Morphemes of Epistemic Contrast in Tolkapaya

Heather K. Hardy  Lynn Gordon
University of California, Los Angeles

In this paper, we shall be describing certain kinds of adverbial and modal constructions in Tolkapaya Yavapai. The types of constructions considered here share various semantic or morpho-syntactic features. Semantically, the constructions involve the expression of certain relationships between propositions or between propositions and the expectations or knowledge of the speaker. These relationships include:

1) the relationship between propositions in which one proposition provides the temporal frame for the other (time clauses);
2) the relationship between propositions in which one provides a sufficient condition for the other proposition to obtain (conditionals);
3) the relationship between propositions whose expectations contrast with each other, or between a proposition and the expectation or knowledge established by context (contrast and counterfactuality).

Diverse adverbial and modal constructions are compared to determine whether a unitary semantic core can be assigned to the relevant morphemes as they are used in Tolkapaya.

I. Temporal Clauses

The various types of temporal clauses in Tolkapaya can be described as making use of a basic dichotomy between sequential and simultaneous occurrence of events. When this distinction is not central, the dichotomy is neutralized by the absence of distinctive morphology. Simple clausal conjunction with switch reference marking is neutral with respect to whether the events are consecutive or concurrent. When the temporal relationship between events is specifically at issue, the relationship can be morphologically and syntactically marked with one of the clauses assigned a subordinate status.

Simultaneous events in the past are related by assigning subordinate status to the proposition providing the temporal pivot, and main clause status to the proposition providing the main assertion.

Simultaneous Events in the Past
(At the time when X occurred, Y occurred)
Subordinate Clause Main Clause
...Y + t + SR Independent sentence

The subordinate clause is marked by suffixing t to the rightmost verb or auxiliary of the clause, and following the t with appropriate switch reference marking. The main clause is marked like any independent sentence. The choice of which clause to mark as the temporal pivot is a function of discourse. Since both clauses describe actions which occurred at the same time, either could be temporally marked.

1) While I was sleeping, my sister took my money.

I-sleep-Tem-DS I sibling-SJ money Rel-have-Dem take-SS

While I was sleeping, my sister took my money.

1. smoa-t-m3 nya 'kel-ch wii ny-wii-wa yoo-k
2. I-sleep-Tem-DS I sibling-SJ money Rel-have-Dem take-SS
3. wi-o-k wu-m
4. do-Ev/perf-SS do-Inc
2) While I was singing, Heather danced.  
nya-ch 'swar-t-m Heather-ch ima-k yu-m  
I-Sj l-sing-Tem-DS Heather-Sj dance-SS be-Inc

3) You were talking while you were sleeping.  
ma-ch m-smaa-t-k m-kwaw-k m-yu-m  
you-Sj 2-sleep-Tem-SS 2-talk-SS 2-be-Inc

The subordinate status of these clauses can be demonstrated, since they can be postposed or center-embedded, as in:

4) My father was sleeping while I ate the chicken.  
a. nya-ch qwaloyawa-ha 'maa-t-m nya tala-ch smaa-k  
I-Sj chicken-Dem 1/3-eat-Tem-DS I father-Sj sleep-SS  
yu-ny  
be-Com  
b. nya tala-ch smaa-k yu-ny nya-ch qwaloyawa-ha  
I father-Sj sleep-SS be-Com I-Sj chicken-Dem  
'maa-t-m.  
1/3-eat-Tem-DS

5) Heather danced while I sang.  
Heather-ch nya-ch 'swar-t-m ima-k yu-m  
Heather-Sj I-Sj l-sing-Tem-DS dance-SS be-Inc

Tolkapaya employs several strategies for emphasizing the order of events as they occurred in real time, as English does in constructions using before and after. Although these Tolkapaya sentences usually correspond to English "before/after" constructions, they don't seem to rely on the same principal of specifying whether the order of clauses in the linear string reflects the order of events in the real world. There are two basic types of emphatic temporal constructions using the temporal marker t. One type uses the negative verb 'um, and the other uses the ordinal verb (hu)puk, 'be first'. The tense frame for the entire sentence is assigned by the main clause, thus these constructions can be used in any tense.

English sentences with "before" translate to Tolkapaya sentences which literally mean "While X is not, Y occurred." This construction explicitly uses the negative verb 'um and allows for the subordinate clause to be postposed.

6) Before the frost sets in, we'll gather the corn.  
kmun-v-ch vaa-h 'um-t-m tyach-va 'yoo-ch-a  
frost-Dem-Sj come-IR neg-Tem-DS corn-Dem 1/3-take-P1-IR

7) Jack always drinks beer before he eats.  
Jack-ch 'ich-maa-h 'um-t-k ha'maala thi-m wi-ch-k wu-m  
Jack-Sj s.t.-eat-Ir neg-Tem-SS beer drink-DS do-P1-SS do-Inc

8) I cooked the chicken before it spoiled.  
a. qwaloyawa ssah-a 'um-t-m nya-ch 'nwir-k 'wu-m  
chicken spoil-Ir neg-Tem-DS I-Sj 1/3-cook-SS l-do-Inc  
b. qwaloyawa 'nwir-k 'wu-m ssah-a 'um-t-m  
chicken 1/3-cook-SS l-do-Inc spoil-IR neg-Tem-DS
The semantic reading of simultaneity for  the suggests the more literal translation "(At the time) when the chicken hadn't yet spoiled, I cooked it," for #8. The use of the  appears to be obligatory with this negative construction. It is not obligatory in the (hu)puk construction, as can be seen in #10 below:

9) Lynn is going to make me a basket first, then I'll pay her.
   Lynn-ch k'u ny-yoov-o puk-t-m 'wii '-e-h-k
   Lynn-Sj basket 3/1-make-App first-Tem-DS money 1/3-give-Ir-SS
   '-unuu-k '-wu-m
   l-Prog-SS 1-do-Inc

10) Jack always drinks beer before he eats.
    Jack-ch ha'maala thii puk-(t)-k 'ich-maa-m wi-ch-k
    Jack-Sj beer 3/3-drink first-(Tem)-SS s.t.-eat-DS do-Pl-SS
    wu-m
    do-Inc

This construction is only interpretable as a temporal relationship, so the  marking, when it appears, is redundant. This use of  is inconsistent with the pattern of  "at the time when": these propositions are positive and emphatically sequential. The  appears to mark the clause only as temporal and subordinate.

