Tolkapaya Syntax: Aspect, Modality, and Adverbial Modification in a Yavapai Dialect

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Linguistics

by

Heather Kay Hardy

1979
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Heather Kay Hardy
1980
The dissertation of Heather Kay Hardy is approved.

William Bright

Margaret Langdon

Alan Timberlake

Pamela Munro, Committee Chair

University of California, Los Angeles
1979
To Molly Starr Fasthorse ---
who unselfishly gave her time, so that
the language of her people would not be forgotten
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<td>the recursive auxiliary</td>
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<td>(dl)</td>
<td>dual verb form</td>
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<td>different subject switch-reference marker</td>
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<td>'someone'; i.e. a dummy object prefix</td>
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<td>appropriate switch-reference marking</td>
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<td>same subject switch-reference marker</td>
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<td>voc</td>
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<td>w.s.</td>
<td>woman speaker</td>
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**single numbers**
- for intransitive verbs, subject person agreement (3rd person is Ø and not glossed)

**double numbers**
- for transitive verbs, the first number is the person of subject agreement, the second number is the person of object agreement (3/3 is Ø and not glossed)

|=| separates phonemes (where otherwise they would be interpreted as a di-graph) |
|-=| separates morphemes |
| :|= separates words within a single gloss |
| *|= first part of a separable verb |
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VITA

July 12, 1952—Born, Houston, Texas

1974—B.A., Rice University

1975–1977—Teaching Associate, Department of Linguistics, University of California, Los Angeles

PUBLICATIONS


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ABSTRACT OF THE DISSERTATION

Tolkapaya Syntax: Aspect, Modality, and Adverbial Modification in a Yavapai Dialect

by

Heather Kay Hardy

Doctor of Philosophy in Linguistics
University of California, Los Angeles, 1979
Professor Pamela L. Munro

This is a descriptive grammar of the higher-level syntax of certain complex sentence types in Tolkapaya. Tolkapaya (or Western) Yavapai is a Yavapai dialect—a member of the Northern Pai subgroup of the Yuman language family of the southwestern United States. The purpose of this study is to provide a record of a vanishing language, to preserve material for students of comparative American Indian syntax and morphology and historical Yuman syntax in particular, and to provide a rigorous syntactic description of complex syntactic and semantic structures which is accessible to linguists of all theoretical persuasions for whom it may be of value in the proposal and testing of linguistic universals.
The basic morphology and syntax of Tolkapaya simple sentences is described and includes information about derivational and inflectional morphology of various types within the verbal system and the expression of aspect and modality in simple sentences. The sketch of the nominal system includes a description of case, number, derivation, possession, and demonstratives. The syntax of the simple sentence is described and the following topics are discussed: terminal marking, the switch-reference system, auxiliary constructions, questions, imperatives, and exhortatives.

The semantic modification of the "objective content" of simple sentences is described. This modification is expressed syntactically through morphemes and auxiliary constructions indicating aspect, modality, and adverbial modification.

The syntax of complex adverbial and modal constructions is analyzed. The types of expressions examined include reason and purpose adverbials, "contrary to expectation" auxiliary constructions, time clauses, conditionals, and contrastives.

The identity and historical origins of the morphemes -th and -h are considered. It is argued that the demonstrative uses of -th and -h are related to their use as modal suffixes; implications are drawn about the general relationship between demonstratives and verb suffixes and the problem of "apparent homophony" in Tolkapaya.
The Tolkapaya auxiliary system is considered in the context of Langdon's (1978) reconstruction of the Proto-Yuman auxiliary system. The auxiliaries are classified into five groups, based on formal and functional considerations: existential, behavioral, modal, adverbial, and locational. Constructions involving the behavioral auxiliaries (including the Final Auxiliary Construction, aspectual constructions, the predicate nominal, and other nominalizations) are given particular attention.
INTRODUCTION

The primary goal in this dissertation is to provide an accurate description of the grammatical facts pertaining to the higher-level syntactic structures of Tolkapaya Yavapai. I have attempted to present these facts in such a way as to make them accessible to linguists of all theoretical persuasions, as well as those who may not be familiar with the structure of Yuman languages.

The introductory chapter provides a general description of Tolkapaya as a member of the Yuman language family. Methods of data collection are discussed, along with a brief review of the literature on the Yavapai language. The phonology of Tolkapaya is outlined and the orthographic conventions that will be observed here are noted.

Chapter I describes the basic morphology and syntax of the Tolkapaya simple sentence. Included are various aspects of the verbal system: derivational and inflectional morphemes of many types and the expression of aspect and modality in simple sentences. The sketch of the nominal system includes the marking of number and case, demonstratives, possession, and the derivation of nouns. The syntax of the simple sentence is presented, with a discussion of how sentences are marked as terminal utterances. The switch-reference system, auxiliary constructions, questions,
imperatives, and exhortatives are introduced.

Chapter II surveys the various means of semantically modifying a simple sentence. Morphemes and auxiliary constructions that express aspect, modality, and adverbial modification are described.

In Chapter III, the syntax of complex adverbial and modal constructions is analyzed. The types of constructions examined include reason and purpose adverbials, those involving the "contrary to expectation" auxiliary construction, time clauses, conditionals, and contrastive expressions.

Chapter IV discusses the identity of the morphemes -th and -h. It is argued that the demonstrative uses of -th and -h are related to their use as modal morphemes and implications are drawn about the general relationship between demonstratives and verb suffixes in Tolkapaya.

Chapter V considers the Tolkapaya auxiliary system in the context of Langdon's (1978) reconstruction of the Proto-Yuman auxiliary construction. The Tolkapaya auxiliaries are classified into five separate groups, based on formal and functional considerations. Constructions involving the behavioral auxiliaries (including the final auxiliary construction, aspectual constructions, the predicate nominal, and other nominalizations) are given particular attention.

0.1 Family relationships

Tolkapaya (or Western Yavapai) is one of several dialects of Yavapai, a native American language spoken in
Arizona. It is a member of the Upland Northern subgroup of the Yuman language family—a subgroup which consists of Yavapai, Havasupai, and Walapai. Upland Yuman, and Paipai, a language spoken in Baja California, comprises the Pai branch of Yuman. Although linguistically closely related to Paipai, Upland Yuman is geographically separated from it by two other Yuman groups: (1) the River branch, consisting of Maricopa, Mojave, and Yuman, and (2) the California-Delta branch, consisting of Cocopa and the various dialects of Diegueno. An isolate, Kiliwa, spoken in Baja south of Paipai, is the remaining member of the Yuman language family.

The dialect situation within Yavapai has been variously described by different investigators. Kendall 1972, in a lengthy discussion of the ethnohistorical history of the Yavapai, distinguishes three "sub-dialects": Northeastern (or Yavape), Southeastern (or Kewevkopaya), and Western Yavapai (or Tolkapaya). Kendall employs the term "sub-dialect" as she considers Havasupai and Walapai to be "sister dialects" of Yavapai, comprising a single Upland Yuman language. Shaterian (n.d.) contends that there are two Northeastern dialects—that of Verde Valley and that of Prescott; he is justified to the extent that there appear to be at least minor differences between the two.

Since this dissertation is concerned specifically with describing the Tolkapaya dialect, rather than with a description of Yavapai in general, or with illuminating the dialect situation, I will follow the practice of referring
to the various dialects (when necessary) as Tolkapaya, Kwevkapaya, Prescott Yavape, and Verde Valley Yavape. These terms seem to be most explicit, and are meaningful to my Tolkapaya teacher, as well.

Both Kendall 1972, and Shaterian (n.d.) have researched and described in detail the ethnographic history of the Yavapai that is relevant to their linguistic constituency. Since adequate descriptions of the history and relationships of the various Yavapai tribes are available, I will limit myself to a brief discussion of the Tolkapaya.

The tribe known as the Tolkapaya apparently did not enjoy great status among the Yavapai. Their social position has been described in historical accounts by Gatschet 1877. According to my Tolapaya teacher, Molly Starr Fasthorse, speakers of her native dialect, Tolkapaya, were laughed at and looked down on for their "funny speech". The consequence of this social situation is that Ms. Fasthorse is familiar with both Kwevkapaya and Tolkapaya. Her younger sisters, however, grew up speaking only Kwevkapaya.

It is not known whether any Tolkapaya speakers other than Ms. Fasthorse still live. Shaterian (n.d.) had thought Tolkapaya became extinct with the passing of his Tolkapaya teacher, Warren Gazzam—until he met Ms. Fasthorse. Ms. Fasthorse herself thinks maybe two or three elderly Tolkapaya remain, but I have not been able to locate them. What is clear, though, is that Tolkapaya is on the verge of becoming extinct.
0.2 Methodology

I have had the privilege of working with Ms. Fasthorse since the fall of 1976 on a more or less weekly basis. This undertaking was initially begun as part of the UCLA field methods class under the direction of Professor Pamela Munro. Since the termination of the original course, several members of the class have continued to work with Fasthorse on a regular basis. The general nature of our work has been within the framework of standard elicitation procedure. Some textual material has been recorded as well.

The semantic complexity of the higher-level syntactic structures that are at the core of this thesis necessitated that a great deal of attention be paid to providing appropriate contexts. The semantics of modality and aspect are difficult to pursue with accuracy in one's own language and doubly difficult when the medium is translation. However, my confidence in the reliability of these data is quite high for several reasons. In the first place, the data presented here represents a sample of an unusually large amount of material collected during two years of working with this speaker. The speaker herself is a Yavapai tribal elder—an intelligent, highly articulate person. In addition, the bulk of consulting sessions was done with the participation of one or more colleagues, thus providing a cross-check of the phonetic accuracy and the pragmatic and contextual appropriateness of the data. Another factor having a direct
bearing here is the fact that quite a lot of work has been done on other aspects of Tolkapaya syntax, as well. For Tolkapaya alone there have been at least six people working fairly intensively on various aspects of the grammar, including demonstratives and intensifiers (Bonnie Glover), relative clauses (Jack Kriendler), passive and stative constructions (Jeni Yamada), complementation, conjunction and other complex sentence types (Lynn Gordon), and certain comparative Yuman problems such as numerals, personal nouns, and certain auxiliary constructions (Pamela Munro). What this body of work signifies is that other aspects of the grammar are being thoroughly described, allowing me to concentrate on the limited topic of this study in some depth. In addition, the fair amount of material in print concerning the syntax of Yavapai greatly reduces the obligation to the field to provide a more comprehensive account of Tolkapaya syntax. The body of literature available on the Yavapai language is described below.

0.3 Review of the literature

The structure of Yavaaapai has received a fair amount of attention, relatively speaking. Prior research on Yavaapai is best represented by the work of Martha B. Kendall and Alan Shaterian. Shaterian's work has been primarily on the phonetics and phonology of the various Yavapai dialects, with some attention to dialect differences and theoretical concerns, in addition to the compilation of a dictionary for general Yavapai. The work of Kendall has dealt with a
variety of syntactic topics based on the Verde Valley dialect. Her primary work is her (Indiana) doctoral dissertation (Kendall 1972), 1 which includes the following topics: general characteristics of the syntax (phrase structure, person/number agreement, some tense/aspect marking, subcategorization of nouns and verbs, and so on), relationships among sentence types (i.e. questions, negation, topicalization, "medio-passive," conjunction, and restrictive modification of noun phrases (relativization). Although the dissertation is intended to be a primarily descriptive grammar, Kendall attempts to describe the syntactic topics within a framework of transformational generative grammar, which she then judges to be an inappropriate and unenlightening way of accommodating the facts of Yavapai. A fair amount of space is devoted to solving the problems raised by this theoretical approach. In more recent papers, she has discussed the problem of -k and -m and "apparent homophony" (Kendall 1975); in Kendall 1976 she discusses various types of irrealis structures and in Kendall 1974 deals with relativization and topicalization.

As can be seen, even though Kendall's work has covered a number of areas within the higher levels of syntax in Yavapai, many essential aspects of the grammar are left undescribed. It is hoped that this dissertation will fill the descriptive gap. Since an adequate and, I hope, illuminating treatment of various syntactic topics is the goal of

Footnotes to Introduction begin on page 13.
this thesis, a premium will be placed on clarity and accuracy of description rather than on theoretical issues or notational mechanizations. Nevertheless, any scientific description implies an attendant theory, however poorly defined. The presentation here will be data-oriented and in the Americanist tradition of descriptive linguistics, but will make use of recent advances in linguistic knowledge, including an attention to the functional aspects of the syntax and semantics and the typological implications.

0.4 Sketch of the phonology and orthography

A brief sketch of the phonology and the orthographic conventions to be used here is offered merely to provide the reader with some "feeling" for the data. For a detailed analysis of the phonology, the reader is referred to Shaterian (n.d.). The phonological representations reflected in this orthography are approximately the underlying phonological forms. Since Tolkapaya has few rules of any morphophonemic consequence, the data should be quite straightforward. In a few cases, where abstraction might cause unnecessary confusion, a form that better represents the surface form will be used.

The orthography was designed by the UCLA field methods class with several considerations in mind: simplicity and faithfulness to the phonological facts of the language, ease of transcription (e.g., diacritics were specifically avoided), and close approximation to "normal" English orthography, in order that our teacher (and other non-
linguists) might more easily learn to read our transcriptions.

I do not intend to describe the phonetic details of Tolkapaya which, once again, have been meticulously described by Shaterian. I will merely mention a few facts to aid in reading the transcriptions. All stops are voiceless and unaspirated (at the systematic phonemic level), but phonetically can be aspirated, depending on the environment. Although pitch and three degrees of vowel length have been claimed by some to be phonemic, our orthography reflects the fact that such distinctions carry an extremely minimal functional load; we recognize only two degrees of vowel length and do not record pitch. The orthography is illustrated below in Table 1:

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Table 1: Tolkapaya phonemes in UCLA orthography
Sequences of phonemes are written with equals signs (=) separating phonemes that would otherwise be confused with di-graphs. So k=w is [kw], k=y is [ky], t=h is [th], and so on. This symbol is used to prevent an ambiguity with morpheme boundaries which are represented by a hyphen.

Stress in Tolkapaya (and other Yuman languages) is assigned morphologically to the root of the word; therefore our orthography does not mark stress.

In addition, with very few exceptions pretonic (unstressed) vowels are not organic; post-stress organic vowels are rare as well. The policy of this orthography is to write only demonstrably organic vowels. In this light, our more abstract representation shows Tolkapaya words to have numerous strings of consonants and few vowels. It must be kept in mind that this is the case phonemically, but that virtually the opposite is true phonetically. Very few consonant clusters are permitted on the surface; phonetic rules insert schwas (or syllabic) which vary in quality depending on surrounding consonants and (pretonically) the root vowel. Sometimes schwas will be barely discernible as transitional elements. This description is very much an over-simplification and Shaterian 1976 should be referred to for a detailed discussion of this problem.

It should be noted as well that vowel length presents various problems in Tolkapaya and in Yuman in general. Length is clearly reconstructable for Proto-Yuman, but the daughter languages evince varying degrees of length and
length is frequently variable. Minimal pairs for length still exist, however, for all of the languages, although pretonic long vowels have disappeared in Pai (Langdon 1977: 240). Indeed, in Tolkapaya as noted above, few vowels exist pretonically at all. Vowel length carries a weak functional load and interacts in complicated ways with loudness, stress, and pitch (Langdon 1977: 240). The point to be made here is that although the orthographic representation of length judgments will be generally consonant with the phonemic facts, a great deal of phonetic variation is possible with respect to vowel length, particularly in the mid vowels and diphthongs (for reasons I will not go into here).5

I would like to mention briefly the convention used here in representing a certain morpheme which plays a significant role in the syntax. The irrealis morpheme /-h/ has a number of variants whose conditioning requires some discussion.

As an independent clause final morpheme, irrealis /-h/ appears as the suffix /ha/. There is a possibility that the vowel -a is of the predicating variety often found clause finally and in other positions (see 2.161). In any case, the shape /ha/ in this position is obligatory. When suffixed to a stem ending in a vowel, the irrealis suffix is realized as -h. Generally, when suffixed to a stem ending in a consonant, the suffix appears as [-a], with one exception. When the next segment following the irrealis morpheme is a sonorant, the morpheme is phonetically [ah]. The
allomorphs are then /h/, /ha/, /a/, and /ah/. For convenience, all but the last form will be written in their surface forms. Where phonetic [ah] appears, only /h/ will be written, and the rules inserting a schwa between the consonants will be presumed to give the correct surface shape.

There are cases where vowels may be suffixed to words (or omitted) without signifying any difference in meaning. These incremental vowels have posed an analytical problem in other Pai languages as well. The only occasions where these vowels are totally optional, or possibly a function of the rhythm of the sentence, are the following: -e suffixed to the subject case marker on lexical nouns, -e suffixed to switch-reference -m on a clause that is not sentence final, and -a suffixed to switch-reference -k on a clause that is not sentence-final. Since these vowels are not morphemes, they will not be segmented.
NOTES

1 Kendall 1972 has been published as Kendall 1976, a work which I have not as yet seen.

2 See for instance Shaterian (n.d.).

3 See Langdon 1977 for a detailed discussion of stress in Yuman.

4 There are a few roots which have pretonic organic vowels, such as ima 'dance', unuu 'incompleive', ukwa 'sense', and tipiry 'be strong'. Alan Shaterian has analyzed these pretonic vowels as (diachronic) derivational prefixes in a presentation to the 1979 Hokan-Yuman Languages Conference, Los Angeles, California. The vowel that appears in the personal prefix form of certain verbs (5.44) when used elliptically is meaningful.

5 I discuss length variation as a problem in the reconstruction of the development of the mid vowels in Pai in Hardy 1979.

6 Hinton 1977 discusses this problem in some detail.
CHAPTER I: Basic Morphology and Syntax of Simple Sentences

1.1 General typological remarks

Tolkapaya, like the other Yuman languages, has the basic word order SOV. Tolkapaya is rigidly verb-final. The order of subject and object noun phrases can be reversed for topicalization purposes, but there is a strong tendency for the first noun in a sentence to be the subject, and to be case marked as such. Nouns and verbs with their affixes make up the basic grammatical units of Tolkapaya; a few particles exist that cannot be assigned either nominal or verbal status.

Verbs and auxiliary verbs are the core of the sentence. Verbs are marked for person and number of the subject (and object, if transitive). In addition, there are a number of tense/aspect and modality affixes that further specify a verb. Nouns can be marked for plural; they are marked for case, and may be specified by demonstrative suffixes.

Tolkapaya has another feature of the Yuman languages: a system of progressive switch-reference marking in sentences.

This chapter is intended to provide an overview of the simple sentence in Tolkapaya. A number of topics that are merely sketched here are certainly deserving of more attention than they will be given. However, they are peripheral to the topic of this thesis. In fact, some have been treated in much more detail by others studying Tolkapaya and Yavapai in general.
1.2 The verbal system

The verb is at the heart of the grammatical system in Tolkapaya. Lexical items that are syntactically distinct in other languages such as English (i.e., parts of speech including nouns, adjectives, adverbs, numbers and so on) are manifested as verbs in Tolkapaya. An appropriately marked verb is the minimal syntactic unit of a Tolkapaya sentence. The inflectional system for verbs is much more complex than for nouns, as can be seen in the description that follows.

1.2.1 Agreement

Verbs in Tolkapaya are obligatory marked for the person and number of the subject of the sentence (and object, if transitive), though this statement must be qualified for certain auxiliary constructions, as will be seen. Agreement for person with the subject is expressed in prefixes to the verb root, shown below:

'--indicates first person intransitive subject
m--indicates second person intransitive subject
ø--indicates third person intransitive subject; a vowel-initial root has an h-onglide in third person

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<th>Subject:</th>
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</table>

Schematically, then, agreement markers are positioned as follows: (plural object) + (person) + VERB + (plural object).

Table 2: Tolkapaya object/subject markers
Examples given below are in the simplest form possible for a Tolkaaya sentence. In this simple construction, the verb is marked only for agreement and is not otherwise suffixed, with one exception. The speaker's citation form for verbs is the same as this short form or absolutive form (of course, without person marking). The absolutive form is the bare stem of the verb for stem ending in vowels; stems ending in consonants have a vowel -i suffixed to the stem. This practice is not that common in Tolkaaya—the short form seems to be favored only with utterances that are in fact "short". The short verb form—with -i suffix or lack of a final suffix—indicates a nonfuture declarative sentence (if intonation is neutral). Examples:

(1) '-chqam-i (1/3-hit-Decl)
'I hit him.'

(2) '-mun-i (1-cold-Decl)
'I'm cold.'

(3) m-chqam-i (3/2 or 2/3-hit-Decl)
'You hit him; he hit you.'

(4) pa-'-u (pl.obj-1/3-see-Decl)
'I saw them.'

(5) ny-'u-ch-i (3/1-see-pl.sj.-Decl)
'They saw me.'

So normally there is little opportunity for ambiguity of reference, since context or pronouns make clear the person of the subject. The following examples with pronouns demonstrate this:
(6) ma-che m-chqam-i (you-sj 2/3-hit-Decl)
   'You hit him.'
(7) ny-tha-ch m-chqam-i (dem-stem-sj 3/2-hit-Decl)
   'He hit you.'

Personal prefixes make no reference to gender, so this must be determined from context.

Plural marking on verbs is generally accomplished by adding the suffix -ch. In conjunction with this, some verbs may undergo lengthening of the root vowel. Also, there is a small set of verbs that are suppletive for number (which may include a dual-plural distinction as well). There is a somewhat larger set of verbs whose plurals are formed by ablaut of the root vowel. These morphological ablaut alternations are relics of a Proto-Yuman verb alternation pattern and are not a productive means of plural formation.¹ Various examples are given below:

   yaami (sg), pem (dl), yaamchi (pl) 'go'
   yaki (sg), tarvi (dl), taarvi (pl) 'be lying down'
   wa (sg), paay (dl), yoo (pl) 'be sitting, situated.'
   yurmi (sg), yurmchi (dl), chpuvmi (pl) 'go into'

A number of these position and motion verbs tend to show remnants of older plural markers as well (e.g. n-, t).

   vskwii (sg), tvskwii (dl), vskwiichi (pl) 'be standing'
   vaa (sg), kav (dl), nvaad (pl) 'come'
   nalki (sg), tnalki (dl), nalkchi (pl) 'come down'

¹Footnotes for Chapter I begin on page 77.
Verbs that ablaut are primarily of the type e\textsuperscript{e} (sg) alternating with ay (pl), though a few verbs are of the type o\textsuperscript{aw} and i\textsuperscript{uy}.

qlyep/qlyayv 'be bad'
vte/vtay 'be big'
qe/qay 'be dirty, sticky'
pi/puy 'die'
thvli/thvluy 'to have a hole(s)'
chovi/chawi 'fight'

Although suppletive and ablauting verbs are very interesting from a historical point of view, they comprise a small percentage of Tolkapaya verbs. The regular means of indicating plural subject is by -ch suffixation. Occasionally, some of the less common or frequent of the ablauting or suppletive verbs will appear with the regular plural formation -ch rather than the lexically prescribed one. So sometimes one will hear yaamch- 'go (pl)' rather than the suppletive form, or qlyepch- 'be bad (pl)' rather than qlyayv-.

1.22 Tense/aspect and modality: a preview

The expression of tense/aspect and modality in Tolkapaya is accomplished in three basic ways—with the affixation of a morpheme or morphemes, by using an appropriate auxiliary construction or by a combination of both. These various strategies, the participating morphemes, the possible arrangements of morphemes that enter into the manifestation of tense/aspect, modality and adverbial modifications are the touchstone of this thesis. At this time, then, the
following brief introduction to this topic will serve only to whet the reader's appetite for later sections on modality and aspect.

The basic temporal opposition in Tolkapaya is an aspectual one, rather than one of tense. In other words, the temporal distinctions observed in Tolkapaya do not relate the situation being referred to to some other time or to the time of the utterance, but rather are of an aspectual nature. By aspect I mean the "different ways of viewing the internal temporal constituency of a situation" (Comrie 1976:3). The various aspects that are expressed grammatically in Tolkapaya include perfective/imperfective, incomplete, punctual, habitual, perfect, and repeated or additional occasions of an event. Aspect may be marked by the presence of certain affixes (see Ch. II) and/or by the use of certain auxiliary constructions (see Ch. V).

1.221 One of the most common occurrences of aspectual marking (in this case perfective/imperfective) is found as part of a formulaic auxiliary construction used to indicate that a clause is an independent declarative sentence. This construction is described in detail in 1.411 as the Final Auxiliary Construction, but is introduced here in order that the reader may identify it in later examples. The perfective/imperfective opposition is conveyed by the suffixes -ny and -m, respectively, when they are part of the Final Auxiliary Construction. One of these suffixes is attached to one of a set of behavioral auxiliaries (yu='be', wi='do',

19
'i='say' which is inflected to agree in person with the subject of the main verb. The main verb itself is suffixed with -k the 'same subject' switch-reference marker. The possible constructions, then, are -k+yum, -k+wum, -k+winy, -k+'im, -k+'iny. An example of this final auxiliary construction is found in each of the following sentences:

(8) m-neh-k m-wi-ny (2/3-kill-SS 2-do)
'You killed him.'

(9) smaa-k yu-m (sleep-SS be-impf)
'He's asleep.'

Further explication of this construction will be deferred until 1.411.

1.222 An ongoing, but not yet realized action or process is predicated through the use of the incompletive auxiliary unuu, as shown in the next example:

(10) nya-ch vam '-tarhar-k '-unuu-k '-yu-m (I-Sj now 1-work-SS 1-Inc Aux-SS 1-be-impf)
'I'm (in the process of) working now.

By contrast, future occurrences (or more accurately, unrealized situations) are manifested through the use of both the progressive auxiliary unuu and the irrealis morpheme -h (0.4, 2.171) suffixed to the main verb.

(11) 'inok '-tarhar-a-k '-unuu-k '-yu-m (later 1-work-Irr-SS 1-Inc Aux-SS 1-be-impf)
'I'll be working later.'

1.223 Explicitly perfect situations, the knowledge of which may be judged to be based on inference, are overtly
marked by the presence of a suffix -ा attached to one of the behavioral auxiliaries. This suffix will be called the Perfect/Inferential (Perf), following Comrie's observation that in some languages the perfect and the inferential share a formal identity. In order to specify the meaning conveyed by this form, it might be useful to cite Comrie's explanation for such an identity.

"With the perfect, a past event is related to a present state; in other words, the past event is not simply presented per se, but because of its relation to a present state. With the inferential, the past event is again not presented simply per se, rather it is inferred from some less direct result of the action" (Comrie 1976:110).

The following examples demonstrate this usage:

(12) 'wi-ny kchiich-k wi-o-k wu-m
    (money-dem steal-SS do-Perf/Inf-SS do-impf)
    'I've been robbed.'

(13) 'ha-v-ch 'ha-thpa-k yu-o-k yu-m
    (water-dem-sj *-freeze-SS be-Perf-SS be-impf)
    'The water was frozen.'

1.224 Tolkapaya has a punctual construction which employs both a prefix and an auxiliary to convey the sense of a situation viewed as having no duration, being momentary (2.12). Two suffixes and an auxiliary verb participate in various combinations to impart the meaning that the predicated action is performed in addition to another (unspecified)
action and/or the specified agent in conjunction with other
unnamed persons performing a certain act (2.11). Tolkapaya
has a habitual construction involving an interesting auxi-
liary structure, atypical switch-reference marking and the
plural morpheme -ch. The habitual construction is discussed
in detail in 1.43.

1.225 Modality and adverbial modification, in general,
are very complex topics that play major roles in the syntax
of Tolkapaya. The boundaries of aspectual distinctions and
modality are not always clear-cut, but overlap and intersect
in significant ways. Modality will be taken to be modifi-
cation of a predication according to the speaker's attitude
towards the utterance; i.e. the speaker's commitment with
respect to the factual status of the utterance, the speaker's
expectations about a situation, or any overt expression of
deviation from a neutral, factual, noncontingent statement.

In Tolkapaya, several suffixes can be used to convey
varying degrees of speaker certainty about an utterance.
Also, the source of the information can be marked by using
an inferential suffix or auxiliaries indicating (specifical-
ly) inference from direct physical evidence or a supposition
based on appearances. Wishes, obligations, intentions, de-
sires, pretense, and various types of nonfactual situations
are expressed through assorted constructions using affixes
and auxiliaries. The items that participate in the expres-
sion of modality in simple sentences will be further identi-
fied and described in Chapter II. Succeeding chapters will
investigate the role in complex sentences involving adverbial modification.

1.23 Other verbal morphology

Modification of the verb in ways other than aspect and modality can be found in Tolkapaya, both in the form of affixation and adverbial modification of complex sentences. In this section, other forms of modification by verb affixation will be described. Modification of the basic lexical verb by affixation is used in order to indicate that the functional roles of the arguments of the verb have been altered—to indicate causality and benefactive relationships, as well as various types of stative situations that are like passives (or like medio-passives) in effect. The intensifier morpheme -ra is also discussed in the context of morphology that is not strictly modal or aspectual.

1.231 Tolkapaya has numerous devices for drawing particular attention to certain aspects of the speech event. One such mechanism is the altering of functional roles of arguments of the verb by introducing additional arguments as terms of the predicate. An applicative suffix is used in this way to indicate a causative or benefactive. A causative can be marked by several affixes which may cooccur with the applicative morpheme, but are sufficient in themselves to derive a causative verb. The causative morphology is lexicalized for some verbs—the root no longer has any individual synchronic meaning. Two derivational suffixes are available as well to convey a stative, descriptive sense
to a predication of an event in order to shift attention to the object acted upon or to the event (activity) itself.

1.2311 The applicative suffix -(w)o indicates the presence in the sentence of an additional argument on the verb. In other words, the presence of -o- signals that a logically one, two, or three-argument predicate has an extra argument. The grammatical roles of the affected arguments are then shifted as well. The meaning conveyed is either causative (in the sense of 'make' or 'allow') or benefactive (in the sense of 'on behalf of' or 'for the benefit of'. Causative examples are given below:

(14) hmany-h-a 'ich-maa-o-k 'wu-m (baby-dem-abs s.t.-eat-App-SS 1-do-impf)
'I fed the baby.'

(15) nya-che J.P. 'mii-o-k 'wu-m (I-Sj J.P. 1/3-cry-App-SS 1-do-impf)
'I made J.P. cry.'

The following examples are benefactives, which show by the change in personal prefixes that the grammatical roles of the objects have shifted. The benefactive object (recipient) becomes the direct object; the patient becomes an oblique object.

(16) Lynn-che qwaqt-a ny-ch-kyat-o-m 'maa-k 'wu-m (Lynn-Sj meat 3/1-CS-cut-App-DS 1/3-eat-SS 1-do-impf)
'Lynn cut up the meat for me and I ate it.'
(17) nya-ch 'chk=yuka ny-knav-o-k 'yu-m
(I-sj tale-abs 1/2-tell-App-SS 1-be-impf)
'I told you a story.'

In examples 14 and 15, where the verb stem ends in a vowel, there is phonetically a "transitional" glide -w- between the final vowel of the stem and the applicative -o.

One intriguing consequence of this fact is that, any time a morpheme is introduced between the verb-final verb root and the applicative morpheme, the so-called "transitional" glide remains attached to the root and is then separated from the -o- of the applicative by the intervening morpheme. The morphemes which may occur in this position are the -ch of plurality (1.21) and the suffix -ny meaning 'too' (2.112).

This phenomenon does not take place with any other -o- suffixes, such as the perfect/inferential, (as far as can be tested in this way). There is likewise never a case where [w] intrudes between a consonant final root and the applicative -o. Consider the following pairs of examples:

(18a) 'mnye-[w]o-k 'wu-m (1/3-be:tasty-App-SS 1-do-
impf)
'I made it tasty.'

(18b) Jeni-che mnye-[w]-ny-o-k war-k yu-m (Jeni-sj be: tasty-w-too-App-SS additional-SS be-impf)
'Jeni made it tasty too.'

(19a) Lynn-che Sophia Loren lwi-ra-k yu-m (Lynn-sj Sophia Loren look:like-Ints-SS be-impf)
'Lynn looks like Sophia Loren.'
(19b) kthye-ch Sophia Loren ny-vlwi-[w]-ny-o-k war-k yu-m
(doctor-sj Sophia Loren 3/1-look:like-w-too-App-SS additional-SS be-impf)
'The doctor made me look like Sophia Loren too.'

(20a) nya-che nymi-nyu '-pi-[w]o-k '-wu-m (I-sj cat-dem 1/3-die-App-SS 1-do-impf)
'I made the cat die.'

(20b) nya-ch-che nymi-nyu '-pi-[w]-ch-o-k '-wu-m (I-pl-sj cat-dem 1/3-die-w-pl-App-SS 1-do-impf)
'We made the cat die.'

1.2312 Example 16 shows an instance of a ch- causative prefix that is one of the causative morphemes that can accompany a verb marked with the applicative -o-. Other causative morphemes include the t-, k- and s- causative prefixes that occur on some verbs. Some verbs appear to be lexicalized with a causative prefix. The causative morphology may appear without the applicative morpheme being added.

(21) '-t-smaa-ch-k '-wu-m (1/3-CS-sleep-pl-SS 1-do-impf)
'I put them to sleep.'

(22a) nya'-yako '-t-thuuny-k '-wu-m (I 1-bed 1/3-CS-be: soft-SS 1-do-impf)

(22b) nya'-yako '-t-thuuny-o-k '-wu-m (I 1-bed 1/3-CS-be:soft-App-SS 1-do-impf)
'I made my bed soft.'

(23) 'wa-nyu '-s'-am-k '-wu-m (door-dem 1/3-CS-go: around(sg)-SS 1-do-impf
'I closed the door.'

Notice that in the above examples it is the object of causation or the benefactive recipient which is the grammatical object of the verb (see 16 and 17) as shown in the person marking. The choice of a causative or of a benefactive sense is determined by the context and the semantics of the verb. Some verbs are more or less equally likely to take a causative reading as a benefactive; other verbs will tend more strongly to one reading over the other. For instance, ge 'be dirty' + ə is more likely to mean 'get, make dirty' than 'be dirty for someone' and maa 'eat' + ə is more likely to mean 'feed someone' than 'eat s.t. for someone' and knav + ə is more likely to mean 'tell s.o. s.t.' than 'make s.o. tell s.t.'.

Examples 18–20 show verbs with vowel-final roots taking the applicative marker without any intervening morpheme (the a version) and with an intervening morpheme (the b version).

It is hard to know what to make of this phenomenon. If the allomorph variation is grammatically conditioned, one might expect [w] to appear only with certain morphemes, but this happens with any intervening morpheme. The presence of [w] is at least in part phonologically conditioned, since it occurs only with vowel-final roots.

Evidence from other Yuman languages suggests that the various causative prefixes were once semantically distinct. In Tolkapaya no consistent meaning (other than causative)
can be applied to these prefixes. Examples showing common occurrences of these prefixes are given below.

The most common causative prefix is the t- prefix:

- t-nyur 'write' (cf. nyur 'be a design')
- t-hwak 'bring two together' (cf. hwak 'be two')
- t-poq 'spill s.t.' (cf. poq spill out, over)
- t-skwii 'stand s.t. up' (cf. v-skwii 'be standing')
- t-hach 'melt s.t.' (cf. hach-v 'melt')

Some verbs are lexicalized with a causative prefix; the bare root has no meaning in itself. Consider the following verbs with ch- prefixes.

- ch-qam 'hit'
- ch-kyo 'bite'
- ch-han 'paint'
- ch-wo 'put, place'
- ch-mnyay 'chew' (cf. mnye/mnyay 'be tasty')
- ch-vskwii 'stand s.t. up' (cf. vskwii 'be standing')

Whereas with some verbs the causative prefix derives a straightforward causative meaning, with other verbs the meaning is obviously lexicalized according to the prefix that is used. This is generally the case for s- and k- in particular.

- s-'am 'close a door' (cf. 'am 'go around' (sg.))
- s-'han 'admire' (cf. 'han 'good')
- s-kav 'bridle' (cf. kav 'two go together')
- k-toh 'kick'
- k-v-naw 'lift, carry' (cf. vnaw 'grab')
1.2312 A property of verbs often closely related to the notion of causality or locus of control is the expression of passive-like notions—stativity, "perfectness", \(^3\) and so on. Morphologically, these qualities are expressed in several ways.\(^4\)

The perfect construction was described earlier (in 1.22) as consisting of a behavioral auxiliary suffixed with \(-\text{g}-\). It should not be surprising that in the following discussion of stativity and passive-like constructions that the "perfect" notion will persist. The only way to focus on the object of an action rather than its agent and still have the agent specified is through topicalization by fronting. The constructions that we will be concerned with here involve the shifting of attention from the agent and action (as in an unmarked predicate) to the patient and the result of an action. In these cases the agent is unknown or unspecified. Two means of accomplishing this shift of attention are available; both employ suffixes with slightly different semantic import. The two suffixes are \(-\text{v}\) and \(-\text{ch}\).

Derived verbs with \(-\text{v}\) and \(-\text{ch}\) focus on a state that is standing in a particular relation to some other state, action, or event, where the agent and patient are not specified as distinct.\(^5\) Although the meaning supplied by \(-\text{v}\) and \(-\text{ch}\) suffixed is similar, there are regular semantic and syntactic differences between \(-\text{v}\) and \(-\text{ch}\) suffixed. Both of these constructions are formed by regular derivational processes.

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and verb- succesfully or verb-chicious forms would in general seem to require separate lexical entries.\textsuperscript{6}

The verb-v construction is formed in the following way:

\textbf{Noun-ch \_ PM-VERB-v- terminal suffixation (see 1.41)}

In other words, the grammatical subject usually receives the \textbf{-ch} subject case marker,\textsuperscript{7} the verb is suffixed with \textbf{-v}, then the perfect construction may occur followed by the Final Auxiliary Construction. In the verb-v construction the stative auxiliary \textbf{yu 'be'} is found much more frequently than any other behavioral auxiliary in both the perfective construction and the Final Auxiliary Construction. An example follows:

\begin{center}
(24) \textit{ma-che m-chqam-v-k m-ulu-si (you-sj 2/3-hit-Sta-SS 2-be-prf)}
\end{center}

\textit{You were hit.}

In this example, the active verb \textit{chqam 'hit'} is suffixed with \textbf{-v}. The recipient of the action is the grammatical subject and the logical subject of the sentence—logical subject, because what the \textbf{-v} construction does is predicate a quality of some noun. So, in this case, the subject \textbf{ma} is described as being in the state of having been hit or as having the property of being hit. This semantic interpretation of the \textbf{-v} construction can best be explained by comparing active and stative verbs.

Suffixed to active verbs, as in the previous example, \textbf{-v} derives a verb which describes the quality of being in a
state resulting from a previous action. This meaning is most easily translated with a passive expression in English. However, with stative verbs such as spo 'know', 'u 'see', 'e yii 'like', -v suffixation describes the subject noun as being in a state as a (potential) goal of another verb. For example, consider the following pairs of y-less verbs with their -v counterparts.

(25a) m-chita nya ny-'uu-k yu-m (2-mother me 3/1-see-SS be-impf)

'Your mother saw me.'

(25b) nya-che '-'uu-v-k'-yu-ny (I-sj 1-see-Sta-SS '-be-prf)

'I was visible.' (i.e. has the potential to be seen)

(26a) nya-ch 'e.'-yii '-qyat-k '-yu-m (I-sj *1/3-like 1-very-SS 1-be-impf)

'I like it.'

(26b) 'e yii-v qyat-k yu-m (*like-Sta very-SS be-impf)

'It's nice, pretty.' (i.e. is a potential object of liking)

(27a) Jack-che chkwar-k yu-m (Jack-sj laugh:at-SS be-impf)

'Jack laughed.'

(27b) Jack chkwar-v-k yu-m (Jack laugh-Sta-SS be-impf)

'Jack is funny.' (i.e. is a potential goal of someone's laughing)

(28a) molo ny-yii-k 'yu-m (*1/2-pity-SS 1-be-impf)

'I pity you.'
(28b) molo yii-v-k 'yu-m (* pity-Sta-SS 1-be-impf)
'I'm sad.' (i.e. is potentially deserving pity)

With both active and stative verbs the \(-v\) construction predicates an attribute of the noun. The fact that the attention here is focused on the noun is reflected by the regularity of subject case marking on the noun and the prevalent use of the stative auxiliary \(yu\) 'be', two factors which will be seen to distinguish the \(-v\) construction syntactically from the \(-ch\) construction. Since these types of stative sentences exist, it should be clear that something other than a strictly "passive" sense is being expressed by the \(-v\) construction. The following sentences further prove this point.

(29a) Allen-che poq-k wu-m (Allen-sj spill-SS do-impf)
'Allen spilled it.'

(29b) poq-v-k yu-m (spill-Sta-SS be-impf)
'It spilled.'

(30a) t-hiny-k wu-m (CS-move-SS do-impf)
'He moved it.'

(30b) t-hiny-v-k yu-m (Cs-move-Sta-SS be-impf)
'It moved.'

In these cases, not only is there no agent expressed, there is no obvious outside agency involved that is distinct from the experiencer of the situation. Since this is true of reflexives and reciprocals as well, it is not surprising that they are formed in exactly the same way as other types of \(-v\) constructions with the morpheme \(yen\) 'self' added for explicitness.
(31) yem m-ktoh-v-k m-yu-m (self 2/3-kick-Sta-SS 2-be-impf)

'You kicked yourself.' (lit. 'you got kicked by yourself')

It is my impression\(^8\) that sentences without yem simply do not refer to any agency at all—they may in fact be used in a reflexive sense as well as any other.

Returning to the question of differences between the -v construction and the -ch construction, we will see that the syntactic differences reflect the semantic ones. The verb -ch construction typically involves a noun with no subject case marking, a verb suffixed with -ch,\(^9\) and the Final Auxiliary Construction. The behavioral auxiliary that is preferred in both places is wi 'do', rather than the stative yu 'be'.

Noun-Ø Verb + ch- terminal suffixation (see 1.41)

Sentences with the -ch construction appear to focus attention on the whole situation (i.e. action, state, or process) itself, rather than on the state or quality attributable to some noun in the sentence. The sense is actually closer to that of the English passive than is the -v construction.

(32) Bonnie 'uu-ch-k wi-ny (Bonnie see-Ps-SS do-prf)

'Bonnie was seen.'

Compare this to 33:

(33) Bonnie-ch 'u-v-k yu-ny (Bonnie-sj see-Sta-SS be-prf)
'Bonnie was visible.'

In the -ch construction, a feeling of an implied agency or locus of control affecting the noun of the sentence is much stronger. Consider the following set of verb forms:

(34) glyee 'dislike'; glyeech 'be disliked'; gleyeep ¹⁰ 'be ugly' (i.e. a potential object of dislike)

(35) 'e yii 'like'; 'e yiich 'be liked'; 'e yiiv 'nice, pretty' (i.e. a potential object of liking)

(36) maa 'eat'; maach 'be eaten'; maav 'be edible'

(i.e. a potential object for eating)

The semantic constrast described above is nicely reflected in the following pair of sentences.

