An Integrated Account of the Morpheme Ø in Tolkapaya

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As has been noted on numerous occasions, the Yuman languages enjoy a fair amount of what has been called "apparent homophony". That is, a small set of phonemes appears to do multiple duty in representing a wide range of syntactic and semantic functions. In many cases it is possible to provide a unified description of these various occurrences in such a way as to establish a single, common identity—one morpheme. In other cases, identity is not so easy to demonstrate and, in fact, may not exist synchronically.

In Tolkapaya, and other Yuman languages as well, this isomorphic relationship holds between certain nominal morphology and verbal morphology. In particular, the set of demonstrative stems and suffixes shows a high percentage of overlap with suffixes of verbal modification. The identity of one such suffix in Tolkapaya, Ø, is the concern of this paper.

As a demonstrative suffix in Tolkapaya, Ø has a fairly narrowly defined semantic function. Clover (1977) has described its basic features as being "previously mentioned" and "very far". Specifically, in contrast to h, which is also distal (and often "invisible" as well), Ø refers to a previous situation that no longer obtains; i.e., Ø means "formerly present, but no longer here". h, on the other hand, makes no reference to any previous state of affairs, as the following pair of examples shows:

1a) v-ya kthar-ha 'this dog' (the one we're talking
prox.pre.-stem dog-suff about that's there now)

1b) v-ya kthar-tha 'this dog' (the one that used to
prox.pre.-stem dog-suff be here, but went off)

The semantics of Ø are further illustrated by the following examples that show the features "formerly" and "far away", which don't necessarily coincide.

2) nyahmi ny'-wiyi-tha hmi wiyy-ch yu-m
husband Rel-1-have-suff belt own-sj be-impf
'That belt belonged to my dear departed husband.'
3) ny-vu-tha  'the dearly beloved (deceased)'
pref-stem-suff

θ also functions in a number of temporal expressions:

4a) kur-tha  'long ago'
distant-suff

4b) kur-m  'far away'
distant-loc (dir.)

Compare also the next two examples with contrasting demonstrative stems:

5a) ny-tha-m  'then'
pref-stem-loc(time)

5b) ny-va-m  'now'
pref-stem-loc(time)

Some time expressions are apparently verbal constructions:

6) ny-yek-ktho  'tomorrow'
when-be today-Mod

The demonstrative morpheme θ(a) has cognates in many Yuman languages and has been reconstructed by Langdon (1968) as deriving from Proto-Yuman *θs 'far'. I will try to show here that the morpheme of verbal modification θ has its origins in the distal demonstrative θ and that the basic meaning of θ has been preserved in the verbal usage, as well as having been naturally extended. For convenience, θ will be referred to as a morpheme of modality (Mod) when a verbal suffix. In fact, its semantics and usage range across the categories of aspect and modality, making θ difficult to classify. Perhaps "modality" is the more accurate term, since the use of θ is strictly determined by the speaker's view of the epistemology of the situation being described.

Several semantic features can be offered that best characterize the verbal morpheme θ. θ is essentially contrastive, nonfactual, and temporally prior. In demonstrating how these features are consonant with the demonstrative meanings, we will look at a wide array of syntactic constructions and semantic functions.

Let us first consider syntactic types which perhaps emphasize the temporal (or aspectual) relationships, rather
than the modal. Several facts characterize these distinctive constructions. The situation expressed in each of the clauses marked with θ is temporally prior to the other situation expressed (or implied) in the sentence. In addition, the situation expressed in the θ-marked clause is (at the time of the utterance) nonfactual or nonexistent. Furthermore, the presence of θ implies a state of epistemic contrast which has the functional result of setting up a background for the assertion of present facts. These features will be further explained as the examples are examined.

The first construction we will consider here involves primarily the expression of temporal priority in a contrastively marked situation. Specifically, the construction temporally orders two future-time situations or one counterfactual situation with respect to a past situation. The former is illustrated by example 7, the latter by example 8.

7) Bob-ch ny-he-k-th-k yuw-a-k unuu-k yu-m
    Bob-sj 3/1-call-dir-Mod-SS leave-Irr-SS Prog-SS be-impf
    'Bob will call me before he leaves.'

8) nya-ch 'ich'-maa-th-k 'yaam-a-ch 'yu-th-ch yu-mo
    l-sj s.t.-1/3-eat-Mod-SS 1-go-Irr-Sj 1-be-Mod-sj be-Dub
    'I should have eaten before I left.'

The semantics of the unrealized expression is best captured by considering it to be a future perfect; i.e., in (7), as "Bob will have called me at the time he leaves." Note, however, that the semantically parallel construction in the factual present/past is temporally ordered with a different morpheme, the "temporal pivot". θ is used only with semantically nonfactual situations.

