Compound Tense Markers in Tolkapaya

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One of the distinguishing morphological characteristics of the Pai languages is the appearance of reduced auxiliaries or "compound tense markers" that are suffixed to the verb. The shape of these markers varies slightly from language to language; among the possible forms in Yavapai are -kyum and -kwim.¹

(1) kah\textsuperscript{\#}\textsubscript{\textipa{\textbullet{\textipa{k}}}\textipa{\textbullet{\textipa{y}}}\textipa{\textbullet{\textipa{m}}}\textipa{\textbullet{\textipa{i}}}\textipa{\textbullet{\textipa{l}}}\textipa{\textbullet{\textipa{y}}}\textipa{\textbullet{\textipa{m}}}-kyum
run-CTns

'He ran away.'

Historically, it is fairly clear that these markers are combinations of an "existential" auxiliary (Langdon 1974) plus syntactic affixes. Yavapai -kyum, for instance, can be analyzed as the auxiliary yú 'be', surrounded by the switch reference markers -k 'same subject' and -m 'different subject'; -kwim has a similar analysis involving the auxiliary \textipa{\textbullet{\textipa{w}}}\textipa{\textbullet{\textipa{i}}} 'do'. A more difficult question is whether the compound tense markers are still segmentable in this way synchronically. This question is of interest because compound tense markers are a standard feature of simple sentences in all the Pai languages.

In this paper I discuss evidence that bears on this question from the Tolkapaya dialect of Yavapai (also known as Western Yavapai). Tolkapaya differs from other dialects of Yavapai (see Kendall 1974) in having a particularly rich system of compound tense markers. I will argue that these markers no longer function as combinations of auxiliary plus syntactic affixes; rather, they have been reanalyzed as single-morpheme tense markers that coexist with the older and historically less complex tense markers of the language. Such a reanalysis produces a striking realignment of the verb morphology. I will suggest further that this change --while striking-- does not simplify the grammar in any obvious sense. As such, it represents a small but interesting contribution to the study of syntactic reanalysis.

The Tolkapaya described in this paper is that spoken by Molly S. Fasthorse, a longtime resident of Los Angeles and perhaps the only surviving speaker of the Tolkapaya dialect. My transcription is high-level phonetic.² Work on this project was supported by the Department of Linguistics, UCSD. Thanks to Margaret Langdon for her encouragement.

1.1 I begin by giving a brief overview of the larger systems of auxiliaries and tense markers in Tolkapaya. Some knowledge of these is a prerequisite to any discussion of the compound tense markers.

Tolkapaya has a set of auxiliaries that occur optionally after the main verb; these differ from main verbs in that they do not have to be inflected for number. (2) lists some representative auxiliaries (see Langdon 1974):

(2) un\#A 'future' w\textipa{\textbullet{\textipa{r}}} 'also' yú 'be'  
\textipa{\textbullet{\textipa{y}}}\textipa{\textbullet{\textipa{m}}} 'not' uk\textipa{\textbullet{\textipa{W}}}\textipa{\textbullet{\textipa{d}}} 'make a sound, feel'  
\textipa{\textbullet{\textipa{w}}}\textipa{\textbullet{\textipa{i}}} 'do'  
\textipa{\textbullet{\textipa{f}}} 'say'
The auxiliaries unú:, ŋum, wár, and ukʷá contribute to the semantic content of the sentence. On the other hand, yú, wí, and ŋí cannot be identified as clearly as meaning-bearing; they seem to serve principally to identify the main verb as "stative" (yú), "active" (wí), or "communicative" (ŋí). The distribution of yú and wí is discussed further below. I ignore ŋí here, since it is not well understood in any Yuman language and since it occurs rarely as an auxiliary in Ms. Fashtorse’s dialect.

Tolkapaya also has a set of tense markers that are suffixed to auxiliaries and to main verbs; these appear to be in complementary distribution with the switch reference markers (Kendall 1972). There are three tense markers, which I will refer to as "simple" because they are historically and synchronically unanalyzable:

(3) -i "present" -ha 'irrealis'  
-a "past"

-ha is an irrealis marker. The syntactic functions of -a and -i are uncertain, and so I have placed their glosses (due to Kendall 1972) in double quotes. Despite this, it seems relatively clear that all three markers have some tense or aspectual function, and that in terms of distribution they form a syntactically unified class.