Another kind of temporal construction marked with  involves the notion of continuing or habitual action up to a particular point in time or ensuing from a particular point in time. In English these are expressed by 'until' and 'since', respectively. The 'since' type construction is fairly common in Tolkapaya and makes use of the existing morphology in a predictable way. 'Since' clauses are formed by marking the predicate of the clause that is the temporal pivot or point of reference with the temporal  suffix and adding appropriate switch reference marking. The predicate of the second clause will then be marked with the distributive auxiliary construction. The  marked clause is the dependent clause (as in all the above examples), since regardless of the order, the non-  marked clause has the final independent tense marking of main clauses.

11) Jack has been a vegetarian since he was a child.
    Jack-ch hmany-t-k 'wila havasu maa-ch-ch yu-m
    Jack-Sj child-Tem-SS 'vegetables' eat-Pl-Sj be-Inc

12) Allen stays home taking care of the baby since JP was a little child.
    Allen-ch 'wa wa-k hmany-ha vwe-m yu-ch-k yu-ny
    Allen-Sj house sit-SS child-Dem care-for-DS be-Pl-SS be-Com
    JP-ch hmany gech-t-m
    JP-Sj child little-Tem-DS

In these clauses  seems to mean "from the time...", so #10 is literally "(From the time when) Jack was a child, he habitually, always eats vegetables."

'Until' clauses are infrequent, possibly due to their semantic complexity. These sentences often appear with three full clauses expressed. The semantics of the construction suggests reasons for why this should
be the case. What is implicit in this construction is that an action is/was/will be performed or a state obtain up to a particular point in time, at which time the situation changes. Tolkapaya often prefers the overt expression of the new situation. The construction takes the antecedent action and marks it as progressive (with unuu) or continuous (by reduplication) and marks it with t and appropriate switch reference.

13) I sang until I shut up.
'swar-k 'swar-t-k 'nyathk-k 'yu-m
l-sing-SS l-sing-Tem-SS l-stop-SS l-be-Inc

14) I'll work until you finish cooking then maybe we'll eat.
nya-ch 'tarhar-k vak 'unuu-t-m ma-ch 'ich-m-nwir-k
I-Sj l-work-SS here l-Prop-Tem-DS you-Sj s.t.-2-cook-SS
m-wir-m 'ich-' maa-ch-ah yi-moo
2-finish-DS s.t.-1-eat-Pl-IR Aux-Dub

The above temporal constructions all involve the temporal marker t. In its simplest usage, it appears to suggest simultaneity. At a deeper level, t seems to mark a clause as subordinate (and probably presupposed for its role in setting the scene) and temporally related to the main clause. The subordinate clause does not have to be the event which occurred first, so t can be used to mark any clause designated by discourse. The various kinds of temporal relationships we have discussed are implied by the combination of tense/aspect marking and temporal t marking.

Sequential actions in the past are typically indicated by attaching the prefix ny- (glossed 'when') to the verbal complex of the temporally antecedent clause, then takes appropriate switch reference marking and is usually followed by the main clause (though it can be postposed or centerembedded).

Sequential Actions in the Past
(When X had occurred, Y occurred)
Subordinate Clause Main Clause
\[ nY \] + V + SR independent sentence

If the order of events is not relevant or is obvious from context, simple juxtaposition of clauses with normal switch reference is sufficient, as in:

15) The rain stopped and the sun came out.
kwivo-k vkiyoh 'i-m 'nyaa-ch vch'al-k yu-m
rain-SS stop Incep-DS sun-Sj come out-SS be-Inc

16) We went to Red Mountain and I saw my father.
kwalthk-yala-he 'yaam-ch-m nya 'tala 'u-k 'yu-m
Red Mountain-to 1-go-Pl-DS I 1-father 1/3-see-SS l-be-Inc

With the ny- prefix:

17) When the turkey was done, Bonnie put it on the table.
yaa-ch ny-na-m Bonnie-ch 'ichmacho-k 'chwo-k yu-m
turkey-Sj when-ready-DS Bonnie-Sj table-Loc put-SS be-Inc
18) You came, then I went away.
ma-ch ny-m-vaa-m nyul 'yam-k 'yu-ny
you-Sj when-2-come-DS away 1-go-SS 1-be-Com

ny- can only mark the clause which is temporally prior (though sometimes
the events expressed in the two clauses overlap). ny- marked clauses
can be postposed and center-embedded.

19) Heather sang, then I danced.
a. nya-ch 'ima-k 'yu-m Heather-ch ny-swar-m
   I-Sj 1-dance-SS 1-be-Inc Heather-Sj when-sing-DS
b. nya-ch Heather-ch ny-swar-m 'ima-k 'yu-m
   I-Sj Heather-Sj when-sing-DS 1-dance-SS 1-be-Inc

There are several ways to temporally relate unrealized clauses. Sequential
and simultaneous actions in the future can be expressed in
a construction utilizing the 'when' prefix ny- and the modal suffixal
particle -ktho (which appears in other constructions we will discuss
below). If this is used to mark sequential action, it marks the tem-
porally antecedent clause. The main clause is marked as unrealized in
the following ways: 1) with the progressive auxiliary (unuu) and the
irrealis marker (ha); 2) with the irrealis marker alone; 3) by some
other non-realized form (e.g. an imperative).

20) When you finish eating, we'll leave.
   'ich-m-maa-k ny-m-wir-ktho 'pem-a-k 'unuu-k 'yu-m
   s.t.-2-eat-SS when-2-finish-Mod 1-go-2-Ir-SS 1-Prog-SS 1-be-Inc

21) After drinking the medicine you'll feel better.
   'sma ny-m-thii-ktho m-han-a-k m-unuu-k m-yy-m
   medicine when-2-drink-Mod 2-good-Ir-SS 2-Prog-SS 2-be-Inc

Sequential acts in the future can also be expressed using -o and
switch reference on the subordinate clause.