(37) 'wi-v-ch ch'han-y-k yu-m (rock-dem-sj paint-SS be-impf)

'It's a painted rock.'

(38) 'wi-h-a ch'han-ch-k wu-m (rock-dem-abs paint-Fs-SS do-impf)

'The rock is (being) painted.'

It's clear from this pair of sentences that -y suffixation reflects the state of an object resulting from a situation whereas -ch suffixation refers more closely to the activity itself.

In this context, we will consider a y- prefix which has been suggested by Hinton (1977:233) to be a positional variant of the -y suffix in Havasupai. Hinton goes on to say that the y- prefix more specifically means an "action origin-
originating from the self", whether directly caused or otherwise motivated by the recipient of the action itself. Tolkapaya certainly has a $v$- prefix that is used in somewhat the same way. There are few unambiguous examples of $v$- prefix, however, in Tolkapaya. The reason for this problem of identification is that the punctual construction consists of a $v$-prefixed verb followed by the auxiliary 'i, which may appear merely as a glottal stop or the vowel $i$—neither of which is easy to hear in that position. It is possible that these are instances of one and the same morpheme. The question is whether or not there is a construction involving $v$-prefixation alone. In cases where there is a $v$- suffix as well, it seems likely that the punctual construction is not involved.

(39) $v$-hach-$v$-a-k unuu-k yu-m (v-melt-Sta-Irr-SS Inc Aux-SS be-impf)
'It will melt.'

(40) '-ch-$v$-skwii-k '-wu-m (1/3-CS-$v$-stand-SS 1-do-impf)
'I stood it up.'

(41) $v$-t-hiny-$v$-k yu-m (v-CS-move-Sta-SS be-impf)
'It moved.'

(42) $v$-hiny-$v$-k yu-m. (v-move-Sta-SS be-impf)
'It had moved.'

Jeni Yamada 1979 has been able to get differences between $-v$ and the combination of $v$- and $-v$. These differences are rather vague and don't always appear to be consistent.
Consider the following examples:

(43a) 'way-ch v-qaw-k yu-m (chair-sj v-break-SS be-impf)
'Someone broke the chair.'

(43b) 'way-ch v-qaw-v-k yu-m (chair-sj v-break-Sta-SS be-impf)
'The chair broke by itself.'

(44a) v-nal-k yu-m (v-drop-SS be-impf)
'IT dropped.'

(44b) v-nal-v-k yu-m (v-drop-v-SS be-impf)
'It had dropped.'

In any case, the use of the v-prefix outside of the punctual construction is much less common than the -v suffix. It is not clear what the v-prefix should be called—it mitigates somewhat the stative effect of the -v suffix and seems to focus more on the activity, but does convey less of a sense of an outside agency than the -ch construction. There does not appear to be a clear-cut consistent semantic difference between v-, -v, and their combination, as there apparently is in Havasapai.

1.232 The morpheme -ra is an emphatic suffix used to intensify the force of a stem, much like the adverbs really or very in English. ra- is suffixed to the stem, as follows:

(45) 'han-ra-v-k yu-ny (good-Ints-Sta-SS be-prf)
'It was very good.'

(46) nya-ch kwathk'ol-a '-hnaaq-ra-k '-yu-m (I-sj apple-abs 1/3-want-Ints-SS 1-be-impf)
'I really want an apple.'
(47) tyach-ra hpira '-hwal-ch-k '-wi-ny (corn-Ints only 1/3-plant-pl-SS l-do-prf)
    'We planted only corn.'
-ra sometimes occurs in the form raa, as shown below:
(48) 'um-raa-i (Neg-Ints-Abs)
    'No! (emphatic)'
(49) yaam-raa-k yu-m '-yii-k '-yu-m (go-Ints-SS be-impf I-think-SS 1-be-impf)
    'I think he really went.'

1.233 There are some verbs in Tolkapaya which must have been derived from nouns historically (Langdon, personal communication). To my knowledge, this is not a productive process in Tolkapaya. These cases involve a suffix -y, a Proto-Yuman suffix deriving verbs from nouns (Langdon 1976). This suffix was first identified in a Yuman language by Halpern for Yuma. Some verbs that possibly have derived from nouns include the following:

nywev 'inhabit' (ny-Poss, wa 'house', y 'denominal suffix', y- stative suffix)

In Tolkapaya, wa+y underwent the regular monophthongization process for ay, yielding e (Hardy 1978). Some of these verbs show the e/ay singular/plural ablaut alternation. Compare the verb 'be fat' se (sg.)/say (pl.) to the corresponding noun 'fat, grease' say.

In some words, more than one prefix can be used to derive a causative verb with a specialized meaning, as the
examples below show.

nyur 'be a design'; t-nyur 'write, make designs';
t-t-nyur 'write w/something' (i.e., cause s.t. to
make a design)

paa 'grow (intrans.) up'; ch-paa 'raise up, grow
s.t.'; ch-k-paa 'climb s.t.'
kav 'two go together'; t-t-kav 'gather s.t. together';
k-t-kav 'divide'

In sets with viable verb roots, the semantics of the
various prefixes can sometimes be compared. Synchronically,
there is no single meaning that can be attached to any par-
ticular causative prefix. The first set below can be com-
pared to the set with the root kav directly above.

   t-kav 'meet, gather, drape around'; s-kav 'bridle
s.t.'; k-kav 'buy'

   -qam (root w/no meaning); ch-qam 'hit'; t-qam
   'bump into'; s-qam 'push s.t. into'; k-qam 'stumble
over'

   -toh (root w/no meaning); ch-toh 'kick at s.t.';
   s-toh 'poke'; k-toh 'kick s.t.'

These specific meanings obviously have to be lexicalized for
each prefix-verb combination.

1.3 The nominal system

Nouns in Tolkapaya do not take the wide range of inflec-
tion found with verbs. Nouns are optionally marked for num-
ber and trigger agreement on the verb. When unmarked for
case (or in the object case) a noun ending in a consonant
will be suffixed with the 'absolutive' marker -a. Nouns in citation form also have -a. There is a small fixed class of derived nouns whose incremental vowel suffix is -e. Many of these are clearly adverbial and retain the -e when case marked and will be discussed in Sec. 1.35.

1.31 Number

Plurality is indicated on nouns in several ways. The most common way of marking a noun plural is by lengthening the root vowel. For emphasis, a long root vowel can get "extra", affective lengthening. In addition, the root may be suffixed with the plural morpheme -ch. The following examples 50-53 are illustrative:

(50) 'wa 'house'; 'waa 'houses'
(51) 'pa 'person'; 'paacha 'people'
(52) hmanyaa 'baby'; hmaanya 'babies'
(53) npi 'aunt'; npiicha 'aunts'

A small set of nouns have a vocalic ablaut alternation to indicate plurality. This means is nonproductive and is a relic of an earlier process in Proto-Yuman. Some of these are arguably verbs, and all were probably verbs in some earlier stage of Yuman.

(54) vqi 'woman'; vquuya 'women'
(55) vha 'old man'; vhaa 'old men'
(56) hume 'son' (ms); huchumaya 'sons'
(57) vche 'daughter' (ms); vchaya 'daughters'
1.32 Case

Grammatical case in Tolkapaya is manifested by the opposition -ch (subject) with Ǿ or the absolutive form (definite, indefinite object) and -k -l, and -m (oblique object). Subjects are marked an extremely high percentage of the time; only rarely is -ch omitted. If one wishes to focus on a noun phrase other than the subject by preposing that noun, the subject must be marked as such. Occasionally, the tendency to mark the first noun in a sentence as the subject is so great that the preposed (object) noun will be suffixed with -ch \(^{13}\) as well. Another consequence of the pervasiveness of this process is that the logical subject of a predicate nominal in Tolkapaya is now often marked with -ch, as well as the predicate noun itself (the regular case). The fact that both the subject noun and the predicate noun are being marked with -ch in predicate nominals has serious implications for the syntactic status and development of the predicate nominal construction in Tolkapaya. This topic is considered in depth in section 5.2222.

There are three other case suffixes which specify the role of an NP in the sentence. The first suffix we will consider is -l, which is used to mark location within or motion into some point of reference. In Tolkapaya -l also appears to serve a more general function of a (nonspecific) locative/directional case marker, especially when attached to the demonstrative stem nyu- (1.33). The most common meaning of
nyu-l is 'away'. Examples 58-63 show cases with nyul.

(58) nyimi-nyu 'wa-v-l m-'oy-i (cat-dem house-dem-Loc 2/3-bring-Imp)
    'Bring the cat in the house.'

(59) Lynn-che 'ha-k'am-l man-k yu-ny (Lynn-sj water-
    Rel-go:around-Loc fall-SS be-prf)
    'Lynn fell in the river.'

(60) 'kwa-v-ch k'u-v-l yak-k yu-m (knife-Dem-sj
    basket-dem-Loc lie-SS be-impf)
    'The knife is lying in the basket.'

(61) nyu-l m-ch-yaam-i (Stem-Loc 2/3-CS-go-Imp)
    'Send it away!'

(62) nyu-l m-ham-i (Stem-Loc 2-look:far:off-Imp)
    'Look out!'

(63) vqi-v-ch nyu-l yaam-k yu-m (woman-dem-sj stem-loc
    go-SS be-impf)
    'The woman went away.'

The two case markers -k and -m raise an issue which has
plagued Yumanists throughout the years. This issue, which
is fated to recur throughout this study as well, is the prob-
lem of what Kendall (1975) referred to as "apparent homo-
phony".14 That is, in Yuman, a very small set of affixes
are pressed into service to perform an extremely wide variety
of grammatical functions. As Kendall (and others) have
pointed out, homophony to such a degree would be highly
marked and improbable. The question, of course, still remains as to where to draw the line in assigning semantic/grammatical identity to the various occurrences of these affixes. The Yumanist tradition seems to have been to tend to assume a common identity or to attempt to establish a common identity. I am in sympathy with this, but believe the problem must be approached with a degree of rigor. The problem is particularly seductive because the answer lies somewhere in the past in many cases. Some of the morphemes must have been related historically, but whether or not the relationship is still valid synchronically must be determined methodically. In some cases I will avoid the whole issue as being peripheral to my main concern here. In other cases, I will make judgments and try to motivate them.

Returning to -k and -m, these affixes above all others have been the subject of much of this sort of discussion among Yumanists. Among the functions of -k and -m are included case-marking in a range of roles, directional marking on verbs, switch-reference marking, aspect, and modality marking. These various faces of -k and -m will be returned to later. For now, let us turn to the role of the -k and -m case markers. I agree essentially with Kendall (who motivates the claim at length) that there is a single case marker -k and (perhaps) a single case marker -m. They simply cover a fairly wide range of semantic territory.
-k is typically used to indicate a motion in a direction towards a point of reference (often the speaker) or location at some point of reference. It seems to be more neutral than -m and has no nondirectional/locational uses as a case marker. Examples:

(64) Steve-che hmany-v-a mat-k ch-nal-k wi-ny (Steve-sj baby-dem-abs ground-Loc CS-fall-SS do-prf)
'Steve dropped the baby on the ground.'

(65) m-yure-nyu waye-nyu-k m-chwo (2-dress-dem chair-dem-Loc 2/3-put:Imp)
'Lay your dress on the chair.'

(66) ny-nyu-k m-s-haa-m-i (dem-Stem-Loc 2/3-hang-Dir-Imp)
'Hang it up here.'

(67) sk'it-k ny-svo-h-k 'unu-k 'yu-m (corner-Loc 1/2-wait:for-SS 1-Inc Aux-SS 1-be-impf)
'I'm going to wait for you at the corner.'

The suffix -m has a number of case roles including instrumental, comitative, and directional/locational. As a directional/locational suffix, -m indicates motion directed away from a certain point of reference, or location at a position away from a point of reference.

(68) Wikmunk-wa-h-m mpar-v-a m-khnul-m-i (San Francisco Mt-dem-Loc leg-dem-abs 2-stretch-Dir-Imp)
'Drape your legs over San Francisco Peak.'

43
(69) hmany hme-v-ch 'hat-v-m man-i (child boy-dem-sj
horse-dem-Loc fall-Abs)
'The boy fell off the horse.'
The choice of -k/-m depends on point of view and sometimes
either one is appropriate:
(70a) ma-ch ha'mal-a nya'-mii-v-m m-poq-k m-wu-m (you-
    sj beer-abs: I 1-foot-dem-Loc 2/3-spill-SS do-impf)
(70b) ma-ch ha'mal-a nya '-mii-v-k m-poq m-wu-m (you-sj
    beer-abs I 1-foot-dem-Loc 2/3-spill-SS 2-do-impf)
'You spilled beer on my foot.'
As an instrumental, -m expresses various types of 'instru-
mental' relationships, including implements, means, and
materials.
(71) hume-v-ch kthar-a 'i-v-m 'av-i (boy-dem-sj dog-
    abs stick-dem-Asso hit-Abs)
'The boy hit the dog with a stick.'
(72) nya-che 'chmay-m 'maa-m 'wi-ch-k 'wu-m (I-sj
    spoon-Asso 1/3-eat-SS 1-do-pl-SS 1-do-impf)
'I always eat with a spoon.'
(73) m-yure-nyu kwe-tha-m m-yooov-ee? (2-dress-dem s.t.-
    stem-Asso 2/3-make-Q)
'What did you make your dress with (out of)?
Cases involving comitative relations between nouns generally
employ the verbal construction with hwak 'be two'; the second
noun of the associated pair has the -m 'associative' suffix.
(74) nya-che Lynn-m hwak-k s'ar-h-e'-pem-k yu-m (I-sj
    Lynn-Asso two-SS store-dem-dir 1-go (dl)-SS be-impf)
'Lynn and I went to the store.'

These various case relations marked by -m (that are non-directional/locational) I will label 'associational' (Asso), following Kendall 1975, and will consider them to be instances of the same morpheme. The directional/locational uses will be glossed separately as Loc(ative). What Kendall calls partitive constructions [e.g., vquv hwa/- 'two women'; kweqlve-m .. 'something bad (DS)'] and temporal constructions will be treated here also as verbal constructions--that is, as containing instances of the -k/-m switch reference markers, not case suffixes.

1.33 Demonstratives

Demonstratives in Tolkapaya have proven to be interesting both synchronically and for their historical implications. I cannot begin to cover this topic adequately here and refer the reader to Glover 1979. The following discussion is therefore a sketch of the basic facts about demonstratives--which, with one important exception, do not play a role in the major topic of this paper.

Demonstratives in Tolkapaya are manifested as prefixes, suffixes, and independent demonstrative words which function as "determiners" or "pronouns". Suffixes on nouns, noun phrases, or nominalized clauses are the most frequent kind of demonstratives encountered.

The most common demonstrative suffix is the ubiquitous -v, which has the general sense of a definite article (like
the), but is more specifically associated with "here" as opposed to "there". It is also the suffix used with generics.

(75) k'u-v-a (basket-dem-abs)
    'this, the basket'
-v is also associated with first person (and sometimes third) in various complicated anaphoric constructions and possessives. For example:

(76a) nya '-sal-v-a (I l-hand-dem-abs)
    'my hand'

(76b) ny-tha sal-v-a (dem-stem hand-dem-abs)
    'his hand'
-v is present time, as well as near space, so is deictically proximal.

(77) 'nya-v-m (day-dem-Loc(time))
    'today'

As can be seen, a vowel is added to the demonstrative suffix if it is in the absolutive form. (Compare k'u-v-ch (basket-dem-sj) with k'u-v-a (basket-dem-abs.) Locations or directions are sometimes marked with a directional noun suffix -e as in 78 and 79 below. 17

-h contrasts with -v in its meaning of 'that' or 'there' as illustrated in the following sentence:

(78) k'u-v-a ny-w-e k'u-h-a hwak-t-t vlwii-v-k yu-m
    (basket-dem-abs dem-stem-Dir basket-dem-abs two-Tem-SS be:like-Sta-SS be-impf)
'This basket here and that basket there are the same.'

-

is distal and associated with the nonpresent, as shown below.

(79) nya-che Kwalthk-yala-h-e '-yaam-k '-yu-m (I-sj
Red Mountain-Dem-Dir 1-go-SS 1-be-impf)
'I went to Red Mountain.'

(80) 'nya-h-m (day-dem-Loc(time))
yesterday'

-

is used in place of -

in possessive constructions, usually with third person:

(81) ny-tha sal-ha (dem-stem hand-dem-abs)
his hand'

-

and -

also contrast in definiteness. -

is used to mark the first mention of a noun as available for future reference; -

is used for all subsequent references.

There is some evidence that -

may contrast with another distal suffix -

in the degree of relevance to the present state of reality. -

is compared to -

in this and other respects at length in Chapter IV. -

is used on nouns to indicate "the former"; that is, the thing or person that formerly met the description given by the verb of the sentence. -

is also used in affective expressions which refer emotionally to someone or something that is now sorely missed. So, for instance,

(82) ny-vu-th-a (dem-Stem-dem-abs)
'the dear departed'
As we will see, -th is one of the modal suffixes on verbs—it will be shown later that the demonstrative suffix and modal suffix are related (4.2).

-ny or nyu generally seems to refer to things that are visible, but farther away than nouns marked with -v. This is the suffix associated with second person in possessive constructions.

(83) pahmi-nyu k-hwan-ch yu-m (man-dem Mexican-sj be-
  impf)
  'The man is a Mexican.'
(84) ma m-sal-nyu (you 2-hand-dem)
  'your hand'

The suffix -w is fairly rare, and the difference between
-w and -v is not all that clear. They sometimes appear to
be variants. The -w(a) is often used in the possessive ex-
pression ny-wiy-wa which is syntactically a relative clause
meaning "that which the subject possesses". -w also indi-
cates that the topic of discussion it marks is well-known
or known to the speaker and addressee.

There are a number of demonstrative stems that can be
prefixed and suffixed to produce demonstrative words. Stems
include -va-, -ya-, -vu-, -nya-, -wa-, -tha-, and -ha-. The
pronoun ka, used for indefinites and interrogatives functions
syntactically like the demonstrative stems. Some stems can
occur as free forms. Stems generally occur prefixed with
either -v- or ny- (and possibly suffixed with a demonstra-
tive) and appropriately case marked. All logical combinations
of prefixes, stems and suffixes are not allowed, but I will not go into the restrictions here.

Referential demonstratives function as pronouns for third person referents or as anaphora. Nytha, which means 'that one', is one of the most common forms of third person pronouns. When demonstrative words modify nouns, the nouns must have a demonstrative suffix as well; e.g.

(85) v-ya kthar-v-a (dem-stem dog-dem-abs)
    'this dog'

This sketch of the demonstrative system is intended merely to allow the reader to recognize demonstrative constructions when one occurs in the examples. The demonstrative system is rich and complex enough to deserve greater attention than I can give it here.

1.34 Possession

Possession of body parts and kinship terms is in general different from possession of other nouns, probably because kin and body parts were historically verbs (Langdon 1977). In the first and second person, the possessor is the unmarked noun; the possessed noun is marked as a verb in agreement with the possessor, although the whole construction is a NP. Certain nouns such as articles of clothing are treated apparently as body parts or inalienably possessed nouns.

(85a) (nya) 'sal-ch rav-i (I l-hand-sj hurt-Dec1)
    'My hand hurts.'
(85b) (ma) m-sal-ch rav-i (you 2-hand-sj hurt-Abs)
    'Your hand hurts.'

(86a) (nya)'-tala (I 1-father)
    'my father'

(86b) (ma) m-tala (you 2-father)
    'your father'

(87) (ma) m-yure (you 2-dress)
    'your dress'

In general, third person possessed body parts and kin terms are unmarked, as would be expected according to normal verb agreement patterns. The two nouns are juxtaposed, possessor-possessed.

(88) Lynn yure (Lynn dress)
    'Lynn's dress'

(89) (ma) m-ny-mat (you 2-Poss-land)
    'your home place'

(90) kwa ny-wiy-w-a (knife Rel-have-dem-abs)
    'his knife'

(91) 'chreye ny-\l{}-wiy-w-a (doll Rel-1/3-have-dem-abs)
    'my doll'

(92) hpu m-wiy-w-a (gun 2/3-have-dem-abs)
    'your gun'

Notice that the relative clause construction for possessives can either be marked with the relative prefix ny- or be unmarked.

(93a) kwakvyam-a 'wiy-v-a (car-Abs 1/3-have-dem-Abs)
(93b) kwakvyam-a ny-\-'wiy-v-a \hspace{1em} \text{car-abs Rel-1/3-have dem-abs)}
'my car'

With some nouns, such as the following with articles of clothing, either the body part construction or the relative clause form can be used.

(94a) m-pur-a \-'yoo-k \-'wu-m \hspace{1em} \text{2-hat-abs 1/3-take-SS l-do impf)}

(94b) ma m-pur-a m-wiy-w-a \-'yoo-k \-'wu-m \hspace{1em} \text{(you 2-hat-abs 2/3-have-dem-abs l-take-SS \-'do-impf)}
'I've got your hat.'

(95a) ny-pur-a \-'yoo-k \-'wu-m \hspace{1em} \text{(Poss-hat-abs 1/3-take-SS l-do-impf)}

(95b) pur ny-wiy-w-a \-'yoo-k \-'wu-m \hspace{1em} \text{(hat Rel-have-dem-abs l-take-SS l-do-impf)}
'I've got someone's hat.'

1.35 Derivation

Although derivation of lexical nouns per se does not play an important part in the grammar of Tolkapaya, there are productive means of forming nouns and there is some suggestion that many nouns in the language are in fact derived. In addition, nominalization as a syntactic strategy is popular in Tolkapaya as in many Yuman languages. It is important, then, to be able to recognize nominal construction. In citation, and in their absolutive form nouns are distinguished from verbs generally by the presence of an \text{-a} vowel
suffix, rather than an -ः vowel (on verbs) following a stem-final consonant. Vowel-final stems are bare in both cases. Of course, in cases other than the object case, nouns can be identified by their case suffixes. Demonstrative affixes also serve to distinguish nouns from verbs. However, as far as the ready identification of nouns and verbs goes, it is unfortunate that much of the nominal morphology is "homophonous" with verbal morphology. For instance, the subject case marker -ःch is homophonous with the marker for plural number on verbs and a verbal morpheme indicating habituality and passive; the demonstrative suffixes -ःy, -ःth, and -ःh all have their verbal suffixal counterparts. In addition, there are a number of nouns which have segmentable vowel suffixes (other than -ःa), and are derived from verbs.

Nouns ending in -ःe rather than -ःa generally refer to some sort of man-made object or instrument. These include such nouns as:

(96) yur-ःe (wear-Nom)
    'dress'; 'clothes'

(97) "i t-ःkyate (wood CS-cut-Nom)
    'axe'

(99) wa-ःye (sit-Nom)
    'chair'

(100) yak-ःe (lie-Nom)
    'bed'
(101) hmany kwar-e (child tie:to a cradle board-Nom)
    'cradle board'

    There is an -o suffix meaning "the place where VERB
    -ing is done", as illustrated by the following examples.
    This suffix is syntactically very productive; it has become
    lexicalized for some nouns.

(102) 'ich-maa-ch-o (s.t.-eat-pl-Nom)
    'table'

(103) tkav-o (meet-Nom)
    'gathering place'

(104) k-glyep-o (Rel-be:bad-Nom)
    'hell'

(104) wa ch-kwaw-v-o (house-CS-talk-SS-Nom)
    'church'

An -o suffix may be used in a clause translating an English
headless relative:

(105) yaam-h 'um-o-h-a'-yaam-ny-k '-yu-m (3-go-Irr
    Neg-Nom-dem-abs l-go-too-SS l-be-impf)
    'I went where he didn't go.'

    Agentive nominals can apparently be formed in a number
    of ways. The most common form is as some sort of relative
    clause,21 either with or without an -o- nominalizer suffixed
    to the root, provided there is some other marker indicating
    its nounhood.

(106) 'ich-k-hwal-o (s.t.-Rel-plant-Nom)
    'ich-k-hwal-h-a (s.t.-Rel-plant-dem-abs)
'ich-k-hwal-o-h-a  (s.t.-Rel-plant-Nom-dem-Abs)
'farmer'

(107)  pa-k-klyoo-ch-a  (person Rel-catch-pl-abs)
'policeman'

(108)  pa-k-swar-a  (person Rel-sing-abs)
        pa swar-a  (person sing-Abs)
        k-swar-h-a  (Rel-sing-dem-Abs)
        k-swar-o  (Rel-sing-Nom)
'singer'

(109)  pa k-kwaw-o  (person Rel-talk-Nom)
        pa k-kwaw-h-a  (person Rel-talk-dem-Abs)
'preacher'

Other types of nouns can be formed by the relative clause process or by the addition of noun morphology, such as a demonstrative plus case suffix.

(110)  'ha k-tay-a  (water Rel-big(pl)-Abs)
'ocean'

(111)  hamsi k-tkwilv-a  (star Rel-late-Abs)
'Late Star' (proper name)

(112)  'nya k-skam-a  (sun Rel-follow-Abs)
'sunflower'

Since all of these semantic types of derived nouns include examples which are prefixed with the relative clause marker k-, and since relative clauses in Tolkapaya often occur with no prefix, a unified treatment of derived nouns might be to view them all as relative clauses with assorted nominal
morphology. (see fn 21).

1.4 The sentence

A simple sentence in Tolkapaya, as noted earlier (1.2), contains minimally an inflected verb with appropriate final marking. The simplest final marking for a declarative sentence (the absolutive form) consists of an -i suffix for consonant-final stems or the absence of any suffix for vowel-final stems. This absolutive or short form of the verb was discussed in section 1.2b. There are several other options available for ending a final independent clause in Tolkapaya, which occur more frequently than the absolutive form.

1.4.1 Final independent clause marking

Simple sentences and sentence final independent clauses require a terminal predicating suffix in order to be considered "complete" utterances. These suffixes range in meaning from being neutral (signifying that the utterance is a simple non-future declarative sentence) to indicating the various modalities and aspects. These will be designated "terminal suffixes" and include the FAC discussed below.

1.4.1.1 The phenomenon which I am calling the independent clause "Final Auxiliary Construction" (FAC) was first analyzed for Tolkapaya by Sandra Chung 1975. Chung uses the term "compound tense markers" for these endings—a convenient label which I reluctantly have replaced here. 22 I
am avoiding this label because it is misleading in light of my analysis of the construction, as I will show.

The Final Auxiliary Construction is by far the most common "neutral" ending for a (nonfuture) independent declarative clause. In addition to marking a clause as being declarative and nonsubordinate, the ending specifies whether the proposition is viewed as completive or is simply unspecified as to whether it is completed or not. Therefore, the endings have nothing to do with tense per se.

The construction is formed in the following way. The last lexical verb or auxiliary in the clause is suffixed with the same-subject switch-reference marker -k. The next (and final) element in the clause is one of the behavioral auxiliaries23 (5.21) which is person-marked to agree with the subject of the main verb whose subject it shares. This final auxiliary is then suffixed with -m (which is neutral or unspecified for completion; i.e. imperfective) or with -ny (which is specifically complete or perfective). I will refer to these suffixes as 'perfective' (ny) and 'imperfective' (m), since 'imperfective' more accurately reflects the unspecified nature of -m. Schematically then, the construction is as follows:

(113) Primary verb/aux. + k

(PM) Behavioral aux. + ny = perfective

m = imperfective
The choice as to which behavioral auxiliary is appropriate is made on the basis of the semantics of the primary (lexical) verb. Any verb may take yu 'be' as its behavioral auxiliary. If the lexical verb is stative or intransitive, the behavioral auxiliary that is chosen must be yu 'be'. An active, transitive verb may take wi/wu 'do' as its auxiliary, but it may also take yu. Verbs indicating some sort of verbal behavior will take the auxiliary 'i/i' 'say' or the neutral yu. Consider the following examples.

(114) '-neh-k '-wi-ny (1/3-kill-SS 1-do-prf)
    'I killed him.'

(115) smaa-k yu-m (sleep-SS be-impf)
    'He's sleeping.'

(116) m-vaa-k '-i-k '-'i-m (2-come-SS 1/3-say-SS 1-say-impf)
    'I said you came.'

It is fairly clear that syntactically these constructs (-k+yum, -k+yuny, -k+winy, -k+wum, -k'+iny, -k+'im) are not compounds in Tolkapaya. They take verbal agreement which separates the -k suffix from the behavioral auxiliary. The behavioral auxiliaries are rarely reduced (except for 'i which is sometimes simply i or '), and Ms. Fasthorse can identify them with their full-fledged auxiliary counterparts (see example 116 above). Munro (1977) has discovered in her work on baby talk that these final auxiliaries can take the diminutive n- prefix as well. Although reports on other dialects of Yavapai clearly show that the direction of
change is toward reduction (both phonological and syntactic) of these final clause markers, they are still analyzable and distinct in Tolkapaya. These markers of independent clause status and declarative mood are particularly important in the analysis of complex sentences. Furthermore, since this construction, which is archaic and reconstructable for an earlier stage of Yuman, is so fully preserved in Tolkapaya, we are not confronted with the phenomenon of sentence final -k and -m which plague those studying Yuman languages such as Mojave, Maricopa, and Yuma.

Predicate nominals in Tolkapaya utilize what looks like a special form of the Final Auxiliary Construction. The same-subject marker -k on verbs does not occur on the predicate noun, which takes the subject case marker -ch. The semantics of predicate nominals insist that the final behavioral auxiliary be stative, i.e. yu 'be'. In other respects, the predicate nominal F.A.C. looks like the regular Final Auxiliary Construction with -k (but see 5.22223). This predicate nominal form in Tolkapaya is apparently a re-analysis of the Proto-Yuman predicate nominal construction, which probably consisted of a sentential subject complement embedded to the existential verb BE (Munro 1974:282). In Tolkapaya, the 'subject' noun of the embedded predicate nominal sentence is being reinterpreted as the subject of the whole (simple) sentence and is optionally marked for subject case. These constructions would then look like all other simple sentences except that they would have a -ch
instead of -\textit{k}, as the following examples show. The first two examples show the subject noun, as well as the predicate noun, suffixed with -\textit{ch}.

(117) Lynn\text{-ch} vqi-v-ch yu-m (Lynn\text{-sj} woman\text{-dem}\text{-sj} be-
\text{impf})

'Lynn is a woman.'

(118) Steve\text{-ch} Bonnie nwah-ch yu-m (Steve\text{-sj} Bonnie
friend\text{-sj} be\text{-impf})

'Steve is Bonnie's friend.'

Example 119 reflects the Proto-Yuman predicate nominal construction more closely, having an unmarked subject noun.

(119) v-ya nya '-tal-ch yu-ny (dem-Stem I 1\text{-father}\text{-sj
be\text{-prf})

'This is my father.'

That these nominal endings can be viewed by the speaker as parallel to the other final auxiliary endings is evidenced by alternative constructions like the following with \textit{k+yum} replacing \textit{ch+yum}.

(120) nya vqi-v-k yu-m (me woman\text{-dem}\text{-SS be\text{-impf})

'I'm a woman.'

Another feature contributing to the apparent similarity between the predicate nominal construction and the F.A.C. is the fact that lexical verbs sometimes appear in predicate nominative form. These cases all involve descriptive, adjectival expressions, or other stative expressions, such as generic statements, axioms, and passive sentences. Some examples follow:
(121) Joe-ch pa nahmirv-ch yu-m (Joe-sj person nice-sj be-impf)
    'Joe is nice.'
(122) kthar-a chyaaq-a maa-ch-ch yu-m (dog-abs bone-abs eat-pl-sj be-impf)
    'Dogs eat bones.'

The very complicated predicate nominal construction and other nominal constructions will be considered later in 5.222. The predicate nominal construction was introduced here because of its superficial similarity to the F.A.C.

1.412 Among the nondeclarative modes are included imperatives and questions which are both formed by the choice of certain final suffixes in conjunction with distinctive intonation.

Imperatives are marked in the same way as simple nonfuture declarative clauses in the absolutive form; that is, the verb stem is suffixed with -i if consonant-final or nothing if vowel-final. In addition, imperatives are marked for second person subjects and bear distinctive command intonation. Some examples are:

(123) m-chsaw-i! (2-look:up-Imp)
    'Look up!'

(124) m-chwo-! (2/3-put:down-Imp)
    'Put him down!'

(125) pa-m-yeev-m-i! (pl.obj.-2/3-be:pl:with.Dir-Imp)
    'Go be with them!'
Question formation in Yavapai has been discussed in detail by Kendall 1972. I will not elaborate, then, on this topic, but will briefly describe the general appearance of Tolkapaya questions. Questions are characterized by an over-long final vowel with a rising-falling intonation pattern. This final vowel is either the final stem vowel of the last verb or the vowel of a question-marking suffix -ee or -wee which replaces the declarative endings. The presence and shape of the suffix is, in part, phonologically determined. If the final verb stem ends in a consonant, it must be suffixed with -ee or -wee. The choice of -ee vs. -wee appears to be aspectual: -ee can be used with any nonfuture utterance, while -wee can apparently be used only for perfective situations. If the final verb ends in a vowel, the most common way of marking the question is to lengthen that root-final vowel, although occasionally the -ee suffix will be added. To indicate a completed event, of course, the -wee suffix could be added.

The following examples illustrate the possibilities using polar questions.

(126) m-ny-wa-h-che twaay-ee? (2-Poss-house-dem-sj be: far-Q)
'Is your house far away?'

(127) m-hi'el-ee? (2-be:lice:infested-Q?)
'Do you have lice?'

(128) 'chii m-wiy-ee? (fish 2/3-have-Q)
'Do you have any fish?'

The next two examples show lengthening of stem-final vowels:

(129) mnye-?: (be:tasty-Q)
'Does it taste good?'

(130) 'ich-m-maa-?: (s.t.-2-eat-Q)
'Are you eating?'

The following examples show the form for events that have already occurred:

(131) 'm-'e-wee? (2/1-give-QPst)
'Did you give it to me?'

(132) Pam-chyaam-wee? (Pam-sj go-QPst)
'Did Pam go?'

(133) 'ich-m-maa-wee? (s.t.-2/3-eat-QPst)
'Did you eat?'

Question word (or phrase) questions asking for new information involve the use of a number of complex question words in Tolkapaya, many of which include the morpheme ka-. Some of these are segmentable into separate morphemes and some are not. The question word is generally topicalized by fronting to the beginning of the sentence. I will not go into the formation of all the question words, but will give a few examples. Note that the question word questions end the same way as polar questions.

(134) v-k-e 'yu-?: ((where) dem-Intr-Dir l-be:located-Q)
'Where am I?'

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(142) kav 'wi-k 'wi-ha-?: (how l-do-SS l-do-Irr-Q)
   'How should I do it?'

The formation of questions says something interesting about the plural form of unuu. Recall that the rule for question formation in non-present/past sentences is to add -ee to consonant-final stems and lengthen the final vowel in vowel-final stems. So, the singular subject form for unuu is with a final lengthened vowel, as expected (see example 141 above). However, with a plural subject, unuu can take the suffix -ee.

(143) yam-ch-a-k unuu-ee? (go-pl-Irr-SS IncAux-Q)
   'Are they going to go?'

(144) m-vaa-h-k m-unuu-ee? (2-come-Irr-SS 2-IncAux-Q)
   'Are you (pl) coming?'

This suggests that the plural form of unuu is really unuw, i.e. consonant-final. This claim is confirmed by the fact that both Jeni Yamada (pers. comm.) and I have perceived unuu in other contexts with a plural form unuw. Another common means of forming future interrogatives is to mark the lexical verb as irrealis using the -h suffix, and then end the sentence with an appropriate bare behavioral auxiliary, lengthening the final vowel.

(145) m-vaa-h m-yu-?: (2-go-Irr 2-be-Q)
   'Will you go there?'

(146) mnye-h yu-?: (be:tasty-Irr be-Q)
   'Will it taste good?'

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(147) pa-ny-tope-ch-h wi-?: (pl.obj.-3/1-Pl-Irr do-Q) 
    'Will they help us?'
(148) kwethkam-i-h m-i-?: (what 2-say-Irr 2-say-Q)
    'What will you say?'

A more marked type of nondeclarative sentence can be formed by adding the -tee suffix which has an exhortative flavor, but bears normal question intonation.

(149) m-nyathk-a-tee?: (2-be:quiet-Irr-Exhor)
    'Why don't you shut up?'
(150) vam maa-ch-a-tee? (now eat-Pl-Irr-Exhor)
    'Why don't we eat now?'
(151) m-thii-ny-a-tee? (2-drink-ny-Irr-Exhor)
    'Why don't you drink it?'

This construction seems to have characteristics of an imperative, as well. It only occurs with future reference which is manifested syntactically by the irrealis suffix on the verb. The exhortative is only used with second person and first person inclusive plural subjects. The form of the suffix resembles the question suffix -ee, with the addition of a morpheme -t. Functionally, it acts like a polite imperative.

Given the semantics of the exhortative and the fact that it requires the irrealis morpheme, a likely candidate for -t- might be the negative morpheme found elsewhere in Pai. -t is used nowhere else in Tolkapaya as a negative morpheme, but the fact that the strange suffix -ny occurs sometimes
with the exhortative (see example 151) is supportive evidence. This suffix has been identified elsewhere as a suffix that occurs on the verb preceding a negative morpheme, such as 'um, the negative verb (2.15). It is not clear what the -ny is, but it is fairly common with both negative utterances and habituals or predicate nominals (5.22233).

Hinton 1977, in describing the uses of the Havasupai negative -t- (which also occurs as a prefix to the negative verb), gives the construction I am calling an exhortative as an imperative using the negative t as a suffix.

(152) Ha. kak nyu-k m-we-h-t-e (neg dem-Loc you-sit-Irr-Neg-Voc?)

'Don't sit there!'

Interestingly enough, she also reports that this t occurs on negative predicate nominals (Hinton 1977:275), a connection that exists for the Tolkapayamorpheme ny. In any case, despite the fact that Tolkapaya has no negative t in any other construction, the evidence strongly suggests this identity for the exhortative t.

1.413 A number of other independent clause markers carry modal or aspectual weight and will be merely identified here, as they will be topics of later sections (2.1). These suffixes include -ma (assertive), -mo (dubitative), and -ha (irrealis). Clauses suffixed with these have independent clause status.

The suffix -ma appears to mark the proposition explicitly as an assertion of the speaker and is often used when the
speaker is drawing conclusions or offering an opinion on something. Examples include the following:

(153) ny-tha wiy-w-ch yu-ma (dem-stem own-dem-sj be-Assr)

'It belongs to him.'

(154) qyat thi-i-k yu-o-ma (really drink-SS be-Perf-Assr)

'He must have drunk too much.'

(155) ma-che m-han-k m-yu-o-ma (you-sj 2-be:good-SS 2-be-Perf-Assr)

'It looks like you must be well.'

(156) nya-che 'wi-ch-ma (I-sj 1-do-Pl-Assr)

'We did it.'

(157) ma-che 'wi nya-wiy-w-a m-kchiich-ma (You-sj money Poss-own-dem-abs 2/3-steal-Assr)

'It looks like you stole the money.'

The dubitative suffix _mo also characterizes the speaker's position as to what he is saying. In this case, the speaker is noting that his assertion is open to doubt or question—he's unsure of his facts.

(158) Jack-che m-chqam-h-mo (Jack-sj 2/3-hit-Irr-Dub)

'Jack may hit you.'

(159) tarhar-mo (work-Dub)

'Maybe he's working.'

(160) 'ich-pay-ch yu-mo (s.t.-alive-sj be-Dub)

'It might be an animal.'

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The irrealis suffix in its form -ha (as opposed to the nonfinal forms -h/a/ah) also constitutes a final independent clause marker. Its use on simple sentences is not as common as its use on independent clauses in complex sentences. In simple sentences an auxiliary construction which includes irrealis -h is the more common way to indicate an irrealis modality. It is difficult to demonstrate that -h is irrealis, not simply future, in these simple examples with the terminal suffix -ha.

(161) tarhar-ha (work-Irr)
'He will be working.'

(162) kavkyuk neh-ha-? (whykill-Irr-Q)
'Why should he kill her?'

In later chapters, the important roles played by these morphemes will be described (2.161, 2.162, 21.71).

1.42 The switch-reference system

The system of progressive switch-reference marking is one of the distinguishing characteristics of the Yuman languages. This system pervades the syntax of Tolkapaya as well--both in simple and complex sentences. The term "switch-reference" was proposed by Jacobsen 1967 for the syntactic process whereby a predicate is marked as being subordinate to some higher (or following) verb in the sentence--the choice between two suffixes (in Yuman--more in some languages) is determined by whether the subject of the lower clause is the same as or different from the subject of the higher verb. For Yuman, the suffix *-m (different
subject) has been reconstructed for Proto-Yuman by Langdon 1978. Furthermore, Langdon 1978 has argued that a switch-reference verb construction utilizing the opposition *-k (same subject)/*-m (different subject) can be reconstructed for Proto-Yuman, by implication. The following schema represents this construction (Langdon 1978:6):

(163) inflected verb (-SR inflected verb)\textsuperscript{N} - SR inflected verb-X

where X is one of a number of predicating morphemes and \textsuperscript{N} indicates that the material in parentheses may be recursive. This particular syntactic arrangement is found very frequently in both simple and complex sentences in Tolkapaya. Its use in simple sentences reflects the prevalence of auxiliary constructions, including the final auxiliary construction discussed above. The switch-reference construction, then, for complex sentences overlaps with the auxiliary construction to a considerable degree. This fact will be considered in further detail in the following section of auxiliaries and in Chapter V.

Examples of the switch-reference mechanism for loosely subordinating/conjoining one clause to another are as follows:

These first two examples show the -k/-m opposition used to conjoin several clauses.

(164) nya-che '-swar-me ma-che m-ima-me Joe-che kwaw-k yu-m (I-sj 1-sing-DS you-sj 2-dance-DS Joe-sj
talk-SS be-impf)
'I sang, you danced, and Joe talked.'

(165) nya-che '-ima-ka 'swar-ka '-kwaw-ee-k '-war-k
'-yu-m (I-sj 1-dance-SS 1-sing-SS 1-talk-again-SS
1-Add-SS 1-be-impf)
'I danced, sang, and talked.'

In the next two examples, we see that switch-referenced
clauses can indicate either a causal relationship or simply
sequential occurrence of related events.

(166) kwe-qlyep-a '-maa-k 'ich-'-rav-k '-yu-m (s.t.-
bad-Abs 1/3-eat-SS s.t.-l-be:sick-SS 1-be-impf)
'I was sick because I ate something bad.'