1.2. In addition to these verbal elements, Tolkapaya has eight compound tense markers. Two of these can be identified as phonologically reduced versions of other compound tense markers; according to Kendall (1972), they are the only compound tense markers in the Yavapé dialect of Yavapai:

(4) Reduced type Noncompleted Completed
-kem -kin

It is with the other six compound tense markers that we are principally concerned. These are:

(5)

yú-type
-kyum -kyun

wí-type
-kwin -kwin

Pred. Nominal type
-cyum -cyun

As suggested by (5), these markers differ according to aspect and predicate type. Compound tense markers ending in -m indicate noncompleted aspect; those ending in -y indicate completed aspect. Markers beginning with -c- are attached to predicate nominals; those beginning with -k- are attached principally to verbs. (6) gives some examples of these forms:

(6)a. vá-k *e-páy-kyum  
Dem-Loc l-sitPL-CTns 'We're sitting here.'

b. huá:v-en yú-ci-kyun  
wander-Comp1 be-PL-CTns 'They used to wander around.'

c. *nɪá-ce *isemá hlu:yí-kwin  
I-Subj root dig-CTns 'I already dug up roots.'

d. cekwár-v-i qi yat-cyum  
laugh-Pass-Tns very-CTns 'He's very funny.'

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By far the most frequent of the compound tense markers is -kyum. -Kyum, -kwim, -kwin, and -cyum occur often, while -cyum is relatively rare.

Perhaps the most surprising of these forms from a Yuman standpoint are the tense markers for predicate nominals, -cyum and -cyum. Predicate nominals in most Yuman languages do not have the properties of main verbs, but occur in a construction where they are inflected with the subject case marker -c and accompanied by the main verb yu 'be'; the syntactic subject of such a construction is in the unmarked (direct object) case. Schematically, SUBJ PREDNOM-c yu (Munro 1974). That -cyum and -cyum no longer reflect this original construction is suggested by two facts. First, the subject of a predicate nominal sentence like (6e) in Tolkapaya can be inflected with the subject case marker -c:

(7)  nu-acc Bill lew-a-vi-cyum
      I-Subj B. spouse-Def-CTns
      'I'm Bill's wife.'

Such inflection is possible (optionally) for all subjects of matrix verbs, but was impossible in the original predicate nominal construction. Second, the tense markers -cyum and -cyum can occasionally be replaced by the tense marker -kyum:

(8)  nu-acc vuq-a-vi-kyum
      I    woman-Def-CTns
      'I'm a woman.'

This also was impossible in the original predicate nominal construction.

The fact that -cyum and -cyum can alternate with a compound tense marker indicates that they too function as compound tense markers in Tolkapaya; further, it shows that the original predicate nominal construction has been (or is being) reanalyzed as one in which the predicate nominal occupies the position of a main verb. This view is supported by the person restriction on -cyum and -cyum. Unlike the other compound tense markers, -cyum and -cyum occur only in sentences with first or third person subjects; sentences with second person subjects must use the original predicate nominal construction with the main verb yu 'be', which is available for all persons. This skewed distribution provides a third piece of evidence that the predicate nominal construction is in the process of being reanalyzed.

The historical origins of the compound tense markers are fairly clear. -Cyum and -cyum are descended from the older predicate nominal construction described above; the -c- in these forms is the subject marker that was originally suffixed to the predicate nominal. -Kyum, -kyum, -kwim, -kwin are descended from a verbal construction in which the main verb was followed by an auxiliary yu 'be' or wi 'do'. The -k- in these forms is the switch reference -k 'same subject', which was originally suffixed to the main verb because it had the same subject.
as the auxiliary. Finally, all of the markers show a regular contrast between final -m and -n\(^y\). -N\(^y\) is a marker of completed aspect that is still productive in Tolkapaya (6b). -M can be identified as the switch reference -m 'different subject' that appears on matrix verbs in other Yuman languages. This gives us the following picture of the historical source of the compound tense markers:

(9) \(\text{yǔ}-\text{type and } wî\)-type: \(\text{NP} \ V-k \ \{\text{yǔ} \ \{ m \ \{ n\(^y\) \}} \)

Pred. Nominal type: \(\text{NP} \ N-c \ \text{yǔ} \ \{ m \ \{ n\(^y\) \}} \)

If the schema in (9) were still valid synchronically for Tolkapaya, it would provide us with an extremely elegant account of the compound tense markers. However, this schema is no longer correct. Below I give seven arguments that the forms in (5) have been reanalyzed as tense markers in complementary distribution with the simple tense markers of (3). This reanalysis has the odd effect of complicating the system of tense affixes without substantially simplifying the system of verbal auxiliaries, since the auxiliaries \(\text{yǔ}\) and \(wî\) are still completely productive in Tolkapaya.