22) As soon as the chicken is ready, we'll eat.
   qwaloyawa-ch ma-o-m 'maa-ch-a-k 'unuu-k 'yu-m
   chicken-Sj ready-0-DS 1/3-eat-pl-Ir-SS 1-Prog-SS 1-be-Inc

23) I'm going to give the cat food before I go.
   nymi-nyu 'ichmava 'a-o-k nyul 'yam-a-k 'unuu-k
   cat-Dem food 1/3-give-o-SS away 1-go-Ir-SS 1-Prog-SS
   'yu-m
   1-be-Inc

th can be used in unrealized clauses to express much the same mean-
ing _ expresses.

24) When Pam hits me, I'm going to tell Jack.
   Pam-ch ny-chqam-th-m Jack 'knavo-h-k 'unuu-k 'yu-m
   Pam-Sj 3/1-hit-th-DS Jack 1/3-tell-Ir-SS 1-Prog-SS 1-be-Inc

25) I will sleep until I go to work.
   'smaa-k 'smaa-m 'yu-ch-th-k 'tarhar-a-k 'unuu-k 'yu-m
   1-sleep-SS 1-sleep-DS 1-be-pl-th-SS 1-work-Ir-SS 1-Prog-SS 1-be-
   Inc
26) Before you come, I'm weaving you a basket.
   m-vaah 'um-th-m nya-ch k'u m-wii-wa ny-puv-o-k
   2-come-Ir neg-th-DS I-Sj basket 2-have-Dem 1/2-weave-App-SS
   'wu-m
   1-do-Inc

   th and o are both used with unrealized clauses to temporally relate them to the main clause. It is difficult to believe that these morphemes are totally unrelated, diachronically if not synchronically, to the ktho suffix.

II. Conditionality
   Conditional sentences generally express some event or state which would have implied or will imply that some other event or state occurs. That is, if X occurs, Y will occur. The clause in which event X occurs is the antecedent clause or condition; the other clause is the consequent clause or the result of the condition being fulfilled.

   Future conditionals in Tolkaqaya typically look like the future 'when' clauses described above, without the ny- prefix. (More specifically, the antecedent clause is marked with the suffix -ktho alone.) Some variation is possible.

   Future Conditionals
   (If X occurs, then Y will occur)
   Antecedent Clause   Consequent Clause
   ...V + ktho          ...Verb + Irrealis marking

   Future conditionals signify that the event expressed in the consequent is contingent on the condition stated in the antecedent. The time frame of the antecedent and, naturally, the consequent, is future--the condition has not yet been realized.

27) If you don't stop crying, I'm going.
   m-mii m-nyathk-h 'um-ktho nyul 'yaam-a-k 'unuu-k 'yu-m
   2-cry 2-stop-Ir neg-Mod away 1-go-Ir-SS 1-Prog-SS 1-be-Inc

28) If Pam hits me, I'll tell Steve.
   a. Pam-ch ny-chqam-ktho Steve 'knavo-h-k 'unuu-k 'yu-m
      Pam-Sj 3/1-hit-Mod Steve 1/3-tell-Ir-SS 1-Prog-SS 1-be-Inc
   b. Steve 'knavo-h-k 'unuu-k 'yu-m Pam-ch ny-chqam-ktho
      Steve 1/3-tell-Ir-SS 1-Prog-SS 1-be-Inc Pam-Sj 3/1-hit-Mod

   In addition to this paradigm future conditional construction, there are other variations. The antecedent clause can be marked in several ways which relate to constructions we have seen elsewhere.

   The antecedent clause can be marked in these ways:
   V + th + SR   (similar to the future temporal)
   V + kho       (similar to the paradigm future conditional marking; h replaces th)
   V + o + SR + Ir (future temporal marking with an element of IRREALIS added)
   V + th + ktho  (a combination of the future temporal marker and the modal particle)
29) If you're around, you'll see me.
   a. vak m-yu-ktho
      here 2-be-Mod
   b. vak m-yu-th-k
      here 2-be-th-SS
   c. vak m-yu-kho
      here 2-be-kho
   'm'-u-h-k m-unuu-na
   2/1-see-SS 2-Prof-Ir-SS 2-Prog-POSS

30) If the coffee is clear, drink it.
   kathve-v-ch qry-o-m-h m-thli
   coffee-Dem-Sj clear-0-DS-Ir 2-drink-Imp

31) If you're around, come in.
   vak m-yu-th-ktho va-l m-yurk-i
   here 2-be-th-Mod here-loc 2-enter-Imp

Counterfactual conditionals have proven to be central to the analysis of the morphological elements constituting the adverbial structures that are to follow. Tolkapaya dialect shows some productive variety in these morphological arrangements that will hopefully contribute to the analytical questions raised for other Upland Yuman dialects (cf. esp. Kendall 1976, pp. 108-114).

Counterfactual conditionals are those which take as their antecedent clause some event which failed to occur and as their consequent clause the predicted outcome had the antecedent event actually occurred. Both propositions, then, are nonfactual and prior to the time of the speech event. The morphology is distinctive, but as we shall see, not unique to counterfactual conditionals.

Counterfactual Conditionals
(If X has occurred, Y would have occurred)
Antecedent Clause       Consequent Clause
...V + k (PM) + yuva       ...V-h (PM) + yitha

This is the paradigm case. It is in fact possible, under appropriate semantic/syntactic conditions, to mark the antecedent with any of the existential auxiliaries combined with any of the demonstratives: Thus instead of yuva, the clause can be marked with yuja, yuya, yuha, yutha, wiva, wiwa, wiha, wiya, witha, 'iva, 'iwa, etc. It is also possible to mark the antecedent with the same marking used to mark the antecedent of future conditionals (though this is not very common).