(167) ma-ch m-vaa-m nyu-l '-yam-k '-yu-ny (you-sj 2-
come-DS stem-Loc 1-go-SS 1-be-prf)
'You came and then/so I left.'

In 168 and 169 are cases where switch-reference indicates
loose subordination.

(168) '-tarhar-k '-nmak-k '-wu-m (l-work-SS 1-stop-SS
1-do-impf)
'I quit working.'

(169) qwaqt-a 'm-ch-kyat-o-m '-maa-? (meat-Abs 2/1-CS-
cut-App -DS 1/3-Imp)
'Cut up the meat for me to eat.'

These various sentence types indicate a portion of the
possible semantic relations that can be expressed through
the switch-reference system. The system will be discussed
in detail in Chapter V.
1.43 The auxiliary verb construction

Obviously, since auxiliaries comprise a chapter of their own (Ch. V), the discussion of auxiliaries here is but an introduction. The importance of auxiliaries and the auxiliary construction within the syntax of Tolkapaya cannot be overstated. Auxiliaries serve as a vehicle for various modal and aspectual suffixes, as well as carrying modal and aspectual significance in their own right. Most of the more interesting and complicated syntactic constructions include auxiliary verbs in some form or another. Only the more simple and common auxiliary types will be considered in this introduction.

We have seen in the previous discussion of the Final Auxiliary Construction one of the more common usages of the behavioral auxiliaries yu, wi, 'i. In addition to this formulaic use of the behavioral auxiliaries, yu, wi, and 'i function in a variety of complex adverbial and modality expressions and as the primary verbs of the sentence as well. When participating in some of these complex constructions, the behavioral auxiliaries are frequently bleached of their literal semantic content, being simply "matched" to the primary verb of the clause along the dimensions of intransitive/stative, transitive/active, and communicative. Often, the meaning contributed by the auxiliary is a function of the meaning of the entire construction. An auxiliary verb which shares all of these features with the behavioral auxiliaries (except for participation in the Final Auxiliary
Construction) is yi(i). This auxiliary will be called the "cognitive" auxiliary, since as a primary verb it means 'think', or combines with particles to mean 'like, want, believe' and so on. It participates in a number of complex modality expressions in many of the same environments as the behavioral auxiliaries and, like them, its absolute meaning is often grammaticized within the construction.

Two of the most simple auxiliary constructions will be presented here to exemplify how auxiliary constructions are formulated. The first of these is the incompletive auxiliary unuu. In its most frequent usage, unuu combines with the irrealis morpheme -h to indicate an unrealized aspect, as illustrated in 170 below.

(170) 'inok m-tarhar-a-k m-unuu-:? (later 2-work-Irr-SS 2-IncAux-Q)

'Will you work later?'

(171) va-m m-tarhar-k m-unuu-:? (stem-Loc(time) 2-work-SS 2-IncAux-Q)

'Are you (in the process of) working?'

However, when used alone without the irrealis morpheme, unuu indicates an on-going process in the past or present, as in example 171. The construction is formulated as follows:

(172) inflected primary verb + (Mod/Asp) + k

PM + unuu + terminal marking

Many auxiliaries in Tolkapaya appear in this same structural form as unuu. There are some auxiliaries, however, which need to be distinguished from the regular type of
auxiliaries because they pattern in structurally different ways. They may differ in that the primary verb is not suffixed with -k, but will appear as a bare root or with some modal suffix or may take -k only optionally. Additionally, for some, the auxiliary itself does not take -k when followed by another auxiliary of the Final Auxiliary Construction. The variation among types of auxiliary phrases will be dealt with in Chapter V, when the auxiliaries in Tolkapaya are described and classified.

Since a very typical formula for an auxiliary construction is identical on the surface to that of a sequence of clauses, some heuristic must be established for resolving the "auxiliary or higher verb" question. As Langdon (1978) points out in her discussion of the auxiliary construction in Yuman, the major criterion for identifying an auxiliary phrase vis-a-vis successions of clauses must be a semantic one. That is, the basic meaning of an auxiliary (usually determined by its meaning as a primary verb) often alters when it participates in a grammaticized auxiliary construction. This is clearly the case with the behavioral auxiliaries which participate in constructions whose grammaticized function is modal or aspectual. I am further extending this criterion to include verbs whose "meaning" is purely aspectual or modal. Many of these verbs can only participate in auxiliary constructions—they can never function as primary verbs. The auxiliary unuu is one such verb. We will
see, however, that for some verbs, the decision is not so easy, due to the syntactic facts, and any choice seems virtually arbitrary.

Some structural properties of auxiliaries can serve as guidelines as well. With one exception, all auxiliary verbs require -\(k\) (same subject) or \(\emptyset\) on the primary verb of the auxiliary phrase; that is, the different subject morpheme -\(m\) never appears. Additionally, auxiliary verbs, while agreeing with the subject of the primary verb, are not marked for the object.

The one exception to the above rule for an auxiliary construction—that the primary verb only takes -\(k\) = same subject, never -\(m\) = different subject—is found in one of the more common grammaticized auxiliary constructions, the habitual or distributive construction. In this auxiliary construction, which indicates that the action or state described by the primary verb is habitual or customary, the primary verb is suffixed with -\(m\) (DS) and followed by an auxiliary phrase consisting of an inflected behavioral auxiliary followed by -\(ch\) and a final predicating morpheme or phrase; i.e. primary verb -\(m\), PM-behavioral aux-\(ch\)-terminal suffixation. The morpheme -\(ch\), a necessary part of the construction, is homophous with the morpheme which otherwise indicates "plural subject", and it occurs in the same position on the verb. It is not unexpected that a morpheme having 'plurality" as part of its meaning could come to be
used as a marker of habitual activity as well. There is an obvious pragmatic connection between the two cases. If an action is performed by several agents, there are several occasions of its being performed, just as in an habitual, there are numerous occasions of an action being performed (if only by one agent, over a period of time). This generalization is also true of continuing states. The following examples illustrate the habitual construction:

(173) 'tla\-h\-m 'yu-\-ch-k 'yu-m (l-be:ti\-red-DS l-be-pl-SS l-be-impf)

'I'm always tired.'

(174) Jack-che 'wil-havs\-uw-a maa-m wi-ch-k wu-m (Jack-sj plant-green-abs eat-DS do-pl-SS do-impf)

'Jack habitually eats vegetables.'

(175a) Pam-che Tolkapaya kwaw-k qyat-m 'i-ch-k 'i-m (Pam-sj Tolkapaya talk-SS very-DS say-pl-SS say-impf)

(175b) Pam-che Tolkapaya kwaw-k qyat-m 'i-ch-m yu-\-ch-k yu-m (Pam-sj Tolkapaya talk-SS very-DS say-pl-DS be-pl-SS be-impf)

'Pam talks Tolkapaya all the time.'

Example 175 indicates that an extra layer of embedding can be added consisting of the behavioral auxiliary yu = 'be', also marked as a habitual.

There is a related construction which uses a -k rather than an -m (and has other differences as well) and refers to
habitual conditions or activities with the additional sense of one who "professionally" does something or who is known for doing something. This "professional" construction and the negative form of the habitual construction will be treated in some detail later (5.22232, 2.15).

The predicate nominal construction, constructions using the plural/habitual -ch, and, in general, constructions using the behavioral verbs in various ways are further elaborated in Chapter V.
NOTES

1 This phenomenon is described in detail in Hardy 1979.
3 I am following Comrie 1976 in distinguishing the labels 'perfect' and 'perfective'. Here, I am referring to perfect aspect, i.e. the quality of 'perfectness'.
4 Jeni Yamada 1977 and 1979 has studied this topic in Tolkapaya in some depth.
5 See Langacker and Munro 1975 for a discussion of the relationship between non-distinct arguments and passive-like notions.
6 This claim has long been maintained by Jeni Yamada. My original feeling was that the process of suffixing -v and -ch to verb roots was a regular process whose semantic consequences were predictable and thus the -v and -ch verbs did not require separate lexical entries. I still believe that such a semantic generalization exists for -v and -ch suffixation for the majority of verbs. Some verbs, however, have clearly lexicalized meanings with these suffixes. How to account for -v and -ch verbs in the organization of the grammar I leave to those who are more interested in the problem than I am.
7 Yamada (1977:14) states that the percentage of times
the grammatical subject takes -ch is roughly two-thirds of the time.

8Yamada (1977:14) gives some examples of verb-verbs sentences without yem which have a reciprocal tense.

9Both the verb-verbs and verb-ch constructions occur quite frequently with the perfect/inferential auxiliary construction (1.223, 5.2212). Given the semantic appropriateness of the perfect to express states resulting from previous actions, this concurrence is not surprising.

10Post-stress -p rather than -v is a relic of *p. The fact that the sound change of post-stress p>v in Tolkapaya did not apply to this word is evidence of its early lexicalization with this meaning.

11Glover 1976 has investigated this morpheme in some detail and was first to relate ra to the verb rav 'hurt'.

12Hardy 1979a discusses Tolkapaya ablaut alternatives in nouns and verbs in detail.

13It was stated in 0.4 that -ch has a variant -che with a vocalic increment.

14Although Kendall 1975 uses this term specifically in an in-depth attempt to solve the -k/-m problem for Yavapai, anyone who has ever worked on a Yuman language has had to deal with the problem on many levels.

15Gorbet 1974 has dealt elegantly with this problem in his treatment of Diegueño case and nominalization.

16This statement is the traditional way to end a story in Tolkapaya.
From Proto-Yuman *-ā+i_ 'locative' (Margaret Langdon, personal communication).

Langdon 1977 argues persuasively for the verbal status of kin terms and body parts.

Langdon 1977 considers the primacy of verbs to be a basic feature of Yuman languages.

The tantalizing relationship between these demonstrative suffixes and their "homophonous" verbal suffixal counterparts is discussed in 4.0.

Kriendler (1977:2) argues that the pan-Yuman nominalizing prefix k_(w) and the subject relative clause prefix are identical, since nominalizations and subject-headed relative clauses in Yuman. So the k- prefix in these simple derived noun examples is the same as the k- in more complicated subject relative clauses. I will adopt this analysis here, referring to k- as the relative clause marker. -k as a relative clause marker is independently motivated, since it is part of the whole paradigm of relative clause prefixes. Its use on these derived agentive nominals is a subset of its general use assaulative prefix. Also, -k's nominalizing function is reserved for these two cases alone. Other nominalized clauses require different nominalizing morphemes.

In previous papers, I have used this convenient term (CTNS) as well.

Langdon's term (via A. Halpern) for the type of auxiliary formerly called "existential" in the literature (see
Chapter V, footnote 10).

24 Forson 1977 has written specifically on questions in Tolkapaya.

25 Margaret Langdon has reminded me that the cognate of unuu in other Yuman languages (*u·niw) is a plural stem. If, in fact, the plural stem in Tolkapaya is unuw, this is the only auxiliary in Tolkapaya which has a unique plural stem.

26 There is a possibility that the morpheme t in yite and its variants is also the Yuman negative t. (see Crook 1976 for a description of Yuman *t). There are examples which show the mysterious -ny suffix occurring on the verb preceding yite occasionally. The semantics would be consistent with this analysis as well (3.22).

27 This analysis was first put forward by Pamela Munro. Kendall 1975 follows the same analysis. See, for instance, Munro 1978, fn. 5.
CHAPTER II: Modification of the Simple Sentence

In this chapter I will be describing in further detail affixes and constructions first introduced in 1.22 and 1.23 and discussing additional ways of modifying a simple sentence. Adverbial modification of complex sentences will be deferred until Chapter III, although some of the morphology presented here is appropriate to complex sentences as well.

2.0 Introduction

Traditional linguistic descriptions of the semantics of verbal categories have their roots in the description of the classical Indo-European languages. As pointed out by Wallace 1979, the distinction of tense, aspect, and modality persists as the fundamental concept of theoretical discussions of verbal categories, as well as for descriptions of actual language data of diverse types. Wallace's claim that these divisions are arbitrary compartmentalizations of verbal semantics finds support in the verbal
semantics of actual languages. Time, aspectuality, and modality often overlap to such a degree as to make their separation an artificial consequence of the linguist's descriptive bias. This fact is more apparent for some languages than others -- I became acutely aware of this descriptive problem in trying to classify the verbal semantics of Tolkapaya in the traditional manner. As noted in 1.22 some morphemes and constructions seem to transcend the dichotomy of aspect and modality and encompass the semantic characteristics of both categories. Other morphemes belong, quite clearly, to neither category. Many morphemes, then, are difficult to force into one or the other of these verbal categories -- even using the traditional criteria outlined in 1.22. For this reason I have decided simply to present the modification of the predication of simple sentences in terms of form, rather than verbal category. That is, simple affixation will be distinguished from modification involving auxiliary constructions. Of course, the labels are useful for purposes of reference and will not be avoided during the discussion. However, I prefer to avoid organizing the description of verbal modification along these overly rigid lines. Expressions that are primarily modal in nature will be further divided into those that refer to the reality or factuality of a situation and those
that disregard this dimension. I was pleased to discover that Wallace 1979 makes this same distinction and has suggested the terms "eventive modality" to refer to what is asserted as actually happening or having happened and "non-eventive modality" to refer to the opposite (negative, potential, possible, hypothetical, counterfactual and dubitative action). I will adopt these terms here in describing modality in Tolkapaya, e.g. in sections 2.16, 2.17, 2.2, 2.3.

2.1 Affixation

Most verbal modification (i.e., modification of the predicate) makes use of some type of auxiliary construction, often in conjunction with affixation. In this section, modification that makes use of an affix, either with or without an auxiliary construction, will be described.

2.11 Morphemes of recurrence

There are several morphemes in Tolkapaya that refer to the additional occurrence of an event. Two suffixes and an auxiliary can function in isolation or together with each other to produce various semantic shades of this basic meaning, recurrence. This construction involves the suffixation of -ee, -ny or -ny+ee to the lexical verb, with the possibility of adding the auxiliary war. The various range of meanings include 'too', 'also', 'still', 'yet' and
'again'. The specific function is described below.

2.111 The suffix -ee, which will be glossed 'again', is suffixed to the root of the verb that expresses a situation which is viewed as having occurred at least once in the past. The following examples are illustrative:

(1) nya-ch 'ich-rav-ee-k '-yu-m (I-sj s.t.-hurt-again-SS 1-be-impf)
   'I'm sick again.'

(2) hmany ahkay m-wiy-ee-wee? (child different 2-have again-QPSt)
   'Did you have another baby?'

The situation expressed by the verb is viewed as occurring again; that is, as having been interrupted. In other words, "again" as opposed to "still", where the action is viewed as having occurred in the past, but without interruption.

2.112 The suffix -ny, 'too', is used to indicate that a situation is being repeated in some way—when an action is repeated but with a different subject or object involved, or when the action is viewed as occurring in addition to some other action. The following examples should make the semantics clearer:

(3) JP-ch yaam-ny-k yu-m (JP-sj go-too-SS be-impf)
   'JP went too.'
(4) pure '‐yoo‐ny‐k '‐yu‐m (hat 1/3‐make‐too‐SS 1‐be‐impf
(e.g. I made a dress and) 'I made a hat too.'
(5) nya‐ch 'ich‐rav‐ny‐k 'yu‐m (I‐sj s.t.‐hurt‐too‐SS 1‐be‐impf)
'I'm sick as well (in addition to my other troubles).'

2.113 The two suffixes -ee and -ny can be contrasted as in the following pair of examples:

(6a) '‐tarhar‐ee‐k '‐yu‐m (1‐work‐again‐SS 1‐be‐impf)
'I'm working again.'
(6b) '‐tarhar‐ny‐k '‐yu‐m (1‐work‐too‐SS 1‐be‐impf)
'I'm working too.'

The two suffixes can be combined in the order ny + ee with the predicted combined meaning.

(7) '‐tarhar‐ny‐ee‐k '‐yu‐m (1‐work‐too‐again‐SS 1‐be‐impf
'I'm working again also.'

2.114 Both -ee and -ny occur most frequently in a construction with the auxiliary war, glossed 'additional' (Add). When the construction is Verb‐ee‐k war‐terminal suffix, the meaning remains that of -ee by itself, i.e. 'again'.
(8) 'ich-rav\text{-ee}-k 'war-k 'yu-m (s.t.-hurt-again-SS l-additional-SS l-be-impf)
'I'm sick again.'

(9) m\text{-nyahmiv-ee}-k m\text{-war-ee}? (2-marry-again-SS 2-additional-Q)
'Are you married again?'

(10) 'pa ahkaya m\text{-neh-ee}-k m\text{-war-ee}? (person different 2/3-kill-again-SS 2-additional-Q)
'Did you kill another person?'

Even more common is the construction involving -ny and war. Once again, the meaning remains that of -ny by itself—'too', or in the case of a negative 'either'.

(11) 'ich-rav\text{-ny}-k 'war-k 'yu-ny (s.t.-hurt-too-SS l-additional-SS l-be-prf)
'I'm sick also.'

(12) 'ich-rav\text{-ny}-h 'um-k 'war-k 'yu-m (s.t.-hurt-too-Irr Neg-SS l-additional-SS l-be-impf)
'I'm not sick either.'

War can be used alone as an auxiliary without the suffixes -ee or -ny. When used alone, war discloses its basic meaning. War means that some situation is being viewed as an additional occasion of some other situation, without regards to the continuity or interruption of the action. There is no single word in English that captures
the meaning that a situation has gone on previously, without specifying whether the action was continuous or interrupted. We will gloss this verb 'additional' to indicate the neutral sense of merely having occurred previously, or of being an activity in a series of related activities, i.e. "as well as". When it occurs by itself, war may be used to express the meaning of "still" in English.

(13) 'tarhar-k 'war-k 'yu-m (1-work-SS 1-additional-SS 1-be-impf)
'I'm still working.'

(14) 'ich-m-rav-k m-war-ee? (s.t.-2-hurt-SS 2-additional-Q)
'Are you still sick?'

In other words, without the presence of -ny or -ee to indicate an interruption, war merely says that a situation has occurred on more than one occasion, without change of participants or the activity involved and without the interruption implied by -ee. This neutrality of meaning is consistent with the typical semantics of certain auxiliaries in Tolkapaya (1.43). With a negative verb, of course, war means 'yet', when used alone.

(15) 'pi-h 'um-k 'war-k 'yu-m (1-die-Irr Neg-SS 1-additional-SS 1-be-impf)
'I'm not dead yet.'

These morphemes cover quite adequately the range of adverbial notions dealing with the relationship of more than one occurrence of a situation.

2.12 The punctual construction

The next construction we will consider is the punctual construction mentioned in 1.224. The punctual construction is used to describe a situation that is viewed as being momentary, having no duration in time whatsoever. Of course, in the world of "real time" every situation has some duration, if only a fraction of a second. The punctual aspect does not regard the situation in that light, but as a single point on a time continuum, without dimension. It can be used to refer to the moment of inception of an event or to the moment of cessation--or the entire event may be viewed as a single moment in time.

The construction itself consists of the root of the lexical verb being prefixed with 'vi' and followed immediately by the behavioral auxiliary 'i', whose usual meaning has something to do with communication or noise. Here, the construction with 'i' is grammaticized and this communicative feature of 'i' is neutralized. There are apparently cases throughout the Yuman family of grammaticized functions of
this 'say' auxiliary. In this construction the lexical (v-prefix ed) verb has no suffix at all—it is a bare stem with the v-prefix. In other words, the lexical verb has v- in place of a personal prefix. The auxiliary i is often reduced phonetically to a glottal stop or the vowel i in fast speech. The auxiliary itself functions syntactically like any other auxiliary in that position. The construction then is:

\[ v- \text{ VERB (PM) } _i \text{-terminal suffix} \]

(16) Heather-ch tu v-pem yu-m (Heather-sj just v-be: lacking Punct-SS be-impf)

'Heather just disappeared.'

(17) va-m v-wir '-i-m'k '-yu-m (stem-Loc(time)

v-finish 1-Punct-Dir-SS 1-be-impf)

'I just finished it.'

(18) nya-ch v-man '-i-k '-yu-m (I-sj v-rise.1-

Punct-SS 1-be-impf)

'I woke up suddenly.'

The construction is so clearly grammaticized that the Final Auxiliary Construction contains yu (as in the above examples) or wi (as below) rather than obligatorily i 'say'.

(20) ma-ch v-gege m-i-o-k m-wu-m (you-sj v-dirty 2

Punct-Perf-SS 2-do-impf)

Footnotes to Chapter II begin on page 170.
'You got it dirty.'

There are some verbs for which the punctual form is virtually lexicalized.

(21) v-k=yu 'i 'stop'
(22) v-pi 'i 'faint' (pi 'die')

The notion of "stopping" is an inherently momentary one, since it refers to a change in condition. The word for 'faint' is a nice example, since it literally means a momentary dying. This punctual construction occurs regularly in expressing such momentary activities as waking up, falling asleep, letting out a scream, falling, getting up, and when the inception or cessation of an activity is being emphasized.²

2.13 Incompletive aspect and repetition

The incompletive aspect was discussed briefly in 1.222. Use of the incompletive auxiliary unuu is the most common means of explicitly marking an activity as on-going and incompletive.

(23) 'ich-m-maa-k m-war-k va-k m-unuu-?:³ (s.t. -2 eat-SS 2-additional-SS stem-Loc 2-IncAux-Q)

'Are you still eating?'

As a regular auxiliary it takes person-marking and normal verbal morphology. The lexical verb that precedes it
takes the same subject switch-reference marker -k. There
is some indication that unuu has a plural form ending in a
-w, i.e. unuw. This suggestion is based on the observation
that the question suffix in the plural can be unuwee, but
not in the singular, which is always unuu: (1.222).

To emphasize that an action is being performed either
continuously, repetitively, or intensively, the lexical
verb can be repeated (i.e. with its switch-reference suffix)
or in some cases reduplicated (the stem alone).

(24) vqi-ch mii-k mii-k yu-m (woman-sj cry-SS cry-SS
    be-impf)
    'The woman kept crying.'
A repeated verb can be followed by unuu, or unuu can itself
be repeated.

(25a) vqi-ch mii-k mii-k unuu-k yu-m (woman-sj cry-SS
    cry-SS IncAux-SS be-impf)
(25b) vqi-ch mii-k unuu-k unuu-k yu-m (woman-sj cry-
    SS IncAux-SS IncAux-SS be-impf)
    'The woman keeps on crying.'

(26) v-tsii tsii '-i-k '-yu-m (v-scream scream l-
    Punct-SS l-be-impf)
    'I started to really scream.'
Example 26 shows that the verb stem (here in a punctual
construction) can be reduplicated, while 24 and 25 repeat
the whole (verb + switch-reference) clause.

As noted in 1.222, to indicate that a situation has not yet occurred, but is expected to in the future, the canonical construction involves the incompletion auxiliary and the irrealis morpheme -h. The lexical verb is suffixed with -h (1.222) and the same subject marker -k, then followed by the auxiliary unuu with regular terminal marking. This construction does not imply that the action will be a continuous action in the future, since what is not completive is the present nonreality or noneventuality of the situation.

(27) ny-s=haa-h-k 'unuu-k 'yu-m (1/2 hang-Irr-SS 1-IncAux-SS 1-be-impf)
'I'm going to hang you.'

(28) Joe-ch tarhar-a-k unuu-k yu-m (Joe-sj work-Irr-SS IncAux-SS be-impf)
'Joe is going to be working.'

(29) ma-ch m-neh-a-k m-unuu-?: (you-sj 2/3-kill-Irr-SS 2-IncAux-Q
'Are you going to kill me?'

There are other ways to express the sense of a future occurrence of a situation without using unuu, but these are rare and will be discussed in a later section (2.171, 2.35).
2.14 The perfect/inferential

The perfect/inferential construction was introduced in 1.223. As noted previously, the perfect construction involves the use of a behavioral auxiliary to which the perfect suffix -\(\text{o}\) has been added. What the perfect does is relate a past event to a present state, as shown below:

(30) pahmi-v-ch s=haa-k wi-o-k wu-m (man-dem-sj hang-SS do-Perf-SS do-impf)

'The man was hanged.'

(31) t=hiny-v-k yu-o-k yu-m (move-Sta-SS be-Perf-SS be-impf)

'It's been moved.'

(32) ma-ch v-qe qe m-i-o-k m-wu-m (you-Sj v-dirty 2-Punct-Perf-SS 2-do-impf)

'You got it dirty.'

The relationship between the perfect and inferential statements was discussed in 1.223, where it was suggested that there is no formal distinction between the two in Tolkapaya. Not surprisingly, the perfect construction occurs frequently with statively marked verbs (e.g. 31).

On a comparative note, it is interesting to observe that in Havasupai (Hinton 1977: 247) the -\(\text{q}\)- of the perfect construction is suffixed directly to the verb stem.
and does not require the additional layer of auxiliary that Tolkapaya seems to require. The following examples are from Havasupai (Hinton 1977: 247) (orthography has been adapted to that of this study):

(33) HA. tha-ch chpeq-ch-o-k wi-e (dem stem-sj wound-pl-Perf-SS do-e)
     'They have wounded you.'

(34) HA. wi-o-k wi (do-Perf-SS do)
     'He has done it.'

Hinton cites some related examples from Walapai as well (from Redden 1966):

(35) WA. chnaal-o (be lost-Perf)
     'It has gotten lost.'

(36) WA. tavs-o (blossom-Perf)
     'It has bloomed, is in a state of blooming.'

The semantics of this morpheme in Havasupai and Walapai suggest that it is the same morpheme as in Tolkapaya. There is no question, however, that in Tolkapaya -o- is never attached to anything other than an (extra) behavioral auxiliary. Hinton's comment on the proliferation of -o-'s in Havasupai is revealing, as it is equally applicable to Tolkapaya:

"Suffixes of the shape [o] or [w] or [wo] show up frequently on Havasupai verbs. They are rather mysterious,
and will demand a good deal more study." (1977: 246)

Like Havasupai, Tolkapaya has a number of -q- 's showing up in various capacities. These will be compared in later sections. So far, we have seen the perfect/inferential and the applicative. In Chapter III the other aspectually oriented instances of -q- will be compared to the perfect usage.

2.15 **Habitual and negative habitual**

The construction expressing habitual aspect, one of the traditional aspect categories, was mentioned previously in connection with switch-reference marking (1.43). The habitual construction is a grammaticized construction that violates the usual rule that switch-reference marks the lexical verb preceding an auxiliary with -k 'same subject'. Rather, in the habitual construction the lexical verb is suffixed with -m 'different subject'. An extra layer of embedding--one of the behavioral auxiliaries--is required as well. This auxiliary is suffixed with -ch, the morpheme of plurality (Munro 1978).

(37) ma-che qaloyaw-a m-maa-m m-wi-ch-k m-wu-m (you-sj chicken-abs 2/3-eat-DS 2-do-pl-SS 2-do-impf)

'You're always eating chicken.'

(38) tohv-m yu-ch-k yu-m (gamble-DS be-pl-SS be-impf)

'He gambles all the time.'

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As can be seen, the habitual construction indicates that some activity is performed regularly or habitually.

The negative version of the habitual in Tolkapaya is interesting in itself. In Tolkapaya, this construction (in one version) is exactly as expected on analogy with the positive form of the habitual construction, except that an additional morpheme -ny can be added to the lexical verb.

(39) rev-ny-h 'um-m yu-ch-k yu-m (play-ny-Irr Neg-DS be-pl-SSs be-impf)
    'He never plays.'

(40) t'ol-h 'um-m wi-ch-k wu-m (boil-Irr Neg-DS do-pl-SS do-impf)
    'She never boils it.'

Of course, it is the negative verb 'um, the final verb in the series before the auxiliary, that takes the -m different subject marker. The -ny is not obligatory, but is a fairly common feature of these constructions. The irrealis -h that is obligatory on the verb preceding a negative verb follows the -ny if one is present.

(41) ma-ch nya 'ya 'm-paa-ny-h 'um-m m-yu-ch-ma
    (you-sj me * 2/l-believe-ny-Irr Neg-DS 2-be-pl-Assr)
    'You never believe me.'
Although the negative habitu als appear to take the -ny suffix most readily, other regular negative verb constructions do as well. This phenomenon will be discussed later (5.2213). This form of the negative habitu als is apparently not found in other dialects of Yavapai. Kendall (1975: 5-6) claims that for negative habitual statements, the habitual construction is not used and -k or -m do not appear. What she appears to mean by this is that -k or -m do not occur on the lexical verb, rather than that neither occurs on the negative verb. But there is really no reason why one would expect switch-reference on the lexical verb anyway, rather than on the negative verb. The negative verb is always the rightmost verb in a series of verbs over which it has scope, and as such, it is the verb that should be expected to take the -m of the habitual construction (as it in fact does in Tolkapaya). Also, the verb preceding the negative verb never takes switch-reference anyway and shouldn't be expected to in this construction. The relevant examples cited by Kendall show that, in fact, what occurs in other dialects of Yavapai is that the negative verb is suffixed with -k or Ø. The examples given below are from Yavapai and have been adapted to the orthography used in this study, but retain Kendall's glosses. These examples are intended to
show an alternate form of the Yavapai negative habitual. Actually, this type of construction is related to a construction in Tolkapaya known as the "professional" construction, discussed at length in 5.22232.

(42) YA. ke matnyu-v-1 '-way-nya '-om-k '-yu-ch-ch
   '-yu-ch-m (Neg farm-dem-on l-exist(pl)-aff
   l-Neg-SS l-be-pl-sj l-be-pl-factive)
   'We've never lived on a farm/We are not-sitter's
   on farms.'

(43) YA. nnyu pa-nyu ke kwe-tvaknya om-k kich-ch⁴
   yu-m (that man-dem neg thing-give/exchange neg-
   SS type-sj be-factive)
   'That man never exchanges goods/is not a goods
   exchanger.

Notice in the next pair of examples that the sentence ends in an unmarked verb--something that would never happen in Tolkapaya. Kendall reports that a predicate nominal construction (as in 42 and 43) is one way of representing a negative habitual in Yavapai. Another way is apparently demonstrated in the next two examples ending in unmarked verbs--a version that is not possible in Tolkapaya.

(44) YA. Savakyuva-ch merika maa yite ke tyach maa
   om-a (Savakyuva-sj beans eat but neg corn eat
   not-tns)

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'Savakyuva will eat beans but he does not (ever) eat corn.'

(45) YA. hitat-ham'onye-ch sah-ee' m-yii. ke nyivicha 'hwi 'om. (back-hump-sj smell-Q 2-think neg (that sort) l-smell l-not)

'Do you think camels stink? I've never smelled one.'

Negative habituals in Tolkapaya, not surprisingly, can also be rendered as a predicate nominal, as shown below:

(46) JP mii-ny-h 'um-ch yu-m (JP cry-ny-Irr Neg-sj be-impf)

'JP never cries.'

(47) Jack-ch qwaqta maa-ny-h 'um-ch yu-m (Jack-sj meat eat ny-Irr neg-sj be-impf)

'Jack never eats meat.'

However, as noted earlier, these examples would not be parallel to Kendall's 42-43, which are equivalent to the 'professional' construction. In other words, none of the four examples cited by Kendall compare to the negative habitual in Tolkapaya. It's difficult to say, then, what the comparative dialect differences are.

The connection between the habitual construction and predicate nominals is not so surprising. It is even more strongly motivated semantically for negative habituals.
With positive habituals, the activity that is viewed as a recurring or habitual activity is not continuous, or without interruption—it is not really a property or an attribute of the "habituee", necessarily. On the other hand, the negative habitual is an assertion of a continuous situation—the "not-doing" of something—and is virtually an attribute of the non-doer. The person who never eats meat is in a constant state of being a non-meat eater. Examples such as these reinforce the close relationship of pluralization and nominalization in the Yuman family argued for by Munro 1973. There are some examples in Tolkapaya which combine, in effect, the habitual construction with a predicate nominal.

(48) Bonnie-ch tu vqi-v-ch yu-m yu-ch-k yu-m
    (Bonnie-sj just woman-dem-sj be-DS be-pl-SS
    be-impf)
    'Bonnie has always been a woman.'

The fact that there may be dialect diversity in the habitual construction and perhaps in the predicate nominal as well and that there are so many cases of variants of each type suggest that the two constructions are in some state of reanalysis.

For instance, it was noted earlier that in the predicate nominal construction the proto-typical construction
has the predicate noun subject marked and the "logical" subject noun unmarked. In Tolkapaya, and other dialects of Yavapai as well, this first noun is increasingly coming to be subject-marked as well as the predicate noun. There are certain sentences, typically generic statements and axioms which combine aspects of the habitual and the predicate nominal constructions, but are different from 48.

(49) kthar-ch qwaqt-a maa-ch-k yu-ch-ch yu-ch-m
    (dog-sj meat-Abs eat-pl-SS be-pl-sj be-pl-impf)
    'Dogs are meat eaters.'
(50) nymi-ch kthar-v-m pa-chov-k yu-ch-ch yu-ch-m
    (cat-sj dog-dem-with pl.obj.-fight-SS be-pl-sj be-pl-impf)
    'Cats and dogs fight.'

These and other descriptive statements that are variants of the predicate nominal are treated in detail in 5.2223.

Unlike Yavapai, where Kendall reports only final -m on the final auxiliary construction in predicate nominals, Tolkapaya allows -ny when the semantics are appropriate.

(51) Allen-ch 'ich-rav 'i-ny-h 'um-ra-ch yu-ny
    (Allen-sj s.t.-hurt say-ny-Irr neg-ints-sj be-prf)
    'Allen used to not ever get sick.'
2.16 **Affixes of eventive modality**

We will now look at affixes that modify a simple statement by conveying the speaker's attitude toward the statement or his opinion or point of view regarding the situation expressed in the statement. Such pragmatic concerns as commenting on how closely one is committed to the assertions one is making are expressed in two terminal suffixes -ma and -mo. Both suffixes occur sentence-finally attached to a lexical verb or, more commonly, to an auxiliary. These terminal suffixes are mutually exclusive with the Final Auxiliary Construction, but may coincide with irrealis -h in semantically appropriate cases.

2.161 The suffix -ma indicates a strong assertion on the part of the speaker—the speaker is more "involved" or responsible for the assertion and is more sure of his facts than in a predication marked by the modally neutral Final Auxiliary Construction or absolutive form. -ma is often translated as 'must be', showing that the speaker claims the assertion as his personal opinion.

(52) ma-ch m-han-k m-yu-o-ma (you-sj 2-good-SS 2-be-Perf-Assr)

'You must be well.'
(53) nya-ch 'wi-ma (I-sj l-do-Assr)
'I did it.'

(54) Pam-ch vam yaam-m 'u-ch-ma (Pam-sj go DS
1/3-see-pl-Assr)
'We just saw Pam leaving.'

This overt marking as being the speaker's considered opinion is shown clearly in an affective use of -ma. This usage is with predicate nominals and imparts a strong sense of the speaker's mildly deprecatory attitude towards the topic of the assertion—that something is "only" or "merely" as described. Compare the two cases below:

(55a) 'nya-ch-v-a vquuy-ch 'yu-ch-m (I-pl-dem-Abs
women-sj be-pl-impf)
'We are women.'

(55b) 'nya-ch-v-a vquuy-ch 'yu-ch-ma (I-pl-dem-Abs
women-sj be-pl-Assr)
'We are only women.'

The following examples have the particle tu 'just', as well.

(56) JP tu hmany qay-ch yu-ma (JP just child small-
sj be-Assr)
'JP is just a little fellow.'

(57) Jack-ch tu kthye-v-ch yu-ma (Jack-sj just doctor-
dem-sj be-Assr)
'Jack is only a doctor (e.g., he's not a miracle-worker).'

-ma occurs most frequently suffixed to an auxiliary, rather than the lexical verb. Any auxiliary verb except hii, lwi, or yite (5.3) can be suffixed with -ma. -ma can be used to make an assertion about an event that has not occurred yet—in other words, to predict—and the usual formula is to mark the lexical verb as irrealis with -h, then to suffix -ma to the incompletive auxiliary unuu. In complex sentences where the outcome is often contingent, the auxiliary yi is sometimes used, as in 59.

(58) tu m-nmak-m '-yaam-a-k '-unuu-ma (just 2-stop-DS 1-go-Irr-SS 1-IncAux-Assr)
    'Just let me go.'

(59) 'e 'm-yii-ktho vak m-wa-k m-yi-ma (* 2/1-like-Mod here 2-be:located-SS 2-Cog-Assr)
    'If you like me, then stay here.'

The irrealis morpheme -h can also be suffixed to the lexical verb and followed by -ma for unrealized situations.

(60) Jack-ch m-chqam-h-ma (Jack-sj 3/2-hit-Irr-Assr)
    'Jack will hit you.'

-ma occurs quite frequently on modal expressions stating an opinion about what should or could happen, or what is proper or supposed to take place. These complex constructions
will not be presented here.

2.162 The suffix -mo conveys that the speaker is doubtful about the truth of his assertion. This dubitative suffix occurs in the same position and with the same verbs as -ma.

(61) Jack-che neh-mo (Jack-sj kill-Dub)
    'Maybe Jack killed him.'

(62) tarhar-mo (work-Dub)
    'Maybe he's working.'

(63) nya-ch 'wa '-yoov-k '-wi-mo (I-sj house 1/3-build-SS 1-do-Dub)
    'Maybe I built a house.'

It is even more likely than -ma to occur with the auxiliary yi for future situations, than with unuu. As with -ma, the lexical verb may simply be suffixed with irrealis -h and followed by -mo.

(64) ny-'u-h '-yi-mo (l/3-see-Irr 1-Aux-Dub)
    'Maybe I'll see you.'

(65) Heather-ch ha'mala 'oy-h yi-mo (Heather-sj beer bring-Irr Aux-Dub)
    'Heather might bring beer.'

Needless to say, it is tempting to try to segment these suffixes into the -m which they share and the two final vowels, and to try to relate the -m to the many other
occurrences of final -m. However, in Tolkapaya there are no contrasting suffixes -ka or -ko that function in a parallel way. There is reason to believe that the suffix -a, at least, is identifiable as a predicking suffix that basically serves to mark a clause as an utterance-final assertion. This same suffix -a is part of the irrealis terminal suffix -ha and occurs on modal auxiliaries (such as lwi) that don’t take any other terminal suffixation.

There is some indication that other dialects of Yavapai make even more extensive use of this -a suffix by itself. Kendall 1975 glosses it "tense" (see, for instance, example 44 above), but says in Kendall 1976 that -a is "vaguely involved with 'tense' or 'emphasis'" (Kendall 1976: 100).

2.163 The morpheme (h)pira is a morpheme whose syntactic status is not readily apparent. Simply stated, hpira is a morpheme meaning 'only' whose scope is the lexical item or constituent that it immediately follows. The problem concerns assigning hpira a syntactic category. Hpira is certainly not a verb, since it has absolutely no verb morphology. It may well be a noun, since occasionally it has occurred with a demonstrative suffix or a directional suffix as well as the absolutive -a shown here. It is certainly not a conjunction in Tolkapaya, as it has been
described for other dialects of Yavapai. Indeed in most of the examples given below, there clearly would be nothing for it to conjoin. But h\textit{pira} is functionally an adverbial modifier.

Compare the following examples which show h\textit{pira} restrictively modifying various types of syntactic constituents.\textsuperscript{5}

(66) 'chi-v-ch h\textit{pira} 'ha-v-l ya'pay-m yu-ch-k yu-m
(fish-dem-sj only water-dem-loc live(pl)-DS be-pl-SS be-impf)

'Only fish live in water.'

(67) 'chi-v-ch 'ha-v-l h\textit{pira} ya'pay-m yu-ch-k yu-m
(fish-dem-sj water-dem-loc only live(pl)-DS be-pl-SS be-impf)

'Fish will only live in water.'

(68) k\textit{tharhan}-ch q\textit{waloyaw}-a p\textit{ira} maa-ch-ch yu-m
(coyote-sj chicken-abs only eat-pl-sj be-impf)

'Coyotes only eat chicken.'

(69) Pam-ch q\textit{waloyaw}-a s\textit{lii}-k p\textit{ira} wi-m wi-ch-k wu-m
(Pam-sj chicken-abs fry-SS only do-DS do-pl-SS do-impf)

'Pam only fries chicken (e.g. she won't boil it).'

(70) myeh hip-\textit{a}m p\textit{ira} 'u-ch-m yu-ch-k yu-m (ghost night-DS only see-pl-DS be-pl-SS be-impf)

'One can only see ghosts at night.'
Notice that in examples 68-70 the initial h- in hpira was not pronounced. This loss of initial h- was observed in another lexical item of dubious syntactic identity, hupuk (2.26). There is no apparent conditioning or change in meaning correlated with the presence of the h onset.

Kendall 1972 classifies pira with a number of other lexical items she calls conjunctions in Yavapai. The same problems with this analysis arise for pira as for (e.g.) yite (2.23). There is nothing for pira to conjoin in the simple sentences given above. Most of Kendall's examples show pira in complex sentences positioned in such a way as to modify one of the clauses—examples best suited for her purpose of demonstrating pira to be a conjunction. For example, the following sentence is from Yavapai (Kendall 1972)—with adapted orthography. The glosses are Kendall's.

(71) YA. John-ch pa'neh-ha um-ha i-ch-ktho pira

(John-sj:person kill-Fut not-Fut say-pl:conditional conj.)

'John won't kill anyone unless they tell him to.'

Example 71 is a typical Yavapai conditional sentence (with the antecedent and consequent clauses reversed) which has the antecedent clause modified by pira. More literally, then, 71 means, 'Only if they tell him to will John kill anyone.' pira doesn't seem to be conjoining anything--
it is functioning as a modifier whose scope is over the whole clause.

Kendall goes on to give examples such as the following simple sentence—still claiming that pira is a conjunction:

(72) Ya. nymi 'ny-hat qwaqt-a pira maa (cat 1-ref-
pet meat-abs conj. eat)
'My cat only eats meat.'

This simple sentence use of pira to modify a lower-order constituent is much more common in Tolkapaya than its use within a complex sentence. But the function of pira remains the same, regardless, as can be seen below.

(73) ich-'-maa-h 'um-a-k 'unuu-m 'yu-ch-k 'yu-m
m-vaw-m pira 'maa-ha (s.t.-1/3-eat-Irr Neg-
Irr-SS 1-InCAux-DS 1-be-pl-SS 1-be-impf 2-come-
DS only 1/3-eat-Irr)
'I won't eat until you come, then I'll eat.'

Returning to the question of the syntactic identity of pira, what little evidence there is suggests that pira is a noun. There is perhaps only one other case where a lexical item that is syntactically a noun functions as a modifier. Typically, in Tolkapaya, all types of adverbial or adjectival-like modification are accomplished by verbs. The next examples show pir with nominal marking. In 74, pir appears
with the demonstrative suffix -v followed by the noun absol-
utive suffix -a.