A similar construction is found in future and counterfactual conditionals. The most common form of the future conditional is to suffix the final verb of the antecedent clause with the compound suffix -ktho; the consequent clause is marked as any unrealized independent clause. This compound suffix formula indicates a strong implication of the type "if...then".

9) m-yaam-ktho ny-'uu-ha
    2-go-Mod 1/2-see-Irr
    'If you go, I'll see you.'
An alternate construction for a future conditional, not surprisingly, is identical to simple temporal priority as in (7).

10) m-yaam-th-m ny-’uu-ha
    2-go-Mod-DS 1/2-see-Irr
'If you go, I'll see you.'

The difference is in the degree of contingency obtaining between the manifestation of the first situation and the consequence.

The formula for a counterfactual conditional is somewhat different. The canonical construction marks the antecedent clause as a nominalization with a behavioral auxiliary (usually yu 'be') suffixed with a demonstrative; the consequent clause also involves an auxiliary construction where the main verb is suffixed with -h 'irrealis', followed by the cognitive auxiliary yi suffixed with θ(a).

11) m-vaa-k m-yu-va ny-’uu-h ’-yi-tha
    2-come-SS 2-be-Dem 1/2-see-Irr 1-Aux-Mod
'If you had come, I would have seen you.'

The auxiliary construction yitha is the usual means of expressing the counterfactual sense of "would have, could have, or should have been" and will be discussed in detail later. Since the antecedent clause in (11) is a nominalization, it might be more appropriately translated "Had you come,..." (as the speaker often does). An alternative version of the counterfactual conditional employs θ in the antecedent, as well, to indicate temporal priority.

12) m-vaa-th-m ny-’uu-h ’-yi-tha
    2-come-Mod-DS 1/2-see-Irr 1-Aux-Mod
'If you had come, I would have seen you.'

Note that for past conditionals, even though events are temporally ordered, θ cannot be used, since the events are factual and have been realized.

These constructions, then, use θ to indicate that certain presently nonfactual situations are temporally ordered and that their relationship is a marked one. It requires little metaphysics to relate the verbal semantics to that of the demonstrative suffix. Further examples will make this point even more forcefully. However, we can observe here that the demonstrative refers to a situation
that is not a part of the reality of the present (is presently nonfactual), but that once was in the past (temporally prior to the present situation). Q is also specifically associated with temporality, as we saw earlier. Furthermore, demonstrative Q marks anaphoric, previously mentioned things (topics); verbal Q marks a whole situation as background that is provided for purposes of contrast with the situation that is being commented on.

The close semantic relationship can be seen more clearly in the next construction we will consider. This construction expresses a condition which formerly obtained, but which no longer does. As in English, where this sense is often expressed by the adverbial form "used to", the Tolkapaya form will often involve a habitual construction3, as shown in (13).

13) Jack-ch qwaqta maa-m wi-ch-th-k vam 'wil-havasu
Jack-sj meat eat-DS do-pl-Mod-SS now 'vegetables'

maa-k wi-ch-k wu-m
eat-SS do-pl-SS do-impf

'Jack used to eat meat, but now he only eats vegetables.'

In this example the fact that Jack formerly ate meat provides a background of information for the present comment that he is a vegetarian and serves to contrast the two situations. Although this construction usually takes the form of Q suffixed to the habitual auxiliary construction followed by simple switch reference, the alternative that we saw for conditionals where the frozen form -ktho was suffixed to the stem can also be used--wichktho as well as wicnthk. The habitual aspect serves to keep this type quite distinct from conditionals.

In (13) the present situation is actually expressed by a full clause. One clause marked with Q is sufficient to state by implication that a certain situation once obtained, but no longer does. The present state of affairs does not need to be expressed.

14) ma-ch m-sc-ch m-yu-th-k m-yu-m
you-sj 2-be fat-sj 2-be-Mod-SS 2-be-impf

'You used to be fat.'

The former state of affairs does not have to have been habitual either; a previous incident, now concluded, that has relevance to a present situation may be expressed.
In all of these constructions one of the primary concerns is with the temporal relations of events. More specifically, the morphology is concerned with the aspect of the whole situation—"the internal temporal constituency of a situation". Beyond that, however, is the speaker's view of the whole situation as being inherently contrastive and nonfactual— a modality issue. In these cases which relate two situations temporally, the canonical form has been to suffix the verb of the backgrounding clause with θ and normal switch reference (except for the frozen suffix -ktho). The other clause determines the "real time" of the situation. The exception to this formula is the past perfect construction which seems to require a predicate nominal type construction, suffixing θ to the verb, which is then subject marked and takes the auxiliary yu 'be'.

