitrary than an appeal to verb classes or verb declensions would be.

In the earlier version of this paper, I discussed a number of the non-factive and counterfactual verbs without contrasting them in any coherent fashion to the formally irrealis verbs. I have listed them again below, this time in opposition to the irrealis verb in an attempt to present a clearer picture of the situation.

1. Verbs, Auxiliaries, and Particles that Require Irrealis Morphemes on Preceding Verbs

always
ma:t probability, uncertainty
yi:9 counterfactual
hi:9 counterfactual
yi:te: but, counter-expectancy
li: should, obligation
no: must, necessity
?om not

sometimes
ono: future
yi: think
?i: inchoative

2. Syntactically Irrealis Elements that Require Irrealis Markers Elsewhere

k-9-o: conditional, future condition
yu:-v-a counterfactual
wi:-v-a counterfactual
?i:-v-a counterfactual
simple future tense semantics
3. "Subjunctive" Verbs that Do Not Take Irrealis Morphology but Take "Non-Factive" /-k/ Instead

<table>
<thead>
<tr>
<th>verb</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kwal+i</td>
<td>want, desire</td>
</tr>
<tr>
<td>hna:q</td>
<td>want, lack</td>
</tr>
<tr>
<td>yi:</td>
<td>think, hope, wish</td>
</tr>
<tr>
<td>ya?pa...(yi)</td>
<td>believe</td>
</tr>
<tr>
<td>ckk+i...?i</td>
<td>ask</td>
</tr>
<tr>
<td>kna:v...?l</td>
<td>tell</td>
</tr>
<tr>
<td>?i</td>
<td>say, report, promise</td>
</tr>
<tr>
<td>vca:r...?i</td>
<td>yell</td>
</tr>
<tr>
<td>tsma:c...(yi)</td>
<td>dream</td>
</tr>
<tr>
<td>?i:v</td>
<td>pretend</td>
</tr>
<tr>
<td>e:...yi</td>
<td>like, love</td>
</tr>
<tr>
<td>(o)kwa</td>
<td>feel</td>
</tr>
</tbody>
</table>

There is a pattern to all this even if it is not without its erratic elements. With the exception of the modal /ma:t/ the verbs and auxiliaries listed under (1) and (2) are concerned with actions or with states that do not exist in the present. They are states that failed to materialize, or have not yet materialized, or are in the processing of materializing. Even the modals /li:/ and /no:/, which describe how things should be, bear the implication that they are not currently that way. In other words, all these words, except /ma:t/, presuppose the non-existence of their complements at the time they are uttered.

The other set, the non-irrealis subjunctives, also incorporate the idea of irreality or unreality, but in a different fashion. While none of these verbs presupposes the truth of its complement, only one of them, /?i:v/, actually presupposes its converse.

Where /?i:v/ is involved, the presupposition is counterfactual or rather negative factive. To "pretend" means to behave in such a way that one indicates he is something he is not. Why, then, is this verb not grouped with the irrealis set, which would appear to be more hospitable to its presuppositional structure?

The answer may be that the non-factive subjunctives, including /?i:v/, are all cognitive or vocal activity verbs, and as such all denote processes originating within an animate being. They denote processes generated within, not imposed from the outside. They are, in fact, human-centered activities. The irrealis verbs, on the other hand, refer to states or activities in the world beyond control of human mind, or at a distance from it.

That so many of the irrealis verbs are built on the stem /yi:/ to think, and that this verb has dual membership in the formal irrealis and formal "subjunctive" sets is significant. Why is it that /yi:/, the most salient of the cognitive process semantic set verbs, be the very core of the non-cognitive set? The answer, I think, is historical and developmental.

Irrealis /-h/ is quite old historically, and is reconstructable as proto-Yuman /*-x/*. The affix /-k/ is also old, though it is not clear that
we can reconstruct a non-factive or subjunctive meaning for it. It looks as if the irrealis category may have originally included these non-factive subjunctives, which only later were accommodated to a new semantic paradigm. If the early irrealis category included the cognitive verbs, there is no reason why /yi:/ should not have been an important root upon which to build irrealis particles and modals. Assuming that such derivational products solidified, or became frozen forms, before the hypothesized split of the irrealis category into "irrealis" and "cognitive-non-factive," we can account quite nicely for the "cognitive" root in the non-cognitive modals.