(74) Pam-che 'ich-maa-v-a JP pir-v-a kkav-o-k yu-o-k
yu-m (Pam-sj s.t.-eat-dem-Abs JP only-dem-Abs
buy-App-SS be-Perf-SS be-impf)
'Pam only bought food for JP.'

In 75 pir is shown with a directional suffix -e replacing
the absolutive -a.

(75) 'chi-v-ch 'ha-v-l pir-e 'am-ch-ch yu-m (fish-
dem-sj water-dem-Loc only-Dir inhabit-pl-sj be-
impf)
'Fish only live in water.'

The other case of a noun serving as a modifier is pay
'all'. In English, all can be syntactically a noun, or
can be an adjective or adverb. In Tolkapaya, in the absol-
utive form paya functions as a noun or can take some verbal
morphology when functioning as a modifier.

(76) pay-a 'wii-h-a '-chkpaa-ch-k '-yu-m (all-abs
mountain-dem-abs 1/3-climb-pl-SS l-be-impf)
'Many of us climbed the mountain.'

(77) pay-t-k '-nvaa-k '-yu-m (all-Tem-SS l-come(pl)-
SS l-be-impf)
'We all came.'

The fact that only can be used in English complex senten-
ces to replace the conjunctions but, unless and except, as
well as an adverb, probably provided the source of confu-
sion leading to Kendall's terming pir a conjunction. In

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future we will consider (h)pir to be a noun, so it will be cited without the absolutive suffix.

2.17 Affixes of noneventive modality

The two morphemes h and th are the two most central morphemes of the verbal modality system in Tolkapaya. As such their usage requires a chapter in itself (Chapter IV). Here their role in the simple sentence alone will be described. It should be kept in mind that, although h and th participate in an extremely wide variety of semantic expressions and syntactic structures, they each have an integrated, unique function. The semantic characterization, relationship to demonstrative h and th, and historical connections will all be discussed in Chapter IV. The following description portrays a mere fraction of the uses of h and th—and these are taken out of the spectrum of uses that define the morphemes. With this caveat in mind, let us look first at -h.

2.171 The morpheme -h 'irrealis' is historically quite old. It has been reconstructed for Proto-Yuman as a verbal affix and all Yuman languages show some reflex of *x. -h has already been identified and several of its uses described. As a terminal suffix (1.413) the morpheme has the shape -ha and is used to assert that a situation will occur in the future. It is likely that the vowel -a in this position indicates that an assertion is being made, since it is also a part of the suffix -ma (nonfuture assertive) (see 2.16). In any case, suffixed to an otherwise unmarked
simple sentence -ha simply indicates futurity.

(78) Joe-ch tarhar-ha (Joe-sj work-Irr)
     'Joe will be working.'

The irrealis morpheme is a good example of the type of morpheme discussed earlier that cuts across the verbal categories of tense, aspect and modality. In some uses h is clearly referring to the temporal orientation of situations; in others, it reflects the epistemology of a situation and the speaker's viewpoint.

As an alternative to the above construction, irrealis -h can be suffixed to the verb stem, followed by switch-reference and the Final Auxiliary Construction, with or without the incompletive auxiliary unuu. (In examples 79 and 80 we see the proper phonological environment for the [-a] variant of /-h/ (between two nonsonorant consonants) that was stated in 0.4.)

(79) Jack-ch ma m-chqam-a-k wu-m (Jack-sj you 3/2-hit-Irr-SS do-impf)
     'Jack will hit you.'

(80) Jack-ch ma m-chqam-a-k unuu-k wu-m (Jack-sj you 3/2-hit-Irr-SS IncAux-SS do-impf)
     'Jack will hit you.'

The version expressed in 80 is by far the most common of the three alternatives given for expressing that an event will occur.

Still another possibility is to suffix -h to the verb stem and follow it with a terminal suffix, but without the
same subject reference marker -k.

(81) yaam-h yu-m (go-Irr be-impf)
    'He will be going.'

(82) Jack-ch m-chqam-h-mo (Jack-sj 3/2-hit-Irr-Dub)
    'Jack may hit you.'

As a question, one can use the same formula as in 82 and use an exclamatory particle hmo, as well.

(83) hmo-?: m-chqam-h-mo (Exclam-Q, 2/3-hit-Irr-Dub)
    'Why don't you hit him?'

_h_ is used in the dubitative auxiliary construction which uses the cognitive auxiliary yi. This formula occurs only with future reference.

(84) ny-'u-h '-yi-mo (1/2-see-Irr 1-Cog-Dub)
    'Maybe I'll see you.'

As a general rule, it seems that in these simple sentences, -h is specifically for future reference, rather than an undifferentiated irrealis.

-h is also required as a suffix on a lexical verb preceding certain auxiliaries. These cases show that -h is essentially irrealis. The auxiliaries that require -h on the preceding verb are described in 2.3 below. These include 'um 'negative verb', mat 'circumstantial inference', chat 'almost', hii/yii 'purposive/obligational', lwi 'should', and the cognitive auxiliary yi. A few examples should be sufficient to indicate that -h is performing an irrealis function rather than "future". For instance, irrealis -h is required on the verb preceding the auxiliary of negation.

113
'um to describe an absolute past time situation:

(85) nya-ch Pam '-u-h 'um-k '-yu-m (I-sj Pam 1/3-
     see-Irr Neg-SS 1-be-impf)
     'I didn't see Pam.'

Irrealis morphology is apparently required on the verb
preceding the auxiliary mat which is used to indicate that
the speaker's assertion is based on circumstantial evidence
and is not viewed as fact.

(86) 'lwi-v-ch pahmi-v-a chkyo-h mat-ma (snake-dem-
     sj man-dem-Abs bit-Irr apparently-Assr)
     'It looks like the snake bit the man.'

It should be obvious how the semantics of the remainder of
the auxiliaries mentioned above are consistent with the
noneventive or irrealis mode of their propositions.

2.172 In Chapter IV all of the various uses of th will
be described and their underlying semantic commonality will
be drawn upon in positing a unified description of the
morpheme. At this time I will simply describe the expres-
sions that use th in one-clause constructions.

As a morpheme of noneventive modality, several semantic
features can be cited as characterizing th. th is essen-
tially an indicator of contrast, nonfactuality, and temporal
priority. Several types of semantic expressions can be
manifested through the use of th in a single clause. Syn-
tactically, two basic types of constructions are possible:
1) a predicate nominal construction or 2) a regular verb
(auxiliary) construction. -th is used with a predicate

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nominal construction to express perfect aspect, to indicate that a situation formerly obtained, but no longer does, and to predicate exclusive identity in an existential expression. Examples are given below.

This highly marked perfect expression represents a past (or prior) event having immediate relevance.

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

The next example shows that th can be suffixed to the auxiliary, rather than the lexical verb.

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

With stative verbs, the sense imparted through this construction is that a certain situation once obtained, but no longer does.

(89) ma-ch m-se-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.'

A habitual activity that formerly obtained follows the same pattern.

(90) Jack-ch qwaqt-a maa-m yu-ch-th-ch yu-m (Jack-sj meat-abs eat-DS be-pl-Mod-sj be-impf)  
'Jack used to eat meat.'

-th provides a sense of a unique identity in certain existential expressions.
(91) 'nya-th-v-ch '-yu-m (be me-Mod-dem-sj 1-be-impf)
'It's only me.'

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

These are highly marked, affective utterances in which th carries a great deal of contrastive modal force. th serves to establish a set of expectations as background for the assertion. The affective force has a diminutivizing effect—"merely."

A verb construction with th has a much similar contrastive effect, emphasizing the uniqueness of an event. th is suffixed directly to the verb stem.

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

This usage of th on regular lexical verbs is fairly infrequent. A much more common combination is th suffixed to a numerical verb to mean "only N, no more, no less."

95 compares a number in its usual form with t to a number verb with -th.

(94) '-sit-th-k '+yaam-k '+yu-m (l-be:one-SS 1-go-SS 1-be-impf)
'I went by myself.'

(95a) nya-ch 'ichi hmuk-t-m '+wii-k '+yu-m (I-sj fish be:three-Tem-DS 1-have-SS 1-be-impf)
'I have three fish.'
(95b) nya-ch 'chi hmuk-th-m 'wii-k 'yu-m (I-sj fish be:three-Mod-DS l-have-SS l-be-impf)
'I have only three fish.'

A contrastive assertion of a different type--specifically noneventive--is more common. In these sentences, -th is suffixed to a behavioral auxiliary which is a necessary part of the construction. The construction is used to express such nonfactual notions as failed attempts and unfulfillable desires.

(96) 'wii '-yoov-a-k 'wi-th-k 'yu-m (money l/2-make-Irr-SS l-do-Mod-SS l-be-impf)
'I tried to make money.'

In this example, the only indication that an attempt was made and failed to accomplish the desired result is found in the -th suffixed to the auxiliary. That the desired result (making money) is nonfactive is shown by the presence of irrealis -h.

(97a) pahmi-v-ch '-yu-th-k+wal '-yii-m '-yu-ch-k '-yu-m
(man-dem-sj l-be-Mod-SS+want l-think-DS l-be-pl-SS l-be-impf)
'I wish I were a man.'

In this case the desire is potentially unfulfillable--what is desired is not only nonfactual but unattainable. Compare 97a to an identical sentence without the th suffix.

(97b) pahmi-v-ch '-yu-k+wal '-yii-m '-yu-ch-k '-yu-m
(man-dem-sj l-be-SS+want l-think-SS l-be-pl-SS l-be-impf)
'I wish I were like a man.'

This sentence, on the other hand, expresses a potentially gratifiable desire—to "be like" something. Nothing in 97b overtly expressed the meaning 'be like' (which is usually expressed by the verb vlwi (cf. 2.22)). The meaning must be interpreted from the absence of th, thereby affording the possibility of the desire being realized.

The final type of single-clause construction we will consider is specifically counter-factual. In other words, this modal expression is used to state what could, would, or should have obtained, had circumstances been otherwise. Since this semantic feature is purely a matter of the speaker's opinion or thoughts about a situation, it is not surprising to find that the auxiliary used in this construction is yi, the cognitive auxiliary. This verb, as an auxiliary (or in the main verb form yii) is used to refer to mental activities such as thinking, wanting, liking, and so on. This construction requires that the lexical verb be marked as irrealis and will not take switch-reference marking. The auxiliary yi (2.36) itself either ends in the predicating vowel -a or may take switch-reference, if followed by a second clause.

(98) ny-tope-h 'yi-th-a (1/2-help-Irr 1-Cog-Mod-a)
    'I should have helped you.'

(99) m-neh-v-ch-a m-yi-th-a m-yu-ch-ma (3/2-kill-Sta-pl-Irr 2-Cog-Mod-a 2-be-pl-Assr)
    'You all could have gotten killed.'
This auxiliary formula yi + th + a recurs in numerous modality expressions to be presented in later chapters. We will return to the semantic properties of th and its historical origins in Chapter III, as we consider certain adverbial expressions using th.

2.2 Eventive auxiliaries and cognitive verbs

We now turn to the auxiliaries and cognitive verbs which serve to qualify expressions referring to events that have actually happened— that is, verbs of eventive modality. These verbs are of various syntactic and semantic types.

2.21 ukwa 'sense'

The verb ukwa indicates that the source of the information on which an assertion is based is from the senses. ukwa is used as an auxiliary with verbs of tasting, smelling, hearing, touching, or bodily states or functions. Syntactically, it functions as a regular auxiliary taking normal verb morphology—the verb preceding ukwa takes the same subject reference marker -k.

(100) 'kwe-th-ch-mo sah-a '-hwi-k '-ukwa-k '-yu-m
   (thing-dem-sj-Dub rotten-abs 1/3-smell-SS 1-sense-SS 1-be-impf)
   'I smell something rotten.'

(101) 'kwe-th-mo ruy-k yu-ch-a '-tpath-k '-ukwa-k
   '-yu-m (thing-dem-Dub hot-SS be-sj-abs 1/3-touch-SS 1-sense-SS 1-be-impf)
   'I just felt something hot.'
(102) nya-ch kwe-th-mo '-ev-k '-ukwa-k '-yu-m (I-sj thing-dem-Dub 1/3-hear-SS 1-sense-SS 1-be-impf)
'I heard something.'

(103) m-tlahv-k m-ukwa-?: (2-be:tired-SS 2-sense-Q)
'Are you tired?'

(104) '-thu-ch-a-k '-ukwa-k '-yu-m (1-urinate-pl-Irr-SS 1-sense-SS 1-be-impf)
'We have to urinate.'

The sensory verb itself does not have to be expressed, in which case, ukwa signifies that the assertion is based on the speaker's (unspecified) sensory knowledge. Notice that subject agreement on ukwa is with the subject of the clause, not necessarily with the speaker (i.e. first person).

(105) 'chi-v-ch sah-k ukwa-k yu-m (fish-dem-sj rotten-SS sense-SS be-impf)
'This fish is rotten.'

(106) qwaloyaw-a '-maa-ch-a-k '-unuu-k '-ukwa-ma
(chicken-abs 1/3-eat-pl-Irr-SS 1-IncAux-SS 1-sense-Assr)
'I guess we're going to eat chicken.'

(107) kwivo-k ukwa-k 'i-m (rain-SS sense-SS say-impf)
'It's going to rain.'

2.22 vlwi 'be right, resemble, etc.'

The verb (v)vlwi has two main functions—a main verb and as a modal auxiliary (2.3). The main verb functions are of two types. Vlwi can be the verb meaning 'be right, ready, sufficient, true or fitting'; in other words, 'be
appropriate to the occasion', as determined by the verb. 'True' in the case of utterances, 'fit' in the case of clothes, 'enough' in the case of provisions and so on. \((v)\text{vlwi}\) can be used to mean 'appear, resemble, or look like.'

2.221 In the first main verb usage, \(\text{vlwi}\) functions syntactically like any verb, as shown in the following examples which illustrate the various shades of meaning.

(108)  'ich-maa-v-ch tu \(\text{vlwi-k}\) '-han-k yu-m (s.t.-eat-dem-sj just right-SS 1-good-SS be-impf)
   'This food is just right.'

(109)  k=waw-k v-\(\text{laawlaaw}\) 'i-ch-h 'um-m \(\text{vlwi-k}\) yu-m
   (talk-SS v-shout Punct-pl-Irr neg-DS right-SS be-impf)
   'It's not proper to talk loud.'

(110)  'ich-'-maa-ch-a-k ':-\(\text{vlwi-ch-k}\) ':-yu-m (s.t.-1/3-eat-pl-Irr-SS 1-ready-pl-SS 1-be-impf)
   'We're ready to eat.'

\(\text{Vlwi}\) can be predicated of propositions (as in 109) or of nouns (e.g. 108, 111). Several observations can be made about these constructions. For some reason the demonstrative word \(\text{vam}\) (dem.stem +Loc. case) which usually means 'here' or 'now', shows up fairly often in \(\text{vlwi}\) sentences, particularly those meaning 'be true' or 'fit'.

(111)  yure-ch Jeni va-m \(\text{vlwi-ra-k}\) yu-m (dress-sj Jeni stem-Loc fit-Ints-SS be-impf)
   'That dress really fits Jeni.'

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(112) va-m m-1wi-ra-k m-knav-o (stem-Loc 2-true-ints-SS 2/3-tell-Appl)

'Tell me the truth.'

The verb (v)lwi, itself can either appear with the y- prefix or without it with no discernible change in meaning when vlwi is functioning as a main verb. It frequently loses the y-prefix when subject marked for second person with m-

Vlwi takes subject agreement like any normal verb and can take the intensifier -ra.

2.2211 The 'be ready' construction (e.g. 110) has some interesting variants that will be briefly mentioned here. As an alternative to the construction in 110, one finds a construction where the verb preceding vlwi has no switch-reference suffix -k, but rather ends in irrealis -h or Ø, as shown below:

(113) '-yaam-h '-vlwi-k '-yu-m (l-go-Irr l-ready-SS l-be-impf)

'I'm ready to go.'

(114) 'ich-m-maa vlwi-k yu-m (s.t.-2/3-eat ready-SS be-impf)

'You're ready to eat.'

These examples may be intermediate stages leading up to what appears to be a subject complement version of the 'be ready' construction—especially 114 which does not
have subject agreement on vlwi.

2.2212 We will digress here to examine this complement clause construction which employs an additional modal auxiliary (hii/yii) which will be described in 2.3. In the canonical form of the complement construction the auxiliary hii/yii preceded the final verb vlwi and is generally suffixed with -ch, the subject case marker. The lexical verb in the sentence is suffixed only with the irrealis -h suffix; if the form of the auxiliary is yii (and not hii) it can take subject person marking. This modal auxiliary can be suffixed with the demonstrative -v in addition to -ch, or may omit -ch and appear with -v, followed only by the absolutive suffix -a, or the different subject reference marker -m.

(115) nya-ch '-chov-h yii-v-ch vlwi-k yu-m (I-sj 1/3-fight-Irr Aux-dem-sj ready-SS be-impf)
'I'm ready to fight.'

(116) '-yaam-ch-h yii-v-ch vlwi-k yu-m (I-go-pl-Irr Aux-dem-sj ready-SS be-impf)
'We're ready to go.'

(117) 'ich-maa-v-ch maa-ch-a hii-v-ch vlwi-k yu-m (s.t.-eat-dem-sj eat-pl-irr Aux-dem-sj ready-SS be-impf)
'The food is ready (for them (unspec.)) to eat.'
(118) kathve-v-ch m-thii-ch-a hii-v-ch vlwi-k yu-m
(coffee-dem-sj 2/3-drink-pl-irr Aux-dem-sj
ready-SS be-impf)
'The coffee is ready for you to drink.'

There appear to be two syntactic types of this expression. In one type, the clause ending in hii/yii is the subject complement of the higher verb vlwi, and as such takes the subject case suffix. This type we have just seen in 115-118.

The other form of the construction shows that the hii/yii clause is subordinate to the vlwi clause, which has as its subject the simple subject-marked noun, rather than the hii/yii clause itself. In this case the hii/yii clause can be center-embedded and takes the -m different subject reference marker. 119-120 demonstrate this type.

(119) ma-ch ny-tope hii-m m-lwi-:? (you-sj 1/2-help
Aux-DS 2-ready-Q)
'Are you ready for me to help you?'

(120) Heather-ch '-tope hii-m vlwi-:? (Heather-sj
1/3-help Aux-DS ready-Q)
'Is Heather ready for me to help her?'

It is not difficult to imagine how the semantics of sentences like these would lead to syntactic confusion, since often there are two potential logical subjects (as in 119
and 120) and the further possibility of viewing the whole situation,—not just the subject noun—as being "ready" or imminent. So it is not surprising then, to find intermediaries (such as 113-114) between the complement structure and the simple embedded structure.

The examples in 119 and 120 are straightforward center-embeddings with the expected -m reference-switching suffix—the two clauses have different subjects. In the following, seemingly parallel example, it's not clear why the -m appears, since the subject of both clauses is the same.

(121) 'swar 'yii-v-m 'vlwi-k 'yu-m (l-sing l-Aux-v-m l-ready-SS l-be-impf)
'I'm ready to sing now,'

This raises the question of the identity of v as well.
If the construction is a nominalization, as in the first type, then v is a normal demonstrative, but what about here? One possibility is that this construction is a nominalization with the v demonstrative and the m associative case suffix. In other words, "I am ready with my singing." Note that in all the above examples of the complement clause structure (115-118) the first noun in the sentence is always subject case marked. There is a strong tendency in Tolkapaya to mark the initial noun in a clause as subject, even when the actual syntactic subject of the sentence is the clause itself. This tendency and the predilection for

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subject-raising contribute to the syntactic ambivalence of the construction. The following is an example of subject-raising in the complement construction and should be compared to 121:

(122) 'swar-h yii-v-ch 'vlwi-k 'yu-m (1-sing-Irr Aux-dem-sj 1-ready-SS 1-be-impf)
'I'm ready to sing now.'

Another type of example that is difficult to analyze is where the auxiliary is clearly nominalized by the -v- demonstrative suffix and the -a absolutive, but where its syntactic relation to the main verb is unspecified. It is further complicated by the fact that subject-raising has occurred.

(123) 'ich-maa hii-v-a va-m 'vlwi-k 'yu-m (s.t.-eat Aux-dem-abs stem-Loc 1-ready-SS 1-be-impf)
'I'm ready to eat.'

Problematic cases such as 121 and 122 are rare. It's possible that given the large number of examples of this 'be ready' construction that has been obtained, these cases are just odd variants of a construction that enjoys a lot of variation, due to its atypical syntactic properties. These cases are reminiscent, actually, of the structure of counterfactual conditionals. Counterfactual conditionals have a nominalized protasis clause that is not marked for its relation to the apodasis, the independent clause. Of course, the clauses of these conditionals are more loosely bound than the clauses of the 'be ready' construction—there
would never be subject-raising from the protasis to the apodasis. Nonetheless, perhaps examples like 121 could be interpreted as juxtaposed clauses, one of which is nominalized. If so, 121 would say something like 'I'm supposed to eat and I'm ready.' This interpretation will be easier to understand after the auxiliary hii/yii is examined in 2.3.

Returning to the question of the origin of sentences such as 113 and 114, which look like 122 with the auxiliary phrase yiivch deleted, it is necessary to consider the function of the auxiliary hii/yii. The auxiliary hii/yii is one of the modal auxiliaries having certain special properties to be taken up in 2.3; it is basically used in constructions to mean 'should' or 'be supposed to'. It would seem that its function in the 'be ready' sentences is as a bit of extra modal material which can be omitted. Sentences like 121 and 122 then, mean something on the order of 'I'm supposed to sing and I'm ready to.'

2.222 Let us return now to the other main clause usage of ylwi—to express resemblance or appearances. The simplest case of this type of construction states that noun X resembles noun Y in appearance.

(124) JP-che Allen lwi-ra-k yu-m (JP-sj Allen resemble-ints-SS be-impf)

'JP looks like Allen.'

Here the two nouns are merely juxtaposed and their physical resemblance is predicated.
Other cases of "looking like/as if" something require a nominalized complement clause embedded to vlwi—as VERB-SS be+Nom+Abs.

(125) 'ar ye-k yu-ch-a vlwi-ma (* happy-SS be-Nom-Abs appear-Assr)
'She seems happy.'

(126) paak-k yu-ch-a vlwi-ma (snow-SS be-Nom-Abs appear-Assr)
'It looks like it's snowing.'

(127) ma-ch m-tiv-k yu-ch-a vlwi-k yu-m (you-sj 2-be: pregnant-SS be-Nom-Abs appear-SS be-impf)
'You look like you're pregnant.'

Pamela Munro has suggested to me that one way of accounting for these and other odd-looking nominalized constructions in Tolkapaya is to posit the existence of a -ch nominalizing morpheme. This analysis is much more appealing for the -ch in these k-yu-ch-a sentences than any of the other possibilities. The -ch plural suffix wouldn't make much sense here; it can't be plural subject agreement of course, and if it were the habitual usage, one would expect -m rather than -k. (But cf. discussion of a related construction in 5.2223). The -ch 'passive' suffix is not a very likely candidate either, since it wouldn't make any sense on an intransitive behavioral auxiliary. The subject case suffix -ch would make more sense, certainly, on a complement of 'appear', but would not be followed by the absolutive suffix -a. There are other complex nominalizations
that we will be looking at later which have two -ch suffixes. These are probably cases of a -ch nominalizer followed by the subject case suffix. This kyucha construction, then, would be in the parallel absolutive form.

Munro (1974: 223), in a discussion of nominalizers in Mojave, points out that certain nominalizers (including -ch) are used to indicate nominalization in Yuma, Diegueno, and Mojave, and cites the following example from Sandra Chung to show such nominalizers occur in Yavapai (Tolkapaya).

\[(128) \ich-maa-ch-a nya tala yoov-ch-a ny-th-a ya-l t=hotv-i \ (s.t.-eat-pl-abs I father make-Nom-abs dem-stem-abs stem-Loc hide-Decl).\]

'He's hiding under the table my father made.'

She also notes that nominalizers are largely optional (and rather scarce in Yuman languages), since many of the languages use case markers and demonstratives (NP suffixes) to signal a nominalization. This, of course, is true of Tolkapaya, and this -ch nominalizer only shows up in certain complex nominalizations with rather complicated semantic relations, such as the 'purposive/obligational' construction and certain complex predicate nominal constructions.

When a -ch is followed by one of these NP suffixes it will be identified as the -ch nominalizer, rather than one of the other -ch suffixes, if the syntactic context is appropriate.
2.23 *yite* 'contrary to expectation'.

The contrastive auxiliary *yite* is one of the set of modal auxiliaries in Tolkapaya, whose most frequent role is the modal modification of complex sentences. One of the clues to its identity lies in the fact that it occurs in simple sentences, however. I will try to characterize *yite* here without going into detail about its use in complex sentences. The general semantic flavor of the *yite* construction fits well under the rubric "contrary to expectation". Cognate constructions apparently only exist in the rest of Upland Yuman—the remainder of the Yuman family does not seem to have distinguished this particular part of semantic space (Crook 1976).

*Yite* is another example of what Kendall calls conjunctions. The justification for calling it a modal auxiliary and evidence indicating *yite* cannot be a conjunction will be offered in Chapter III and V. That *yite* is a modal auxiliary will be assumed here and examples of *yite* in simple sentences will be studied.

First of all, the fact that *yite* can occur in simple sentences suggests it is not a clausal conjunction. The examples below show that *yite* is different from the regular auxiliaries described in 1.43 in that the lexical verbs preceding it have bare stems without switch-reference or most other verbal marking (although the verb can be marked as irrealis when semantically appropriate). Notice also that *yite* does not take any suffixation itself. It
Just as in English, the subject of the complement can be raised to be the subject of vlwi. Compare 129-130:

(129) ma-ch 'ich-m-rav-k yu-ch-a m-lwi-k m-yu-m (you-sj s.t.-2-hurt-SS be-Nom-Abs 2-appear-SS 2-be-impf)
    'You look sick.'

(130) ma-ch 'ich-m-rav-k yu-ch-a vlwi-k yu-m (you-sj s.t.-2-hurt-SS be-Nom-Abs appear-SS be-impf)
    'It looks like you're sick.'

If the manner of the resemblance is to be stated, then another clause with same subject reference marking is added:

(131) Jack-ch vo-k nkoch-ch yu-ch-a vlwi-k yu-m
    (Jack-sj walk-SS bear-sj be-Nom-Abs resemble-SS be-impf)
    'Jack walks like a bear.'

Vlwi takes all regular verb morphology in this construction, including the applicative -o-, -ny 'too', and so on.

(132) kthye-v-ch Sophia Loren ny-vlwi-ny-o-k war-k yu-m (doctor-dem-sj Sophia Loren 3/1-resemble-too-appl-SS additional-SS be-impf)
    'The doctor made me look like Sophia Loren too.'

This verb functions as a modal auxiliary in the form lwi; this usage will be described with other noneventive auxiliaries in 2.3.
shares these properties with certain other auxiliaries discussed later.

(133) ma-ch 'smaa m-thii m-vite m-yu-m (you-sj medicine 2/3-drink 2-CEx 2-be-impf)
    'You just drank the medicine (e.g., but you didn't know it).'

(134) 'kur-th-a pahmi m-wiy m-'u m-vite m-yu-m (long-dem-abs man 2-have 2/3-see 2-CEx 2-be-impf)
    'You saw your husband awhile ago (but you didn't know it was him).'

(135) vqi qyat-o k-'iv-ch 'ich-spool-h 'um vite 'i-m/yu-m (woman very-o Rel-pretend-sj s.t.-know-Irr Neg CEx say-impf/be-impf)
    'The girl who pretends to be smart, isn't really.'

Examples 133 and 134 show that vite is person-marked to agree with the subject of the sentence, as are other auxiliaries.

When vite is the penultimate auxiliary in a sentence and followed only by the Final Auxiliary Construction, it occasionally loses its final vowel -e. This is frequently the case when there is no person marking intervening between vite and the final auxiliary construction.

(136) vqi-ny-ch 'han-h yit yu-m (woman-dem-sj good-Irr CEx be-impf)
    'That girl is going to get better, after all.'

Since there is some variability, though, in the presence of -e in this one-clause construction, there is also
the possibility that -e is a separable morpheme, or at least a vocalic increment, that is required when two clauses participate, but not when there is only one clause manifested. That there is only one word *yit* is unquestionable, since the semantics and syntactic properties remain the same whether there is one clause or two clauses involved. When *yite* is used with a one-clause sentence, what it expresses is that the assertion of the sentence is made in the face of contrasting expectations. For instance *136* is uttered in a context where everyone except the speaker has given up hope. The speaker judges that the expectations of his audience would be contradictory to what he is asserting.

That *yit(e)* has a peculiar status as an auxiliary is suggested by the observation that *yit*- cannot serve as the final auxiliary in a sentence, taking any type of terminal marking itself. *Yite* must be followed by some version of a behavioral auxiliary construction. The behavioral auxiliary will take a terminal suffix such as *ma* or *mo* or will end in *-m*, giving it a superficial resemblance to the F.A.C. That this is not the F.A.C., but a special auxiliary construction, is argued in 5.32.

It would seem likely that *yite* is a composite morpheme. As noted earlier, the final vowel appears to be separable. In addition, the root *yi* can be, on occasion, replaced by one of the behavioral auxiliaries *yu*, *wi*, or *'i*. This fact suggests, of course, that *yi* is the 'cognitive' auxiliary—the auxiliary that most often is a part of modal
expressions. The t- may have a distinct meaning as well. This composite aspect of yite and the identity of the morphemes of which it is comprised will be discussed in Chapter III, where yite occurs with more than one clause.

2.24 tu, tuy a 'just, be wrong, lying'

There is one other modal morpheme that belongs to this category of nonirrealis morphemes that qualify an assertion in accordance with the speaker's attitude toward the situation. This morpheme is the particle tu which means 'just', 'merely' or 'only'. This particle precedes the predicate that is being qualified. It is never inflected, either as a verb or noun. It could be considered a pre-prefix on the verb, but seems to carry heavier stress than would be appropriate for a prefix and the vowel is never reduced.

(137) tu pahmi-v-ch yu-m (just man-dem-sj be-impf)
    'He's only a man.'

(138) tu tye-k yu-m (just lie-SS be-impf)
    'He just lied.'

(139) tu ny-v-wi-m wi-ch-k wu-m (just proc-dem-do-DS do-pl-SS do-impf)
    'I just do it that way.'

(140) ma tu vqi-v-ch m-yu-m (you just woman-dem-sj 2-be-impf)
    'You're just a woman.'

Sometimes the form tuy a is substituted for tu.

(141) tuy-a ny-v-wi-m wi-ch-k wu-m (just-abs proc-dem-
    do-DS do-pl-SS do-impf)
'I just do it that way.'

(142) tuy-a Bonnie-ch yu-m (just-Abs Bonnie-sj be-impf)
   'It's just Bonnie.'

(143) tuy-a ny-vu-ch yu-o-k yu-m (just-Abs dem-Stem-sj be-Perf-SS be-impf)
   'It's just her.'

(144a) nya-ch tuy-th-a '-we-v-ch '-yu-m (I-sj just-Abs 1-mouse-dem-sj 1-be-impf)

(144b) nya-ch tuy-a '-we-th-v-ch '-yu-m (I-sj just-Abs 1-mouse-only-dem-sj 1-be-impf)
   'I'm only a mouse.'

Example 144 shows that the demonstrative suffix -th (4.2) can appear on either the predicate nominal or on tuy-.

More common, however, is a use of tuy-a to mean something like 'be not the case', or 'be wrong'. This is a very peculiar word that is difficult to characterize both semantically and syntactically. Syntactically, it poses many of the same problems as bpir (2.163). It appears to have no verb morphology. It ends in a vowel that could be the absolutive suffix for nouns and occasionally it appears with a demonstrative suffix. It may have a dual function as an adverbal modifier and as a sort of anaphoric proform. The following examples provide some clues to its identity:

(145) tuy-a '-i-m (false-a 1-say-impf)
   'I didn't mean to say it that way.'
(146a) tuy-a m-'i-ma (false-a 2-say-Assr)
(146b) tuy-a m-yu-ma (false-a 2-be-Assr)

'You're wrong.'

This is the one example showing person agreement on tuy.

(147) '-tuy-a '-yu-m (l-false-a 1-be-impf)

'I'm not really doing it.'

Examples such as 145 and 146 which actually use the verb 'say', show most clearly the connection between the meaning 'just/only' and the 'be wrong' interpretation. One can be "just saying" something or not really meaning what one says, therefore not necessarily saying something factual or, in fact, being wrong. This negative sense can be metaphorically extended to the other behavioral activities--being, doing, or thinking. In this example, the final auxiliary may be replaced by 'say' with the same effect:

(148a) ma-ch kthye-v-ch m-yu-ch-a m-yii m-yite tuy-a m-yu-m (you-sj doctor-dem-sj 2-be-Nom-abs 2-think 2-CEx false-a 2-be-impf)

(148b) ma-ch kthye-v-ch m-yu-ch-a m-i-h m-yite tuy-a m-i-ma (you-sj doctor-dem-sj 2-be-Nom-abs 2-say-Irr 2-CEx false-a 2-say-Assr)

'You may think you're a doctor but you're not.'

In the following examples, two contrasting clauses are given that, predictably, involve the auxiliary yite, since a situation of counter-expectancy is involved. In these cases, the future clause uses tuy-a plus an auxiliary rather than the negative auxiliary 'um (which is often used and would have
the same meaning).

(149) pahmi-ch pi-k yu-ch-a vlwi yite tuy-a yu-m (man-sj
die-SS be-Nom-Abs appear CEx false-a be-impf)

(150) Bonnie '-chqam-o '-iv '-yite tuy-a yu-m (Bonnie
1/3-hit-o 1-pretend 1-CEx false-a be-impf)
'I pretended to hit Bonnie, but I didn't really.'

(151) ma-ch ny-nyu m-neh-k ny-m-i-w-a tuy-a pe-k war-k yu-
m (you-sj dem-stem 2/3-kill-SS Rel-2-say-dem-abs
false-a alive-SS Add-SS be-impf)
'You said you killed him, but he's still alive.'

Notice the resemblance between all of these sentences
ending in tuy-a behavioral aux-terminal marking/-m and the
yite one-clause sentences. The constructions are exactly
parallel. tuy-a is in this respect like the other modal
auxiliaries described in 5.3. If tuy-a is a noun, however, as
suggested by Hinton, it's hard to see what it's relationship
to the auxiliary is--how it's functioning syntactically.
Even if tuy-a took the predicate nominal form, as in Havasupai,
it wouldn't necessarily be a noun, since descriptive
verbs often take this form in Tolkapaya.

Hinton describes tuy in Havasupai as a noun meaning
'falsehood'. It replaces the negative verb in a similar
fashion to that described above, except that it apparently
only occurs as part of a predicate nominal construction.
This is not the case in Tolkapaya and there are no examples
of tuy in the predicate nominal form or with any case
marking. The following Havasupai examples (adapted to our
orthography) are illustrative (Hinton 1977: 276):

(152) HA. tuy-v-ch yu (false-dem-sj be)
   'It is false.'

(153) HA. kak 'nyaa-v k-we-ch-v-ch yu-t-a tuy-v-ch yu
   (Neg East-dem Rel-sit-pl-dem-sj be-Neg-a falsehood-dem-sj be)
   'He does not live in the East.'

Tuy can also take personal affixes in Havasupai, that agree with the subject of the lower clause (154):

(154) HA. Kak kwe-wal-v-a 'i-k'-u-v-e '-yu-t-e '-tuy-v-
   ch yu (Neg s.t.-wing-dem-a ?-Rel-see-dem-incr
   l-be-Neg-incr 1-falsehood-dem-sj be)
   'I have never seen an airplane before.'

Hinton gives the more literal translation 'That he lives in the East is a falsehood' for 153. This construction in Havasupai turns up frequently with the equivalent to yite, i.e. yu-t-a. Although Hinton identifies the [t] in tuy with the negative t- prefix in Havasupai, she does not mention any relationship to tu 'just', a particle which Havasupai has as well.\(^7\) (Hinton 1977: 276).

I am of the same opinion that tuy probably comprises the negative morpheme \(-t-,\) \(^8\) but believe that it is related to tu as well. The semantics are too close to believe otherwise, as well as the fact of the substitution of one for the other in Tolkapaya. The semantic connection between "just" or "only" and the contrastively negative aspect of tuy was suggested earlier. tuy, not to mention tu,
remains somewhat of a syntactic anomaly in Tolkapaya. Crook (1976: 44) makes this point in referring to tu: "Such particles are decidedly rare in and uncharacteristic of Yuman languages and this one is apparently an Upland innovation. Possibly it is a borrowing from a neighboring non-Yuman language." However, Pamela Munro tells me there is a possible cognate in Mojave—the verb utuy 'tell a lie', so this statement may have to be revised. Regardless of its origins tu/tuya remains somewhat of an enigma in Tolkapaya, though tua at least looks much like the modal auxiliaries. My feeling is that the preponderence of evidence is in favor of calling tua a modal auxiliary. The fact that tua sometimes substitutes for tu is confusing, however.

2.25 yii 'think, want, like'

The main verb usage of yii is described in this chapter on simple sentences, in order that it may be compared to the auxiliary use of yii. The cognitive verb yii, like the other behavioral verbs, can function as the main clause higher verb or as an auxiliary. When yii is functioning as a cognitive auxiliary in modal expressions, it is phonologically reduced to yi or is weakly stressed—a common property of auxiliaries. The auxiliary function of yii will be dealt with in 2.3. As a verb, yii serves alone, or in conjunction with certain particles, to indicate several types of cognitive activities. The structure of these sentences is quite interesting and has been variously treated by Gordon (1977) and Kendall (1976). As an
unadorned main verb yii means 'think'. In this form, the logical object of the verb can be a full-fledged clause with independent clause marking, as indicated below:

(155) swar-ma '-yii-k '-yu-m (sing-Assr 1-think-SS 1-be-impf)
     'I think she might sing.'

(156a) m-yaam-rav-k yu-m '-yii-k '-yu-m (2-go-ints-SS be-impf 1-think-SS 1-be-impf)
     'I think you really went.'

Another option is for the complement of yii 'think' to end merely in -k without any final auxiliary, as shown in 156b.

One analysis of this construction is that the Final Auxiliary Construction (if that is the terminal suffix) can be omitted, leaving only the -k 'same subject' marker. This attractive syntactic analysis was first proposed by Gordon\(^9\) (1977) as an alternative to Kendall's more semantically-based suggestion that this was a 'factive' usage of -k. Compare 156a with 156b,

(156b) m-yaam-rav-k '-yii-k '-yu-m (2-go-ints-SS 1-think-SS 1-be-impf)
     'I think you really went.'

which shows the -k suffixation.

The use of yii with the clitic wai to mean 'want (a proposition)' has basically the same syntactic structure as with yii 'think'. In example 157 the two clauses have different subjects; in 158 they have the same subject.
(157) Pam-ch ima-k wal '-yii-k '-yu-m (Pam-sj dance-SS+ want 1-think-SS 1-be-impf)
'I want Pam to dance.'

(158) '-ima-k wal '-yii-k '-yu-m (1-dance-SS+ want 1-think-SS 1-be-impf)
'I want to dance.'

Notice that in both cases, the first clause is suffixed with -k same subject---regardless of whether the subjects are actually same or different. This is due to the fact that a final auxiliary has been deleted, as in the earlier cases. 159 demonstrates that this same deletion is operating in the 'want' sentences by providing the full form with _yum._

(159) '-vo-m-k '-yu-m+wal '-yii-k '-yu-m (1-go-Dir-SS 1-be-impf+want 1-think-SS 1-be-impf)
'I want to go home.'

Wal contributes the meaning 'want, desire' and apparently cliticizes to the first clause. If nothing separates the -k from the wal, there is usually not even a schwa inserted between the [-k] and the [w]. Occasionally, though, wal will even take a personal prefix in agreement with the subject of the -k marked verb.

(160) ma-ch 'wa m-yoo-v-k m-wal '-yii-k '-yu-m (you-sj house 2-build-SS 2-want 1-think-SS 1-be-impf)
'I wish you would build a house.'

Interestingly enough, another case of yii used with the adhering prefix 10 'e to mean 'like' shows ordinary switch-reference marking after the first clause, rather than the
option of a terminal suffix. Compare 161 (same subjects) with 162 (different subjects):

(161) nya-ch 'swar-k 'e 'yii-k 'yu-m (I-sj 1-sing-
SS like 1-think-SS 1-be-impf)
'I like to sing.'

(162) nya-ch m-swar-m 'e 'yii-k 'yu-m (I-sj 2-sing-
DS like 1-think-SS 1-be-impf)
'I like you to sing.'

The first two constructions involved a paratactic relationship of the two clauses by simple juxtaposition. In the case of 'e yii, the clausal object of 'e yii may be a dependent complement. One possible explanation for the difference is that 'e yii can take simple noun phrase objects, unlike yii or wal yii. The normal way to indicate liking of a simple NP object is with 'e yii.

(163) nya-ch Jack 'e 'yii-k 'yu-m (I-sj Jack like 1-think-SS 1-be-impf)
'I like Jack.'

In this respect 'e yii is more like other cognitive or perception oriented verbs such as spoo 'know', 'u 'see', 'ya-
paa 'believe', 'ev, 'hear', and so on. Another interesting fact to note about these verbs which incorporate yii is that, although their "complements" are often unrealized; they are not suffixed with irrealis -h. Perhaps the explanation lies in the fact that these complements are not so much irrealis as not overtly factive. The
presuppositions of the cognitive verb neither presume nor deny that the proposition is factual or real. The cognitive verb is an eventive verb because its complements are not unrealized (just neutral with respect to factivity) and the complements are not marked with irrealis -h.

2.26 hupuk 'be first'

(Hu)puk 'be first' falls into a limited class of adverbial auxiliaries (5.4) that do not take person marking themselves. The verbs that precede these auxiliaries in the auxiliary construction have no suffixation of any sort. Otherwise, these auxiliaries are marked in a normal fashion. One problem with this morpheme is the (unpredictably) variable appearance of the initial syllable hu- or its reduced form h-. Recall that hpira 'only' had this same feature. In any case, this morpheme is used to state explicitly that a certain situation temporally precedes another situation (that is either expressed or implied). (Hu)puk is most often used in complex sentences to emphasize temporal priority of the event expressed in one of the clauses. This usage will be discussed in Chapter III.

(164) '-yaam hupuk-a-k '-unuu-k '-yu-m (I-go first-Irr-SS I-IncAux-SS I-be-impf)
'I'm going to go first.'

(165) nya-ch ma ny-chqam puk-k '-yu-ny (I-sj you 1/2-hit first-SS I-be-prf)
'I hit you first.'
This auxiliary might be treated as a complex suffix, but occasionally it appears with person marking (as in 166) and the lexical verb having been suffixed with -k (as in 167):

(166) ma-ch nya 'm-chqam _m-puk-k m-yu-ny (you-sj I 2/1-hit 2-first-SS 2-be-prf)
    'You hit me first.'
(167) nya-ch '-yaam-k hpuk-k '-yu-ny (I-sj 1-go-SS first-SS 1-be-prf)
    'I left first.'