It is quite common for past perfect constructions in languages to have the characteristics of stative copular-like constructions and this tendency may override the canonical verbal form for these types of utterances.

Example (17) shows that θ may be suffixed to the auxiliary rather than the lexical verb. Of course, the perfect construction manifests the semantics of θ beautifully in representing a past (or prior) event with immediate relevance.

Another verbal construction involving θ emphasizes the contrastive nature of the morpheme. θ used in this way conveys an exclusive quality to the assertion. Suffixing to the numeral verbs, θ means "only N, no more, no less".

'I was dancing, but now I'm tired.'

'm-neh-th-ch' m-yu-ma
2/3-kill-Mod-Sj 2-be-Assr
'You had killed it.'

Lynn-ch Joe chqam-ch yu-th-mo
Lynn-sj Joe hit-sj be-Mod-Dub
'Lynn might have hit Joe.'

'I went by myself.'
Ø can impart a sense of exclusive identity in existential sentences.

19) 'n̥ya-th-v-ch   'yu-m
    l-be me-Mod-Sta-sj 1-be-impf
    'It's only me.'

20) tu pahmi-th-ch  yu-ma
    just man -Mod-sj    be-Assr
    'He's only a man.'

Suffixed to a verb in this construction, Ø refers to
the uniqueness of an event.

21) m-yaam-th-k  m-yu-m
    2-go-Mod-SS  2-be-impf
    'You should only be going.'

In this contrastive construction, Ø serves to establish a
set of expectations as background for the assertion. These
are highly marked, affective utterances in which Ø carries
a great deal of modal force and contrastive sense. A
sentence such as (20), in effect, calls to mind all possible
attributes of the referent, then excludes them all as being
nonfactual—except the attribute that is being predicated.
The final type of modal expression we will consider is
also contrastive and nonfactual. This construction requires
the use of an auxiliary. The morpheme Ø is suffixed to the
auxiliary, not to the lexical verb. It is used to express
such nonfactual notions as failed attempts and unfulfillable
wishes. For these meanings, the set of behavioral auxiliaries is used.

22) 'wii   'yoov-a-k   wi-th-k   'yu-m
    money  1/3-make-1rr-SS 1-do-Mod-SS 1-be-impf
    'I tried to make money.'

In this example, the only indication that the action (making
money) has not been accomplished is found in the Ø suffixed
to the auxiliary.

23a) pahmi-v-ch 'yu-th-k wal  'yi-in-m 'yu-ch-k   'yu-m
    man-Sta-sj 1-be-Mod-SS 1-want-DS 1-be-pl-SS 1-be-impf
    'I wish I were a man.'

In this case the desire is potentially unfulfillable—what
is desired is nonfactual and ineluctable. Compare (23a)
to the identical sentence without the Ø suffix.
This sentence, on the other hand, expresses a potentially gratificable desire—to "be like" something. Nothing in (23b) overtly expresses the meaning "be like" (which is another verb, \textit{vli})—this must be interpreted from the absence of \textit{θ} which affords a possibility of the desire being realized.

The final type of construction to be considered is specifically counterfactual. In other words, this modal expression is used to state what "could, would, or should have" obtained, had circumstances been otherwise. Since this feature is purely a matter of the speaker's opinion or thoughts about the situation, it is not surprising that the auxiliary that is used for this construction is \textit{yi}, the cognitive auxiliary. This verb, as an auxiliary or main verb, is used to refer to mental activities such as thinking, wanting, liking, and so on. The construction requires that the lexical verb be marked as irreals and not take switch reference. The auxiliary \textit{yi} itself either ends in the incremental vowel -\textit{a} following \textit{θ} or may take switch reference if followed by a second clause.

The next two examples show the possibilities with two clauses:

25) \textit{mwar-ch pem-k yu-m} \\
\textit{1-make bread-pl-Irr Aux-Mod-Incr flour-sj be gone be-impf} \\
'\textit{We could have made bread, but the flour's gone.}'

26) \textit{Jeni-ch vak yu-h yi-th-k 'i-k 'i-m} \\
\textit{Jeni-sj here-be-Irr Aux-Mod-SS s.t.-sick-SS say-SS say-im} \\
'\textit{Jeni would be here, but she's sick.}'

In examples (24) and (25), we can see that the special marking on the consequent clause of the counterfactual conditionals discussed earlier is merely this contrastive counterfactual statement. When an antecedent clause is expressed, it simply states the condition that would have been necessary for the counterfactual event to have been fulfilled.
The cases we have been considering show how one morpheme with highly marked modal properties can be used to express a wide range of meanings. The essential semantic nature remains constant throughout. However, the interaction with the auxiliary system and other modal and aspectual markings allows the morpheme to function in a variety of settings. The basic semantic features of θ—contrastive, nonfactual, and temporally prior—have been shown to derive naturally from the basic meanings of the demonstrative suffix—"distal" and "previously mentioned." The verbal morpheme θ is essentially contrastive; one of its primary functions is to establish a cognitive distance between some situation and the reality of the present. This conception of θ is the metaphor linking the modal usage of θ to the distal demonstrative suffix.