32) If you had come I would have seen you.
   a. m-vaak m-ya-va ny'-u-h yitha
      2-come-SS 2-be-Dem 1/2-see-Ir Mod
   b. m-vaak-th-m ny'-u-h yitha
      2-come-th-DS 1/2-see-Ir Mod

33) If Bonnie had said she would come, she would have come.
   Bonnie-ch vaa-h 'i-k 'i-va vaa-h yitha
   Bonnie-Sj come-Ir say-SS say-Dem come-Ir Mod

34) If I'd been a doctor, I'd really have been something.
   a. kthye-v-ch ('-yu-k) '-yu-va pa quata-h yitha
      doctor-Dem-Sj 1-be-SS 1-be-Dem person emph-Ir Mod
b. kthye-v-ch 'yu-ktho pa qyata-h yitha
doctor-Dem-Sj 1-be-Mod person Emph-IR Mod

35) If you had gone, I would have seen you.
   a. m-yaam-o-m-h ny-'u-h yitha
      2-go-o-DE-IR 1/2-see-IR Mod
   b. m-yaam-kho ny-'u-h yitha
      2-go-kho 1/2-see-IR Mod

The constituency of the primary morphological marker of the antecedent clause of a counterfactual conditional (yuva) is certainly yu = 'be' (auxiliary verb) + y(a) = demonstrative. The fact that yu can be replaced by the other auxiliary verbs 'i = 'say' and wi = 'do' and that va can be replaced by other members of the set of demonstrative suffixes confirms this analysis. That this construction is synchronically analyzable by Tolkapaya speakers is clear. However, the form yuva is by far the most commonly volunteered. Since yu can always be substituted for 'i or wi and appears to be the most neutral auxiliary, its prevalence is not surprising. As for the demonstrative suffixes, va is unquestionably preferred here. Only wa and ya have occurred spontaneously to any degree. Whichever member of the demonstrative set is used, it has no deictic force. Nonetheless, this range of possibilities suggests that Kendall's tentative analysis of -v- as the demonstrative -v- for the equivalent construction in Yavpe is correct (Kendall, 1976).

Tolkapaya offers supporting evidence that, indeed, the "counterfactual reading" does not come from the Auxiliary + demonstrative marker construction of the antecedent clause because Tolkapaya hypothetical conditionals use the same morphology for the antecedent clause (see below). The interpretation of conditionals as either hypothetical or counterfactual is determined by the morphology of the consequent clause. We will argue below that the "counterfactuality" meaning is contributed specifically by the morpheme th.

Hypothetical conditionals are particularly interesting in Tolkapaya because they morphologically and semantically bridge the gap between future and counterfactual conditionals. Semantically, hypotheticals can be past or future in time reference, and make no claims as to their factuality. Morphologically they share features of both other types of conditionals, future and counterfactual.

Hypothetical Conditionals
(If X were to happen, Y would happen)
Antecedent Clause Consequent Clause
...V (PM) + yuva V + IRREALIS marking

The boundary between hypothetical and future conditionals, on the one hand, and countereftacts on the other is not clearly defined in all cases. The semantics are such that, occasionally, a future time hypothetical will be translated as a simple future conditional. So for example "I would know her if I were to see her" may translate as either

36) '-u-k 'yu-va '-spoo-ha
1/3-see-SS 1-be-Dem 1/3-know-IR
37) If I see her, I will know her.
'-'-u-ktho '-'spoo-ha
1/3-see-Mod 1/3-know-Ir

The same semantic ambiguity can be true of counterfactuals, depending on the presuppositions involved, as in

38) If I weren't afraid of blood I would be a doctor.
a. hwatcha '-'mshe-h 'um-k '-'yu-va kthyey-v-ch '-'yu-ha
   blood 1/3-fear-I neg-SS 1-be-Dem doctor-Dem-Sj 1-be-Ir
b. hwatcha '-'mshe-h 'um-k '-'yu-va kthyey-v-ch '-'yu-h
   blood 1/3-fear-IR neg-SS 1-be-Dem doctor-Dem-Sj 1-be-IR
   'yitha
   1-Mod

For the most part, hypotheticals are rendered in the form schematically represented above, as the following examples show:

39) If Steve says it, it must be true.
   Steve-ch nyuv-'i-k yu-va 'i-ra-k 'i-ha
   Steve-Sj Dem-say-SS be-Dem say-Ints-SS say-IR

40) If I were you, I'd marry him.
   nya-ch ma-ch ('-'yu-k) '-'yu-va nyarimy-ha
   I-Sj you-Sj 1-be-SS 1-be-Dem marry-IR

One explanation for the occasional use of -ktho (and other future conditional morphology) on hypotheticals lies with the structure of hypothetical conditionals in Tolkapaya. The free variation between ha and hi:tha/yi:tha as reported by Kendall for Yavpe (Kendall, 1976) is meaningfully distinctive in Tolkapaya. Tolkapaya has hypotheticals which act as an intermediary between future and counterfactual conditionals. Hypothetical conditionals might well provide a means through which the usage of certain morphological forms could transfer by analogy.

Looking at the syntax of conditionals, one can see that the -ktho (and yuva) marked clauses are subordinate to the consequent clause. For one thing, ha is a main clause final aspect marker (on the order of the compound Tense Markers) and yitha can plausibly be analysed as having the -a reflex of ha as its final component. Also, simple past conditionals (not counterfactual) such as the following, have main clause final tense marking on the consequent clause (and the antecedent clause is marked the same as counterfactual conditionals).

41) If Bonnie stayed, Jack went.
   Bonnie-ch va-k yu-k yu-va Jack-che yam-k yu-m
   Bonnie-Sj Dem-Loc be-SS be-Dem Jack-Sj go-SS be-Inc

42) If you (in fact) beat Steve, then you must really gamble.
   Steve m-tkwili-a-ktho m-tohv-k m-qyat-k m-okwa-na
   Steve 2/3-beat-IR-Mod 2-gamble-SS 2-very-SS 2-feel-POSS
Additional support for -ktho clauses being subordinate is that they can be center-embedded to the main clause of the sentence, as follows:

43) If you go away, I won't be here.
   nya-ch ma-ch nyul m-yam-ktho va-k 'yu-ny-ah 'um-ak
   I-Sj you-Sj away 2-go-Mod Dem-Loc l-be-Dem-Ir Neg-Ir-SS
   'unu-k 'yu-m
   1-Prog-SS l-be-Inc

III Counterfactuality

Returning to the question of what makes a counterfactual conditionally contrary to fact and the role that the morpheme th- plays, we will now look at a different type of counterfactual sentence. The following discussion will concern sentences of the type that describes an event which might have occurred, but which failed to occur or cannot occur. In the complex sentences, only one proposition is contrary to fact; the other proposition describes what actually took place or provides some further explanation of the situation. The semantic domain includes failed attempts, unfulfillable wishes, clauses describing a state that formerly obtained, but which no longer does, and cases where the realization of one clause precludes that of the other.