2.3 Auxiliaries of noneventive modality

The auxiliaries presented in this section have several elements in common. Semantically, they refer to predications that are nonfactual or noneventive. Consequently, the lexical verbs that precede them are suffixed with -h irreals. Additionally, the lexical verb is suffixed only with irreals -h and does not take a switch-reference marker—a fact which sets these auxiliaries apart from other auxiliary verbs. Some of these auxiliaries never take personal prefixes (chat, mat, hii), others will take them only rarely ('um, lwi, yii) and others take them as regularly as most auxiliaries (vi, 'iv). As to their ability to accept verbal suffixes, once again they show a divergence. mat, chat, 'um and 'iv allow normal terminal marking—lwi, hii/yii and vi do not. These various characteristics will be discussed and compared in the following sections. The auxiliaries will be further classified and discussed in Chapter V.
2.31 mat 'apparently'

The auxiliary verb mat is used to indicate that the assertion is based on the speaker's inference from circumstantial evidence. The verb that precedes mat does not take switch reference marking, but must be suffixed with irrealis -h. The auxiliary itself never takes personal prefixes, but does allow the full range of verbal suffixes, including the terminal suffixes.

(168) kthur-ch quaqt-a maa-h mat-ma (dog-sj meat-abs eat-Irr apparently-Assr)

'It looks like the dog ate the meat.'

(169) ma-ch ny-m-wi-h mat-ra-ma (you-sj Rel-2-do-Irr apparently-ints-Assr)

'You really should be able to do it.'

When several auxiliaries are present in the string, certain orderings are found. The only auxiliaries that follow mat in the string are the behavioral auxiliaries (but only in the F.A.C. and the habitual construction), ukwa, the 'sensory' auxiliary and yite 'contrary to expectation'. When mat is followed by these auxiliaries it takes the ending appropriate to verbs preceding that particular auxiliary, i.e. switch-reference -m before the habitual construction and -k before ukwa. Verbs preceding yite remain unmarked, without a suffix--mat, however, takes the -e vowel suffix that is found on yite when it is not the final auxiliary in the string.
(170) kthar-v-a tkwan-h mat-m wi-ch-k wu-m (dog-dem-Abs beat-Irr apparently-DS do-pl-SS do-impf)
'it seems like he beats the dog.'
(171) Steve-ch Jack chqam-h mat-k yu-m (Steve-sj Jack hit-Irr apparently-SS be-impf)
'It looks like Steve hit Jack.'
(172) Lynn-ch vam neh-v-h mate yite yu-ma (Lynn-sj now kill-Sta-Irr apparently CEx be-Assr)
'Lynn could have just gotten killed.'
(173) 'kur-th-a va -v- 'wi-h mat-k 'ukwa-k 'yu-m
(ago-dem-obs proc-dem-l-do-Irr apparently-SS l-sense-SS l-be-impf)
'It feels like I've done this before.'

The auxiliary ukwa further specifies that the source of the circumstantial evidence is through the senses.

All other auxiliaries, and higher verbs such as behavioral auxiliaries in the perfect construction, the negative 'um, vlwi 'be right' will precede mat.

2.32 chat 'almost'

Chat is an auxiliary meaning 'almost' whose scope is the situation described in the main predication. As with mat, the verb preceding chat does not take switch-reference and is either suffixed with -h'irrealis' or ø. Chat does not freely take personal prefixes, but does take normal terminal marking.
(174) ma-ch Lynn m-mii-o chat-k m-yu-m (you-sj Lynn 2/3-cry-App almost-SS 1-be-impf)
    'You almost made Lynn cry.'

(175) nya-ch '-u-h chat-k '-yu-m (I-sj 1/3-see-Irr almost-SS 1-be-impf)
    'I almost got to see it.'

(176) '-pi-h chat-k '-yu-ny (1-die-Irr almost-SS 1-be-prf)
    'I almost died.'

(177) m-mii chat-ee? (2-cry almost-Q)
    'Did you almost cry?'

*chat* may well be a higher verb for the same reason as *'um* (2.33). It takes \(\emptyset\)=third person agreement (or none), but does take an applicative, whether the scope is over the "making" or the action itself.

(178) nya-ch Lynn 'man-a chat-o-k '-yu-m (I-sj Lynn 1/3-fall-Irr almost-App-SS 1-be-impf)
    'I nearly made Lynn fall.'

2.33 *'um' negative verb*

Sentence negation is manifested in the negative verb *'um* (5.44). Unlike other Upland Yuman dialects, Tolkapaya does not have any other negative morphology, such as the \(\text{ke}\) negative particle in Yavapai or the \(\text{t}-\) negative prefix in Havasupai. The proposition to be negated is the logical subject of the negative verb. It is not entirely clear as to whether *'um* is an auxiliary in the same clause as the
lexical verb or a higher verb. The majority of the relevant
data seems to be weighted in favor of the latter. The sub-
ject complement to 'um does not take a switch-reference
marker, but invariably is suffixed with -h 'irrealis', since
the proposition is nonfactual. 'um is unlike the verbs that
are clearly auxiliaries in that it can be the only verb in
a clause (albeit an elliptical one). Also, 'um can take
the applicative -o- morpheme signaling the presence of an
additional argument, thus implying 'um already has an argu-
ment.11 Since 'um takes a subject complement clause, it
predictably shows no personal prefix, which would be consis-
tent with having a third person (= Ø) clausal subject.
Most auxiliaries do automatically take person-marking in
agreement with the subject of the main verb, though some
do not. However, as with some of those which do not show
personal prefixes (cf. mat, chat, lwi, hii, etc.) any
auxiliary following 'um which normally takes subject agree-
ment will frequently agree with the subject of the comple-
ment clause, as shown below.

(179) ma-ch Heather m-mii-o-h 'um-k m-yu-m (you-sj
Heather 2/3-cry-App-Irr Neg-SS 2-be-impf)
'You didn't make Heather cry.'

(180) nya-ch qwagt-a '-maa-(y)ee 'um-a-k '-unu-u-k
'-yu-m (I-sj meat-abs 1/3-eat-again Neg-Irr-SS
1-IncAux-SS 1-be-impf)
'I'm never going to eat meat again.'
ma-ch 'nya 'ya 'm-paa-ny-h 'um-m m-yu-ch-ma
(you-sj me * 2/l-believe-ny-Irr Neg-DS 2-be-pl-Assr)
'You never believe me.'
The personal prefixes, then, "skip over" the verb 'um to agree with succeeding auxiliaries. The following example shows 'um suffixed with the applicative morpheme -o- which indicates there is an extra argument in the sentence--the usual meaning is 'forbid' or 'not let someone do something.'

nya '-tal-ch '-mi-h '-i-h 'um-o-k yu-m (I l-father-sj l-cry-Irr l-say-Irr Neg-App-SS be-impf)
'My father doesn't let me cry.'

'um can also take the verb suffix -ee 'again'.

'ich- '-rav-h 'um-ee-k '-yu-m (s.t.-l- hurt-Irr Neg-again-SS l-be-impf)
'I'm not sick again.'

Negation in Tolkapaya is a much more complicated topic than indicated in this sketch and deserves more study. An interesting phenomenon that needs further investigation is the condition under which the negative verb appears with subject agreement--when it occurs in a clause without the clausal complement expressed. That is, when used elliptically, as in cases like the following:

nya-ch '-yaam-k+wal '-yii '-yite 'a-um-k '-yu-m
(I-sj l-go-SS+want l-think l-CEx l-Neg-SS
l-be-impf)
'I wanted to leave, but I didn't.'
As in English, the second clause of the sentence does not have to repeat the lexical verb (yaam). English uses the dummy verb 'do' to carry the negation. Tolkapaya apparently inserts a vowel -a- after the consonant of the personal prefix that agrees with the subject of the deleted verb. The following examples further illustrate this point.

(185) Lynn 'tope-h 'yite 'a-'um-a-k 'unuu-k 'yu-m
   (Lynn 1/3-help-Irr 1-CEEx 1-Neg-Irr-SS 1-IncAux-SS 1-be-impf)
   'I can help Lynn, but I won't.'

(186) smaa 'i-h ma-'um-o (sleep say-Irr 2-Neg-App-Imp)
   'Don't let him sleep!'

(187) nya-ch m-yaam-h 'i-h 'a-'um-o-k 'yu-m (I-sj
   2-go-Irr say-Irr 1-Neg-App-SS 1-be-impf)
   'I won't let you go.'

2.34 lwi 'should'

The morpheme lwi in Tolkapaya poses a number of intriguing questions. lwi is related to the verb (v)lwi (2.22; 5.33) which means 'be right, proper, fitting' or 'appear'. lwi means 'should or be supposed to'. lwi is a modal auxiliary sharing certain syntactic properties with yite (2.23), and hii/yii (2.35). The syntactic characteristics of lwi and the modal auxiliaries are different from regular auxiliaries. To begin with, lwi (unlike v*lwi) rarely takes personal subject prefixes. The verb that precedes lwi does not take switch-reference marking and may or may not
take irrealis -h--sometimes the irrealis suffix is difficult to perceive in this position. \textit{lwi} does not take a switch-reference suffix itself, nor can it take a terminal suffix; in this respect \textit{lwi} is like \textit{yite}. Rather, \textit{lwi} is usually followed by an auxiliary which has terminal marking (as is \textit{yite}). Occasionally, \textit{lwi} is the final auxiliary in a sentence (192), and, in these cases, a final \textit{-a} is the only suffix added. This \textit{-a} could be further evidence for an \textit{-a} predicating morpheme (2.162), except that the form \textit{lwi(y)a}\textsuperscript{12} occurs before a final auxiliary \textit{yu}. Consider the following examples:

\begin{itemize}
\item[(188)] Bonnie-ch 'ich-maa-h gyat-a \underline{lwi} yu-ma (Bonnie-sj s.t.-eat-Irr really-Irr should be-Assr)
  'Bonnie really should eat more. '
\item[(189)] nya-ch 'ich-'-thii-ee-h 'um-a \underline{lwi-(y)a} '-yu-ma
  (I-sj s.t.-1/3-drink-again-Irr Neg-Irr should-a 1-be-Assr)
  'I shouldn't drink anymore.'
\item[(190)] ma-ch kthy-e m-'u-h \underline{lwi-ra} m-yu-ma (you-sj doctor 2/3-see-Irr should-ints 2-be-Assr)
  'You should go see a doctor.'
\end{itemize}

In examples 188-190 \textit{lwi} does not show subject agreement, but the following auxiliary does. The auxiliary here, of course, is the full-fledged verb and not the Final Auxiliary Construction--which is in complementary distribution with \textit{-ma} and does not take the plural \textit{-ch} suffix. This fact is discussed at length in 5.22253.
(191) 'vo-ch-m-a 'lwi-(y)a 'yu-ch-ma (l-go-pl-Dir-Irr l-should-a l-be-pl-Assr)

'We should go home.'

In 191 we see lwi showing person marking and occurring before the auxiliary with the -a suffix. The auxiliary yu has the plural subject suffix -ch.

Example 192 is a case where lwi(y)a occurs finally (although there are two clauses in this sentence):

(192) 'wilv-t-k 'yaam-ch-a lwi-(y)a (l-hurry-Tem-SS 1-go-pl-Irr should-a)

'We should have left sooner.'

193 indicates that irrealis -h is not obligatory.

(193) ma-ch nymi m-ny-hat-nyu 'ich-m-e lwi-(y)a m-yu-ma (you-sj cat 2-Poss-pet-Dem s.t.-2/3-give should-a 2-be-Assr)

'You should feed your cat.'

lwi can also be used counterfactually to mean 'should have', but if this notion is made explicit, assorted complex morphology generally enters in. 194 shows some possibilities:

(194a) nya-ch '-yaam-a lwi-(y)a yite yu-m (I-sj l-go-Irr should-a CEx be-impf)

(194b) nya-ch '-yaam-a lwi-ch-ch 'yite '-yu-ma (I-sj 1-go-Irr should-Nom-sj 1-CEx 1-be-Assr)

'I should have gone.'

The contrastive, nonfactual morpheme th can convey this sense, as well.
(195) m-yoo-ny-a lwi-th m-yu-ma (2-be:located:(pl)-
too-Irr should-Mod 2-be-Assr)
'You should have come here too.'

Several questions arise regarding the syntactic status of lwi. In most respect, lwi is like yite (and the other modals) and poses some of the same problems. lwi takes person marking, though less frequently than yite, which suggests that lwi is a verb. But, like yite, lwi cannot ordinarily be the final verb of a sentence. In addition, lwi has a vowel suffix -a that comes and goes, while yite has a segmentable -e suffix. Kendall calls lwi/lii a modal auxiliary, which is what I am calling the class including lwi, yite, and hi/ii.

An interesting side-light of a comparative nature is a construction xa + lyvii in Yuma which Norwood 1976 calls an enclitic. (Yuma lyvii is directly cognate to Tolkapaya lwi.) In Yuma, the construction is used to express a desiderative. Once again, this is a plausible semantic extension deriving from the verb lyvii 'look like', as Norwood explains. Norwood argues convincingly that xa (=irrealis) + lyvii is an enclitic in Yuma--it never allows person or number agreement--and suggests how it might have developed historically. It is entirely possible that such an enclitization process is going on in Yavapai as well. Kendall reports that the cognate auxiliary in the Verde Valley Yavpe dialect is lii, a reduced form of lwi. It is possible that lwi and the other modal auxiliaries with
anomalous syntactic properties are undergoing a process of encliticization, becoming less like full-fledged verbs.

2.35 **hii/yii 'purposive, obligational'**

The modal auxiliaries **hii/yii** participate in a number of complex modal expressions. They enjoy a variety of possible morphological shapes and pose a problem of identity as well. The basic question is: are **hii** and **yii** two phonological variants of the same morpheme, or are they two morphemes that are virtually interchangeable? Semantically, the two forms mean the same thing—they convey a purposive, intentional, or obligational sense to an assertion. Often, **hii/yii** will occur in combination with other modal auxiliaries or verbs like **lwi**, **yite**, or **vlwi**.

The identification problem may lie in the fact that the verb preceding **hii/yii** is always suffixed with **-h** or **-a** and nothing else. The **-h** is certainly the irrealis suffix\(^{13}\). There is some question as to whether the **-a** is the variant of **-h** or something else\(^{14}\). The auxiliary itself is phonetically either **yii** with a strong h onglide or **hii** (with the preceding verb sounding bare, if vowel-final or ending in **-a**, if consonant-final).

(196) qwaloyaw-a slii-ch-h yii-v-ch yu-m (chicken-abs fry-pl-Irr Aux-dem-sj be-impf)

'That chicken is for frying.'

(197a) v-ya'a qwaloyaw-a ma m-nwir-a hii-v-ch yu-m (dem-stem chicken-Abs you 2/3-cook-Irr Aux-dem-sj be-impf)
'These chickens are for you to fry.'

A relevant factor may be that apparently only the form with yii can take a personal prefix. This suggests that perhaps the conditioning is phonological (or morphophonological). If the irrealis -h and the following [y] of yii are contiguous, the [y] can delete, but not if it is separated from -h by a personal prefix. This case is exemplified in a comparison of 197a above and the person-marked 197b below.

(197b) v-ya'a qwaloyaw-a ma m-nwir-a m-yii-v-ch yu-m

(dem-stem chicken-Abs you 2/3-cook-Irr 2-Aux-dem-sj be-impf)

'These chickens are for you to fry.'

Since it is not clear why such a rule would operate with this morpheme alone, and since Kendall reports a semantic contrast between the modal auxiliaries hii and yii in Yavpe, I will continue to maintain a distinction between the two, keeping the distribution described above in mind, and the fact that they seem to mean exactly the same thing in Tolkapaya.

The syntactic constructions involving hii/yii are interesting in themselves. If hii/yii are the only modal auxiliaries in the sentence (and therefore the final verb), they will appear as part of a predicate nominal construction. That is, the verb will end in the -ch subject case marker, optionally preceded by the -y demonstrative suffix and followed by the auxiliary yu with final marking. hii/yii rarely takes the switch-reference-marked Final Auxiliary
Construction. The following examples are typical:

(198) qwaqt-nymay-v-a m-qlii m-yii-v-ch yu-m (cattle-
milk-Dem-Abs 2/3-milk 2-Aux-dem-sj be-impf)
'That cow is for you to milk.'

(199) 'ich-maa-v-a ma m-maa hii-v-ch yu-m (s.t.-eat-
Dem-Abs you 2/3-eat Aux-dem-sj be-impf)
'This food is for you to eat.'

A number of constructions are possible when an addi-
tional verb is present. The purposive clause with hii/yii
can be center-embedded as in 200 and 201 below:

(200) nya-ch myal-a m-maa hii ny-yoov-k wi-ny (I-sj
bread-Abs 2/3-eat Aux 1/2-make-SS do-prf)
'I made some bread for you to eat.'

(201) v-ya tyach-v-a ma-ch m-hwal-a hii ny-'oy-o-k
'-wu-m (dem-stem seed-dem-Abs you-sj 2/3-plant-
Irr Aux 1/2-bring-App-SS 1-do-impf)
'I brought these seeds for you to plant.'

When the hii/yii clause is center-embedded the auxiliary
hii/yii remains bare. In the center-embedded construction,
the auxiliary always takes the form hii. The clauses can
be reordered as shown in 202 below, which should be con-
trasted with 201:

(202a) v-ya tyach-v-a ny-'oy-o-k ('-wu-m) ma-ch m-hwal-a
hii (dem-stem seed-dem-Abs 1/2-bring-App-SS
(''-do-impf) you-sj 2/3-plant-Irr AUX)

(202b) v-ya tyach-v-a ny'-oy-o-k ('-wu-m) ma-ch m-hwal-a
m-yii-v-ch yu-m (dem-stem seed-dem-Abs 1/2-bring-
App-SS ('do-impf) you-sj 2/3-plant-Irr 2-Aux-dem-

'sj be-impf

'I brought these seeds for you to plant.'

Example 203 is another case of clause-reversal where the
main clause optionally deletes its Final Auxiliary Construc-
tion (cf. 202), ending in the same subject reference marker
-k, plus the vocalic increment -a.

(203) tyach '-hwal-k-a koch-a '-maa-ch-a hii (corn
1/3-grow-SS-Voc pig-Abs 1/3-eat-pÎ-irr Aux)
'I grow corn for pigs to eat.'

(204) 'hat ny-kkav-m cha m-wa m-yii-v-ch yu-m (horse
1/2-buy-DS top 2-sit 2-Aux-dem-sj be-impf)
'I bought a horse for you to ride.'

The full range of possibilities for constructions ending in
the predicate nominal form with hii/yii might suggest that
hii and yii are distinct morphemes that happen to mean the
same thing. Example 205 illustrates the various combina-
tions which show that hii and yii can cooccur.

(205a) tyach-nyu ma m-hwal-a hii-v-ch yu-m (seed-dem
you 2/3-plant-Irr Aux-dem-sj be-impf)

(205b) tyach-nyu ma m-hwal-a hii yii-v-ch yu-m (seed-
dem you 2/3-plant-Irr Aux Aux-dem-sj be-impf)

(205c) tyach-nyu ma m-hwal-a m-yii-h yii-v-ch yu-m (seed-
dem you 2/3-plant-Irr 2-Aux-Irr Aux-dem-sj be-impf)

(205d) tyach-nyu ma m-hwal-a hii m-yii-v-ch yu-m (seed-
dem you 2/3-plant-Irr Aux 2-Aux-dem-sj be-impf)
'These seeds are for you to plant.'
Of course, this argument is mitigated by the fact that yi can occur twice itself (205).

Other less common variants exist to indicate a pur-
posive or intentional statement. One variant that occurs frequently with the obligatory sense, though less fre-
quently as a purposive, is that of replacing -v with a second occurrence of -ch. At the same time, the vowel of the auxiliary appears shortened (i.e. to yi-). Compare 206 to the above sentence with the same meaning (198).

(206) qwaqt-nymay-v-a m-qlii-h yi-ch-ch yu-m (cattle-
milk-dem-Abs 2/3-milk-Irr Aux-ch-sj be-impf)
'This cow is for you to milk.'

Since these purposive or intentional expressions convey a sort of timeless or permanent (or generic) nature to the assertion, it is likely that the additional -ch is the -ch nominalizer introduced in 2.222 in the 'look like' construc-
tion.

(207) 'hat ny-kkav-m cha m-wa yi-ch-ch yu-m (horse
1/2-buy-DS top 2-sit Aux-Nom-sj be-impf)
'I bought a horse for you to ride.'

207 is an example with two clauses, showing the -ch + -ch construction.

An interesting fact about the ch +ch construction is that is occurs more frequently with obligationals than with purposive meaning. With the purposive meaning, yi is apparently the only form of the auxiliary possible for the -ch + -ch construction; hi (also shortened) shows up in
obligational expressions with -ch + -ch. The semantics of purposive, intentional and obligational expressions are closely related and often indistinguishable. One difference between a purposive and an intentional/obligational is the placement of emphasis. Notice that in the purposive expressions above the focus of attention is on the logical object of the lexical (embedded) verb in the one clause sentences. None of the noun phrases are subject case marked, including the logical subject of the embedded verb.

Compare the preceding purposive examples to the obligational examples below:

(208) 'ich-m-maa m-yi-ch-ch m-yu-m (s.t.-2/3-eat
2-Aux-Nom-sj 2-be-impf)
'You're supposed to eat.'

(209) ma-ch va-k m-yu-h m-yi-ch-ch m-yu-ma (you-sj stem-Loc 2-be-Irr 2-Aux-Nom-sj 2-be-Assr)
'You have to stay here.'

(210) nya-ch tarhar-a hi-ch-ch '-yu-ma (I'sj work-Irr Aux-Nom-sj 1-be-Assr)
'I have to work.'

An examination of the two-clause purposive constructions provides some clues as to the nature of the purposive and suggests that the basic meaning of the hii/yii auxiliary is the obligational meaning, i.e. 'should'. In other words, cases such as 202 show that the non-center-embedded or loosely joined clauses can be more literally represented as

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a main clause with an obligational conjunct, i.e. 'I brought these and (therefore) you should plant them' rather than 'I brought these seeds for you to plant.' At least, such an arrangement may be the original source for the purposive expression, which now enjoys a number of syntactic variants. The one-clause expressions can now be explained as regular predicate nominals--this analysis provides a motivation for the suffix demonstrative which is a common feature of the predicate noun in Tolkapaya.

It is possible that in many cases where the -a suffix on the embedded verb is glossed 'irrealis', it may in fact be the absolutive nominal suffix, since irrealis -h apparently is not obligatory here. There are some examples which support this claim by having demonstrative suffixes attached to the verb, followed by this -a suffix—a typical nominal configuration.

(211a) nya-ch ' -swar- h ' -yii-ch-ch ' -yu-ma (I-sj l-
sing-Irr l-Aux-Nom-Sj l-be-Assr)

(211b) nya-ch ' -swar-ny-a ' -yi-ch-ch ' -yu-ma (I-sj l-
sing-dem-Abs l-Aux-Nom-Sj l-be-Assr)

(211c) nya-ch ' -swar-v-a ' -yi-ch-ch ' -yu-ma (I-sj l-
sing-dem-Abs l-Aux-Nom-Sj l-be-Assr)

'I'm supposed to sing.'

Interestingly enough, the obligational expression rarely, if ever, uses the -y suffix, but frequently uses the double -ch construction. In the simple predicate nominal cases, the predicate nominal construction with the
verbs *hii/yii* 'should', 'be supposed to' indicates that the (subject) noun has the attribute of being in a state as a potential goal of another verb. The interesting aspect of this construction is that the subject noun of the predicate nominal is never case-marked as a subject. Marking the subject noun of a predicate nominal with the subject case marker is an atypical and highly marked construction, though Tolkapaya does sometimes mark subjects of simple predicate nominals. A more difficult problem to solve is why the obligational expressions with -ch nearly always have case marked subjects, even though they are essentially in predicate nominal form. The obligational expression has a fair amount of latitude in its formation. Although the most common form is *yi* or *hi + ch + ch*, followed by an auxiliary construction, this auxiliary and other morphology can vary. To convey the meaning 'be time for (something)' the higher verb *vlwi* can be used (see 2.22 for *vlwi* 'be ready, correct, etc.'). In this construction, just about any of the *hii/yii* combinations can be found. Both -v and -ch occur with *hii* or *yii*.

(212) '-yaam-a hii-v-ch vlwi-k yu-m (l-go-Irr Aux-dem-sj ready-SS be-impf)  
'It's time for me to go.'

(213) tarhar-ch hii-v-ch vlwi-k yu-m (work-pl Aux-dem-sj ready-SS be-impf)  
'It's time to work.'
(214) Heather-ch qwaloyaw-a slii-h yii-v-ch vlwi-k yu-m
   (Heather-sj chicken-Abs fry-Irr Aux-dem-sj ready-
   SS be-impf)
   'It's time for Heather to fry the chicken.'
(215) 'ich-m-maa hi-ch-ch vlwi-k yu-m (s.t.-2/3-eat
   Aux-Nom-sj ready-SS be-impf)
   'It's time for you to eat.'
(216) '-yaam-a '-yi-ch-ch vlwi-k '-yu-m (l-go-Irr l-
   Aux-Nom-sj ready-SS 1-be-impf)
   'It's time for me to go.'

Occasionally, in this "time for" construction the hii/yii
auxiliary will be suffixed with an -o which comes after
the -v, if there is one.

(217) ma m-yaam-h yii-v-o-ch va-m vlwi-k yu-m (you
   2-go-Irr Aux-dem-o-sj stem-Loc ready-SS be-impf)
   'It's time for you to go.'

The -o is most likely the nominalizer discussed in 1.35.
The fact that a confirmed nominalizer occurs in place of
the -ch is further evidence for calling it a -ch nominalizing
suffix. Sometimes the -ch nominalizer suffix will occur on
the verb vlwi.

(218) tu va-m '-vo-m-h yi-ch-ch vlwi-ch-ch '-yu-m
   (just stem-Loc l-walk-Dir-Irr Aux-Nom-sj ready-
   Nom-sj 1-be-impf)
   'It's time for me to go home.'

The "time for" expressions appear to be logical ex-
tentions of the "be ready" meaning of vlwi in conjunction
with the purposive/obligational hii/yii expressions.

The association of the -v- suffixed regular predicate nominal form with purposive expressions and the -ch nominalizer suffixed construction with obligational expressions is fairly consistent. Why this should be the case is not obvious, though it's not the only case where a -v/-ch opposition serves to distinguish two types of derived verbal constructions (cf. the -v/-ch 'stative/passive' distinction, 1.2313). Perhaps the explanation can be found in the semantics of the purposive and the obligational. The purposive, in its simplest form states an identity of a noun--'X is the one for Y'. A predicate nominal construction is the obvious way to indicate such a relationship. The obligational expression, on the other hand, merely expresses the obligational mode of the assertion--that some event is supposed to be. This is an existential notion. The nominalized complement expresses an event that is subordinated to a higher verb BE, as in 208-210 or v1wi 'be ready' as in 212-217. This analysis helps account for the fact that the simple noun subjects of obligationals are subject-marked, as are the subjects of most complement clauses, and that the subject noun of the purposive predicate nominals is not subject marked.

There are some very rare, unusual cases of hii being suffixed with switch-reference -k. It is not clear how these should be interpreted.
Obligational expressions involving counterfactuality or counter-expectancy can be quite complicated, but they shed some light on the auxiliaries and morphemes involved in the expression of modality. To begin with, it seems fairly obvious that the yi auxiliary used with contrastive modal expressions is the same used in the purposive/obligational expressions—the cognitive auxiliary that is derived from the verb yii 'think'.

Once again it is to be expected that the cognitive auxiliary is the verb of choice for modal relationships that reflect the speaker's point of view. As far as hii is concerned, there are a number of possibilities. Either it is a distinct verb that is interchangeable with yii (in these expressions) or it is a (conditioned or unconditioned) phonological variant. Recall that hii can cooccur with yii and when it does, hii is first in the string and is unmarked (cf. 205); however, two instances of yii are also possible. Kendall reports that in Yavpe there is a difference between yii, which is concerned with intentions and desires, and hii, which is concerned with opportunities or capacities, at least in their counterfactual forms. If this distinction once obtained in Tolkapaya, not surprisingly, this ephemeral semantic distinction has been eroded in purposive/obligational expressions. The possibility that phonological variance is involved cannot be ignored. The variation in vowel length is a problem as well. Why should these two words have ii before the suffix -v and
(219) ma-ch m-hwak-ra-k hii-k 'yii-k '-yu-m (you-sj
 2-be:two-ints-SS Aux-SS l-think-SS l-be-impf)
  'You have to come with me.'

If this represents an embedded complement to yi in 'think',
then the -k on hii is explained, since complements of yi take
'k, regardless of whether their subjects are same or
different; of course, hii normally doesn't take any switch-
reference at all.

Another case is where hii is followed by the incompletive
auxiliary unuu, which is in the -ch marked predicate nominal
form. The lexical verb is predicably unmarked, but hii
is suffixed with -k.

(220) Jack-ch kthar-v-a 'ich-'e hii-k unuu-ch-ch yu-m
    (Jack-sj dog-dem-Abs s.t.-give Aux-SS IncAux-Nom-
     sj be-impf)
  'Jack is supposed to feed the dog.'

Rarely, one of the behavioral auxiliaries will be sub-
stituted for hii/yii in purposive/obligational expressions.

(221) v-ya qwaq-t-nmay-v-a Heather thii yu-ch-ch yu-m
    (dem-stem cattle-milk-dem-Abs Heather drink be-
     Nom-sj be-impf)
  'This milk is for Heather to drink.'

(222) '-yaam-h yu-ch-v-a '-vlwi-k '-yu-m (l-go-Irr
    be-Nom-dem-Abs l-ready-SS l-be-impf)
  'I'm ready to go.'

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i before -ch, -t or -th, as shown below?

(223) ma-ch m-yaam-h 'um-a hi-th-ch yu-ma (you-sj
  2-go-Irr Neg-Irr Aux-Mod-sj be-Assr)
  'You shouldn't have gone.'

(224) ny-v-wi-h 'um-h yi-th-a yu-ma (proc-dem-do-Irr
  Neg-Irr Aux-Mod-abs be-Assr)
  'I shouldn't have done that.'

The counterexpectancy cases reveal some interesting variations in the usual form *yite*. Notice in 225 that *yite* can precede or follow the obligatory auxiliary.

(225a) ma-ch m-tope-ra-h yite m-yi-ch-ch m-yu-ma (you-sj
  2/3-help-ints-Irr CEx 2-Aux-Nom-sj 2-be-Assr)

(225b) ma-ch m-tope-ra-h yi-ch-ch yite m-yu-ma (you-sj
  2/3-help-ints-Irr Aux-Nom-sj CEx 2-be-Assr)
  'You were supposed to help her.'

The following variant of a counterfactual appears to be a case where *hi* is substituted for the usual form *yi* in a predicate nominative complement of *yii* 'think'.

(226) m-yaam hi-th-ch yu-m '-yii-k '-yu-m (2-go Aux-
  Mod-sj be-impf 1-think-SS 1-be-impf)
  'I think you should have gone.'

In addition to the usage of *yi* with the modal elements *yite* and *th*, we find *yi* used with other expressions of modality. As noted in 2.16, *yi* is often used in place of unuu for unrealized assertions utilizing the -mo or -ma suffixes, which indicate the speaker's degree of commitment to the truth of his assertion. For predications or
assertions about the future, yi is often used, as it is
in counterfactual and counterexpectancy modes. Since
these modes totally reflect the speaker's state of mind,
rather than the objective statement of verifiable facts,
yi is obviously the most appropriate auxiliary to use.

The cognitive auxiliary yi is used in so many places
where the behavioral auxiliaries also occur, and often shares
so many essential grammatical characteristics of the beha-
vioral auxiliaries, that it is useful to establish a class
of auxiliaries that includes yu, wi, 'i, and yi. This will
be argued for on syntactic, as well as semantic, grounds
in 5.2. The concepts of being, doing, saying, and thinking
cover the fundamental and essential aspects of human life
and behavior. I will from this point on reserve the term
'existential' auxiliaries to refer to the class of the
behavioral auxiliaries and the cognitive auxiliary yi,
on the basis of their kinship.

2.36 'iy 'pretend'

The verb 'iy 'pretend' fits nicely into this section
of auxiliary verbs whose propositions are noneventive.
'iy is different only in that the verb that precedes it
does not take irrealis -h, but rather is suffixed with an
-g. The complement of 'pretend' is not irrealis, in fact,
but rather presupposes that the opposite of what is asserted
is fact. 'iy is a normal verb in other respects, taking
personal prefixes and the full complement of verbal suffixes.
'iy may in fact be a special usage of the verb 'i 'say'
with the stative -v suffix. Although one can "pretend" by acting in a certain way, it is not hard to imagine the meaning 'pretend' deriving from 'say'--specifically, being in a state of saying (communicating) something. The verb 'iv will frequently take the behavioral auxiliary 'i.

(227) nya-ch 'ich'-maa-o '-iv-k 'wu-m (I-sj s.t.-1/3-eat-o l-pretend-SS l-do-impf)

'I pretended to eat.'

(228) 'ich-k-nyay-ch '-yu-ch-o '-i-ch-o '-iv-ch-mo (s.t.-Rel-hunt(pl)-sj l-be-pl-o l-say-pl-o l-pretend-pl-Dub)

'Maybe we could pretend to be hunters.'

(229) Lynn-ch mii-o 'iv-k yu-m (Lynn-sj cry-o pretend-SS be-impf)

'Lynn pretended to cry.'

With different subjects in the complement to 'iv there is no change in verb morphology:

(230) nya-ch Heather-ch ny-chqam-o '-iv-k '-yu-m (I-sj Heather-sj 3/l-hit-o l-pretend-SS l-be-impf)

'I pretended Heather hit me.'

(231) nya-ch Heather nya chit-ch yu-o '-iv-k '-yu-m (I-sj Heather I mother-sj be-o l-pretend-SS l-be-impf)

'I pretended Heather was my mother.'

The identity of the -o suffix is somewhat more complicated. Either -o is totally unrelated to any other -o suffix (in which case there is a multiplicity of o's) or
it's the same morpheme with multiple functions. It seems unlikely that -o is the applicative on semantic grounds alone, but additional support lies in the fact that person agreement is unaffected. The perfect -o can only occur on auxiliaries. The temporal -o can be ruled out on both semantic grounds and syntactic grounds, since it requires a two-clause construction. The two most likely candidates would be the -o nominalizer described in 1.35 and the -o of the -mo dubitative suffix. Syntactically, the -o nominalizer is most reasonable. It is not at all unlikely that the complement of 'iv 'pretend' would be nominalized. What is somewhat surprising is that there are no other indicators of nominalization, such as demonstratives. The absence of the -ch subject marker is to be expected, since if it is a nominalized complement clause, it would be an object clause rather than a subject clause. At this point, there is no proof that -o is the nominalizer, but that is a more acceptable solution than positing a morpheme that only occurs on the complements of 'iv and doesn't contribute any meaning.

It should be noted that 'iv 'pretend' never occurs alone, i.e. without its complements suffixed with -o-. Therefore, it is a more accurate reflection of the data to say that what means 'pretend' is the construction Verb+o 'iv-.15
NOTES

1 See Langdon 1977 and 1978 and Munro 1974. For further discussion see 5.2214.

2 This construction occurs frequently on reduplicated forms. This apparent semantic contradiction is mitigated by the fact that reduplication often signals intensity (rather than repetition and the use of the punctual reinforces this.

3 vak and hak are often used before unuu, especially in narratives, to punctuate the action (Glover 1979: 7).

4 I am not sure what this segmentation and gloss are intended to represent. The corresponding phrase in Tolkapaya would have the form 'um-k_yu-ch-ch (Neg-SS be-pl-sj), similar to what Kendall gives for example 42.

5 Pamela Munro tells me that there is a word in Mojave, huper 'just' that might be cognate with Tolkapaya hpira. In Mojave, it usually precedes the whole sentence or predication and appears to have scope over the whole predication, unlike in Tolkapaya, where it has apparently been extended in use to the modification of constituents. She gives the
following two examples:

(1) MO. huper aar-mot-k 'She just didn't want to'
    (answers 'Why didn't she...?')

(2) Parker 'uyavay-mot-m huper nyath '-tarahaar-k
    '-iduu-m
    'I don't live in Parker, I just work there.'

See section 2.25 for a discussion of this wal...yii
'want' construction.

Munro 1973 comprehensively discusses the various
Yuman negative morphemes and constructions.

As noted earlier (see fn. 23, Chapter I), Tolkapaya
does not have a t morpheme in its negative construction,
but it may be a part of certain semantically negative
words (like tu/tuy).

Sandra Chung first noted these facts about complements
of 'say' (and related verbs like 'think') in Yuman (for
Tolkapaya).

Pam Munro suggested this label to me.

Lynn Gordon was first to suggest this analysis (see

The parenthetical y indicates the glide between the
two vowels; the suffix could, of course, be -ya, if it is
not this -a predicating morpheme.

Another possibility is that this (hii) is some form
of ii with a third-person h- onglide. Pamela Munro has
pointed out to me that the cognitive verb yii 'think' is
historically related to 'i 'say'. This being the case, an
analysis like this for hii is not so far-fetched.

One possibility would be -a 'absolutive'.

Carol Slater has suggested to me that this -o- might be related to an -o- 'hortatory' suffix found in Yuma. This -o- does not show up on complements of 'pretend' (which is the cognate of 'i' 'say' marked with an evidential suffix) in Yuma, however. Hinton (1977: 249) reports an -o- hortative suffix in Havasupai. Tolkapaya does not have this hortative -o- apparently. It should be mentioned that this is another possible source for the -o- in the 'pretend' construction.
CHAPTER III: Complex Adverbial and Modal Constructions

3.0 **Introduction**

This chapter describes the various adverbial and modal constructions in Tolkapaya—the complex structures that make specialized use of the morphemes and auxiliary verbs introduced in previous chapters. Many of the constructions share various semantic or morphosyntactic features. Semantically, the constructions involve the expression of certain relationships between propositions or between propositions and the expectations, knowledge, and attitudes of the speaker. These relationships include:

1) the relationship between propositions in which one proposition is asserted to be causally related to the other (reason and purpose clauses);

2) the relationship between propositions whose expectations contrast with each other, or between a proposition and the expectation or knowledge established by context (contrary to expectation auxiliary constructions);

3) the relationship between propositions in which one provides the temporal point of reference for the other
(time clauses);

4) the relationship between propositions in which one provides a sufficient condition for the other to obtain (conditionals);

5) the relationship between propositions in which a proposition contrasts in some way with present reality (non-eventive contrastive clauses).

3.1 Reason and purpose adverbials

3.1.1 Reason clauses

Given the right semantic context, clauses joined by simple switch-reference (1.42) can imply a causal relationship. In the basic causal construction, the clause stating the cause occurs first and is marked with a switch-reference marker, then the result is stated in a clause with normal independent clause morphology. Schematically then: (CAUSE)...Verb + SR (RESULT)....Verb + terminal suffix expresses the notion "X so Y" or Because X, Y".

(1) Pam kthye-v-ch yu-ka 'pa-ch pa-tope-m wi-ch-k wu-m (Pam doctor-dem-sj be-SS person-pl pl:obj.-help-DS do-pl-SS do-impf)
   'Pam is a doctor, so she helps people.'
(2) 'ich'-'rav-k '-tarhar-h 'um-k yu-m (s.t.-l-hurt-SS 1-work-Irr Neg-SS be-impf)
   'I didn't work because I was sick.'
(3) ny-tha-ch nya ny-lap hpuk-m nya-ch '-av-ny-k war-k yu-m (dem-Stem-sj me 3/1-hit first-DS 1-sj 1/3-hit-too-SS additional-SS be-impf)
'I hit him because he hit me first.'

Out of context and when the semantics don't make the relationship obvious, this type of construction represents most neutrally simple conjunction of the type "X and then Y". In this sense, the following example can have two interpretations --causal or simply correlational.

(4) ma-\,ch m-vaa-m nyu-l '\-yaam-k '\-yu-ny (you-sj 2-come-DS stem-Loc 1-go-SS 1-be-prf)
    'You came so/and then I went away.'

As long as the morphology remains constant the clauses can be reversed, as shown below:

(5a) ma-\,ch kwe-m-spo m-qyat-m 'e ny-yii-k '\-yu-m (you-sj s.t.-2/3-know 2-really-DS like 1/2-think-SS 1-be-impf)

(5b) nya-\,ch 'e ny-yii-k '\-yu-m ma-\,ch kwe-m-spom-qyat-me (I-sj like 1/2-think-SS 1-be-impf you-sj s.t.- 2/3-know 2-really-DS)
    'I like you because you're smart.'

One aspect in which causal and correlational sentences differ is with respect to this freedom of various in ordering. If the clauses are causally related the CAUSE clause can be center-embedded. Center-embedding is not allowed with clauses that are neutrally or only correlationally related. In causal sentences only the CAUSE clause can be center-embedded.

(6a) Heather-\,ch nyu-l skekm-m Pam-\,ch man-k yu-m (Pam-sj Heather-sj Stem-Loc push-DS fall-SS be-impf)

(6b) Pam-\,ch Heather-\,ch nyu-l skekm-m man-k yu-m (Pam-sj
Heather-sj Stem-Loc push-DS fall-SS be-impf)
'Heather pushed Pam and she fell.'
(7) Bonnie-ch Lynn-ch pi-me 'ich-rav-k yu-ny (Bonnie-
sj Lynn-sj die-DS s.t.-hurt-SS be-prf)
'Bonnie got sick because Lynn died.'
(8a) nya-ch hmany-a '-seq-m mii-k yu-m (I-sj baby-abs
1/3-DS cry-SS be-impf)
(8b) hmany-ch nya-ch '-seq-m mii-k yu-m (baby-sj I-sj
1/2-hit-DS cry-SS be-impf)
'The baby cried because I hit her.'

Yet another possibility is to express a causal relation-
ship by juxtaposing two fully-marked independent clauses.
Generally, this method is only used when the ordering is the
reverse of the basic order; i.e. RESULT clause followed by
the CAUSE clause.

(9) 'nya-v-m '-tlah-v-k '-yu-m hipa-m '-smaa-k 'han-a
'um-k yu-m (day-dem-Loc(time) l-tire-Sta-SS l-be-impf
night-Loc(time) l-sleep-SS good-Irr Neg-SS be-impf)
'I'm tired today because I didn't sleep well
last night.'