The historical connection is certainly clear. Since some of the modal constructions are arguably nominalizations, it is not difficult to imagine how the deictic suffix became adapted to the verbal morphological system. There are precedents in other languages for just such things happening. However, since the demonstrative usage of θ is more complex than suggested here and since many of the modal constructions are indisputably verbal, it seems that the most conservative approach is to call these two occasions of θ separate morphemes in the synchronic grammar of Tokapaya.
Notes

1 Tolkapaya Yavapai or Western Yavapai belongs to the subgroup Pai of the Yuman language family. Grateful thanks goes to Molly Fasthorse, as always, for her hours of hard work at helping me learn her language. Thanks also to Pam Munro and Lynn Gordon for endless discussion on this and other matters. Special thanks to Philip Davis sharing his viewpoints on this as an "outsider"—non-Yumanist.

Examples are written in the orthography developed by the UCLA Tolkapaya group. In this orthography, the phoneme ŋ is written as the digraph th, but I will refer to it in the body of the text as ŋ. Abbreviations used here in glossing morphemes are as follows:

<table>
<thead>
<tr>
<th>Abbr</th>
<th>Description</th>
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<tbody>
<tr>
<td>Asr</td>
<td>Assertive</td>
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<tr>
<td>Aux</td>
<td>Auxiliary</td>
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<tr>
<td>Dem</td>
<td>Demonstrative</td>
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<tr>
<td>DS</td>
<td>Different subject</td>
</tr>
<tr>
<td>Dub</td>
<td>Dubitative</td>
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<tr>
<td>Impf</td>
<td>Imperfective</td>
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<tr>
<td>Incr</td>
<td>Vocalic increment</td>
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<tr>
<td>Irr</td>
<td>Irrealis</td>
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<tr>
<td>Loc</td>
<td>Locative case suffix</td>
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<tr>
<td>Mod</td>
<td>Modal suffix</td>
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<tr>
<td>Neg</td>
<td>Negative verb</td>
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<tr>
<td>Perf</td>
<td>Perfective</td>
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<tr>
<td>Pl</td>
<td>Plurality</td>
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<tr>
<td>Rel</td>
<td>Relative clause marker</td>
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<tr>
<td>sj</td>
<td>Subject case marker</td>
</tr>
<tr>
<td>SS</td>
<td>Same subject</td>
</tr>
<tr>
<td>Prog</td>
<td>Progressive Auxiliary</td>
</tr>
<tr>
<td>*</td>
<td>1st part of separable verb</td>
</tr>
</tbody>
</table>

2 Kendall (1975) uses this term, but anyone working on a Yuman language has had to deal with the problem.

3 The habitual construction inserts one of the behavioral auxiliaries after the verb and before the final auxiliary construction. The behavioral auxiliary is suffixed with the suffix -ch 'Pl.', which corresponds to the "plurality" or distributivity of the action. The verb preceding the behavioral auxiliary always takes the -m 'different subject' switch reference marker. The entire construction is: Verb-m Behavioral Aux.-ch-k Behavioral Aux.+Aspect

4 Comrie (1976), p. 3.

5 The predicate nominal construction in Yuman is discussed in detail in Munro (1976). Langacker and Munro (1975) discuss the relationship between passive-like constructions and perfects in language.
BIBLIOGRAPHY

Bright, William, A Reverse Index of Yuma Stem Morphemes, based on A.M. Halpern, Yuma, IJAL 12 (1946) and IJAL 13 (1947).


Glover, Bonnie, 1977, Tolkapaya Demonstratives, m.s.


Hymes, Dell H., 1960, Lexicostatistics So Far, Current Anthropology 1:3-44.


Kaufman, Terence, and Alan Shaterian, English-Paipai Vocabulary, preliminary version, m.s.


_____, 1972, Metathesis in Yuman Languages, ms.


Mixco, Mauricio, 1976, Glossary of Reconstructions, unpub. ms.

Munro, Pamela, 1976, From Existential to Copula: The History of Yuman BE, presented at the Symposium on Mechanisms of Syntactic Change, UCSB.


_____, 1966, Walapai II: Morphology, IJAL 32:2:141-63.


Sawyer, Jesse O, 1962, 100-Word Diagnostic List in Wappo, dittoed.


_____ Yavapai Phonology, unpub. ms. n.d.


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PREFACE

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

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

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

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

James E. Redden
Carbondale, May 1979
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