A. "Failed attempts" imply that the action was attempted but not accomplished. The "failed attempt" is often juxtaposed to a statement of the true outcome of the situation, as in

44) Jack tried to shoot the rabbit and missed.
   Jack-ch hloa-ha kyaa-k unuu-th-k cham-k wu-m
   Jack-Sj rabbit-Dem shoot-SS Prog-SS miss-SS do-Inc

Alone, the th marked auxiliaries are sufficient to signify that the action expressed in the sentence was unfulfilled, as in

45) I'm trying to make money.
   'wii 'yoov-a-k 'wi-th-k 'yu-m
   money 1/3-make-Ir-SS l-do-Mod-SS l-be-Inc

Thus th does not intrinsically mark the clause as subordinate. It marks the clause as contrary-to-fact. This marking cannot be used if the action is actually accomplished. It is not a mere negative however, because the structure implies that an attempt was made.

B. "Unfulfillable wishes" (or impossible dreams) refer to desires which cannot be realized. There is a desiderative construction which expresses possible desires. Compare the meanings of the following two sentences, with and without th:

46) I wish I were you.
   ma-ch 'yu-th-k wa 'yii-k 'yu-m
   you-Sj l-be-Mod-SS * l-wish-SS l-be-Inc

47) I wish I were like you.
   ma-ch 'yu-k wa 'yii-k 'yu-m
   you-Sj l-be-SS * l-wish-SS l-be-Inc

Nothing in the second sentence provides for the meaning "be like" which
is expressed with another verb in Tolkapaya. However, since this structure implies that the desire is potentially fulfillable, *yu* is metaphorically extended.

This is used in another desiderative construction to express unrealizable wishes, e.g.

48) I wish I hadn't done it.
   ny'-wi-th-a 'um-ra-ch yu-h 'yii-k 'yu-m
   Dem-1-do-Mod-Ir Neg-Ints-Sj be-Ir 1-think-SS 1-be-Inc

These wishes are more than just unreal, they are impossible to realize.

C. "Used to" is expressed by suffixing *th* to the main (usually the distributive) auxiliary before the switch reference. "Used to" intrinsically implies that what "used to" be the case no longer holds. Thus, these clauses are presently counterfactual. They are often in complex sentences, where the second clause expresses the present state of affairs, e.g.

49) You used to be fat.
   ma-ch m-se-ch m-yu-th-k m-yu-m
   you-Sj 2-fat-Sj 2-be-Mod-SS 2-be-Inc

50) Jack used to eat meat; now he only eats vegetables.
   Jack-ch qwaqt a maa-m wi-ch-th-k van 'wila havasu maa-m
   Jack-Sj meat eat-DS do-Pl-Mod-SS now vegetables eat-DS
   wi-ch-k wu-m
   do-Pl-SS do-Inc

-th can be marked on the verb itself without the habitual reading as in

51) I was dancing, but now I'm tired.
   '-ima-th-k '-tlahv-k '-yu-m
   1-dance-Mod-SS 1-tired-SS 1-be-Inc

-ktho is also used to mark the "used-to" clause in these complex sentences.

52) Jack used to eat meat, but now he only eats vegetables.
   Jack-ch qwaqt a maa-m wi-ch-ktho vame 'wila havasu maa-m
   Jack-Sj meat eat-DS do-Pl-Mod now "vegetable" eat-DS
   wi-ch-k wu-m
   do-Pl-DS do-Inc

D. These sentences described as "might have, except that" express in the clause marked with *yi* + *th* (+ either Ir or Sr) something which cannot be true; the second clause expresses the true state of affairs which precludes the truth of the first clause.

53) Jeni would be here, but she's sick.
   Jeni-ch vak yu-h yi-th-k 'ich-rav-k 'i-k i-m
   Jeni-Sj Dem-Loc be-Ir Aux-Mod-SS s.t.-hurt-SS say-SS say-Inc
54) You could have (had) some beer, but we drank it all.
   ha-maala m-thii-nya m-yi-th-a paya 'thii-k 'chav-k
   beer 2/3-drink-Dem 2-Aux-Mod-Ir all 1/3-drink-SS 1-finish-SS
   'wum
do-Inc

55) We thought there were snakes around here, but we were wrong.
   'lwi-v-ch vak huwav-ch-k 'yi-th-ch-m tuya
   snake-Dem-Sj here go around-PL-SS 1-Aux-Mod-DS wrong
   'yu-o-k 'yum
   1-be-Ev/Perf-SS 1-be-Inc

The structure of these sentences involves the use of -th- to mark the
auxiliary verb (often yi, as in conditionals) which is optionally
person marked. The auxiliary is either appropriately switch reference
marked (if the time frame is past) or marked with irrealis -a (if the
time frame is referring to future events). In the cases marked with
irrealis -[h]a (cf. 53), the event is not 'counterfactual' in the usual
sense of a past possible event that failed to materialize, but rather
that the speaker has reason to suppose that an event could not transpire
in the future, circumstances being what they are. In fact all of these
sentence types are expressing the speaker's opinion or speculation about
"what might have been" or his wishes or desires that are contrary to
reality. It is in this light that we can hypothesize that the root
yi(i) found in so many examples of this type can be identified as the
auxiliary use of a common root yi(i) found in certain 'cognitive' verbs
(e.g., 'e yii 'like', yal yii 'want'). In a number of these examples
the verb "think" is expressed in the translation (cf. 54).

It appears to be the case that in all the above examples involving
-th- this morpheme is signalling that the -th- marked proposition is
contrary to what is currently factual in the real world or that the
speaker's predictions for the future doubt the possibility of the propo-
sition's being actualized.