In the following cases, the cause-result relationship is not
between the two predications, but rather between the CAUSE
clause and the performative. The speech act itself is moti-
vated by the situation expressed in the CAUSE.

(10) qwaloyaw sqaw-a '-wiy-v-a m-yoo-h 'um-i nya-ch
'-hnaq-k '-yu-m (chicken egg-Abs l-own-dem-abs
2-take-Irr Neg-Imp I-sj 1/3-want-SS l-be-impf)
'Don't take my eggs because I need them.'

(11) vqi-ny-ch 'ich-maa qyat-k i-mo see-k yu-m
(woman-dem-sj s.t.-eat really-SS say-Dub be:fat-
SS be-impf)
'(I say) that woman must eat a lot because she's
fat.'

(12) Lynn-ch ny-chqam-mo '-sal-ch rav-k 'i-m (Lynn-sj
3/1-hit-Dub 1-hand-sj hurt-SS say-impf)
'(I say) Lynn must have hit me because my arm
hurts.'

Yet another possibility for reversing the basic order
CAUSE + RESULT is to use the question word kavyuka =
'(the reason) why', 'for some/what reason'. This question
word, like the other question words, is multimorphemic;
the morphemes are ka- (interrogative proclitic), v- (demon-
strative prefix), yu ('be'), -k (same subject) and -a
(vocalic increment). kavyuka can occur in various positions
in relation to the RESULT clause, including sentence-
initially, following the subject, or following the verb.
In other words, kavyuka is a clause that is subordinate to
the RESULT clause and means something like "(and) there
is some reason".

(13) Pam-ch kavyuka 'ar ye-k qyat-m yu-ch-k yu hmany
wiy-v-k 'ar ye-k yu-m (Pam-sj why happy-SS
really-DS be-pl-SS be baby have-Sta-SS happy-SS
be-impf)
'The reason Pam is happy is that she has a baby
(so she's happy).'

13 is more literally 'Pam is really happy and there is a reason--she has a baby (so she's happy).

(14) kavyuka Jeni-ch ruv qyat-k yu-m m-yi-ch-th-me
    ich-rav-k yu-m (why Jeni-sj thin really-SS
    be-impf 2-think-pl-Con-DS s.t.-hurt-SS be-impf)
    'The reason Jeni is thin, if you think about it,
    is that she's been sick.'

(15) nya-ch nyu-l '-yaam-me kavyuka ma-ch '-yaam-h
    m-i-m yu-ma (I-sj stem-Loc 1-go-DS why you-sj
    1-go-Irr 2-say-DS be-Assr)
    'The reason I left is that you told me to leave.'

There clearly seems to be a marked ordering for clauses (RESULT + CAUSE) and an unmarked ordering (CAUSE + RESULT), as reflected in the special constructions necessary for the order RESULT + CAUSE. This ordering is consistent with the neutral, correlational meaning of simple switch-reference joined clauses which indicates that the events expressed in the clauses occurred in the same temporal sequence as the clauses. Since the CAUSE clause can be center-embedded and is always the one with switch-reference (as opposed to terminal) suffixes, it seems to be loosely subordinated to the RESULT clause. This syntactic distinction is then consistent with the functional differences, since the result is the primary assertion while the statement of the cause represents background or modifying
information. This functional pattern of background versus primary information seems to be characteristic of complex sentences with adverbial clauses in general.

3.12 Purpose clauses

Most simple clauses expressing purpose or intent are auxiliary constructions with a noun phrase complement rather than a complex sentence and were discussed in 2.35. However, complex sentences using the auxiliary hii/yii to indicate a purposive or intentional expression have something in common with the syntax and semantics of the above reason adverbials.

The problem of the identity of hii/yii was elaborated on in 2.35, where it was discussed whether or not hii and yii in purposives represent two auxiliaries or are phonological variants of one auxiliary. In simple sentences with purpose clauses hii/yii always takes the form of a predicate nominal, since functionally it expresses properties of some noun. The complex versions are somewhat different and show some variation.

In one version, the one that is syntactically similar to reason adverbials, the EVENT clause is stated first followed by switch-reference marking, then the PURPOSE clause is stated in its predicate nominal form. I am referring to the PURPOSE clause as the clause which expresses the purpose for the other event stated in the sentence—the for-to complement of an English purposive

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expression. This form of the Tolkapaya purposive shows both the relationship with the obligational use of hii/yii and also the similarity with reason clauses. The former connection has already been discussed. The relationship between reason adverbials and purpose adverbials is an obvious one semantically and is reflected by the syntax in many languages. Example 16 looks much like a reason adverbial, but for the fact that the PURPOSE clause is a predicate nominal.

(16) 'hat ny-kkav-m cha m-wa m-yii-v-ch yu-m (horse 1/2-buy-DS top 2-sit 2-Aux-Sta-sj be-impf)
               'I bought a horse for you to ride.'

The rather odd thing about purpose adverbials is that the most common ordering of clauses is a syntactically marked one. With reason adverbials we saw that the unmarked order was CAUSE + RESULT. With the purpose adverbials, the most common order is EVENT + PURPOSE (or with the PURPOSE clause center-embedded), but this is a syntactically marked order in several ways, as will be shown below.

(17a) v-ya tyach-v-a ny'-oy-o-k ('-wu-m) ma-ch m-hwal-a m-yii-v-ch yu-m (dem-Stem seed-Dem-abs 1/2-bring-App-SS (1-do-impf) you-sj 2-plant-Irr 2-Aux-Sta-sj be-impf)

(17b) v-ya tyach-v-a ny'-oy-o-k ('-wu-m) ma-ch m-hwal-a hii (dem-Stem seed-Dem-Abs 1/2-bring-App-SS (1-do-impf) you-sj 2/3-plant-Irr Aux)
               'I brought these seeds for you to plant.'
In both 17a and 17b the EVENT clause--the first clause--can optionally take the Final Auxiliary Construction, indicating that it is the main clause of the complex sentence. Several things suggest that the PURPOSE clause with the auxiliary hii/yii is subordinate to the EVENT clause. 17b shows that the auxiliary hii can come at the end of a sentence with no terminal marking of any sort while the EVENT clause has a terminal suffix. Sentence 17a is somewhat ambiguous syntactically, since the auxiliary occurs as an (independent) predicate nominative--interpretable as two sentences. However, the following example 17c shows there is an option of center-embedding the PURPOSE clause, indicating that it is quite clearly subordinate.

(17c) v-ya tyach-v-a ma-ch m-hwal-a hii ny-'oy-o-k
     '-wu-m (dem-Stem seed-dem-Abs you-sj 2/3-plant-Irr Aux 1/2-bring-App-SS 1-do-impf)
     'I brought these seeds for you to plant.'

In this respect, the purpose adverbials are like the reason adverbials--only the PURPOSE and the CAUSE clause can be center-embedded. What is unusual about the purposive expressions is that the PURPOSE clause--the subordinate clause--is usually either center-embedded or the final clause in the string. This order is the reverse of the normal clause order of complex sentences, which is to have the backgrounding adverbial clause that is morphologically marked, or otherwise subordinate, be first in the
sentence and followed by the primary assertion which has independent clause status. But notice that this order is consistent with the temporal order of the actual events.

In a sense then, sentence 17 says 'I brought these seeds because you're supposed to plant them', but this order for a reason adverbial is a marked order. This ordering reversal may actually be as much a characteristic of purposive adverbials as is the *hii/yii* auxiliary—distinguishing them from reason adverbials. Further evidence that the ordering is marked lies in the slight tendency for "framing" the PURPOSE clause with a repetition of the main verb.

(18) *nya-ch* Pam k'u '-e-k 'ya ha-1 chkwa-h hii '-e-k 'wi-ny (I-sj Pam basket 1/3-give-SS mesquite: beans Stem-Loc put-Irr Aux 1/3-give-SS 1-do-prf) 'I gave Pam a basket to carry mesquite beans in.'

Example 19 has a repeated verb "framing" the PURPOSE clause, but the repetition takes a more complex form with an applicative (benefactive) morpheme and a plural subject prefix—'I plant it for them'.

(19) *nya-ch* tyach '-hwal-k koch-a maa-ch hii pa-'-hwal-o-k '-wu-m (I-sj corn 1/3-plant-SS pig-Abs eat-pl Aux pl:obj-1/3-plant-App-SS 1-do-impf) 'I grow corn for pigs to eat.'

The expression of reason and purpose, causality and intent, is more complicated than it appears at first glance. It is clear that the two adverbial types are related semantically and syntactically, but the exact relationship
remains undefined.

3.2 **vite 'contrary to expectation'**

The next construction to be considered here involves the modal **vite** (2.23) which is a modal auxiliary whose general semantic flavor fits well under the rubric "contrary to expectation." The syntax is fairly straightforward and reasonable analyses can be given for the morphology. It is 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 modal domain discussed above, at least not with a similar construction.

3.21 **Complex **vite** constructions**

As suggested in section 2.23, **vite** is in fact a modal auxiliary comparable to **lwi 'should, be supposed to'** (2.34) and **hii/yii 'purposive/obligational'** (2.35). Several syntactic arguments are available to support this claim. First of all, **vite** occurs in final position in its clause, as do all verbs in Tolkapaya; that is to say, it is a member of the clause it follows when the clausal order is reversed. Compare sentence 20 with 21 below.

(20) m-ruv m-yite qe m-han m-qyat-k m-yu-m (2-thin 2-CEx * 2-pretty 2-very-SS 2-be-impf)

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

(21) qe m-han m-qyat-k m-yu-m m-ruv m-yite (* 2-pretty 2-very-SS 2-be-impf 2-thin 2-CEx)

'You're pretty, even though you're thin.'

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yite is person-marked to agree with the subject of the clause it follows, as shown in sentence 22.

(22) m-'ev-ch-h 'um m-yite 'swar-k 'unuu-k 'yu-m
     (2-hear-pl-Irr Neg 2-CEx 1-sing-SS 1-IncAux-SS
      1-be-impf)

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

Notice that yite is different from other verbs and auxiliaries in that the verbs preceding it are bare stems without switch-reference marking or other verbal marking; the modal auxiliaries lwi and hii/yii share this property with yite in Tolkapaya. Although yite is different from most verbs in this respect, it cannot be equated with any other syntactic category (such as, for instance, a contrasting conjunction like English but) because it can occur as a modal auxiliary in a single independent clause as demonstrated in 2.23.

3.22 Simple sentence yite constructions

In the next example of this type of simple sentence, yite is followed by a construction that looks like the Final Auxiliary Construction, i.e. (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 construction. This is a peculiarity of other modal auxiliaries (lwi and hii/yii), a fact which suggests that the compound form (person marking) + behavioral verb + m is the main verb usage of the behavioral verb and not the Final Auxiliary Construction that is suffixed to all independent
clause main verbs in Tolkapaya. This hypothesis is further born out by the fact that this final behavioral auxiliary can be suffixed with the plural subject agreement morpheme -ch when the subject of the clause ending in yite (+person-marking + Aux + m) is plural. This can never be the case with these behavioral auxiliaries when functioning as the Final Auxiliary Construction.

(23) vquuy-a han-k yi-ch-th-m 'um-ch yite yu-ch-m
    (woman:pl-abs pretty-SS Aux-Pl-Con-Ds Neg-Pl CEx
     be-pl-impf)
   'Those girls may think they're pretty, but they're not.'

This point is argued further in 5.22253.

It could conceivably be argued that the yite that occurs between two full clauses is not related to the yite + Aux + m as the last auxiliary construction in a simple clause.¹ But the evidence in favor of the association of these two instances of yite in Tolkapaya is quite substantial. In the first place, the semantics are identical, as can be seen in the examples given below. Both kinds of clauses with yite express something the speaker is contrasting with certain expectations--either those established by context, or those set up by the other clause in the sentence. The sentences which use yite are either true or have the possibility of being true.²

Footnotes to Chapter III begin on page 216.
Second, phonologically the two occurrences are equivalent, allowing for reasonably conditioned phonetic variations (2.23) (discussed below). Let us first consider some typical examples of this construction.

(24) ny-'wa-v-ch qech yite 'e '-yii-k '-yu-m (Rel-1-house-dem-sj small CEx like 1/3-think-SS 1-be-impf)

'Even though my house is small, I like it.'

(25) ma-ch m-vaa m-yite va-k '-yu-h 'um-ha (you-sj 2-come 2-CEx Stem-Loc 1-be-Irr Neg-Irr)

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

(26) hloo '-waal '-yite pem-k yu-m (rabbit 1/3-seek 1-CEx be:lacking-SS be-impf)

'I looked for rabbits, but there weren't any.'

The following are examples of yite in a one-clause auxiliary construction (2.23):

(27) ma-ch 'smaa m-thii m-yite m-yu-m (you-sj medicine 2-drink 2-CEx 2-be-impf)

'But you just drank the medicine (you didn't know it)!'

(28) 'kur-th-a pahmi m-wiy m-'u m-yite m-yu-m (ago-dem-abs man 2/3-have 2-see 2-CEx 2-be-impf)

'But you saw your husband a while ago (you didn't know it was him).'

(29) vqi qyat-o k-'iv-ch 'ich-spoo-h 'um yite 'i-m/ yu-m (girl-vry-o Rel-pretend-sj s.t.-know-Irr Neg CEx say-impf/be-impf)

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'The girl who pretends she's so smart isn't really.'

As noted earlier 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 30 below:

(30) vqi-ny-ch 'han-h yit yu-m (girl-dem-sj good-Irr CEx be-impf)

'That girl is going to get better! (said although everyone thinks she's going to die)'

Since there is some variability in the presence of -e in this construction (27-30), there is also a possibility that -e is a separate morpheme not required in the position before a main auxiliary, as is the case with the other vocalic increments. In any case, the relationship between these two types of yite constructions seems well-established on semantic grounds alone.

The segment -t may be a separate morpheme as well. It was discussed in Chapter I (fn. 26) that there is a -t negative morpheme in Yuman that has reflexes as a negative affix in other Pai dialects. There is no parallel negative -t in Tokapaya, but the -t in yite (and related forms like, e.g. yute) may be this negative morpheme. A negative morpheme would certainly seem to be appropriate semantically for a phrase indicating 'contrary to expectations'. The fact that the auxiliary vi can be replaced by yu in existential constructions and occasionally by 'i or wi in other types of auxiliary constructions (see 5.231) involving
counterexpectancy is further evidence for the segmentability of \( t \).

Hinton (1977: 275) analyzes what appears to be a related construction in Havasupai as having a negative \(-t\). In Havasupai, the examples all involve the auxiliary \( yu \) 'be', rather than \( yi \), followed by \(-t\) and an incremental vowel. The semantics of the Havasupai examples suggest that this construction might also have something to do with counterexpectancy.

3.23 **Double yite constructions**

The following construction having two instances of \( yite \) proves to be helpful in determining the semantics of this auxiliary. These cases all happen to involve the verbs 'iv 'pretend' or (v)lwi 'seem, appear, look/act like', and have \( yite \) after each of the two main propositions. The examples with \( vlwi \) involve a nominalization described in 2.222. The construction is \(-yu-ch-a \) (be-Nom-abs) before the verb \( (v)lwi \).

(31) Simba-ch 'han-k yu-ch-a vlwi yite 'um yit yu-m

(Simba-sj good-SS be-Nom-abs seem CEx Neg CEx be-impf)

'Simba acts nice, but he isn't.'

(32) Bob-ch 'ich-rav-h 'um-k yu-ch-a lwi yite 'ich-rav yit yu-m (Bob-sj s.t. -hurt-Irr Neg-SS be-Nom-abs seem CEx s.t. -hurt CEx be-impf)

'Bob doesn't look sick, but he is.'
In all 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 what 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 created by prior discourse and the extra-linguistic context. To emphasize this disparity two instances of *yite* can be used, as in the above examples. Since the speaker is actually establishing a set of expectations in the first assertion, the second *yite* is appropriate. The decision to use both occurrences of *yite* 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 occurrence of *yite* is employed. However, in both cases the information being imparted comes as no surprise, since it happens to refer to people and their attributes that are a part of both the speaker and the
hearer's knowledge about the world.

(34) Jeni-ch pa nmirv-h 'um-k yu-ch-a vlwi yite pa nmirv-ch yu-m (Jeni-Sj person kind-Irr Neg-SS be-Nom-abs seem CEx person kind-Sj be-impf)
'Jeni doesn't seem kind, but she is.'

(35) Steve-ch pa qyat-o 'iv-ra-h 'um yite pa qyat-ch yu-m (Steve-sj person really-o pretend-Ints-Irr Neg CEx person really-sj be-impf)
'Steve doesn't act like a big shot, but he is.'

The semantic unity of the various uses of yite has thus been demonstrated. Like many of the other constructions that are discussed in this chapter, the yite 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, being another case where a Pai languages has innovated a special construction to further differentiate its system for expressing modality.

3.3 Time clauses

The various types of time clauses in Tolkapaya can be described as effectively making use of a basic dichotomy between simultaneous and sequential 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 (3.11). When the temporal relationship between
events is at issue, the relationship can be morphologically and syntactically marked with one of the clauses assigned a subordinate status.

3.31 -t clauses

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. 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 the discourse. Since both clauses describe events which occurred at the same time, either could be temporally marked. The following examples illustrate the temporal pivot construction.

(36) 'smaa-t-m nya 'kyel-ch 'wi ny-wiy-wa yoo-k wi-o-k wu-m (1-sleep-Tem-DS I 1-sibling-Sj money Rel-have-dem take-SS do-Perf-SS do-impf)
'While I was sleeping, my sister took my money.'

(37) ma-ch m-smaa-t-k m-kwaw-k m-yu-m (you-Sj 2-sleep-Tem-SS 2-talk-SS 2-be-impf)
'You were talking in your sleep.'

The subordinate status of these clauses can be demonstrated, since they can be center-embedded, as in 38:

(38) Pam-ch nya-ch 'swar-t-m ima-k yu-m (Pam-Sj I-Sj 1-sing-Tem-DS dance-SS be-impf)
'While I sang, Pam danced.'

The ò-clause can be postposed as well, as in 39:

(39a) nya-ch qwaloyaw-h-a 'краа-ò-m nya'-tal-ch
     smaa-k yu-ny (I-Sj chicken-dem-abs 1/3-eat-Tem-
     DS I 1-father-Sj sleep-SS be-prf)

(39b) nya '-tal-ch smaa-k yu-ny nya-ch qwaloyaw-h-a
     'краа-ò-m (I 1-father-Sj sleep-SS be-prf I-sj
     chicken-dem-abs 1/3-eat-Tem-DS)

'My father was sleeping while I ate the chicken.'

Tolkapaya employs several strategies for emphasizing
the order of events as they occurred in real time, as does
English in constructions using before and after. Although
these Tolkapaya sentences usually correspond to English
before/after constructions, they don't seem to operate with
the same principle 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 ò-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 correspond to Tolkapaya
sentences which actually mean something like 'While event X
is not (yet), event Y occurs'. This construction explicitly
uses the negative verb 'um and allows for the subordinate
clause to be postposed, as is shown in 41 below:
(40) kmun-v-ch vaa-h 'um-t-m tyach-v-a '-yoo-ch-a
   (frost-dem-Sj come-Irr Neg-Tem-DS corn-dem-abs
   1/3-take-Pl-Irr)
   'Before the frost sets in, we'll gather the corn.'

(41) Jack-ch 'ich-maa-h 'um-t-k ha'mal-a thii-m wi-
   ch-k wu-m (Jack-Sj s.t.-eat-Irr Neg-Tem-SS
   beer-abs drink-DS do-Pl-SS do-impf)
   'Jack always drinks beer before he eats.'

(42a) qwaloyaw-a s=sah-a³ 'um-t-m nya-ch '-nwir-k '-wu-m
   (chicken-abs spoil-Irr Neg-Tem-DS I-Sj 1/3-cook-
   SS 1-do-impf)

(42b) qwaloyaw-a '-nwir-k '-wu-m s=sah-a 'um-t-m
   (chicken-abs 1/3-cook-SS 1-do-impf spoil-Irr
   Neg-Tem-DS)
   'I cooked the chicken before it spoiled.'

The usual semantic reading of -t constructions suggests
the more literal translation '(At the time) when the chicken
hadn't yet spoiled, I cooked it', for 42. The use of -t
seems to be obligatory with this negative construction. It
is not obligatory in the (hu)puk construction, as can be
seen in 44 below:

(43) Jeni-ch k'u ny-yoo-v-o puk-t-m 'wi '-e-h-k
   '-unuu-k '-wu-m (Jeni-Sj basket 3/1-make-App
   first-Tem-DS money 1/3-give-Irr-SS 1-IncAux-SS
   1-do-impf)
   'Jeni is going to make me a basket first, then
   I'll pay her.'
(44) Jack-ch ha'mal-a thii puk-(t)-k 'ich-maa-m wi-
   ch-k wu-m (Jack-Sj beer-abs drink first-
   (Tem)-SS s.t.-eat-DS do-pl-SS do-impf)
   'Jack always drinks beer first before he eats.'

This construction is only interpretable as a temporal,
given the semantics of (hu)puk, so the -t, when it appears,
is somewhat redundant. This use of -t is different from the
pattern of -t as 'at the time when'; these propositions are
positive and emphatically sequential. The -t appears to
mark the clause as the temporal point of reference and as
subordinate.

Another kind of temporal construction marked with -t
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 notions are expressed by until
and since, respectively. The since type of 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 -t suffix
and adding appropriate switch-reference marking. The pred-
icate of the second clause is then marked with the habitual
auxiliary construction and/or is in the predicate nominal
form. The -t marked clause is the dependent clause (as in
all the above examples), since regardless of order, the
non-t-marked clause has the terminal marking of main clauses.
(45) Jack-\text{-}ch h\text{-}many-\text{-}t-\text{k} 'wil-\text{-}havasu m\text{-}aa-ch-\text{-}ch yu-\text{-}m
   (Jack-\text{-}Sj child-\text{-}Tem-SS plant-\text{-}green eat-\text{-}pl-\text{-}Sj
   be-\text{-}impf)
   'Jack has been a vegetarian since he was a child.'

(46) Allen-\text{-}ch 'wa wa-k h\text{-}many-h-a v\text{-}we-m yu-\text{-}ch-k yu-\text{-}ny
   JP-\text{-}ch h\text{-}many qech-\text{-}t-\text{m} (Allen-\text{-}Sj house sit-\text{-}SS
   child-dem-abs care:for-DS be-\text{-}pl-\text{-}SS be-prf JP-\text{-}sj
   child little-Tem-DS)
   'Allen stays home taking care of the child since
   JP was a baby.'

In these clauses -t seems to mean 'from the time...', so
45 is literally '(From the time when) Jack was a child,
he's always been a vegetable eater'.

\textit{Until} clauses are infrequent, possibly due to their
semantic complexity. These sentences often appear with
three full clauses expressed. The semantics of the con-
struction suggests reasons why this should be the case.
What is implicit in this construction is that an action is/
was/will be performed or a state obtained up to a parti-
cular point in time, at which time the situation changes.
In Tolkapaya, the overt expression of the new situation is
quite common. The construction takes the antecedent action
and marks it as incompletive (with unuu) or continuative
(by repetition of the lexical verb) and affixes the temporal
pivot -t and appropriate switch-reference marking.
(47) 'swar-k 'swar-t-k 'nyathk-k 'yu-m (l-sing-SS l-sing-Tem-SS l-be:silent-SS l-be:impf) 'I kept singing until I shut up.'

(48) nya-ch 'tarhar-k va-k 'unu-u-t-m ma-ch 'ich-mnwir-k m-wir-m 'ich-'-maa-ch-h yi-mo (I-sj l-work-SS stem-Loc l-IncAux-Tem-DS you-Sj s.t.-2-cook-SS 2-finish-DS s.t.-1/3-eat-pl-Irr Cog-Dub) 'I'll work until you finish cooking then maybe we'll eat.'

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

3.32 -ny clauses

Sequential actions in the past are typically indicated by attaching the prefix ny- 'when' to the verbal complex of the temporally antecedent clause, which then takes appropriate switch-reference marking and is usually followed by the main clause (though it can be postposed or center-embedded).
(49) 'yaas-ch ny-ma-m Bonnie-ch 'ichmaacho-k chwo-k yu-m (turkey-Sj when-ready-DS Bonnie-Sj table-Loc put-SS be-impf)

'When the turkey was done, Bonnie put it on the table.'

(50) ma-ch ny-m-vaa-m nyu-l '-yaam-k '-yu-ny (you-Sj when-2-come-DS stem-Loc 1-go-SS 1-be-prf)

'You came, then I went away.'

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.

(51a) nya-ch '-ima-k '-yu-m Barn-ch ny-swar-m (I-Sj 1-dance-SS 1-be-impf Barn-Sj when-sing-DS)

(51b) nya-ch Barn-ch ny-swar-m '-ima-k '-yu-m (I-sj Barn-Sj when-sing-DS 1-dance-SS 1-be-impf)

'Barn sang, then I danced.'

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

(52) kwalthk=yala-h-e '-yaam-ch-m nya '-tala '-u-k '-yu-m (Red Mountain-dem-Dir 1-go-pl-DS I 1-father 1/3-see-SS 1-be-impf)

'We went to Red Mountain and I saw my father.'

There are several ways to relate unrealized clauses temporally. Sequential and simultaneous events in the future can be expressed in a construction utilizing the
'when' prefix ny- and the complex modal suffix -ktho (which appears in other constructions discussed in 3.4). If this suffix is used to mark sequential action, it marks the temporally antecedent clause. The main clause is marked as unrealized in the following ways: 1) with the incompleted auxiliary unuu and the irrealis morpheme -ha; 2) with the irrealis morpheme alone; 3) by some other non-realized form (e.g. an imperative).

(53) 'ich-m-maa-k ny-m-wir-ktho '-pem-a-k '-unuu-k '-yu-m (s.t.-2/3-eat-SS when-2-finish-Mod 1-go(dl)-Irr-SS 1-IncAux-SS 1-be-impf)
'When you finish eating, we'll leave.'

(54) 'sma ny-m-thii-ktho m-han-a-k m-unuu-k m-yu-m (medicine when-2/3-drink-Mod 2-good-Irr-SS 2-IncAux-SS 2-be-impf)
'After drinking the medicine, you'll feel better.'

3.33 -o clauses

Sequential situations that are noneventive can also be expressed using -o and switch-reference on the subordinate clause.

(55) qwaloyaw-ch ma-o-m '-maa-ch-a-k '-unuu-k '-yu-m (chicken-Sj ready-o-DS 1/3-eat-pl-Irr-SS 1-IncAux-SS 1-be-impf)
'As soon as the chicken is ready, we'll eat.'

(56) nymi-nyu 'ichmav-a '-'e-o-k nyu-l '-'yaam-a-k '-unuu-k '-yu-m (cat-dem food-abs 1/3-give-o-SS stem-Loc 1-go-Irr-SS 1-IncAux-SS 1-be-impf)
'I'm going to give the cat food before I go.'

The data suggest that -o is in fact a marker of temporal priority. -o is used on dependent clauses in complex sentences to mark the event expressed in the clause as being temporally prior to that of the second clause, as shown in the above examples.

It also occurs as part of the variant morphology of future conditionals, including the "frozen" suffix -ktho, which will be discussed in 3.4.

(57) va-k m-yu-ktho 'm-'u-k m-unuu-ma (stem-Loc 2-be-Cond 2/1-see-SS 2-IncAux-Assr)
    'If you're here you'll see me.'

(58) m-yaam-kho 'm-'u-ha (2-go-Cond 2/1-see-Irr)
    'If you go you'll see me.'

(59) 'ha-v-ch qrye-omh m-thii (water-dem-sj be:clear-Cond 2/3-drink:Imp)
    'If the water is clear, drink it.'

-o- occurs in explicitly counterfactual statements that involve temporal ordering, as well.

(60) m-yaam-o-th-m ny-'u-h yi-th-a (2-go-o-Con-DS 1/2-see-Irr Cog-Con-Voc)
    'Had you gone I would have seen you.'

(61) 'ich-'-maa qyat-o-th-k '-yu-th-ch '-yu-mo
    (s.t.-1/3-eat very-o-Con-SS 1-be-Con-sj 1-be-Dub)
    'I really should have eaten earlier.'
Notice that the temporal priority referred to in these examples is in noneventive modes—either irrealis or counterfactual. In this respect, -o- overlaps with one domain of -th 'contrastive' which is discussed below. Neither -o- nor -th is used to express temporal priority of simple past/present situations in dependent clauses.

However, both -o- and -th are used to express perfect aspect, which can be viewed as doing just that; i.e. relating a past event to a present state or implicitly ordering two situations temporally (cf. 2.14 and 4.11).

3.34 -th clauses

The multifaceted morpheme -th is characterized by the semantic features of contrast, temporal priority, and non-eventiveness. One of the syntactic constructions in which -th participates emphasizes the feature of temporal priority for the purpose of ordering events in complex sentences. Since -th functions in a noneventive mode, the situation expressed in the -th marked clause is (at the time of the speech act) nonfactual or noneventive. The situation expressed in each of the clauses marked with -th is temporally prior to the other situation expressed (or implied) in the sentence. Furthermore, the presence of -th implies a state of epistemic contrast which has the functional result of setting up a background for the assertion of present facts.

In the examples below, the construction temporally orders two future-time, yet to be realized situations or one
counterfactual situation with respect to a past situation. The former is illustrated in example 62, the latter in example 63.

(62) Bob-ch ny-he-k-th-k yuw-a-k unuu-k yu-m (Bob-sj 3/l-call-Dir-Con-SS come(d1)-Irr-SS IncAux-SS be-impf)

'Bob will call me before he leaves.'

(63) nya-ch 'ich'-maa-th-k 'yaam-a-ch 'yu-th-ch yu-mo (I-sj s.t.-1/3-eat-Con-SS 1-go-Irr-Sj 1-be-Con-sj be-Dub)

'I should have eaten before I left.'

The semantics of the unrealized expression is best captured by viewing it as a future perfect; i.e. in 62, as 'Bob will have called me at the time he leaves'. Note, however, that the semantically parallel expression in the factual, eventive present/past is temporally ordered with another morpheme—t the 'temporal pivot' discussed in 3.31.

A similar construction is found in future and counterfactual conditionals which are themselves discussed in 3.4. The canonical shape of the future conditional is to suffix the final verb of the antecedent clause with the compound modal suffix -ktho (cf. 3.33, 57 above); the consequent clause is marked as any unrealized independent clause. This compound suffix formula indicates a strong implication of the type "if...then".

(64) m-yaam-ktho ny'-u-ha (2-go-Cond 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 62 above. The difference is in the degree of contingency between the manifestation of the first situation and the consequence.

(65) m-yaam-th-m ny-'uu-ha  (2-go-Con-DS 1/2-see-Irr)
     'If you go, I'll see you.'

The formula for a counterfactual conditional (see 3.42) is somewhat different. The canonical construction marks the antecedent clause as a nominalization with a behavioral auxiliary (usually yu 'be') suffixed with a demonstrative (usually v + -a 'abs'); 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 th + a 'Voc'.

(66) m-vaa-k m-yu-v-a ny-'uu-h 'yi-th-a  (2-come-SS 2-be-dem-abs 1/2-see-Irr 1-Cog-Con-Voc)
     '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 in 3.42. An alternative version of the counterfactual conditional employs -th in the antecedent, as well, to indicate temporal priority.

(67) m-vaa-th-m ny-'uu-h 'yi-th-a  (2-come-Con-DS 1/2-see-Irr 1-Cog-Con-Voc)
     'If you had come, I would have seen you.'
Note that for past conditionals (3.44) even though events are temporally ordered, -th cannot be used, since the events are factual and have been realized. These constructions use -th to indicate that certain presently non-factual situations are temporally ordered and that their relationship is a marked one.

-th and -q-, then, both have a multiplicity of functions in the morphology of Tolkapaya. One function that they have in common is to substitute for -t to indicate temporal priority in complex sentences in noneventive modes. In simple sentences, this feature of temporal ordering is shared in that both morphemes are used to express perfect aspect. How this role expansion occurred for the morpheme -th is discussed in Chapter IV. For the morpheme -q-, the perfect will be assumed to be the basic meaning, since it exists in all the Pai languages and occurs in simple sentences. The use of -q- in complex sentences to indicate temporal priority is a natural extension of the ordering relationship implicit in the perfect aspect.

3.4 Conditional clauses

Conditional sentences generally express some event or state which will imply or would have implied 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 having been fulfilled.
3.41 **Future conditionals**

Future conditionals signify that an event expressed in the consequent is contingent on the condition imposed in the antecedent clause. The time frame of the antecedent and, naturally, the consequent, is future—the condition has not yet been realized. Future conditionals in Tolkapaya in their most common form are similar to the 'when' clauses described in 3.32, but without the ny- temporal prefix. Specifically, the antecedent clause is marked by the -ktho suffix alone, while the consequent is a main clause with some form of irrealis marking. Some variation is possible.

(68) m-mii m-nyathk-h 'um-ktho nyu-l '-yaam-a-k
'-unuu-k '-yu-m (2-cry 2-be:silent-Irr Neg-Mod
Stem-Loc 1-go-Irr-SS 1-IncAux-SS 1-be-impf)
'If you don't stop crying, I'm going.'

(69a) Pam-ch ny-chqam-ktho Steve: '-knavo-h-k '-unuu-k
'-yu-m (Pam-Sj 3/1-hit-Mod Steve 1/3-tell-Irr-
SS 1-IncAux-SS 1-be-impf)

(69b) Steve '-knavo-h-k '-unuu-k '-yu-m Pam-ch ny-
chqam-ktho (Steve 1/3-tell-Irr-SS 1-Inc Aux-SS
1-be-impf Pam-Sj 3/1-hit-Mod)
'If Pam hits me, I'll tell Steve.'

In addition to this standard future conditional construction, there are several variations. The antecedent clause can be marked in other ways, which are like constructions described earlier. The antecedent clause of a future conditional can be suffixed in the following ways:
... Verb + th + SR (cf. 3.34, the future temporal)
... Verb + k + h + o (i.e. -h replaces -th)
... Verb + o + h + SR (cf. 3.33; future temporal with
the Irrealis suffix added in atypical order)
... Verb + th + ktho (the modal -th, in addition to the
"frozen" complex modal suffix -ktho)
The following examples are illustrative:

(70a) va-k m-yu-th-k 'm-'u-h-k m-unuu-ma (stem-Loc
2-be-Con-SS 2/l-see-Irr-SS 2-IncAux-Assr)
(70b) va-k m-yu-kho 'm-'u-h-k m-unuu-ma (stem-Loc 2-
be-Mod 2/l-see-Irr-SS 2-IncAux-Assr)
'If you're around, you'll see me.'
(71) kathve-v-ch qrye-o-h-m m-thii (coffee-dem-Sj
clear-Mod-Irr-DS 2-drink:Imp)
'If the coffee is clear, drink it.'
(72) va-k m-yu-th-ktho va-l m-yurk-i (stem-Loc 2-be-
Con-Mod stem-Loc 2-enter-Imp)
'If you're around, come in.'

3.42 Counterfactual conditionals

The structure of counterfactual conditionals has
proven to be interesting with respect to the analysis of
the morphological elements constituting the adverbial
structures discussed in later sections. The Tolkapaya
dialect shows some productive variety in these morphological
arrangements that will hopefully contribute to the analytical
questions raised for the other dialects of Upland Yuman.
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.

By far the most common morphological arrangement constituting a counterfactual conditionals is as follows: the final verb of the antecedent clause is suffixed with -k 'same subject' and followed by the form yu + v + a which is optionally person marked; the consequent clause has the final verb suffixed with the irrealis morpheme -h followed by the form yi + th + a\(^4\) which is optionally person marked.

(73) m-vaa-k m-yu-v-a ny-'u-h yi-th-a (2-come-SS 2-be-dem-abs 1/2-see-Irr Cog-Con-Voc)

'If you had come, I would have seen you.'

It is in fact possible, under appropriate semantic/syntactic conditions, to mark the antecedent clause with any of the behavioral auxiliaries combined with any of the demonstratives: thus, instead of yu + v + a, the clause can be marked with yuwa, yuya, yuha, yutha, wiva, wiwa, 'iva, 'iwa, etc.

(74) Bonnie-ch vaa-h 'i-k 'i-v-a vaa-h yi-th-a
    Bonnie-Sj come-Irr say-SS say-dem-abs come-Irr Cog-Con-Voc)

'If Bonnie had said she would come, she would
have come.'

Very rarely, the antecedent has been marked the same as a future conditional. Some of these options are given below.

(75) m-vaa-th-m ny-'u-h yi-th-a (2-come-Con-DS 1/2-see-Irr Cog-Con-Voc)

'If you had come, I would have seen you.'

(76a) kthye-v-ch ('-yu-k) '-yu-v-a pa qyat-h yi-th-a (doctor-dem-sj (1-be-SS) 1-be-dem-abs person really-Irr Cog-Con-Voc)

(76b) kthye-v-ch '-yu-ktho pa qyat-h yi-th-a (doctor-dem-sj 1-be-Mod person really-Irr Cog-Con-Voc)

'If I'd been a doctor, I'd really have been something.'

(77a) m-yaam-o-h-m ny-'u-h yi-th-a (2-go-o-Irr-DS 1/2-see-Irr Cog-Con-Voc)

(77b) m-yaam-kho ny-'u-h yi-th-a (2-go-Mod 1/2-see-Irr Cog-Con-Voc)

'If you had gone, I would have seen you.'

The constituency of the primary morphological marker of the antecedent clause of a counterfactual conditional (yuva) is certainly yu 'be' (auxiliary verb) + v 'demonstrative + a 'absolutive'. The fact that yu can be replaced by the other behavioral verbs 'i 'say' and wi 'do' and that -v can be replaced by other members of the set of demonstrative suffixes confirms this analysis. That this construction is synchronically analyzable for Tolkapaya is clear. However, the form yuva is by far the most commonly
volunteered. Since \textit{yu} can always be substituted for 'i or \textit{wi} and appears to be the most "neutral" auxiliary, its prevalence is not surprising. As for the demonstrative suffixes, \textit{y} is unquestionably preferred here. Whichever member of the demonstrative set is used, however, it seems to carry no deictic force. Nonetheless, this range of possibilities affirms that Kendall's (1976) tentative analysis of \textit{–y} as the demonstrative \textit{–y} for the equivalent Yavpe construction is correct.

Tolkapaya offers supporting evidence that, indeed, the "counterfactual reading" does not come from the auxiliary + demonstrative construction of the antecedent clause, since Tolkapaya hypothetical conditionals use the same morphology for the antecedent clause. The interpretation of conditionals as either hypothetical or counterfactual is determined by the morphology of the consequent clause. The "counterfactuality" meaning is contributed specifically by the morpheme \textit{–th} which is described in Chapter IV.

3.43 \textbf{Hypothetical conditionals}

Hypothetical conditionals are particularly interesting in Tolkapaya because they morphologically and semantically bridge the gap between future and counterfactual conditionals. Semantically, hypotheticals can be either 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 essentially correspond to the English sense 'If event X were to happen/have happened, then event Y would happen/would have happened.' The boundary between hypothetical and future conditionals, on the one hand, and counterfactual conditionals, on the other, is not clearly defined in all cases. The semantics are such that, occasionally, a future time hypothetical in English will be translated as a simple future conditional. So for example 'I would know here if I were to see her' may translate as either 78a or 78b.

(78a) 'u-k 'yu-v-a 'spoo-ha (l/3-see-SS l-be-dem-abs l/3-know-Irr)

(78b) 'u-ktho 'spoo-ha (l/3-see-Mod l/3-know-Irr)

(78b, lit. 'If I see her, I will know her.')

As can be seen, then, in 78a the morphology of a hypothetical consists of marking the antecedent clause with yu + v + a (like the counterfactual) and the consequent clause with some form of irrealis (like the future). The same semantic ambiguity described above can be true of counterfactual conditionals, depending on the presuppositions involved, as in

(79a) hwatch-a 'mshe-h 'um-k 'yu-v-a kthye-v-ch 'yu-ha
(blood-abs 1/3-fear-Irr Neg-SS l-be-dem-abs doctor-dem-Sj l-be-Irr)

(79b) hwatch-a 'mshe-h 'um-k 'yu-v-a kthye-v-ch 'yu-h
'yi-th-a (blood-abs 1/3-fear-Irr Neg-SS l-be-dem-abs doctor-dem-Sj l-be-Irr l-Cog-Con-Voc)
'If I weren't afraid of blood, I would be a doctor.'

For the most part though, hypotheticals appear as described above, as the following regular example shows:

(80) nya-ch ma-ch ('-yu-k) '-yu-v-a nyahmiy-ha (I-Sj you-Sj (1-be-SS) 1-be-dem-abs marry:(w.s.)-Irr)

'If I were you, I'd marry him.'

Given the fact that the morphology of hypothetical conditionals in Tolkapaya has features in common with both future and counterfactual conditional morphology—in addition to the semantic complexity of conditionals in general—it is not surprising that a hypothetical conditional in English will not always elicit a hypothetical response in Tolkapaya. The free variation between -ha and hi:9a/yi:9a that Kendall 1976 reports for Yavpe is meaningfully distinctive in Tolkapaya. It is clearly the case for Tolkapaya that there are three different types of conditionals with distinctive morphology and semantic function.

Looking now 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 terminal suffix and yitha can also occur as the final marker of a single independent clause, as will be seen in 3.5. Along the same lines, both types of consequent clauses can be replaced by a clause with independent clause terminal marking to form a simple past conditional (not counterfactual).
3.44 Simple past conditionals

The following examples of simple past conditionals further demonstrate the claim that the tense frame of conditionals is determined by the time of the consequent clause. This fact is another instance of the dependence relationship between the antecedent and the consequent.

(81)  Bonnie-ch va-k yu-k yu-v-a Jack-ch yaam-k yu-m
      (Bonnie-Sj stem-Loc be-SS be-dem-abs Jack-Sj
       go-SS be-impf)
      'If Bonnie stayed, Jack went.'

(82)  Steve m-tkwiil-a-ktho m-tohv-k m-qyat-k m-ukwa-ma
      (Steve 2-beat-Irr-Cond 2-gamble-SS 2-very-SS
       2-feel-Assr)
      'If you (in fact) beat Steve, then you must really gamble.'

That the antecedent clause is actually subordinate to the consequent clause is supported by the fact that clauses ending in -ktho or yuva can never be independent clauses occurring alone, and further, can be center-embedded to the consequent clause, as follows:

(83)  nya-ch ma-ch nyu-l m-yaam-ktho '-yu-ny-h⁵ 'um-a-k
       '-unuu-k '-yu-m (I-Sj you-Sj stem-Loc 2-go-
       Cond 1-be-ny-Irr neg-Irr-SS 1-IncAux-SS 1-be-impf)
       'If you go away, I won't be here.'