At this stage, the hypothesis is proffered with considerable tentativeness. It remains to be seen whether the historical reconstruction will confirm or deny such speculation.

In the meantime, the synchronic generalization about cognitive vs. non-cognitive unreal states seems to hold, and to bring order into these syntactic and semantic domains.
BIBLIOGRAPHY

Alpher, Barry, n.d., Unpublished Maricopa fieldnotes on file with the Yuman Archives at the University of California, San Diego.

Baker, Carol E., 1970, Tense Nonsense in Diegueño, Linguistics Notes from La Jolla 4:29-42

Chung, Sandra, n.d., Unpublished Yavapai fieldnotes on file with the Yuman Archives at UCSD.


Crook, Donald, n.d., Unpublished Yuma fieldnotes on file with the Yuman Archives at UCSD.


Gorbet, Larry, n.d., Unpublished Diegueño fieldnotes on file with the Yuman Archives, UCSD.


Hinton, Leanne, Unpublished Havasupai fieldnotes on file with the Yuman Archives at UCSD.

Jacobs, Roderick, n.d., Unpublished Diegueño fieldnotes on file with the Yuman Archives at UCSD.


Joel, Judith, 1974, The –k and –m suffixes in Paipa, paper read at the American Anthropological Association Meeting, Mexico City.


Kendall, Martha, 1972, Selected Problems in Yavapai Syntax, Ph.D. dissertation, Indiana University, Bloomington.


Kendall, Martha B., 1975, Yavapai Modals, Conditionals, Counterfactuals, and Other Unreal States, Paper presented to the Yuman Languages Workshop, San Diego.


Langdon, Margaret, 1974, Auxiliary Verb Constructions in Yuman Languages, paper read at American Anthropological Association Meeting, Mexico City.


Langdon, Margaret, n.d., Unpublished Diegueño fieldnotes on file with the Yuman Archives at UCSD.


Mixco, Mauricio, 1975, The Syntax of Proto-Yuman Indefinites, Unpublished manuscript.

Munro, Pamela, 1973, Nominalization and Plurality in Mojave, in You Take the High Node and I'll Take the Low Node, Proceedings of the CLS Comparative Syntax Festival, Corum, C. Ed., 53-64, Chicago

Munro, Pamela, 1973, Reanalysis and Elaboration in Yuman Negatives, in Linguistic Notes from La Jolla 5:56-62.


Munro, Pamela, Comitative Conjunctions: A Syntactic Reinterpretation in Yuman, preliminary draft, November 1975.

Munro, Pamela, 1975, Subject Copying, Auxiliaries and Predicate Raising, typescript.


Steele, Susan, 1974, Conjunction, Emphasis, and Modality in Classical Aztec, unpublished manuscript.

Steeels, Susan, 1975, Past and Irrealis: Just What Does It All Mean?, IJAL 41:3:200-217.


Winter, Werner, n.d., Manuscripts of Walapai Texts, on file at the Yuman Archives at UCSD.
University Museum Studies

Proceedings of the First Yuman Languages Workshop

by

James E. Redden, Editor
University Museum Studies

Number 7

PROCEEDINGS

OF THE

FIRST YUMAN LANGUAGES WORKSHOP

James E. Redden, Editor

Research Records, publications of the University Museum and Art Galleries, provide early release to interested colleagues of the archaeological research reports and records of the Southern Illinois program carried out by the University Museum and Art Galleries, Southern Illinois University—Carbondale. The Research Records consist of three series:

1. Mesoamerican Studies
2. Southern Illinois Studies
3. University Museum Studies

These detailed reports on specific topics, sites, artifacts, ethnohistory, and other studies in archaeology, ethnology, history, geography, and related fields of Mesoamerica and Southern Illinois will be released in the appropriate series as they become available. While the series were published primarily as an outlet for researchers of the Southern Illinois program, reports on related research by others may be included as space permits. The series will utilize inexpensive means of reproduction in order to make possible issuance of the maximum number of reports but will be distributed in limited numbers. Single copy purchase or subscription will be available for all titles issued. Price may be affected by printing costs. University Museum and Art Galleries, Southern Illinois University, Carbondale, Illinois 62901.