2.1. The arguments in this section are organized as follows. 2.2 gives four arguments that the -\(\text{yǔ}\)- and -\(wî\)- in compound tense markers do not behave like the \(\text{yǔ}\) and \(wî\) auxiliaries. (In addition, these arguments show that the -\(\text{yǔ}\)- in -cyum and -cyum\(^y\) does not behave like the main verb \(\text{yǔ}\) 'be'.) 2.3 gives three arguments that the -m in -kyum, -kum, and -cyum does not behave like a switch reference marker. The arguments are presented in order of increasing strength; taken together, they establish that the compound tense markers are no longer segmentable synchronically in Tolkapaya.

2.2. Four pieces of evidence argue that the -\(\text{yǔ}\)- and -\(wî\)- in compound tense markers cannot be identified as synchronic auxiliaries. The first two of these also appear in Kendall (1974).

2.2.1. Phonologically, -\(\text{yǔ}\)- and -\(wî\)- are distinguished from true auxiliaries by stress. Auxiliaries in Tolkapaya are lightly stressed; this includes the auxiliaries \(\text{yǔ}\) and \(wî\):

(10) \(\text{we-simiýe}: \text{râ-k yǔ-n\(^y\)e}\)
1-forget very-SS be-Compl
'I forgot it.'

In contrast, the -\(\text{yǔ}\)- and -\(wî\)- in compound tense markers are never stressed.

2.2.2. -\(\text{yǔ}\)- and -\(wî\)- are also distinguished from true auxiliaries by person and number agreement. As suggested above, auxiliaries in Tolkapaya can optionally be inflected for number; they can also be inflected for person:

(11)a. wa-n\(^y\)â-c-ak yǔ-c-o
mind-forget-PI-SS be-PI-Evid
'\text{They forgot.}'

(11)b. c. veká me-côv-ek mi-yǔ-\text{we:}
who? 2-fight-SS 2-be-Q
'\text{Who did you fight with?}'
b. má-c-ik wi-c-o
eat-Pl-SS do-Pl-Evid
'They ate it.'

In contrast, the -yu- and -wi- in compound tense markers are never inflected for person or number.

2.2.3. Syntactically, -yu- and -wi- are distinguished from true auxiliaries by their cooccurrence restrictions. As mentioned in 1.1, the choice between the auxiliaries yu and wi is determined by the semantic-syntactic type of the main verb; this situation occurs in a number of Yuman languages besides TolkaPayá. The exact difference between yu and wi has been defined slightly differently for different Yuman languages. In Walapai, according to Redden (1966), the difference is one of state vs. action; in Yuma, according to Halpern (this Conference), it is one of behavior vs. performance. In TolkaPayá, the difference seems to be as follows. Wi is used with transitive verbs that take an agent and (noncoreferential) direct object:

(12)a. yure me-kaká:vi-c-o wi-w-i
dress 2-buy-Pl-Ben do-Evid-Tns
'They bought you a dress.'

Yu is used with intransitives and with psychological verbs, which do not take an agentive subject:

(13)a. huá:v-enY yu-ci-kyunY
wander-Compl be-Pl-CTns
'They used to wander around.'

It is also used with verbs that are passive, reflexive, or reciprocal:

(14)a. John-ce néh-v-ik yu-i
J.-Subj kill-Pass-SS be-Tns
'John was killed.'

b. yé:m wiýat-v-ik yu:-kyum
self hitPL-Refl-SS be-CTns
'They hit themselves.'

In Langacker's (1976) terms, the generalization is that wi occurs with transitive verbs whose agent and object arguments are distinct; yu occurs elsewhere.

Significantly, the cooccurrence restrictions for -yu- and -wi- in compound tense markers are not exactly the same as those for the yu and wi auxiliaries. -Wi- occurs only when the main verb is transitive and takes an agent and (noncoreferential) direct object. This restriction is like that for the wi auxiliary:

(15) ?nýá-ce ?isemá hlú:yi-kwim
I-Subj root dig-CTns
'I'm digging up roots.'

But -yu- can occur with all verbs regardless of their transitvity; in particular, it can be used with transitives that take an agent and object NP:
Historically, what seems to have happened in the compound tense markers is that the unmarked -yu- has been generalized to all verbs regardless of the distinctness of their arguments. A result of this development is that the -yu- in (16) has different occurrence restrictions synchronically from the yu auxiliary. Hence it argues that the -yu- in compound tense markers and the yu auxiliary are no longer the same.