3.5 -th-marked contrastive clauses

Returning to the question of what imparts the sense of being contrary to fact in a counterfactual conditional,
we will examine the role played by the morpheme -th in other types of nonfactual adverbial constructions. The following discussion will concern sentences of the type that describes an event which might have occurred, but which failed to occur, or can never occur. In the complex sentences, only one proposition is nonfactual; the other proposition describes what actually took place or provides some further explanation of the situation. The semantic domain includes such expressions as failed attempts and descriptions of a state that formerly obtained, but which no longer does, and situations where the realization of one event precludes that of another.

One type of noneventive clause occurs in the expression of failed attempts described in 2.172, which imply that an action was attempted but not accomplished. The "failed attempt" is often juxtaposed to a statement of the true outcome of the situation, as in

(34) Jack-ch hloo-h-a kyaa-k unuu-th-k cham-k wu-m
     (Jack-Sj rabbit-dem-abs shoot-SS IncAux-Con-SS miss-SS do-impf)
     'Jack tried to shoot the rabbit, but he missed.'

Alone, the -th marked auxiliary is sufficient to signify that the intended act stated in the sentence was unfulfilled, as in

(35) 'wi '-yoov-a-k '-wi-th-k '-yu-m (money 1/3-make-
     Irr-SS l-do-Con-SS l-be-impf)
     'I'm trying to make money.'

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Thus -th does not intrinsically mark the clause as subordinate. In this case, it marks the clause as noneventive. -th cannot be used in this construction if the action has actually been accomplished. It is not a mere negative, however, because the structure implies that an attempt has been made.

One construction which is definitely counterfactual has the basic semantic sense 'might have X, except that Y'. In other words, one clause is marked with -th and states an event which is explicitly contrary to fact; the second clause expresses the actual state of affairs which precludes the truth of the first proposition.

(86) Jeni-ch va-k yu-h yi-th-k 'ich-rav-k 'i-k 'i-m
    (Jeni-Sj stem-Loc be-Irr Cog-Con-SS s.t.-hurt-SS say-SS say-impf)
    'Jeni would be here, but she's sick.'

(87) ha'mal-a m-thii-ny m-yi-th-a paya 'thii-k 'chav-k 'wu-m (beer-abs 2/3-drink-ny 2-Cog-Con-Voc all 1/3-drink-SS 1-finish-SS 1-do-impf)
    'You could have (had) some beer, but we drank it all.'

This construction is always formed with the cognitive auxiliary yi + th, followed by appropriate switch-reference or the predicated vowel -a attached to the nonfactual clause.

Another very common function of -th is in the formation of clauses indicating a state which obtained in the past, but which no longer holds. By attaching -th to the main
auxiliary (which is often in the distributive construction), the sense is conveyed that the proposition "used to be" the case, but no longer is. Thus, these clauses are explicitly marked as being at present nonfactual. They are often in complex sentences, where the second clause expresses the present state of affairs. For example,

(88) ma-ch m-se-ch m-yu-th-k m-yu-m (you-Sj 2-fat-Sj 2-be-Con-SS 2-be-impf)
'You used to be fat.'

(89) Jack-ch qwaqt-a maa-m wi-ch-th-k va-m 'wil-havasu maa-m wi-ch-k wu-m (Jack-Sj meat-abs eat-DS do-pl-Con-SS stem-Loc(time) plant-green eat-DS do-pl-SS do-impf)
'Jack used to eat meat, but now he only eats vegetables.'

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

(90) '-ima-th-k '-tlahv-k '-yu-m (l-dance-Con-SS l-tired-SS l-be-impf)
'I was dancing, but now I'm tired.'

All of these various sentence types with -th 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 the root yi (2.35) found in so many of these examples can be identified as the auxiliary use of a common root yi(i) (2.25) found in certain cognitive verbs (e.g. 'e-yi 'like', wal-yii 'want').

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In these complex constructions (and others not considered here) it seems that the morpheme -th is signalling that the -th-marked proposition is at odds with what is currently factual in the real world, or that the speaker's predictions for the future admit some doubt as to the proposition's being actualized. The speaker indicates by using -th that the proposition is in contrast with the reality of the present and "removed" from the space/time of the speech event. These cases and others not presented here strongly suggest that the modal suffix -th is related to the distal deictic suffix -th, a relationship that will be described in detail in Chapter IV which integrates the various functions of -th.
NOTES

1Kendall (1976:104) gives examples of both complex and simple sentence yite constructions (examples 10-13). Although the examples aren't discussed in detail, the semantic descriptions of the two uses of yite seem to be at odds and their glosses are not the same—a fact which suggests to me that Kendall treats them as distinct constructions.

2This fact can be contrasted with -th marked clauses which usually imply that their assertions are noneventive and cannot be realized.

3I am writing this word with a digraph s=s initial segment to indicate that it is always pronounced with a long s sound which is probably a case of affective, expressive lengthening.

4The final -a in the construction yitha is probably identifiable as the predicating morpheme described in 2.161.

5This example is another instance of the -ny that occurs before negatives and habituas (see 2.15).

6See fn. 5.
CHAPTER IV: An Integrated Account of the Morphemes -th and -h

4.0 Introduction

As has been noted several times within this study, the Yuman languages enjoy a considerable amount of what has been referred to as "apparent homophony".¹ That is, a small set of phonemes appears to do multiple duty in representing a wide range of syntactic and semantic functions. The decision that must be made for each phoneme of this type in each language is whether the various occurrences of the phoneme are manifestations of one morpheme or more than one. In many cases it is possible and desirable to establish a unified description of these various occurrences in such a way as to posit 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 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.² The identity of two such suffixes, -h and -th, which occur both as demonstrative suffixes and as verb suffixes, is the concern of this chapter.

Footnotes for Chapter IV begin on page 248.
First, the various functions of -th in its role as a modal suffix will be compared and shown to be manifestations of a single morpheme; the verbal suffix -th will then be compared to the demonstrative -th in order to establish that their semantic parallelism indicates a common (historical) identity. The same process will then be followed for the morpheme -h.

4.1 The modal suffix -th

The morpheme -th has by far the widest range of uses of any verbal suffix. The complex of semantic features that characterize -th are such that the morpheme can be used to express relationships that cut across the verbal categories of aspect and modality. -th is most often used in complex sentence types, as would be expected of a relational morpheme, but has several special uses in simple sentences. The uses of -th in simple sentences have been briefly described in section 2.172; -th in complex sentences has been described in sections 3.34, 3.4, and 3.5. This somewhat disparate treatment of -th will be integrated here in order to demonstrate the fundamental characteristics of the morpheme.

-th is best characterized by the semantic features contrastive, noneventive, and temporally prior. In a sense, both temporal priority and noneventiveness are contrastive qualities, since they explicitly mark a contrast with present reality. As will be seen in the examples to follow
one or two of these features may be emphasized at the expense of the others in the semantics of a particular construction.

4.11  -th as a marker of temporal priority

We will first consider constructions that employ -th to emphasize the aspectual notion of temporal priority. Several distinctive properties of these constructions can be noted. The situation expressed in the clauses marked with -th is temporally prior to the other situation expressed (or implied) in the sentence. In addition, the situation expressed in the -th marked clause is (at the time of the utterance) noneventive or does not obtain. Further, the presence of -th implies a state of epistemic contrast which has a functional result of setting up a background for the assertion of facts about the real present/past. In complex sentences, the -th marked clause is the dependent clause. These features will be further explained as the examples are examined.

4.111 The type of construction exemplified below involves primarily the expression of temporal priority in a contrastively marked situation.

(1) Bob-ch ny-he-k-th-k yuw-a-k unuu-k yu-m (Bob-sj 3/l-call-dir-th-SS come(dl)-Irr-SS IncAux-SS be- impf

'Bob will call me before he leaves.'

(2) wa+v-siiv m-i-th-k

ny-m-wi-h-! (*+v-reflect

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2-Punct-th-SS Proc-2-do-Irr-Imp)
'You should think before you do it!'
(3) '-smaa-k '-smaa-m '-yu-ch-th-k '-tarhar-a-k
'-unuu-k '-yu-m (l-sleep-SS l-sleep-DS 1-be-Pl-th-SS l-work-Irr-SS l-IncAux-SS l-be-impf)
'I will sleep until I go to work.'

Specifically, the construction temporally orders two future-time situations or one counter-factual situation with respect to a past situation. The former is illustrated by l-3; the latter by 4-6.

The following examples are of counterfactual situations. Note that the final -th marked clause is the counterfactual clause which applies to the entire structure preceding it. This aspect of the construction will be covered in 4.13.

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

(5) Pam-ch wa+siiv-k marmar-th-k ny-v-wi-h-ch yu-th-ch
yu-mo (Pam-sj *+reflect-SS ponder-th-SS Proc-
dem-do-Irr-sj be-th-sj be-Dub)
'Pam should have thought about it before she did it.'

(6) nya-ch wa+'-siiv-th-k kkav-a-(ch) '-yu-th-ch
'-yu-mo (I-sj *+l-reflect-th-SS buy-Irr-(sj)
l-be-th-sj l-be-Dub)
'I should have thought about it before I bought it.'
The semantics of the unrealized situations is best captured by considering them to be future perfects. For instance, I would be translated 'Bob will have called me at the time he leaves'. By viewing these as future perfects the parallelism with past perfects is preserved as well as the relationship with the -t temporal construction. Recall that the semantically parallel construction in the eventive, factual present/past is temporally ordered with a different morpheme, -t the 'temporal pivot' (see section 3.3.1). -th is directly substituted for -t in all noneventive clauses involving temporal priority. -th is used only with semantically noneventive situations.

4.112 A related usage of -th is found in future and counterfactual conditionals (see sections 3.41 and 3.42). One alternative construction for a future conditional, not surprisingly, is identical in form to a simple future sentence involving temporal priority as in 1-3.

(7) m-yaam-th-m ny-'uu-ha (2-go-th-DS 1/2-see-Irr)
'If you go I'll see you.'

The canonical form of a future conditional sentence is to suffix the final verb of the antecedent clause(Cl1) with the complex suffix -k-th-o; the consequent clause(Cl2) is then marked as any independent (unrealized) clause. This complex suffix indicates a strong implication holding between the two clauses of the type "if Cl1, then Cl2." The antecedent clause usually precedes the consequent, following
normal temporal order, but the clauses can be reversed. The following examples are typical of future conditionals in Tolkapaya.

(8) m-yaam-k-th-o ny-'uu-ha (2-go-k-th-o l/2-see-Irr)
    'If you go, I'll see you.'

(9) 'm-chqam-k-th-o Pam knav-o-h-k '-unuu-k '-yu-m
(2/1-hit-k-th-o Pam tell-App -Irr-SS 1-IncAux-SS l-be-impf)
    'If you hit me, I'm going to tell Pam.'

(10) v-ya 'iismav-a m-thii-k-th-o m-'oh-a m-'um-ha
    (dem-Stem medicine-Abs 2/3-drink-k-th-o 2-cough-Abs 2-Neg-Irr)
    'If you drink this medicine you'll stop coughing.'

The semantic difference between 7 and 8-10 is perhaps in the degree of contingency obtaining between the manifestation of the first situation and the consequent situation. Since the canonical marking for a future conditional antecedent is the "frozen" suffix -ktho, the complex suffix always indicates a strong implication. The version with -th alone is perhaps weakened to the point of simply indicating the temporal ordering of the events. As described in section 3.33, -q can be used in the same way to indicate temporal priority.

4.113 The formula for a counterfactual conditional (as described in section 3.42) is somewhat different from that of a future conditional. The antecedent clause is
syntactically a nominalization involving one of the behavioral auxiliaries (usually vu 'be') which is suffixed with a demonstrative suffix (usually -y); the consequent clause also involves an auxiliary construction. In this construction, the lexical verb is suffixed with -h 'irrealis' followed by the cognitive auxiliary yi suffixed with -th+a. This form of the counterfactual conditional illustrates the noneventive aspect of -th, rather than temporal priority which is shown in 13.

(11) m-vaa-k m-yu-v-a ny-'uu-h 'yi-th-a (2-come-SS 2-be-dem-Abs 1/2-see-Irr 1-Cog-th-Pred)

'If you had come, I would have seen you.'

(12) nyu-1 '-yaam-a-k '-yu-v-a 'm-chqam-h yi-th-a

(Dem-Loc 1-go-Irr-SS 1-be-dem-Abs 2/1-hit-Irr Cog-th-Pred)

'If I had gone away, you would have hit me.'

An auxiliary construction involving -th is the usual means of indicating counterfactuality in Tolkapaya. Note that the above sentences 4-6 show both uses of -th—the first clause is marked for temporal priority, the nominal clause for counterfactuality. Other counterfactual uses of -th will be discussed in detail in 4.13.

One alternative version of a counterfactual conditional uses the verb form of a temporally prior clause, rather than a nominalized clause. Compare 13 to 11 above:

(13) m-vaa-th-m ny'-uu-h 'yi-th-a (2-come-th-DS 1/2-see-Irr 1-Cog-th-Pred)
'If you had come, I would have seen you.'

It is significant that for simple past conditionals -th cannot be used even though events are temporally ordered, since the events are factual and have been realized.

-th can be utilized, then, to indicate that certain presently noneventive situations are temporally ordered and that their relationship is a marked one. Verbal -th marks a whole situation as a background that is provided for the purpose of contrast with the situation that is being commented on or predicated.

4.114 A construction that is closely related to the above types, both semantically and syntactically, is the following type which expresses a situation which formerly obtained, but which no longer does. As in English, where this sense is often expressed by the modification used to, the Tolkapaya form often involves a habitual construction (see sections 1.43 and 2.15), as shown below:


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

In 14 the fact that Jack formerly ate meat provides the background for the assertion that he is presently a vegetarian and serves to contrast the two situations. The usual form for
this construction when two clauses express habitual actions is to suffix -th to the habitual auxiliary construction in the backgrounding clause. Occasionally an alternate form will be used that is reminiscent of the alternation found with future conditionals--here, the frozen form -ktho can be substituted for -th + S.R. In 14 this would mean the form wichktho can replace wichthk in the first clause.

In 14 the immediate situation is actually expressed in a full clause. One clause marked with -th is sufficient to state by implication that a certain situation once obtained, but no longer does. The current state of affairs need not be expressed. This is shown in 15-18:

(15) ma-ch m-se-ch m-yu-th-k m-yu-m (you-sj 2-be:fat-Nom 2-be-th-SS 2-be-impf)
    'You used to be fat.'

(16) Jack-ch qwaq-anye-m wi-ch-th-ch yu-m (Jack-sj deer-abs hunt-DS do-pl-th-sj be-impf)
    'Jack used to hunt deer.'

(17) 'paa-ch-ch va-k wa(y)-o-m⁴ yu-ch-th-k yu-o-k yu-ny (people-pl-sj stem-Loc live-Nom-Loc be-pl-th-SS be-Perf-SS be-prf)
    'Indians used to live around here.'

(18) kthar'han-ch yu-th-ch yu-ma (coyote-sj be-th-sj be-Assr)
    'It must have been a coyote.' (e.g. seeing bones on the ground)
The previous state of affairs does not have to have been habitual (or stative) either; a prior incident, now concluded, that has relevance to a present situation may be expressed.

(19) -ima-th-k '-tlahv-k 'yu-m (l-dance-th-SS l-be: tired-SS l-be-impf)
'I was dancing, but now I'm tired.'

In all of the above constructions, one of the primary concerns is with the temporal relations among events—specifically, the aspect of the whole situation, the "internal temporal constituency of a situation" (Comrie 1976). Beyond that, however, is the speaker's basic view of the whole situation as being inherently contrastive and in some respects noneventive.

In these cases which relate two situations temporally, the usual procedure is to suffix the verb of the backgrounding clause with -th and normal switch-reference (except in the case of -ktho). The other clause determines the "real or absolute time" of the situation. The exceptions to this formula are (1) the nominalized constructions as in 15 and 18 which express only one situation and (2) the past perfect construction described below which seems to require a predicate nominal type construction. In fact, the two constructions are syntactically identical. Examples 15 and 18 are the stative counterparts to 20 and 21 below:

(20) m-neh-th-ch m-yu-ma (2/3-kill-th-sj 2-be-Assr)
'You had killed it.'
(21) Lynn-ch Joe chqam-ch yu-th-mo (Lynn-sj Joe hit-sj be-th-Dub)
    'Lynn might have hit Joe.'

In these constructions (15-21) the lexical verb (or the auxiliary verb, as in 21) is suffixed with -th and is nominalized with -ch and takes the verb yu 'be'. It is quite common for perfect expressions in languages to be in a stative, nominal-like form and this tendency may explain why these types of utterances are nominalizations rather than the regular verb + k construction.

The spectrum of aspectual types described above quite nicely shows the obvious relationship between temporal priority clauses and the past perfect aspect. In the first group discussed here (4.111, 4.112, 4.113), temporal ordering of two noneventive situations was marked by -th on the temporally prior clause. In the "used to" construction (4.114), we see that a previous situation that no longer obtains is expressed because it has relevance to a present situation. Of course, this is exactly what the perfect expresses—a prior event with present relevance. These constructions are all implicitly contrastive and the -th marked clause is never presently true.

4.12 -th as a contrastive indicating uniqueness

Another verbal construction involving -th emphasizes the contrastive aspect of the morpheme, imparting an exclusive or unique quality to the predication. This type of
usage is especially common with numeral verbs. Suffixed to a numeral verb, -th means "only N—no more, no less", "exactly N". Example 22 below is an example of a simple usage of a numeral verb, given for purpose of comparison with 23 which has a -th marked numeral verb.

(22) nya-ch mpar-a hwak-m '-wiy-k'-wu-m (I-sj leg-Abs be:two-DS 1/3-have-SS 1-do-impf)
'I have two legs.'

(23) nya-ch 'chi hmuk-th-m '-wiy-k'-wu-m (I-sj fish be:three-th-DS 1/3-have-SS 1-do-impf)
'I have only three fish.'

The verb sit 'be one' when used with -th means 'alone, by oneself'.

(24) '-sit-th-k '-yaam-k '-yu-m (1-be:one-th-SS 1-go-SS 1-be-impf)
'I went by myself.'

In existential sentences, -th conveys a sense of unique identity which can be used affectively in a slightly deprecatory way.

(25) 'nya-th-v-ch '-yu-m (be:me-th-Sta-sj 1-be-impf)
'It's only me.'

(26a) tu pahmi-th-ch yu-ma (just man-th-sj be-Assr)
(26b) tu pahmi-v-ch yu-th-k yu-m (just man-dem-sj be-th-SS be-impf)
'He's only a man.'

(27) tu kthye-v-ch '-yu-th-v-ch 'yu-m (just doctor-dem-sj 1-be-th-dem-sj 1-be-impf)
'I'm only a doctor.'

Suffixed to a regular verb in this construction, -th refers to the uniqueness of a possible event. This usage is fairly infrequent. The sentence usually indicates that an event ought to occur and that only that event (and no others) should occur.

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

Notice that in this type of example the situation is once again noneventive and that -th is the only element of the sentence that can be expressing the fact that the situation has not occurred. That is, the unmarked version of this predication would be as follows:

(29) m-yaam-k m-yu-m (2-go-SS 2-be-impf)
    'You go/are going.'

In these contrastive constructions -th establishes a set of expectations as background for the assertion. Such highly marked sentences carry a great deal of modal force and contrastive sense. This contrastive construction demonstrates most compellingly the close connection of modal -th and demonstrative -th--both in its semantic effect and its syntactic form. The parallelism will be argued in detail after the description of modal -th is concluded.

4.13 -th as a contrastive of noneventive modality

-th is used in a modal expression to mark failed attempts, unfulfillable wishes, and counterfactual assertions (3.5). The usage is explicitly noneventive and contrastive.
These constructions require the use of an auxiliary to which -th is suffixed. Usually the existential auxiliaries --yu, wi, 'i and vi--are used. The incompletive auxiliary unuu can be used to signal an on-going attempt, as in 30.

(30) 'wiw -yoov-a-k '-wi-th-k '-yu-m (money 1/3-make-Irr-SS 1-do-th-SS 1-be-impf)
'I tried to make money.'

(31) 'wiw -yoov-a-k '-unuu-th-k '-yu-m (money 1/3-make-Irr-SS 1-InCAux-th-SS 1-be-impf)
'I'm trying to make money.'

In these examples -th indicates that the intended result (making money) has not been accomplished (is noneventive). Of course, irrealis -h contributes to this meaning, but is not required in this construction, as 32 shows.

(32) 'hat cha '-wa-k '-wi-th-k '-wu-m (horse top 1-sit-SS 1-do-th-SS 1-do-impf)
'I tried to ride the horse (but failed).'</n
When a desire is potentially unfulfillable, based on known facts about the real world, -th is used on the predicate that expresses the desired condition.

(33) pahmi-v-ch '-'yu-th-k+wal '-yii-m '-'yu-ch-k '-'yu-m
(man-dem-sj 1-be-th-SS+want 1-think-DS 1-be-pl-SS 1-be-impf)
'I wish I were a man.'

In this case the desire is not only noneventive (as are all complements of wal...yii), but impossible to fulfill. The
-th marked clause can never be realized as fact. Example 34 shows that the corresponding sentence without -th, while expressing a presently unrealized desire, implies the possibility of fulfillment.

(34) pahmi-v-ch '-yu-k+wal '-yii-m '-yu-ch-k '-yu-m
    (man-dem-sj 1-be-SS+want 1-think-DS 1-be-pl-SS
    1-be-impf)
'I wish I were like a man.'

To "be like" something is a potentially gratifiable desire. Nothing in 34 overtly expresses the meaning "be like" (which would normally be the verb ylwi) -- this must be interpreted from the absence of -th, by contrast.

Explicitly counterfactual expressions usually employ the auxiliary yi. The construction is used to express what could, would, or should have obtained, had circumstances been otherwise. Since such a feature is purely a matter of the speaker's speculation about a situation, the cognitive auxiliary is most appropriate. In this construction the lexical verb is marked as irreals and does not take switch-reference. -th is suffixed to yi and followed by the predicating vowel suffix -a,5 when at the end of a simple sentence.

(35) ny-tope-h '-yi-th-a (1/2-help-Irr 1-Cog-th-Pred)
'I should have helped you.'

(36) '-yuu-v-m 'uu-h yi-th-a (1-eye-Dem-Asso see-Irr
    Cog-th-Pred)
'I should have looked harder.' (lit. 'looked with my eye')

A comparison of this construction to the consequent of a counterfactual conditional (see section 4.1.13) shows their similarity.

There are several options for marking a counterfactual expression as a predication, in addition to the construction outlined above. The expression may be couched in a nominalized form, as shown below:

(37) ma-ch m-yaam-h 'um-h yi-th-ch yu-ma (you-sj 2-go-Irr Neg-Irr Cog-th-sj be-Assr)
'You didn't have to go.'

(38) m-neh-v-ch-a m-yi-th-a m-yu-ch-k m-yu-m (2-kill-Sta-pl-Irr 2-Cog-th-Abs 2-be-pl-SS 2-be-impf)
'You (pl) could have gotten killed.'

(39) m-yaam-k 'yi-th-ch-ch 'yu-ma (2-go-SS 1-think-th-pl-sj 1-be-Assr)
'We had thought you'd gone.'

(40) ma-ch nya m-chqam-h 'um-h yi-th-ch yu-ma (you-sj me 2/1-hit-Irr Neg-Irr cog-th-sj be-Assr)
'You shouldn't have hit me.'

In these cases the auxiliary can be yu rather than yi.

(41) nya-ch 'yaam-ny-a-ch yu-th-ch 'yu-ma (I-sj 1-go-too-Irr-sj be-th-sj 1-be-Assr)
'I was supposed to have gone too.'

(42) ma-ch-ch m-svo-ch-ny-a-ch yu-th-ch m-yu-ch-ma
(you-pl-sj 2-wait-pl-too-Irr-sj be-th-sj 2-be-pl-Assr)
'You were supposed to have waited for me.'
The following examples show the possibilities when two clauses are used to express a counterfactual situation; the additional clause usually states an explanation for why the event in the -th marked clause is contrary to fact. The auxiliary construction can either end in -a (as in 43 or take switch-reference marking (as in 44).

(43) 'myal-ch-h yi-th-a mwar-ch pem-k yu-m (l-make:
    bread-pl-Irr Cog-th-Pred flour-sj be:gone-SS be-
    impf)
'Jeni would be here, but she's sick.'

The constructions we have been considering here show how one morpheme with highly marked modal properties can be used to express a wide range of meanings in a variety of different syntactic forms. The essential semantic features of -th remain constant throughout. However, the interaction with the auxiliary system and other indicators of aspect and modality allows -th to function in this variety of settings. Maximum mileage within the modal sphere is gained in this way. The basic semantic features of -th—contrastive, non-eventive, and temporally prior—cover a wide area of the modal domain. The verbal morpheme -th is essentially contrastive in nature; one of its primary functions is to establish a cognitive distance between some situation as perceived by the speaker and the reality of the present. This conception of -th is the metaphor which semantically links
the modal usage of -th to the distal demonstrative suffix discussed below. The syntactic constructions most likely to have facilitated such an extension of functions will be discussed as well.

4.2 The demonstrative -th

The distal demonstrative -th in Tolkapaya has a fairly narrow defined semantic function. -th exists in two morphemic classes—both as a demonstrative stem and as a suffix, whose semantic features are quite close. Since we are comparing the demonstrative use to a modal suffix, we will only be describing the suffixal use of the demonstrative. Like the other demonstrative suffixes (1.33), -th can best be understood in opposition to the other members of the demonstrative paradigm (Glover 1979). Glover 1979 (see 1.33) assigns the following set of deictic features to -th: distal (but unspecified as to relative distance), unique, removed (i.e. formerly present, but no longer around), no shared knowledge of speaker and hearer, and emotive. As these features are explored, -th will be compared to the other distal demonstrative -h. -th is used most commonly to refer to someone or something that was in near proximity to the speaker at one time, but has since been removed or has left.

(44) 'kwa-th-a m-wal-ee? (knife-dem-Abs 2/3-look:for-Q)
    'Are you looking for the missing knife?'

As with the other demonstrative suffixes, -th is followed by a vowel (-a) which is probably segmentable from the consonantal suffixes as the absolutive noun suffix. The following
pair of examples compares -th and -h.

(45) v-ya kthar-h-a (dem-stem dog-dem-Abs)
    'this dog' (i.e. the one that we're talking about
    that's there now)

(46) v-ya kthar-th-a (dem-stem dog-Abs)
    'this dog' (i.e. the one that used to be here,
    but that went off)

The semantics of -th are further illustrated below in exam-

(47) nyahmi ny-"-wiy-th-a hmi wiwv-ch yu-m (husband
    Rel-1-have-dem-Abs belt own-sj be-impf)
    'That belt belonged to my dear departed husband.'

Example 48 shows the usual way of referring to the deceased,
whose name is not supposed to be mentioned:

(48) ny-yu-th-a (dem-stem-dem-Abs)
    'the dear departed'

-th in this usage and in the examples below with the direc-
tional suffix -e show the emotive quality of -th indicating
attachment or affection. -th contrasts with -h in this re-
spect.

(49) Texas-th-e '-yaam-k '-yu-m (Texas-dem-dir l-go-SS
    l-be-impf)
    'I'm going to dear Texas (i.e. my home).'

(50) Ohio-h-e '-yaam-k '-yu-m (Ohio-dem-dir l-go-SS
    l-be-impf)
    'I'm going to Ohio.'

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-th functions in a number of temporal expressions, as the contrasting pair below shows:

(51) kur-th-a (distant-dem-Abs)
     'long ago'
(52) kur-m (distant-Loc)
     'far away'

Compare the next two examples which have the contrasting demonstrative stems -tha- and -va-:

(53) ny-tha-m [dem-stem-loc(time)]
     'then'
(54) ny-va-m [dem-stem-loc(time)]
     'now'

Some time expressions are verb constructions as in 55:

(55) ny-yek-ktho⁷ (when-tomorrow-suff)
     'tomorrow'

The -th suffix indicates uniqueness or exclusive membership in a set.

(56) vqi-th-ch vaa-k yu-ny (woman-dem-sj come-SS be-prf)
     'Only the woman came.'
(57) nyavme 'kwa ny'-wiy-th-a '-smee-k '-yu-m (today knife Rel-1-have-dem-Abs 1/3-lose-SS 1-be-impf)
     'Today I lost my only knife.'

-th is used as a suffix on indefinite pronouns when the speaker and addressee do not share a common knowledge of the referent.
(58) kwe-th-moo 'u-k 'yu-ny (thing-dem-Dub 1/3-see-
    SS 1-be-prf)
'I saw something.'

In summary, the demonstrative -th is used as a special
kind of distal marker. In addition to the feature 'distal',
which -th shares with -h, -th is characterized by the fea-
tures of prior existence—indicating a former proximity, but
now removed; it refers to the past as in 51-54, but more
importantly to the relative past, as in 55. -th is used
contrastively to denote uniqueness or exclusivity, as in 56
57, and with affective emotional connotation in 47-50. I
think these deictic features can quite easily be linked to
the features -th exhibits as a modal suffix. In addition,
quite plausible examples of constructions which might be
seen as merging the modal and demonstrative usage will be
given below.

4.3 Summary: from demonstrative -th to modal -th

The demonstrative morpheme -th has cognates in many
Yuman languages and has been reconstructed in Langdon 1968
as deriving from the Proto-Yuman demonstrative *s 'far'.
The semantic and syntactic evidence linking the demonstrative
-th to the modal -th is compelling, and I feel that the modal
-th has its origins in the distal demonstrative -th. The
basic meanings of this morpheme have been preserved in the
modal usage, as well as having been naturally extended. As
Glover (1979:22) points out, the age and integrity of the
Yuman demonstrative system suggest that the verbal morphemes
which are homophonous (and semantically linked) with demonstratives are more likely to be extensions of the system than later innovations or the reverse. I will first summarize the semantic evidence for this connection, then describe clausal uses of the suffix -th which provide the syntactic evidence.

In comparison with the other Pai languages, Tolkapaya has by far the widest range of semantic features for the demonstrative -th. The Pai languages agree on the basic feature 'distance', which has been extended in Havasupai, Walapai and Paipai to include 'anaphoric', for the stem use of -th. The other Pai languages apparently have no demonstrative suffix -th, as -th and -h merge in post-stress position---th occurs only as a demonstrative stem, not as a suffix (except in some frozen forms) (Glover 1979:33). The extensions of Tolkapaya -th to include 'removed', 'unique', 'emotive' and 'unknown' appear to be innovative. It is not at all surprising that such semantic richness would make -th a likely candidate for adoption into the modal system. We saw in 4.11 that modal -th engaged in various adverbial constructions to indicate temporal priority of one situation vis-a-vis another. This feature is a direct correlate of the demonstrative feature 'removed' which indicates that at some previous point in time the referent was present, but no longer is. This is in fact the exact meaning of one type of temporal construction--the "used to" construction of 4.114. Demonstrative -th is used in a number of specifically temporal
expressions that refer to the past as well (cf. 51-54). Demonstrative -th is used with the meaning 'only' to indicate uniqueness or exclusivity of membership in a class; it is used as a modal suffix with the same effect to indicate uniqueness of a situation or exclusive identity. In the existential sentences, -th can have an affective connotation that is slightly deprecatory. -th as a demonstrative suffix carries affective modal weight as well, in indicating the emotional involvement of the speaker with the referent. The contrastive force of -th as a modal suffix is consonant with its highly marked position within the demonstrative system. The features 'distal' and 'unknown' quite naturally translate into 'noneventive' in the modal domain. Finally, it should be noted that the development of an aspect/modality marker from a deictic marker is not uncommon in languages. Both aspect/modality and deixis are relational elements, which depend to a greater or lesser degree on the perspective of the speaker at the time of the speech event. The semantic integrity of the morpheme -th in these two syntactic roles seems well-motivated.

The historical connection of the two instances of -th is quite clear. Since a number of the modal constructions are arguably nominalizations, it is not difficult to imagine how the deictic suffix became adapted to the verbal modality system. Most complex sentences involving adverbial modification in Tolkapaya make use of auxiliary verb constructions and in some cases nominalized clauses. Demonstratives or
demonstrative-like elements appear on many of these nominalized clauses. Some demonstratives seem to have become specialized in their use with only certain types of constructions; in other constructions, the relationship to the whole demonstrative paradigm is retained and any demonstrative can be selected (but usually with the meanings neutralized). For instance, as Glover (1979:18) notes, relative clauses tend to take the suffixes -wa and -ha. Since relative clauses function syntactically as nouns, this fact is hardly surprising. It was Kendall (1976) who first suggested that the form of the auxiliary element on the antecedent clauses of hypothetical and counterfactual conditionals in Yavapai consisted of the auxiliary yu 'be' + the demonstrative va. This suggestion was supported in Hardy and Gordon 1978 with evidence from Tolkapaya that other behavioral auxiliaries could replace yu and that any other demonstrative suffix could replace -va. This evidence was adduced to propose that these antecedent clauses were in fact nominalizations. I will add here that the -a vowel that follows the demonstratives in this form is segmentable as the absolutive suffix, as with any simple noun. A number of the constructions described in 4.1 are arguably nominalizations as well. Of the temporally prior clauses, the "used to" construction can be in the form of a nominalized clause with -th, as in examples 15 and 18. The past perfect construction is always in predicate nominal form, but the -th may be suffixed either to the lexical (nominalized) verb or to the stative auxiliary,
as in 20 and 21. In existential sentences where -th connotes unique identity, -th is suffixed either to the predicate noun (25, 26) or to the stative auxiliary as in 27. Counterfactual statements may be manifested in a nominalized form, as in 35-40. Where there appears to be an option of choosing a more nominal form or a more verbal form, the nominalized form is usually used where only one situation is being expressed and the accomplished state is being emphasized. The verb construction is usually used where two situations are being explicitly contrasted. For example, in 41 below (examples are repeated here for the reader's convenience) the situation is expressed as a state.

(41) nya-ch '-yaam-ny-a-ch yu-th-ch '-yu-ma (I-sj l-go-too-Irr-sj be-th-sj l-be-Assr)
    'I was supposed to have gone too.'

The situation that 41 is contrasted with--whether an explanation for the failure to go or simply the statement that the speaker didn't go after all--is implied. The construction is a nominalization. In contradistinction to this, we have an example like 43 where two situations are related. Example 43 is a verbal construction with switch-reference.

(43) Jeni-ch va-k yu-h yi-th-k 'ich-rav-k 'i-k 'i-m
    (Jeni-sj dem-Loc be-Irr Cog-th-SS s.t.-hurt-SS
     say-SS say-impf)
    'Jeni would be here, but she's sick.'

There are numerous cases throughout the spectrum of expressions using -th where nominalizations are required,
or at least allowed as an option. The fact that in some of these, such as the auxiliary construction in the antecedents of certain conditionals, yu+va, the demonstrative-like morphemes are still perceived as part of the demonstrative paradigm makes the hypothesis of a demonstrative origin for some modal suffixes even more reasonable. Although, as Glover 1979 points out, at least five demonstrative suffixes have specific clause-modifying functions, only -th and -h are really convincing candidates for establishing the demonstrative origin of modal suffixes, I feel, because their semantic connection is so strong. -th was introduced into the system of verb modification through the use of nominalized constructions, came to be interpreted as a modal suffix, and was adopted for use with all verbal constructions. Since its meaning is so highly specialized in this syntactic role, it is logical that other members of the demonstrative paradigm would not be substitutable. In fact, the only time that demonstratives are mutually interchangeable in nominalizations is where their paradigmatic oppositions are neutralized, as in the yu+va construction. In this construction the function of the demonstrative is specifically to mark the auxiliary as a nominalized clause--its features as a member of the demonstrative paradigm are in abeyance. In this respect, -th almost seems to be operating outside of the paradigm, or at most, merely intersecting with it.

Glover 1979 describes the demonstratives as being characterized by their relationship to other members of the
paradigm—in other words, they take a large part of their meaning from their opposition to another member of the set. -th, however, seems to have developed its own set of unique, and not particularly deictic, features that exist independently of the other demonstratives. Since -th is somewhat more autonomous, it seems particularly suited for adoption into the modality system as a suffix with a very high semantic load.

Although the semantics of 'irrealis' -h are much easier to describe, the morpheme has some interesting properties of its own which invite discussion. The arguments for its origin are similar to those given above for -th: semantic compatibility with the demonstrative and syntactic motivations. The semantics of -h are discussed below.

4.4 The suffix -h

The evidence that links demonstrative -h with the modal suffix 'irrealis' -h is largely circumstantial. That is, the semantics of a distal deictic suffix and the modal function of cognitive distance or irreality are certainly compatible. And there is precedence in Tolkapaya for a demonstrative origin of some modal suffixes. However, there are problems of both a synchronic and diachronic nature that mitigate the force of these arguments for -h.

Since both the demonstrative uses of -h and the modal uses have been catalogued earlier (2.17) and are fairly easily described, they will only be reviewed here. Particular attention, then, will be devoted to a discussion of the
problems surrounding the identity of -ʰ, with somewhat inconclusive results.

4.41 The demonstrative -ʰ

As a demonstrative suffix in Tolkapaya, -ʰ is the most markedly distal. The other distal suffix -th is indeterminate as to relative distance (Glover 1979). -ʰ on the other hand is 'very far' and usually 'invisible'. It often stands in opposition to the proximal suffix -v, as shown below.

(59) nya-v-m [day-dem-Loc(time)]
    'today'

(60) nya-h-m [day-dem-Loc(time)]
    'yesterday'

Glover 1979 reports that -v and -ʰ contrast in definiteness as well. In a narrative, -ʰ marks the first introduction of a noun into the discourse, making it available for later references, which will then take -v. This use of -ʰ is non-anaphoric, but the noun is marked for specificity. -v can contrast with -ʰ in this respect by referring to a generic class, or to a definite member of the class. -ʰ, along with -w, is one of the most common suffixes on relative clauses. The demonstrative stem -ha- shares the same features as the suffix, as shown below.

(61) ny-ha-ch (dem-stem-sj)
    'that distant one'

The fact that there is a demonstrative stem and suffix -h(a) alongside a demonstrative stem and suffix -th(a) in Tolkapaya brings us to one of the problems with -ʰ. In
the other Pai languages the distribution of -th and -h as suffixes and stems is somewhat defective. It seems that Walapai and Yavapai have both ha and -tha as stems, but Havasupai and Paipai may have only tha (or sa for Paipai) as distinct stems. This distribution appears to reflect a general phonological process in which -th occurs only in pre-stress position and -h occurs both poststress and pre-stress. The other Pai languages, then, have no suffix -th; it is in complementary distribution with -h in this position. Possibly because of the specialized extended meanings of -th in Tolkapaya, or this factor in combination with certain phonological factors, -th exists side by side with -h as both stem and suffix.

4.42 The irrealis suffix

Although -th as a demonstrative is clearly a reflex of Proto-Yuman *s 'very far', the status of -h is problematic. Langdon 1968 suggests that *x 'anaphoric', may be reconstructible, but the evidence is inconclusive and further complicated by the distribution in the rest of Pai. There is, however, a well known verbal suffix *x 'irrealis' which is quite old. It occurs with the appropriate reflex in every Yuman language (although it is sometimes glossed 'future'). Given the phonological situation between the reflexes of *x and *s, and the fact that both were most likely 'distal', the development of a verbal suffix *x 'irrealis' might have contributed to the waning of the demonstrative usage, as the meaning 'irrealis' came to be uniquely associated with -*x.
Langdon 1968 points out that it is more reasonable to assume a very archaic demonstrative *x than that there was a shared innovation in the languages where it occurs.

Another argument in favor of a connection between demonstrative -h and irrealis is the fact that irrealis -h occurs on many embedded clauses and clauses preceding modal auxiliaries. One such usage, which may be very old, since it is found in Diegueno as well as Pai, is -h suffixed to the lexical verb that precedes the negative verb.\(^{11}\)

(62) Bonnie-ch pi-h 'um-k yu-m (Bonnie-sj die-Irr Neg-SS be-impf)
'Bonnie didn't die.'

Other verbs which require -h on the preceding lexical verb include mat 'apparently', chat 'almost', lwi 'should', hii/yii 'purposive/obligational', and the cognitive auxiliary yi in some constructions. In these cases, no other suffix follows -h. Demonstrative -h is also one of the most common suffixes on the verb of a relative clause.

In this position (after a consonant and before a word) it is sometimes difficult to identify the morpheme as -h, since it has a phonological alternant -a. This leads to a surprising amount of confusion with -a absolutive. The only phonological distinction between the two following consonant-final stems is that an h- onglide to the following word, if it is sonorant-initial, indicates the morpheme -h. You will recall that the alternants of -h are [h] after vowels, [a] after consonants and [ah] after a consonant and preceding a
sonorant-initial word. The problem is that the _h_-onset is not that easy to hear, the _h_ after vowels in certain environments is not always obvious, and _a_ 'absolutive' doesn't occur after vowel-final stems. A particularly problematic case in point is the hii/yii construction (see section 2.35 and 3.12).

In any case, given the degree of overlap between the deictic system and the morphemes of verbal modification and the strong case for demonstrative origin that can be made for _th_, a relationship between demonstrative _h_ and irreals _h_ seems plausible in Tolkapaya, even if it cannot be proven conclusively. The use of nominalizations and auxiliary constructions in complex sentences can be seen as a contributing factor in this extension of a basically demonstrative function.
NOTES


2This isomorphy holds for the suffixes -v, -ny, and -w which are demonstratives, as well as verb suffixes. Glover 1979 mentions the possibility of these demonstrative morphemes being related to the various verbal suffixes (see Appendix I).

3Recall that this is an example of the punctual construction described in 1.224.

4If this analysis (and gloss) is correct, this sentence actually means something like, 'The place where Indians live used to be around here'.

5The only other possible identity for this suffix is -a 'absolutive', in which case the auxiliary phrase is a nominalization. If it is a nominalization, then both clauses of these constructions and counterfactual conditionals are dependent, i.e., there is no clause marked as an independent main clause.

6This -a is most likely the 'absolutive' -a, since the construction is parallel to 37 which is subject-marked as a predicate noun. 38 is not in a predicate nominal form, but the counterfactual clause does appear to be subordinated to the main verb BE (see fn. 5).
7 It's not clear what the stem yek means, but that it is a verb is without doubt. There are alternants in other dialects (without the ny- prefix and -ktho suffix) with switch-reference. (For example, see Shaterian n.d.) examples 818-819).

8 That is, not the deictic or absolutive past, but prior time with respect to the time of another event.

9 Hinton (1977:139) reports that the stem ha occurs rarely as a phonological variant of tha. Kozlowski 1972 gives examples with ha as a case-marked bare stem (see example lxxvii), however.