The morpheme -th- has another set of related uses that perhaps sug-
gest a source for the verbal modal particle use of -th--; -th- occurs
suffixed to numeral stems, as a member of the set of deictic demonstra-
tive suffixes and in a frozen form on certain non-present time words.

Numerals, which are syntactically verbs, take -th as a verbal suf-
fix to indicate "only". For example, the numeral 'sit = 'one', when
suffixed with -th means "alone, once, only one":

56) I went alone.
   'sit-th-k 'yaam-i
   one-th-SS 1-go-Tns

57) I have only three dresses.
   'ya-ch tcek-ya hmuk-th-m 'wii-k 'yu-m
   1-Sj dress-Dem three-th-DS 1/3-have-SS 1-be-Inc

This usage is semantically parallel to the 'used to' use of th;
there it meant 'used to but no longer', here it means 'one (or any
other number) but no more, no less.' It contrasts the actual number
with every other possible quantity of items or events.

The th demonstrative refers to an object that was formerly present,
but which is no longer here. When referring to people or
anthropomorphized things (e.g. a doll), the sense is that of "dear departed one"—one that has died or been lost. In these cases the salient feature is that the reference is to the past, with present relevance—in fact, with present absence (a kind of pseudo-counterfactuality). Compare this usage to the use of th to indicate a state that formerly obtained, but which no longer holds.

58) I saw my dear (lost) sister.

ny'a 'kel-th 'u-k 'wi-ny
I 1-sibling-Dem 1/3-see-SS 1-do-Com

Th(a) is used in a temporal capacity as a demonstrative, either in combination with other deictics or as part of certain time adverbials with a fixed form:

59) 'then' (cf. 'now'—ny-va-m)

ny-tha-m
Dem-Dem-time

60) 'long ago'

'kur-tha
long-Dem

In all the various occurrences of -th- that have been catalogued above, a certain constant semantic element can be found common to all. The presence of -th- indicates that the current state of affairs is different from or contrasts with some other state of affairs (whether explicitly mentioned or implied) that existed in the past or that might exist in the future. Certainly the semantics and origin of this morpheme is worth pursuing, but a more definitive analysis of this topic is beyond the scope of this paper.

IV Contrast

The final adverbial construction to be considered here involves the modal yite which overlaps semantically with the preceding set of counterfactual and related sentences. The general semantic flavor of this construction fits well under the rubric "contrary to expectation." Upon closer examination of underlying presuppositions and the various uses of the construction, a slightly more complicated situation emerges. The syntax is fairly straightforward and reasonable analyses can be given for the morphology. It is also interesting to note that cognate constructions apparently exist only in Upland Yuman—the rest of the Yuman language family does not appear to have separated out this piece of semantic space from the larger class discussed above, at least not with a similar construction (cf. Crook, D. 1976, "Yuman "t").

It will be argued here that yite is in fact a modal auxiliary (comparable to lwi = 'should, supposed to'); several syntactic arguments can be given to support this claim. First of all, yite occurs in final position in its clause, as do all verbs; that is to say, it is a member of the clause it follows. Evidence for this is: (1) yite moves with the clause it follows when clausal order is reversed. Compare sentence 61 with 62:

61) You're very thin, but you are still pretty.

m-ruv m-yite ge m-hana m-qyat-k m-yu-m
2-thin 2-ModAux * 2-pretty 2-Emph-SS 2-be-Inc
62) You're pretty, even though you're thin.

qe m-hana m-qyat-k m-yu-m m-ruv m-yite
* 2-pretty 2-Emph-SS 2-be-Inc 2-thin 2-ModAux

(2) yite is person marked to agree with the subject of the clause it follows.

63) I will sing, even though you can't hear.

m-'ev-ch-ah 'um m-yite 'swar-k 'unu-u-k 'yu-m
2-hear-Pl-IR Neg 2-ModAux 1-sing-SS 1-Incom-SS 1-be-Inc

Notice that yite is different from main verbs and auxiliaries in that the verbs preceding it are bare stems without switch reference marking or other verbal marking; the modal auxiliary lwi shares this property with yite in Tolkapaya. Although yite is different in this respect from most verbs in Tolkapaya, it can not properly be equated with any other syntactic category (such as a contrasting conjunction like English "but") because it can occur as amodal auxiliary in a single independent clause. In the following such example, yite is followed by the final auxiliary marker--(person marking) +yu/'i/wi+m. Unlike other main verbs and auxiliaries, yite does not take the suffix -k = same subject marker before this final clause marker. This is a peculiarity of other modals,8 which suggests that the compound (person marking) +yu/'i/wi+m is the main auxiliary verb itself and not the "compound tense marker" that is suffixed to all main verbs in Tolkapaya. This hypothesis is further born out by the fact that this final auxiliary ju/'i/wi can be suffixed with the plural subject agreement form -ch- when the subject of the clause ending in yite + (person marking) +Aux +m is plural. This is never the case with these auxiliaries when functioning as "compound tense markers" (cf. Chung 1976).9

64) Those girls think they're pretty, but they're not.

vquuya hana-k yi-ch-th-m 'um-chi yite yu-ch-m
girls good-SS Aux-pl-ModPrt-DS Neg-Pl ModAux be-Pl-Tns

It can conceivably be argued that the yite that occurs between two full clauses is not related to the construction with yite + Aux +m as the final auxiliary construction of a simple clause,10 But the evidence in favor of the association of these two instances of yite is quite substantial in Tolkapaya. In the first place, the semantics are identical, as can be seen in the examples given below. Both kinds of clauses marked with yite express something the speaker is contrasting with some expectations--either those established by context, or those set up by the other clause. The sentences which use yite are either true or have the possibility of being true (unlike th-marked clauses).

Second, phonologically the two occurrences are equivalent, allowing for reasonably conditioned phonetic variations (discussed below). Let us first consider some typical examples of this construction.