2.2.4. Finally, -yu- and -wi- are distinguished from true auxiliaries by their distribution in questions. Questions in Tolkaipay are formed by suffxing a question marker to the verb. The question markers are -cə, -we:, or overlength on the stem vowel; they are obligatory in yes-no questions but optional in wh-questions:

(17)a. pa:c-ʔ-me-sep:ö:-e:  
Pl-1-2-know-Q  
'Do you remember us?'

b. me-či-k wa:l-m-yə:  
2-drink-SS mind-2-wantQ  
'Do you want to drink?'

(from wa:l...yə 'want')

If the main verb is accompanied by an auxiliary, the question marker is suffixed to the auxiliary:

(18)a. ʔkWəʔa me-pːq-ek me-wi:-we:  
what? 2-spill-SS 2-do-Q  
'What did you spill?'

b. má:ce me-šēve-n'ye mi-yu:  
you-Subj 2-angry-Compl 2-beQ  
'Would you be angry?'

The simple tense markers -l, -a, -ha and the switch reference markers -k and -m never appear on the last verb (or auxiliary) of a question. Since the question marker occupies the same slot as these markers would occupy in a declarative sentence, it appears that the question marker replaces them.

Significantly, compound tense markers also fail to appear on the last verb of a question. For compound tense markers ending in -m, this failure might conceivably be due to the fact that the final -m is a (historical) switch reference marker. Such an explanation is not, however, available for compound tense markers ending in -ny. This is because the completed aspect marker --the historical source of -ny in these forms-- is regularly allowed in questions:

(19)a. má:ce me-sːive-ny:e;  
you-Subj 2-read-Compl-Q  
'Did you read it?'

b. ka-vi-yu:ny:e;  
Q-Def-be-Compl-Q  
'How was he?'

Given (18-19), the failure of -kyu:nW, -kwimW, and -cyu:nW to appear in questions argues that they are no longer segmentable as sequences of an auxiliary plus the completed aspect. Rather, they have been reanalyzed as simple tense markers, and pattern with these in their absence from questions.

2.3. In this section, I present three arguments that the -m in
compound tense markers no longer functions as a switch reference marker.

In Tolkapaya, verbs that are coordinated or loosely subordinated to some other verb can be suffixed with the switch reference markers -k or -m (Jacobsen 1967). -k indicates that the subjects of the two verbs are the same; -m indicates that they are different:

(20) ʔəhmə sɨl-ic-em ʔəhàn-i quail fry-Pl-DS good-Tns 'We fried the quail and it's good.'

Although choice of -k or -m is generally determined by the reference of the subjects, there are environments where the choice is suspended and only one (or neither) of the markers is allowed. These environments provide the arguments that the switch reference -m and the -m in compound tense markers are no longer the same.

2.3.1. The -m in compound tense markers differs from the switch reference -m in its distribution in relative clauses. In Tolkapaya, the switch reference markers never appear in relative clauses. This is doubtless because relative clauses act as NPs of the clause in which they are embedded; as such, they take ordinary NP case marking and do not count as coordinated or loosely subordinated. -k and -m fail to occur in relative clauses regardless of whether the relative clause is headless (Gorbet 1974) or headed. (21) gives an example of a headless relative clause; (22) gives an example of a headed one:

(21) vuqäya-c yfri nɪyí-yó:v-c-a: (/m) ʔwák-nɪyú-l sehá:v-i [women-Subj dress Sbd-make-Pl-Tns] house-Dem-Iness hang-Tns 'The dress that the girls made is hanging in the house.'

(22) kuuqːi:-nVe Olga-ce ʔpila nVe-cekWá:-w-a(/m) me-tehőt-i bask.-Dem [0.-Subj worm Sbd-put-Evid-Tns] 2-hide-Tns 'Hide the basket that Olga put the worms in!'

(Although (21) has another reading where the embedded clause is not a relative clause and -m is allowed, this does not concern us here.)

In contrast, the -m in compound tense markers does occur in relative clauses. Consider (23), where the relative clause is headless:

(23) qetkó:-k kapéla nVe-cikikWá:-kyum nVe-eyá:ce pe: [intest.-Loc bag Sbd-stuff-CTns] Dem-Subj ? 'Is this the paper bag that you stuffed with cow's intestines?'