University Museum
Southern Illinois University
Carbondale, Illinois

Library of Congress Catalog
Card Number 76-20016
Research Records, publications of the University Museum and Art Galleries, provide early release to interested colleagues of the miscellaneous research reports and records of the multiple programs carried out by the University Museum and Art Galleries of Southern Illinois University—Carbondale. The Research Records consist of three series:

1. Mesoamerican Studies
2. Southern Illinois Studies
3. University Museum Studies

Somewhat detailed reports on specific topics, sites, artifacts, ethnic groups, and other studies in archaeology, ethnology, history, geography, and cultural ecology of Mesoamerica and southern Illinois will be released in the appropriate series as they become available. While the series were established primarily as an outlet for researchers of the Southern Illinois University, reports on related research by others may be included on occasion. The series will utilize inexpensive means of reproduction in order to make possible issuance of the maximum number of reports but will be published in limited numbers. Single copy purchase or continuing subscription for all titles issued in all series may be effected by writing to: University Museum and Art Galleries, Southern Illinois University, Carbondale, Illinois 62901.
PREFACE

The study and analysis of Yuman languages in the last decade have drawn many researchers into a field where previously there had been only a half-dozen active workers. Much of the credit for encouraging the study of these languages must go to Margaret Langdon. Her efforts in finding funding for the Yuman Archives and two conferences on Hokan and Yuman languages have spurred many researchers to put forth determined efforts to describe these languages while speakers who really control these languages are still available for consultation. These conferences have been especially fruitful in permitting face-to-face study and discussion of mutual problems, and many insights into the analysis of Yuman languages have resulted from these discussions. All of us in the study of Hokan and Yuman languages are especially grateful to her for all she has done for the study of these languages.

Unfortunately, everyone who presented a paper at the First 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 Yuman workshop except the one by Yamamoto, who was unable to attend the workshop.

The papers are presented according to the groups of languages presented at the Yuman 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.

James E. Redden
Carbondale, March 1976
INTRODUCTION

The papers in this volume represent revised versions of presentations made at the First Workshop on Yuman Languages held on the campus of the University of California, San Diego, June 17-21, 1975. The specific aim of the Workshop was to allow for close interaction between all linguists interested in the structure of Yuman languages and exchange of data. The focus was on the area of syntax, where the least amount of published information had previously been available, with emphasis more on the discussion of interesting problems than on theoretical agreement. New data were presented for all Yuman languages still spoken. The decision to make the results of the Workshop more generally available was unanimously supported by the participants. This volume then is offered in the hope that the syntactic patterns illustrated and described will be interest not only to other Hokanists but to students of syntax in general.

Thanks are due to James Redden for arranging the publication of this volume and assuming responsibility for all editorial details, and to the National Science Foundation for including support for consultants in Grant GSOC-7418043 (Yuman Languages of the Southwest—Margaret Langdon, Principal Investigator).

Margaret Langdon
La Jolla, January 1976.
CONTENTS

Langdon, Margaret
Syntactic Diversity in Diegueño Dialects 1

Gorbet, Larry
Diegueño Case Marking: Conditions of Optionality 10

Crawford, James M.
The Cocopa Auxiliary Verb ya', be located, happen 18

Mixco, Mauricio J.
Oblique and Non-Oblique Surface Case in Kiliwa Syntax 29

Crook, Donald E.
Yuman *t 35

Crawford, Judith C.
The Reduction of idú: be in Mohave 45

Munro, Pamela
Mojave Modals 55

Harwell, Henry O.
The Say Auxiliary in Maricopa: Some Notes and Speculations 63

Slater, Carol E.
Not, in Yuman, I say 71

Norwood, Susan
Kwtsaan iyvi as an Enclitic 78

Sundheim, Beth M.
Internal and External Heads in Kwtsaan Relative Clauses 88

Kozlowski, Edwin
Havasupai Comparatives 93

Kendall, Martha B.
Yavpa Irrealis Constructions 98

Chung, Sandra
Compound Tense Markers in Tolkapaya 119

Shaterian, A. V.
No More Schwa for Yavapai 129

Redden, James E.
Notes On Walapai Syntax 134

Joël, Judith
Some Notes on Paipai Object Order and Object-Marking 142

Yamamoto, Akira Y.
Notes on the Interpretation of /-m/ and /-k/ in Walapai 149