65) Even though my house is small, I like it.

nya'-wa-v-ch qech yite 'e'-yii-k 'yu-m
I-house-Dem-Sj small ModAux *1/3-like-SS 1-be-Inc

66) Even though you will come, I won't be here.

ma-ch m-vaa m-yite vak 'yu-h 'uma-ha
you-sj 2-come 2-ModAux here 1-be-IR Neg-IR
67) I looked for rabbits, but there weren't any.
    hloq -waala -yite pem-k yu-m
    rabbit 1/3-seek 1-ModAux be lacking-SS be-Inf

With yit(e) in a final auxiliary construction:

68) You just drank the medicine (but didn't know it)!
    ma-ch 'amaa m-thii m-yite m-yu-m
    you-Sj medicine 2/3-drink 2-ModAux 2-be-Inf

69) You saw your husband a while ago (but didn't know it was him).
    'kur-tha pahmi m-vii m-ju m-yite m-yu-m
    long-Dem man 2/3-own 2/3-see 2-ModAux 2-be-Inf

70) The girl who pretends she's so smart isn't really.
    vqi qyat-oq k-iv-ch 'ich-spo-h 'umi yite 'i-m/y
    girl very-Dub Rel-pretend-Sj s.t.-know-Inf neg ModAux say-Inf

The phonological situation that allows for the "disappearance" of the final -e vowel on yite seems to be primarily when there is no intervening person marking before the -y- of yu, as represented in

71) That girl is going to be better! (you say when everyone thinks
    vqi-ny-ch 'hana-h yiti yu-m she's going to die)
    girl-Dem-Sj good-Inf ModAux be-Inf

Since there is some variability in the presence of -e in this construction (68-72), there is also a possibility that -e is a separate morpheme not required in the position before the main auxiliary. In any case, the relationship between these two types of yite constructions seems well-established here on semantic grounds alone.

The following construction having two instances of yite proves to be helpful in determining the semantics of this adverbial. In these cases, all of which involve the verbs 'iv = "pretend" or (v)lw = "seem, appear, look/act like", after each of the two main propositions.

72) Jack acts nice, but he isn't.
    Jack-ch 'han-k yu-cha lw'i yite 'umi yiti yu-m
    Jack-Sj good-SS be-Pl seem ModAux Neg ModAux be-Inf

73) Lynn doesn't look sick, but she is.
    Lynn-ch 'ich-rav-ha 'um-k yu-cha lw'i yite 'ich-rava
    Lynn-Sj s.t.-hurt-Inf neg-SS be-Pl seem ModAux s.t.-hurt
    yiti yu-m
    ModAux be-Inf

74) Those men look like Indians, but they're not.
    pah-ch-ch yu-cha lw'i yite pa-ch-ha 'un-ch yu-cha
    Indian-Pl-Sj be-Pl seem ModAux Indian-Pl-Inf neg-Sj be-Pl
    yiti yu-ch-m
    ModAux be-Pl-Inf

In all the examples with two manifestations of yite the pragmatic situation is that appearances are deceiving. The speaker is describing the way things appear to be and then stating that the real situation is other than this (appearances) would lead us to expect. The usage of yite "between" two clauses indicates that there is a contrast between
the sets of expectations established by one proposition and that of the other. Where yite + Auxiliary is used after a proposition, there is a contrast between the expectations created by that proposition and the expectations provided by the prior discourse and the extra-linguistic context. To emphasize this disparity, both instances of yite can be used as in the above examples. Since the speaker is actually expressing the “extra-linguistic context” in a sense, the second yite is appropriate. The decision to use both yite's seems to depend on how "unexpected" the speaker judges the situation to be. For instance, in the following examples which appear to parallel the three above, only one yite is employed. However, in both cases the information being imparted comes as no surprise, since it refers to people and their attributes that are part of both the speaker and hearer's knowledge about the world.

75) Jeni doesn't seem kind, but she is.
   Jeni-ch pa mmirva-h 'um -k yu-cha vlwi yite pa
   Jeni-Sj person kind-IR Neg-SS be-PL seem ModAux person
   mmirv-ch yu-m
   kind-Sj be-Inc

76) Steve doesn't act like a big shot, but he is.
   Steve-ch pa qyat-oo 'iv-ra-h 'umi yite
   Steve-Sj person Emph-Dub pretend-Inte-IR Neg ModAux
   pa qyat-ch yu-m
   person very-Sj be-Inc

The semantic unity of yite in its various uses has thus been demonstrated. As did many of the other adverbial types, this construction indicates a contrast between reality and some other mode. The expression of "contrary to expectation" in this distinctive way is apparently unique to Upland Yuman and thus is historically interesting. The morpho-syntactic strategies for indicating the range of adverbial expressions described here for Tolkapaya should provide valuable points of comparison for comparative studies of higher-level syntax in Yuman.

Footnotes

I Tolkapaya Yavapai or Western Yavapai belongs to the subgroup of the Yuman language family, Northern or Upland Yuman. Our sincere appreciation goes to Ms. Molly S. Fasthorse for the many patient hours devoted to teaching us her language and for her never-flagging sense of humor. Thanks also to Pamela Manro for her guidance, to Steve Anderson and Bill Bright for their detailed comments and to the other members of the UCLA Tolkapaya class for their suggestions—specifically Steve Anderson, Bonnie Glover, Jack Kriender, and Jeni Yamada.

Abbreviations used here in glossing morphemes are as follows:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>App</td>
<td>applicative</td>
</tr>
<tr>
<td>Aux</td>
<td>auxiliary</td>
</tr>
<tr>
<td>Com</td>
<td>completive</td>
</tr>
<tr>
<td>Dem</td>
<td>demonstrative</td>
</tr>
<tr>
<td>DS</td>
<td>different subject</td>
</tr>
<tr>
<td>Dub</td>
<td>dubitative</td>
</tr>
<tr>
<td>Emph</td>
<td>emphatic</td>
</tr>
<tr>
<td>switch</td>
<td>reference marker</td>
</tr>
</tbody>
</table>

19
Ev/perf = evidential perfective   Pl = plural subject agreement
Imp = imperative                   POSS = possible
Inc = incompletive                Poss = possessive
Incep = inceptive                  Prog = progressive auxiliary
Ints = intensifier                 Rel = relative clause marker
Ir = irrealis (ha/h/a)             Sj = subject case suffix
Loc = locative case suffix        SR = appropriate switch reference marker
Mod = modal particle               SS = same subject switch reference marker
ModAux = modal auxiliary          Tem = temporal marker
Neg = negative verb                Tns = tense marker