(The -nVe in compound tense markers also occurs in relative clauses. This point, though irrelevant to the argument, is mentioned here to round out the facts:

(24) nVe-ec-kWétaʔili ʔqWágata me-taʔóli-kyumWá a-hàná:qi-kyum I-Subj pot [beef 2-boil-CTns] 1-want-CTns 'I want the pot that you boiled the meat in.')

Although relative clauses like (23) do not occur that often, they are perfectly grammatical in Tolkapaya. Hence they argue that the -m in compound tense markers no longer acts as a switch reference marker.

2.3.2. The -m in compound tense markers also differs from the switch reference -m in its distribution in parallel constructions. In
Tolkapaya certain types of coordinate sentences do not allow the switch reference -m. The defining characteristic of these structures seems to be that their conjuncts are syntactically and semantically parallel (for a Mohave parallel see Munro 1974):

(25) víya ku?i:-ve-ce ?h^wát-i(/^m), ?esiti-k-a huvásá-i  
this bask.-Def-Subj red-Tns one-SS-Aug blue-Tns  
'This basket is red, the other is blue.'

Although the clauses in (25) have different subjects, the switch reference -m is not allowed. This seems to be a function of the construction rather than the particular verbs involved, since color adjectives can ordinarily be suffixed with switch reference markers:

(26) ?lewí k^wáθe-k yá-k yák-i  
snake yellow-SS front-Loc lie-Tns  
'A yellow snake is lying in front of it.'

Parallel constructions like (25) are rare in my data; further, it is obscure why (25) is considered parallel but similar coordinate sentences are not:

(27) ?n'á-ce ?sa?ár-im kaká:vu-kwim  
I-Subj l-sell-DS buy-CTns  
'I sold it and she bought it.'

Nonetheless, whatever the exact explanation for (25), it seems clear that some mechanism must prevent it from taking a switch reference marker. But the same mechanism must allow this construction if its -m is part of a compound tense marker:

(28) víya ?ehá:-vi-cyum, ?esiti-k huváli-cyum  
this cottonw.-Def-CTns one-SS pine-CTns  
'This is a cottonwood, the other is a pine.'

(28) is exactly like (25) except that it contains the compound tense marker -cyum. The grammaticality of (28) provides a second argument that the switch reference -m and the compound tense marker -m are no longer the same.

2.3.3. Finally, the -m in compound tense markers differs from the switch reference -m in its interaction with verbs of statement or belief.

In addition to distinguishing 'same subject' from 'different subject', -k and -m in Tolkapaya are used to distinguish belief from reality. -k indicates belief, doubt, or opinion; -m indicates fact or reality. This use of -k and -m is rare in matrix sentences:

(29)a. yúri me-kaká:v-ic-o yí:-k-a  
dress 2-buy-Pi-Ben think-SS-Aug  
'I think they bought you a dress.'

b. cúrē huvák vuá:ve-k ?ýí yíte: humáθ k vuá:ve yíte: ?ýí-m  
year two ten-SS say but three ten but say-DS  
'He says he's twenty, but he's really thirty.'

The belief-reality contrast is exploited most regularly in complement sentences—in particular, in complements of verbs of statement or belief like ?ýí 'say', ?ýí 'think', and ?awo? yí 'want'. Since these com-
lements represent the belief or opinion of the next higher subject, they are suffixed with -k regardless of whether their subjects are the same or different:

(30)a. mehə:n'ya lá:wi-k ə-kem c. Gloria pa:n'yə:-n6-ik wál child many-SS say-CTns G. Pl-3/1-hear-SS mind 'She says her children are 'I want Gloria to hear us.' many.' (wál from wál...yɨ)

b. ?inV':-hu-m ve-m-e-wále-k/(*m) ə-yɨ:-kyun' day-Dem-DS 1-2-seek-SS 1-think-CTns 'I thought you were looking for me yesterday.'

Although -k appears regularly on these complements, it is optional, and it is possible for a simple tense marker to occur instead. This suggests that it is only the switch reference -m that is excluded from this construction:

(31) mā:-ce me-śwär-i/(*m) ə-k-i-kem you-Subj 2-sing-1ns say-Pl-CTns 'They want you to sing.'

Crucially, compound tense markers in -m can be suffixed to complements of verbs of statement or belief:

(32)a. n'yəd-a-ce velewí-ci-kyum me-ŷi: Dem-Pl correct-Pl-CTns 2-thinkQ 'Do you think they're right?'

b. wa-síva ce-páymi-kyum ųi-ca-ye mind-have Pl-losePl-CTns think-Pl-Tns 'They might think we've lost our senses.'

c. əhWá vəqǐ:va əehWá-vi-kyum əi-ŷi-hu əm-í stranger woman-Dem Apache-Def-CTns 1-think-Pl-Tns not-Tns 'I don't think she's an Apache woman.' (hu assimilated from -mu 'irrealis')

Given that the switch reference -m is not allowed here, sentences like (32) argue that the -m in compound tense markers is no longer a switch reference marker. Further, since simple tense markers are allowed in this construction, sentences like (32) argue that the compound tense markers function as synchronic tense markers in Tolkepaya.

3. The effect of the reanalysis that I have argued for above is morphologically rather striking. Consider, for instance, the switch reference -m. From internal evidence and evidence from other Yavapai dialects (Kendall 1972), it is clear that the switch reference -m was originally quite common in matrix sentences in Tolkepaya. The form for sentences with yə and wɨ auxiliaries, for instance, was originally something like:

(33) VERB-k AUX-m/n'y

As a result of the reanalysis, however, the -m in (33) ceased to be segmentable as a switch reference marker. This, combined with the frequency of sentences like (33), seems to have contributed to the general demise of switch reference -m in matrix sentences in Tolkepaya. Today, -m occurs on auxiliaries in certain peculiar distributive con-
structions (34a). It also occurs regularly on the main verb yú 'be' in predicate nominal constructions (34b):

(34a) a. ʰám-c-ek yú-m yú-c-i b. haykó hʷána ʰi-yú-m
    come-Pl-SS be-DS be-Pl-Tns whiten man mex. 1-be-DS
    'come often; come on and off' 'I'm a Mexican.'

But it has disappeared in all other types of matrix sentences. In particular, -m no longer occurs on the auxiliaries yú or wí in constructions like (12-14), and it is almost never found on main verbs like (35) (cf. though (29b)):

(35) pahmí-ve-c kahʷíl-1(/*m)
    man-Def-Subj run-Tns
    'The man ran away.'

Hence, as a result of the reanalysis that produced the compound tense markers, Tolkapaya has changed from a situation in which most sentences ended in switch reference -m to one in which almost no sentences end in this way.

A more difficult question is why the auxiliary constructions of (9) were reanalyzed as tense markers at all. In general, it is assumed that reanalysis contributes to the overall simplicity of the grammar by bringing underlying representations closer to their surface forms. In Kiparsky's (1971) terms, reanalysis maximizes the transparency of a given construction. While it is easy to think up reasons for considering the constructions in (9) nontransparent (and hence subject to reanalysis), it is hard to explain why not all instances of (9) were reanalyzed. For instance, it might be claimed that the reanalysis "simplified" the grammar by eliminating the semantically empty auxiliaries yú and wí. But this would fail to account for the fact that the yú and wí auxiliaries are still perfectly productive in Tolkapaya. Similarly, it might be claimed that the reanalysis was motivated by the desire to eliminate -nʷ or sentence-final -m (admittedly an opaque instance of a switch reference marker). But this could not explain why -nʷ is still productive, or why sentence-final -m still persists in several different, though rare, constructions.

In short, attributing the reanalysis to the nontransparency of any particular morpheme begs the question of why some instances of the morpheme are still productive. This amounts to saying that the reanalysis does not "simplify" the grammar in any obvious sense, since it creates new morphemes but fails to completely destroy their historical sources. I do not know any way out of this dilemma. Conceivably, one might suggest that the real reason for the reanalysis was to eliminate combinations of sentence-final auxiliaries plus -m. Such a suggestion allows the reanalysis to "simplify" the grammar, since combinations of this sort do not occur any longer. What remains to be explained is why this particular combination of morphemes should qualify as nontransparent; that is, why it should have needed to be reanalyzed at all.

1 Possible compound tense markers in other Pai languages are Paipai -k-wūmn, -čwūmn (Joel, this Conference), Walapai -ku(nʷ), -kwí(nʷ) (Redden 1966), -k:-m (Winter, ms.), H'avasupai -kyu, -kwí (Hinton 1976).

2 In my transcription e = [e], unstressed e = [ə].

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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 faultless 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 Hokinists 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 GSO-7418043 (Yuman Languages of the Southwest—Margaret Langdon, Principal Investigator).

Margaret Langdon
La Jolla, January 1976.
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