* = 1st part of separable verb
s.t. = something, dummy object
single numbers: for intransitive verbs, subject agreement in person
  1 = ', 2 = m, 3 = Æ (3rd person is unglossed)
double numbers: for transitive verbs, 1st number = person of subject agreement, 2nd number = person of object agreement
  (1/3 is Æ and not glossed)

In this paper, the examples are written in the practical orthography developed by the Yavapai Field Methods course.

ch = č   sh = š    a hyphen separates phonemes,
th = ò     so k-w = kw, not kʷ
ny = n/y
kw = kʷ
ky = kʸ
qw = qʷ
' = ?
vv = long v

2 Switch reference marking in Yavapai in general is discussed in Kendall 1975. -k marks same subject, -m marks different subject on the subordinate clause or on the non-final clause. We are using the term switch reference (SR) to refer to the appropriate assignment of either -k or -m. Where only one is appropriate, the abbreviations SS or DS are used.

3 The -m/-k switch reference markers and the -ch subject marker can be followed by vocalic increments which appear to be semantically empty-- -k is -ka, -m is -me, and -ch is -che. These increments are never used before auxiliaries. These increments were first noted by Hinton 1977 for Havasupai.

4 This contains the distributive construction, used to express habitual or repeated action. This construction inserts one of the existential auxiliaries after the verb and before the final tense marking. The existential auxiliary is suffixed with the -ch plural marking. The entire construction is: V + m†Existential Aux + ch + ḱ + Existential Aux + Tns.
yu can be used with any verb; wi can be used with active, transitive verbs; and 'i can be used with verbs of speaking or otherwise communicating or making noise.

Thanks to Brent de Chene for his help in sorting out these conditionals.

The demonstrative system of Tolkapaya has been analyzed in great detail by Glover.

Other modals of this type include lwiya ("ought") and yiivch ("should").

The Compound tense markers first discussed by Chung (1976) are one of the ways of marking independent clauses. All matrix verbs can typically take this synchronically analyzable compound form which consists of the main verb + k; subject person marking, followed by one of the three auxiliary verbs yu, wi, 'i and then either m = incomplete or ny = completeive. This morphology contrasts with the final marker found in many other Yuman languages, which is simply either k or m. The Tolkapaya marking system is particularly useful in deciding questions of subordination vs. coordination in complex sentences. The final tense marker seems to be a definite morphological indicator of main clause status for Tolkapaya. The compound tense markers do not permit plurality to be marked on their existential auxiliary.

Kendall, 1976, pg. 104 gives examples of both types (cf. examples 10-12 with 13). Although the examples aren't discussed specifically in any detail, the semantics of the two uses seem to be described in disparate ways and the glosses are not the same, suggesting that Kendall treats them as separate constructions.
BIBLIOGRAPHY


Chung, Sandra, 1976, Compound Tense Markers in Tolkapaya, University Museum Studies, S.I.U. at Carbondale.


Crock, Donald, 1976, Yuman "t", University Museum Studies 7, S.I.U. at Carbondale.


______, 1973, How to Tell a Head When You See One: Disambiguation in Diegueno Relative Clauses, Linguistic Notes from La Jolla, University of California, San Diego 5.


Joel, Judith, 1966, Paipai Phonology and Morphology, Ph.D. Dissertation, UCLA.


Munro, Pamela and Nellie Brown, 1976 ms, A Mojave Dictionary (Preliminary version).

Shaterian, Alan, 1971ms, Yavapai Phonology.


Occasional Papers On Linguistics


Department of Linguistics
Southern Illinois University
at Carbondale
OCCASIONAL PAPERS ON LINGUISTICS

Number 2

PROCEEDINGS

OF THE

1977 HOKAN-YUMAN LANGUAGES WORKSHOP

James E. Redden, Editor

Held at
University of Utah, Salt Lake City

June 21-23, 1977

Department of Linguistics
Southern Illinois University
Carbondale, Illinois

Library of Congress Catalog

Number 73-66354
PREFACE

The first meeting of linguists working on Hokan and Yuman languages was held at the University of California, San Diego, in 1970 at the invitation of Margaret Langdon, who established the Yuman Languages Archives with the aid of a National Science Foundation grant. This meeting made it possible for various specialists working on these languages to get to know each other and to benefit from technical discussions of many problem points. Those attending this first meeting felt that the papers and discussions contributed so much to the advancement of the understanding of these languages that participants soon began asking when we would meet again. In 1975 Margaret Langdon again invited the Yumanists to meet at San Diego. It was felt that this and the previous meeting had contributed so much to the collective understanding of Hokan and Yuman that it was decided to meet every year if it could be arranged. In 1976 another workshop was held at UCSD, to which both Hokanists and Yumanists were invited. In 1977 Hokanists and Yumanists met at the University of Utah in Salt Lake City. In 1978 the meeting will again be at UCSD.

The participants of the 1977 Hokan-Yuman Languages Workshop gratefully acknowledge all the work done by Professor Mauricio Mixco and his assistants, which made the workshop run so smoothly and enjoyably.

Unfortunately, everyone who presented a paper at the 1976 Hokan-Yuman Languages Workshop was not able to prepare a final version for inclusion in this volume. All papers in this volume were presented in an earlier version at the 1977 workshop. The papers are arranged in the order that they appeared on the program at the workshop. The Yuman papers were given first, and papers from the other branches of Hokan followed.


The proceedings of the 1975 and 1976 workshops 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.

James E. Redden
Carbondale, May 1978
CONTENTS

Redden, James E.
The Walapai Intensive Prefixes /vi-/ and /mi-/

Hardy, Heather K. and Lynn Gordon
Morphemes of Epistemic Contrast in Tolkapaya

Munro, Pamela
Yuman Personal Nouns

Langdon, Margaret
The Origin of Possession Markers in Yuman

Crawford, James M.
Nominalization in Cocopa

Waterhouse, Viola and Muriel Parrott
Oaxaca Chontal Noun Inflection and Classification

Moser, Mary B.
Articles in Seri

Bibliography