10 Glover (1979:33) describes these contributing phonological factors.

11 See Munro 1973b for a discussion of this and other Yuman negative constructions.
CHAPTER V: The Tolkapaya Auxiliary System

5.0 Introduction

Specific auxiliaries and the aspectual and modal constructions requiring auxiliaries have been discussed in a number of different contexts elsewhere in this study (see especially 1.22, 1.411, 1.42, 1.43, 2.2, 2.3, and 3.2). The auxiliary construction is one of the primary syntactic devices available in Tolkapaya for the semantic modification of the objective content of a predication.¹ The various types of auxiliaries will be contrasted and classified here in order that the Tolkapaya auxiliary system may be compared to other auxiliary verb constructions in Yuman.

5.1 Background: the Yuman auxiliary system

The first topic that must be addressed is the superficial identity between loosely embedded switch-reference-marked sequences of clauses (which usually have an adverbial function)² and one type of the auxiliary verb construction (which often has aspectual or modal force). The switch-

Footnotes to Chapter V begin on page 305.
reference system was described in 1.42. Briefly, -k
(same subject) is suffixed to the inflected verb of a sub-
ordinate clause whose subject is the same as that of the
main verb, and -m is suffixed to a subordinate verb having
a different subject. Langdon 1978 has reconstructed the
switch-reference construction for Proto-Yuman as follows:
(1) inflected verb (-SR inflected verb)^N-SR inflected
verb-X where N indicates a recursive option and X any
appropriate terminal marking. An example of simple switch-
reference marking on a subordinate clause of both same and
different subjects is given below.

(2) nya-ch 'swar-k 'ima-k 'yu-ny (I-sj 1-sing-SS
1-dance-SS 1-be-prf)
'I sang and then I danced.'
(3) m-swar-m ny-'ev-k 'yu-m (2-sing-DS 1/2-hear-SS
1-be-impf)
'I heard you sing' (or 'you sang and I heard you').

Like most other Yuman languages (Langdon 1978) the
Tolkapaya auxiliary construction is formally identical
(in part)^3 to the switch-reference construction. Specifi-
cally, the same mechanism of suffixing series of verbs with
switch-reference marking applies to both auxiliaries and
series of clauses. This overlap is demonstrated in the two
examples above which have both two separate clauses joined
by switch reference and an auxiliary construction—the
terminal marking Final Auxiliary Construction (-k inflected
behavioral auxiliary + aspect).

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5.11 Identifying auxiliaries

Since there is a surface isomorphism between the switch-reference construction and certain auxiliary verb constructions, one must appeal to criteria other than syntax in identifying auxiliaries. As Langdon notes (1978: 9) "...the major criterion for identifying "auxiliary phrases" in most Yuman languages as opposed to structurally identical successions of separate clauses is a semantic one". The meaning contributed by an auxiliary will have been grammaticized to a greater or lesser degree and will express a semantic modification of the objective content.

Several syntactic properties can be used to help distinguish auxiliaries in Tolkapaya which participate in constructions that are formally identical to a series of clauses. These auxiliaries will be inflected to agree with the subject of the primary verb in person only--they cannot take inflection for number--and take no object markers. With one exception, only the same subject switch-reference marker -k (as opposed to -m 'different' subject) appears on the primary verb. For these auxiliaries, the order of the verbs is fixed, with the primary verb preceding the auxiliary verb. Some of these auxiliaries appear reduced in stress and/or cliticized to the primary verb. Some cannot occur alone as a primary verb.

5.12 Langdon's reconstruction of the Proto-Yuman auxiliary construction
Langdon 1978 reconstructs two classes of auxiliaries for Proto-Yuman. One class she calls Locational auxiliaries which, as verbs, characterize the position, location, or direction of motion of the subject of a primary verb. The whole auxiliary construction itself, however, is used to characterize an ongoing event or action in progress, but is neutral with respect to actual time—indicates aspect, in other words (Langdon 1978). Included in this set of verbs also is the root *kwa with the meaning 'make a noise, express' because it shares all the structural properties of the locational auxiliaries (1978: 9).

The other class of Proto-Yuman auxiliaries proposed by Langdon she calls Behavioral auxiliaries, consisting of the verbs normally meaning 'be', 'do' and 'say'. Langdon notes that phrases with 'be' are typically characteristic of stative sentences, while 'do' is used for active, nonverbal behavior and 'say' for specifically verbal behavior. The Locational and Behavioral auxiliaries can cooccur and do so in the order primary verb +locational auxiliary + behavioral auxiliary. The behavioral auxiliaries across Yuman are shown to be grammaticized to quite a degree and often appear to contribute little meaning. In some languages their participation as auxiliaries is optional. Langdon reconstructs the following verb construction for P-Y:

(4) Primary inflected verb (*k inflected Locational Aux) (-k inflected Behavioral Aux)-X
Within both classes of auxiliaries, Langdon notes the
eexistence of a "neutral" member. The neutral member of
the locational set does not exist in Tolkapaya, but the
neutral behavioral auxiliary for Proto-Yuman, 'be', is the
unmarked member in Tolkapaya. yu 'be' can be substituted
for the other behavioral auxiliaries in all but the most
rigidly grammaticized constructions.

5.13 The Tolkapaya auxiliary system

In her description of the synchronic facts concerning
auxiliary constructions in Yuman, Langdon notes (1978: 13)
that there is "less than perfect congruity" across languages
in reflexes of the locational auxiliary class. Speaking of
Tolkapaya, she notes that only two of the reconstructed
locational auxiliaries are attested, but that some other
auxiliaries not found in the other Yuman languages are also
present. In order to describe the auxiliary system in
Tolkapaya, one has to go beyond the two-way classification
reconstructed for Proto-Yuman. Based on structural and
semantic properties I propose that there are at least four
classes of auxiliaries, although the boundaries are not
clear-cut in all cases. I call these classes locational,6
existential (of which behavioral is a subclass), modal, and
adverbial auxiliaries.

Langdon's hypothesis was that auxiliary verb construc-
tions must be reconstructed for P-Y with the grammatical
function of distinguishing aspect. The auxiliary system in
Tolkapaya has been augmented and elaborated to the extent
that a large percentage of all grammatical manifestation of aspect, modality and adverbial modification is accomplished, at least in part, through the use of auxiliaries. In some cases the semantic nuances that are attributable to the presence or absence of additional levels of auxiliaries are so subtle as to be difficult to characterize. Auxiliary constructions in conjunction with the use of certain morphemes make for a rich and diversified system of expressing modality, aspect, and adverbial notions. Given the hypothesized structural overlap that existed for Proto-Yuman between an auxiliary construction and sequences of switch-reference-marked clauses (which often express adverbial modification), it is not surprising that certain Yuman languages expanded their auxiliary system in the direction of modal, as well as adverbial, expression.

5.2 Existential auxiliaries

The discussion of the Tolkapaya auxiliary system will begin with a description of the existential auxiliaries. The existential auxiliaries are the most important auxiliaries involved in the expression of verbal modification in Tolkapaya. They participate in the widest range of grammaticized functions, both as auxiliaries and as regular verbs. In terms of sheer frequency of occurrence, the existential auxiliaries appear in some form in almost all but the simplest, shortest utterances. One function served primarily by existential verbs is to provide the mortar that holds together the various morphemes in the
construction of modifying expressions. This is not to say that the auxiliaries themselves have no "meaning", but rather that the meaning of a given grammatical construction is a composite function of its elements and that the "meaning" of a particular auxiliary varies depending on the construction it is participating in.

5.21 Identification

The class of existential auxiliaries consists of the behavioral auxiliaries *yu*, *wi* and *'i* and the cognitive auxiliary *yi(i)*. These two types of auxiliaries are discussed as a class because they share a number of functions which will be described in the course of this section. Semantically, their association is quite natural as well (see fn. 6). From a syntactic standpoint the cognitive auxiliary must be viewed as a kind of chameleon. Its occasional syntactic overlap with the behavioral auxiliaries is another reason for setting up the class of existential auxiliaries.

5.22 Behavioral auxiliaries

The behavioral verbs will be considered here in two parts—first, as proto-typical auxiliaries and second, as regular verbs participating in nominalizations. When operating as auxiliaries, the behavioral verbs typically express aspect. The functions of the nominalized expressions are more difficult to characterize, but include the indication of modality and other properties that will be discussed later.
5.221 The auxiliary use of behavioral verbs in the expression of aspect in Tolkapaya conforms, to a large extent, to that proposed for Proto-Yuman. That is, the verb yu 'be' is associated with stative or intransitive predicates, wi 'do' is associated with active, transitive predicates, and ëi 'say' is usually associated with predicates indicating verbal behavior. It is also true for Tolkapaya that the neutral auxiliary is yu 'be', since it can be substituted for the other two auxiliaries in most cases. The basic Proto-Yuman construction type is largely conformed to as well; the two exceptions are discussed below. That is, the usual form of behavioral auxiliary constructions will have the inflected behavioral auxiliary rightmost in the string of verbs and marked with appropriate terminal marking. The verbs or auxiliaries that precede the behavioral auxiliary are suffixed with -k, the same subject marker. The behavioral verb is inflected to agree with the subject of the primary verb, but is not marked for number. This feature, in part, distinguishes the auxiliary usage from the regular verb usage. More than one behavioral auxiliary may appear in a sentence. These typical cases used to express aspect, and the exceptional constructions will be discussed below.

5.2211 The most common use of the behavioral auxiliaries in Tolkapaya is in what I have called the Final Auxiliary Construction (F.A.C.) described in 1.411. This construction is the most common non-modal means of
terminating an utterance. It is used primarily to indicate that an utterance is a declarative statement and an independent clause. It serves as a marker of aspect indicating perfective/imperfective. The F.A.C. is only found on independent clauses and is obligatory unless it can be replaced by another terminal suffix (see 1.41). In other words, an independent clause in Tolkapaya cannot end in a bare verb or a switch-reference-marked verb. The F.A.C. consists of the -k, marking the final auxiliary or verb in the string, followed by an inflected behavioral auxiliary suffixed with -ny 'perfective' or -m 'imperfective' (1.221). The example below illustrates this construction using the behavioral auxiliary yu 'be'.

(5) nya-ch 'ima-k 'yu-m (I-sj 1-dance-SS 1-be-impf)
'I'm dancing.'

5.2212 The perfect/inferential is an aspectual construction that requires the use of a behavioral auxiliary in Tolkapaya. It is discussed at length in 1.223 and 2.14. The perfect/inferential construction asserts as an inference of the speaker that a past event is related to a present state. The construction is formed by adding an appropriate behavioral auxiliary to the end of the sentence, suffixing -o- to it, and following that with a terminal suffix. Typical examples are given below.

(6) nya-ch 'chqam-k 'wi-o-k 'wu-m (I-sj 1/3-hit-SS 1-do-Perf-SS 1-do-impf)
'I have hit him.'

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(7) smaa-ch-k yu-o-k yu-m (sleep-pl-SS be-Perf-SS be-impf)

'They are already asleep.'

5.2213 The habitual construction (see 1.43 and 2.15) is a frequently-used aspectual construction that is the one exception to the property of auxiliary constructions that, if the preceding verb takes switch-reference marking, it always takes same subject -k. In the habitual construction the preceding verb always takes -m. In addition, the behavioral auxiliary is suffixed with -ch, the plural suffix, which refers not to a plural subject, but to the habitual, distributed, or otherwise multiple aspect of the event. The next example is typical:

(8) ma-ch 'm-chqam-m m-wi-ch-k m-yu-m8 (you-sj 2/1-hit-DS 2-do-pl-SS 2-be-impf)

'You're always hitting me.'

The auxiliary is inflected to agree with the subject of the primary verb, as expected, and ends in a terminal suffix.

5.2214 The punctual construction in Tolkapaya also diverges from the canonical auxiliary construction. The punctual construction is one of the special constructions using the verb 'say' that have been noted in other Yuman languages. Langdon, in discussing the Proto-Yuman behavioral auxiliaries, quite rightly decides to pass over these special 'say' constructions in silence9.

(9) v-snuunv 'i-k yu-m (v-wake:up Punct-SS be-impf)

'He woke up.'
There is some evidence that this usage of 'i 'say' is as a regular verb, not as an auxiliary. For one thing, 'i can take plural subject marking. The nature of the construction is such that 'i may have to be viewed as the main verb, since the primary verb looks very "unverb-like". For example, the primary verb is not inflected to agree with the subject--it is prefixed only with v-. It cannot take switch-reference marking, or any other specifically verbal inflections (it can take the directional suffixes), and it can take suffixes that appear to be noun suffixes, such as the absolutive -a and the demonstratives -ny and -v (see eg. 13-14).

The following is an example of the behavioral verb 'i 'say' marked to agree with a plural subject.

(10) v-'uu 'i-ch-k yu-m (v-see Punct-pl-SS be-impf)

'They saw it at last.'

Another interesting feature of this construction is that it is grammaticized to the degree that the corresponding behavioral auxiliary in the F.A.C. is almost always yu 'be', rarely 'i 'say', so the connection with the semantics of verbal behavior is tenuous at best in the construction.

A slight diversion at this point to speculate on why 'i 'say' was selected over the other behavioral auxiliaries to express punctuality might not be out of line. Unlike the other aspectual uses of auxiliaries, which express essentially durative or stative properties of events, this construction expresses punctual aspect, indicating that an
event is perceived as having no duration, being instantaneous. Of the three auxiliaries, 'say' comes closest to having this property, since an utterance is the least concrete, the least stative, the least permanent of behaviors. An utterance is of momentary duration and its physical effects fade immediately. This property of the transience of the speech signal, "rapid fading", is one of the defining characteristics of human language.

Returning to less metaphysical speculations we can consider the peculiar properties of the lexical verb. The following examples demonstrate some of the possibilities.

(11) v-nal 'i-h-k yu-m (v-drop Punct-Irr-SS be-impf)
    'It's about to drop.'

(12) nya-ch tu v-pem-a '-i-k '-yu-ny (I-sj just v-be:
    gone-Abs l-Punct-SS l-be-prf)
    'I disappeared.'

Examples 13 and 14 show demonstrative suffixes on the lexical verbs followed by the absorutive -a.

(13) nya-ch qwaloyaw-a v-tii-ny-a 'i-o-k '-unuu-k
    '-yu-m (I-sj chicken-Abs v-change-dem-Abs Punct-
    App-SS l-IncAux-SS l-be-impf)
    'I'm going to turn you into a chicken fast.'

(14) tu v-smaach li 'v-a'-i-m-k '-yu-o-ma (just v-sleep-
    dem-Abs l-punct-Dir-SS l-be-Perf-Assr)
    'I guess I just fell asleep.'

Example 15 has the lexical verb marked with the directional suffix -m, which can also occur on 'i, as in 16:
(15) v-pem-m-a 'i-ch-k 'yu-ny (v-be:gone-Dir-Abs
1-Punct-pl-SS 1-be-prf)
'We disappeared.'

(16) Bonnie-ch v-mii 'i-m-k yu-m (Bonnie-sj v-cry
Punct-Dir-SS be-impf)
'Bonnie burst into tears.'

The v-...'i expression is used when a situation is
viewed as being momentary. As such, the punctual can be
used to characterize the inception of an event, or its
termination, or even to express the imminence or immediacy
of an event as in 11.

5.222 The behavioral verbs are used in a number of
diverse constructions that express a variety of meanings.
Most of these constructions involve nominalizations that
include such nominalizing morphemes as -ch (subject case),
-ch (nominalizer), demonstratives, and the absolutive -a.
In general, the nominalized constructions which involve the
use of one or both -ch suffixes refer to habitual activities
or characteristic traits or states of a referent. The more
complicated the nominalization, the more complex the semantic
load. Examples of these various constructions will be
discussed below. One construction has become grammaticized
as the marker of the protasis of a counterfactual condi-
tional—the form is completely frozen in other dialects of
Yavapai as yuva. There is one grammaticized usage of a
behavioral verb that does not involve a nominalization
(see 5.2221).
5.2221 A behavioral verb construction is used to distinguish overtly between accidental actions and actions done on purpose. This construction does not involve a nominalization, but rather constitutes a separate clause from that of the primary verb. The choice of behavioral verb depends on the semantics of the primary verb. The construction consists of the behavioral verb (optionally suffixed with the intensive -ra) which is switch-referenced with -k, since it is inflected to agree with the subject of the primary verb. This verb phrase is introduced as a clause immediately following the subject\(^{12}\) (if there is an overt subject) and always precedes the primary verb. The following are examples of this usage.

(17) 'wi-ra-k Pam 'ktoh-k 'wu-m (1-do-ints-SS Pam 1/3-kick-SS 1-do-impf)

'I kicked Pam on purpose.'

Since these sentences are active and transitive the behavioral verb is wi 'do'. Notice in the following sentences, which use the stative -y suffix, that the behavioral verb used is yu 'be'. These are used to indicate that the recipient of the action was intentionally the recipient of the action—in other words, brought it about volitionally or deliberately.

(18) Pam-che yu-ra-ka ktoh-v-k yu-m (Pam-sj be-ints-SS kick-Sta-SS be-impf)

'Pam got kicked on purpose.'
(19) Pam tu yu-ra-ka ktoh-v-k + wal yii-k yu-m (Pam just be-ints-SS kick-Sta-SS + want think-SS be-impf) 'Pam wants to get kicked on purpose.'

(20) yu-ra-ka yem neh-v-a-k 'i-ch-k 'm (be-ints-SS self kill-Sta-Irr-SS say-pl-SS say-impf) 'He got himself killed on purpose they say.'

If the referent is the innocent recipient of a deliberate action, the -ch suffix is used with the behavioral verb wi 'do'.

(21) Lynn wi-ch-ra-k 'av-ch-k wu-m (Lynn do-Ps-ints-SS hit-Ps-SS do-impf) 'Lynn was hit deliberately.'

These two types of examples demonstrate very nicely the semantic difference between the verb -v construction and the verb -ch construction (l.2313).

In contrast with the 'deliberate' construction there is a construction that notes explicitly the 'accidental' nature of an action. This expression involves the use of the verb cham 'to make a mistake' as a separate clause, but more importantly, in the context of this discussion, uses the perfect/inferential.

(22) tu '-cham-k Lynn '-'av-k '-wi-o-k '-'wu-m (just l-err-SS Lynn 1-hit-SS 1-do-Perf-SS 1-do-impf) 'I hit Lynn accidentally.'

(23) '-cham-ka Pam '-ktoh-k '-wi-o-k '-'wu-m (l-err-SS Pam 1-kick-SS 1-do-Perf-SS 1-do-impf) 'I kicked Pam by accident.'
This use of the perfect/inferential is quite natural, since it creates a distance between the speaker and the event that is reported, being reported as an inference of the speaker. The speaker is indicating that apparently something happened to somebody and he was the cause, but since it wasn't his intent to do so, he's inferring that the event was a result of some unintended action on his part.

These two constructions are nice examples that show how the behavioral verbs can be used affectively to modify the basic meaning of a predication.

5.2222 The basic predicate nominal construction which has been described briefly elsewhere (1.411) will be looked at in detail here to provide a background for the discussion of more complex nominalizations.

5.22221 The first in-depth analysis of the predicate nominal construction in Yuman is found in Munro 1974\textsuperscript{14}. To account for certain unusual features of predicate nominals Munro proposes that the historical source for the predicate nominal construction is the following complex structure:

![Diagram]

This structure accounts for the fact that in many of the languages the 'subject', \( \text{NP}_i \), is not marked with \( -\text{ch} \), while
the predicate nominal, NP_j, always is. Munro concludes that the construction is not a copular construction originally, but a complement structure with a higher existential verb. Evidence from various languages is adduced to support the suggestion that synchronically the existential verb BE is in fact an auxiliary—it can be deleted in some languages and person-marked to agree with the subject of one or the other of the NP's, for instance. Furthermore, closer examination shows that the syntactic status of this construction is in the process of reanalysis in some of the languages. The underlying tendency of Yuman languages to get rid of subject complement clauses manifests itself in different ways in the various languages. Munro describes two basic processes that appear to be at work in the reinterpretation of the predicate nominal as a one-clause construction: 1) that one of the nouns will come to be interpreted as the subject of 'be' and 2) that the role of 'be' itself changes to become less like an auxiliary and more like a main verb, or to be reinterpreted as part of a unitary suffix -ch + 'be'. All of these processes seem to be at work in Tolkapaya, as will be shown below.

5.21222 From the outset, as Munro notes, there are several features that set off the construction in N. Pai from, say, Mojave. For one thing, yu 'be' cannot be deleted in Tolkapaya as it can in other languages. Typical for Pai is the use of the -y demonstrative suffix on the predicate noun—a practice that is impossible in some of
the other languages—as in the following example:

(24) nya vqi-v-ch '-yu-m (me woman-dem-sj l-be-impf)
    'I'm a woman.'

A practice that is quite common in Tolkapaya is to mark the 'logical' subject, NP₁, as the formal subject with -ch, as well as marking the predicate nominal.

(25) ny-tha-ch ktheye-v-ch yu-m (dem-stem-sj doctor-dem-sj be-impf)
    'He's a doctor.'

(26) ma-ch ktheye-v-ch m-yu-m (you-sj doctor-dem-sj 2-be-impf)
    'You're a doctor.'

There are a number of contradictory properties that indicate that the syntactic status of the predicate nominal construction in Tolkapaya has not been resolved. The variability within the predicate nominal construction seems to allow it to be analyzed alternatively as a complement to a higher verb, as an NP + NP structure verbalized by the -ch yu + aspect suffix, or as a regular NP + V sequence with an existential auxiliary. The examples given in the following discussion show why this is the case.

5.22223 At first glance, it appears that in Tolkapaya and the other Pai languages, the -ch + yu + tns/asp sequence for predicate nominals is perfectly analogous to the -k + yu + tns/asp sequence (F.A.C.) for regular (verbal) declarative sentences (see 1.411). It looks as if chyum; for instance, is just replacing kyum in a predicate nominal.
There is a tendency, especially in the Yavapai dialects other than Tolkapaya, to push through this analogy (i.e. chyum=kyum for predicate nominals) strongly. Both types of predicing suffixes get highly reduced and de-stressed in Yavapai.

In Tolkapaya, however, there are differences between the -ch + yu + aspect sequence and the F.A.C. that prevent one from saying that the predicate nominal suffix has been completely adopted into the F.A.C. paradigm. Recall that in Tolkapaya this sequence of -k (or -ch) + Aux + aspect can be distinguished as separate elements phonologically, as it is usually interrupted by person-marking on the auxiliary (1.411). The terminal marking -k+Aux + aspect cannot, however, agree with the subject in number--it doesn't allow the -ch plural suffix to be marked on the auxiliary. In the predicate nominal construction, on the other hand, yu can take the -ch plural suffix, as is shown below.

(27) nya-ch-v-a vquuy-ch '-yu-ch-m (I-pl-dem-Abs women-sj l-be-pl-impf)

'Ve are women.'

This fact makes yu look more like a main verb than an auxiliary. However, main verbs in Tolkapaya cannot end simply with the -m or ny aspect marker. Final verbs either end in the Final Auxiliary Construction (-k + Aux + aspect), or in another terminating suffix, such as ma or mo (1.41); and in fact, the predicate nominal construction can end in -ma or -mo, following the verb yu.
So, even if ordinary verbal declarative sentences originated in a structure similar to that of predicate nominals (e.g. 24), in synchronic Tolkapaya they are being interpreted as different structures; the predicate nominal is being reanalyzed in such a way that it requires a behavioral verb. To reiterate, 28 has two elements that show the sequence \(-ch + yu +\) aspect cannot be the same structure synchronically as the Final Auxiliary Construction: 1) the F.A.C. is in complementary distribution with other terminal markers, and 2) the F.A.C. cannot take the plural subject suffix.

It is not hard to see why the combination \(-ch + yu + m/ny\) would continue for the most part to be interpreted as part of the F.A.C. paradigm. The predicate nominal construction is required to end in the behavioral verb \(yu\) in Tolkapaya. In the majority of cases, just as with regular main verb declarative sentences, the auxiliary ends in \(-m/ny\). What is changing is how the auxiliary \(yu\) is analyzed in predicate nominals. There are now examples of predicate nominal sentences with an "extra" auxiliary \(yu\) followed by the \(-k\)-marked F.A.C.

\[(29)\] tu pahmi-v-ch yu-th-k yu-m (just man-dem-sj be-Con-SS be-impf) 'He's only a man.'
Most of these occur with modal expressions as in 29, but the following simple example is cited by Munro 1977: 23 (from Chung) as an example showing main verb morphology on the behavioral verb, further evidence that it has some properties of main verbs.

(30) hwak-v-ch hayko kthy-e-v-ch yu-k yu-m (sibling-dem-sj white doctor-dem-sj be-SS be-impf)

'Her brother's a doctor.'

Apparentely, what we have is a situation where the form NP NP-ch yu + m/ny has remained the regular form for simple predicate nominals, on analogy with simple verbal declarative sentences ending with -k + Aux + -m/ny. But, the auxiliary verb is being reinterpreted as a main verb part of the time, giving structures like NP-(ch) NP-ch yu + X, where X is any terminal suffix including the F.A.C., just like in 30. The extra yu in the innovating construction may come to be required in simple predicate nominals; the form NP NP-ch yu + m/ny is still most common. This historical arrangement, though, also makes the predicate noun itself look more like a surface verb. Alternately, the predicate noun may be moving in the direction of real verbal status, which would encourage the retention of the form -ch + yu + m/ny, since it looks like a regular verbal ending. This possible strategy for reinterpretation is another means of making the predicate nominal look less like a complement structure and more like a 'normal' verbal structure.
Both strategies of reanalysis seem to be in operation in Tolkapaya.

5.22224 The predicate noun in Tolkapaya does have a number of verb-like properties. The predicate noun occasionally is person-marked to agree with the logical subject, as shown below.

(31) nya '-vqi-v-ch '-yu-m (I 1-woman-dem-sj
l-be-impf)
'I'm a woman.'

(32) tu pa-m-hmi-th-ch m-yu-m [17] (just * -2-man-Con-sj
2-be-Assr)
'You're only a man.'

(33) ma kthar-m-'han-ch m-yu-m (you * -2-coyote-sj
2-be-impf)
'You're a coyote.'

In addition, it takes certain verbal morphemes such as the -th in 32 here indicating uniqueness (see 4.12).

There is also a construction where real lexical verbs are used in the predicate nominative form. Predictably, these cases are all of a highly stative nature, such as adjectival, descriptive expressions, generic statements or axiomatic facts, and passive-like sentences. Some examples are given below:

(34) Bonnie-ch pa nahmirv-ch yu-m (Bonnie-sj person
nice-sj be-impf)
'Bonnie is nice.'
(35) kthar-a chyaaq-a maa-ch-ch yu-m (dog-Abs bone-Abs eat-pl-sj be-impf)
'Dogs eat bones.'

(36) 'nya 'e ny-yii-ch-h 'um-ch yu-m (I like 3/I-think-Ps-Irr Neg-sj be-impf)
'I'm not liked.'

The fact that these 'verbal' predicate nominal sentences can exist alongside noun phrase predicate nominals should influence the interpretation of the predicate noun as a verb, perhaps at the expense of the competing strategy interpreting yu as a main verb. Such an interpretation allows for predicate nominal sentences like the following, where -k is substituted for -ch in the Final Auxiliary Construction.

(38) nya vqi-v-k yu-m (I woman-dem-SS be-impf)
'I'm a woman.'

To summarize, it seems that the most common predicate nominal construction is being reanalyzed from a structure with an existential BE verb in two competing ways. In one, the existential auxiliary following -ch is coming to be seen as a regular verb, requiring its own terminal marker, thus approximating normal SOV surface order; marking the first NP with -ch further reinforces this. The other alternative is to treat the predicate noun as a verb, give it verb morphology, and preserve the auxiliary construction that helps make a predicate nominal look like a normal sentence in the language. The existence of stative
expressions like 34-36 probably encourages this tendency.

A further example of the first type of strategy is described below. This involves a predicate nominal in the protasis of a counterfactual conditional.

Recall that the protasis of a counterfactual conditional contains the main verb followed by -k, then an inflected behavioral auxiliary with a demonstrative suffix, as shown below:

(38) ma-ch m-va-k m-yu-v-a,... (you-sj 2-come-SS 2-be-dem-Abs)

'If you had come...'

When the only 'verb' in the protasis is a predicate nominal construction followed by the frozen from yuva, an additional verb BE with switch-reference can be added before yuva:

(39) kthye-v-ch ('-yu-k) '-yu-v-a,... (doctor-dem-sj 1-be-SS 1-be-dem-Abs)

'If I were a doctor,...'

(40) nya-ch ma-ch '-yu-v-a,... (I-sj you-sj 1-be-dem-Abs)

'If I were you,...'

This description of the Tolkapaya predicate nominal should provide a background for the following sections dealing with complex nominal constructions.
5.2223 A proliferation of behavioral verbs in a construction can be associated with increased semantic depth ranging from modal modification to an increase in the degree of stativity or "facthood", intensity or habituality of a state. These usages of complex predicate nominal constructions will be discussed next.

5.22231 A variation of the predicate nominal construction having an extra layer of the behavioral verb **yu** is used apparently to emphasize a description. Statements of a generic sort that comment on the nature of things often take this form. The construction seems to be claiming that the attribute or habitual activity described is an essential part of the nature of the referent. The following examples are illustrative:

(41) kthar-ch gwaqt-a maa-ch-k yu-ch-ch yu-ch-m

(\textit{dog-sj meat-Abs eat-pl-SS be-pl-sj be-pl-impf})

'Dogs are meat eaters.'

(42) nymi-che kthar-v-m pa-chov-k yu-ch-ch yu-ch-m

(\textit{cat-sj dog-dem-Asso pl:obj-fight-SS be-pl-sj be-pl-impf})

'Cats and dogs fight.'

There is an analogous descriptive phrase that can be used to express a defining characteristic of the referent. The construction consists of the verb indicating the trait being suffixed with -\textit{k} and followed by \textit{yu}, which has the -\textit{ch} nominalizing suffix (2.222). The -\textit{ch} nominalizing suffix will be seen to play an important part in a
number of complex nominalizations. The descriptive phrase follows the noun it modifies and is otherwise marked for the role that the whole NP has in the sentence. One common usage is in truisms like the following:

(43) 'hat-che mpar-a qaw-v-k yu-ch-a kya-ch-ch yu-m
    (horse-sj leg-Abs break-Sta-SS be-Nom-Abs shoot-
    pl-sj be-impf)
    'They shoot horses that break their legs.'

(44) vquy-che q-waw-a 'kwath-k yu-ch-che vquya 'han-k yu-m
    (women-sj hair-Abs brown-SS be-pl-sj women pretty-SS be-impf)
    'Girls with brown hair are pretty.'

(45) ka-v-yu-ha hmany-a 'ich-rav-k yu-ch-a tope-ch-ch yu-m
    (proc-dem-be-dem child-Abs s.t.-hurt-SS be-Nom-Abs help-pl-sj be-impf)
    'Anyone would help a sick child.'

The same construction is used for complements of the verb (v)lwi when it means "N looks like it is V." This construction was introduced in 2.22.

(46) ma-ch m-tiv-k yu-ch-a m-lwi-k yu-m
    (you-sj 2-pregnant-SS be-Nom-Abs 2-appear-SS be-impf)
    'You look like you're pregnant.'

(47) Pam-ch 'ich-rav-k yu-ch-a vlwi-k yu-m
    (Pam-sj s.t.-hurt-SS be-Nom-Abs appear-SS be-impf)
    'Pam looks like she's sick.'

Occasionally the construction is used for "N_i looks like (it is) N_j" type sentences, as below.
(48) 'kwii-v-ch kwivaw-ch yu-ch-a vlwi-k yu-m (cloud-dem-sj storm-sj be-Nom-Abs appear-SS be-impf)
    'Those clouds look like storm clouds.'

Usually the existential verb is not inflected, but sometimes it will agree with the subject.

(49) ma-che 'ich-m-rav-k m-yu-ch-a m-lwi-k m-yu-m
    (you-sj s.t.-2-hurt-SS 2-be-Nom-Abs 2-appear-SS 2-be-impf)
    'You look like you're sick.'

5.22232 An obviously related construction is one used to indicate a profession. Notice that here again the construction is used to describe an action that is so customary or habitual as to have become an identifying characteristic of the referent. This "professional" construction was first observed by Munro (pers. com.) who noted several variants.\(^\text{18}\) One common option is for the predicking verb to be suffixed with -k and followed by the inflected auxiliary phrase yuchch yum.

(50) Ellsworth q=wawa pa chkyat-k yu-ch-ch yu-m
    (Ellsworth hair-Abs pa cut-SS be-pl-sj be-impf)
    'Ellsworth is a barber.'

(51) nya-ch pa 'qlyko-k 'yu-ch-ch 'yu-m (I-sj pa l-catch-SS l-be-pl-sj l-be-impf)
    'I'm a policeman.'

The following example eliminates the first auxiliary as a variant of the predicate nominal construction.
(52) nya-ch pa 'qlkyo-ch-ch 'yu-m (I-sj pa l-catch-
    pl-sj l-be-impf)
    'I'm a policeman.'

Apparently the -ch of the predicate nominal can be replaced
by -k with no change in meaning (cf. 37).

(53) nya-ch 'wa 'yoov-k 'yu-ch-k 'yu-m (I-sj
    house l-make-SS l-be-pl-SS l-be-impf)
    'I'm a carpenter.'

Munro points out the similarity of this construction to
the habitual construction, as outlined below:

(54) "professional" construction:

    subj (obj) inflected verb-k PM-yu-ch-k/ch

    PM-yu-m

    habitual construction:

    subj (ofj) inflected verb-m PM yu/wi/'i-ch-k

    PM-yu/wi/'i-m

The primary differences, of course, are the -k/-m opposition,
the fact that the professional construction requires the
use of the stative yu, and the fact that the professional
construction frequently takes the predicate nominal form.

The semantic similarity between the habitual construc-
tion and the professional construction suggests that the -ch
that occurs in the professional construction might be the
habitual suffix of plural origin, rather than the -ch
nominalizer. The fact that the -ch can be followed by the
verbal suffix -k further supports this analysis. However,
the example in 52 is worrisome since the -ch occurs on the
verb itself, not on the auxiliary. The habitual (plural) -ch only occurs on a behavioral auxiliary in Tokapaya.

5.22233 To emphasize that something is 'always' the case, another auxiliary phrase can be used. This construction frequently uses the morpheme tu 'just, only' (2.24) to which the suffix -ny may be attached. This suffix is frequently associated with habituals, especially negative habituals (2.15). The behavioral verb phrase yu + ch follows next, with an ending that is appropriate to its role in the sentence. Consider the following examples:

(55) Pam-che tarhar-k tu-ny yu-ch-ch yu-m (Pam-sj work-SS just-ny be-pl-sj be-impf)
    'Pam works all the time.'

(56) pahmi-h-ch tu-ny yu-ch-k 'ich-rav-k yu-ch-a vlwi-ch-ch yu-m (man-dem-sj just-ny be-pl-SS s.t.-hurt-SS be-Nom-Abs appear-Nom-sj be-impf)
    'That man always looks sick.'

(57a) Breyne-ch tu-ny yu-ch-k wife ny-yoov-o-m wi-ch-k wu-m (Breyne-sj just-ny be-pl-SS dress 3/1-make-App-DS do-pl-SS do-impf)

(57b) Breyne-ch wife ny-yoov-o-k ny-yu-ch-m wi-ch-k wu-m (Breyne-sj dress 3/1-make-App-SS ny-be-pl-DS do-pl-SS do-impf)
    'Breyne always makes me clothes.'

It is possible to analyze -ny here as a suffix on tu, or as a verb prefix. tu, or its variant tuy, often occurs with demonstrative suffixes. The suffixes that occur on tu
are ones which are homophones with verb suffixes -\textit{y}, -\textit{th}, and -\textit{ny}. \textit{Ny} occurs as a suffix on verbs in habitual constructions other than this auxiliary phrase meaning 'always.' It would not be implausible to suppose that this suffix -\textit{ny} is the same as the verb suffix -\textit{ny} 'too'. The semantics of -\textit{ny} (see 2.112) are consistent with the meaning of habituals.

It should be noted that phonetically the \textit{ny} of the 'always' phrase often sounds like a prefix on the following auxiliary. There are several plausible candidates for \textit{ny} if it is a prefix. One is the temporal subordinator 'when'. Since the phrase means 'always' which is a temporal kind of modifier, the semantics are not at all far-fetched—"when it is a habitual state." The verbal endings that this construction takes makes 'when' a more likely choice than the relative prefix \textit{ny}. For the construction to involve the relative \textit{ny}- it would need to be functioning as an NP, but it appears rather to be functioning as a clause. Semantically, the relative clause analysis isn't very attractive. At this point I leave open the decision of whether \textit{ny} is the suffix -\textit{ny}, the temporal prefix \textit{ny}-, or another possibility described below.

5.22234 The similarity of the 'always' construction to the following "proclitic" construction should be mentioned. Glover 1979: 23 describes the proclitic construction as consisting of the proclitic \textit{ny} (or \textit{ka} or \textit{va}), usually followed by a demonstrative prefix, then the inflected
behavioral auxiliary. The construction apparently functions as its own clause, as the following example shows:

(58) ny-\textsuperscript{v}'-yu-k 'yu-m (proc-dem l-be-SS l-be-impf)
    'I\'m that way.'

In this context, the \textit{ny} prefix carries the meaning 'that' or 'that way'. These clauses are used anaphorically to refer to an understood purpose or manner of behaving or to pronominalize an unspecified complement of a behavioral verb. Consider in particular the following examples using the proclitic construction with a predicate nominal to refer to a habitual or customary state of being.

(59) tu ny-\textsuperscript{v}-yu-ch-ch '-yu-m (just proc-dem-be-Nom-sj l-be-impf)
    'That\'s just the way I am.'

(60a) Heather-ch tu ny-\textsuperscript{v}-yu-ch-ch yu-m yu-ch-k yu-m
    (Heather-sj just proc-dem-be-Nom-sj be-DS be-pl-SS be-impf)

(60b) Heather-ch tu ny-\textsuperscript{v}-yu-m yu-ch-ch yu-m (Heather-sj just proc-dem-be-DS be-pl-sj be-impf)
    'Heather was always that way.'

There\'s no question that the constructions in 59 and 60 are referring to a customary, permanent, and essential aspect of the individual being described. The semantics and the structure itself are very similar to the 'always' construction--the one difference being the \textit{yu}-demonstrative prefix here. The \textit{yu}-prefix may, in fact, be contributing the definiteness of reference that in part distinguishes the
proclitic constructions from the 'always' constructions.

If the 'always' construction is one of these proclitic constructions, it's not immediately obvious how the semantics works out. At this point there's not enough relevant evidence to allow a satisfactory choice among these alternatives although the proclitic analysis looks most attractive. The variety of structure and the scope of semantics of these constructions demonstrate how prolific the behavioral auxiliaries are in forming complex adverbial constructions.

5.2224 The distinctive element identifying the protasis of counterfactual and hypothetical conditionals is the nominalized auxiliary phrase that ends the clause (3.42). This phrase consists of a behavioral auxiliary (usually yu) that is inflected to agree with the subject of the primary verb and is suffixed with a demonstrative (usually -v), followed by absolutive -a. In other dialects of Yavapai the phrase is virtually frozen as the grammaticized "suffix" yuva.19 Tolkapaya does allow the appropriate use of wi or 'i and the other demonstratives. The following examples illustrate this usage.

(61) m-vaa-k m-yu-v-a 'ich-m-maa-h m-yi-th-a (2-come-SS 2-be-dem-Abs s.t.-2/3-eat-Irr 2-Cog-Con -Abs) 'If you had come you could have eaten with us.'

(62) ma-che 'il-a m-tii-k m-yu-v-a v-thrii m-i m-yu-?: (you-sj insect-Abs 2-turn:into-SS 2-be-dem-Abs v-fear 2-Punct 2-be-Q)
'If you turned into a bug, would you be afraid?'

As noted in the discussion of predicate nominals, even this highly grammaticized construction provides for the identification of the verb *yu* as the stative verb of existential sentences. The main verb *yu* can be added where the protasis is a predicate nominal.

(63) kthyε-v-ch ('-yu-k) '-yu-v-a pa qyat-h yi-th-a
(doctor-dem-sj (1-be-SS) 1-be-dem-Abs person very-Irr Cog-Con-Abs)

'Had I been a doctor, I'd have been rich.'

5.2225 One or more behavioral verb is used frequently in the expression of modality. The possibilities for combining the various modal morphemes and auxiliaries with the behavioral auxiliaries, and the semantic shadings these allow, can be boggling. Most of these constructions have been described elsewhere, but can be summarized here.

5.22251 For instance, the modal terminal suffixes -ma 'assertive' and -mo 'dubitative' occur more frequently attached to an auxiliary (usually *yu*) than attached to the primary verb. This is particularly true if other modal morphemes, such as -th, are involved. The examples below are representative.

(64) tu 'm-'u-h 'um-k m-yu-ma (just 2/1-see-Irr Neg-SS 2-be-Assr)
'I must have just not seen you.'

(65) tarhar-ch-k yu-ch-mo (work-pl-SS be-pl-Dub)
'They might be working.'

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5.22252 One of the most common modal constructions using a behavioral verb is a nominalization with the -ch subject marker. Frequently, a counterfactual or perfect statement with -th will be involved, as below:

\[(66) \text{ wa '}-yoov-th-ch yu-mo (house 1/3-make-Con-sj be-Dub) 'I might have built a house.'}\]

\[(67) \text{ Jack-ch swar-th-ch yu-mo (Jack-sj sing-Con-sj be-Dub) 'Maybe Jack sang.'}\]

\[(68) \text{ 'wa-ch kwaw-v-o-ch nyu-k yoo-th-ch yu-mo (house-sj talk-dem-Nom-sj stem-Loc be:located-Con-sj be-Dub) 'Maybe there was a church there.'}\]

Compare 68 to the following more elaborate nominalization.

\[(69) \text{ 'wa-ch kwaw-v-o-ch nyu-k yoo-th-ch yu-ch-ch yu-mo (house-sj talk-dem-Nom-sj dem-Loc be:located-Con-sj be-Nom-sj be-Dub) 'There could have once been a church right there.'}\]

In some vague way it seems that the more complicated or weighty the semantics, the more levels of behavioral auxiliaries are required. Compare the following counterfactual statement to the above merely perfect ones.

\[(70) \text{ nya-ch '}-yaam-ny-a-ch yu-th-ch '-yu-ma (I-sj 1-go-too-Irr-sj be-Con-sj 1-be-Assr) 'I am supposed to have gone too.'}\]

It is not odd either that perfects are often couched in a stative or nominalized form (4.114), and the
counterfactual statements are appropriate in a similar way. These contrary to fact statements describe a referent as being in a state resulting from some prior (non-) event, e.g. in 68, the state of being supposed to go, but not having gone.

5.22253 Certain modal auxiliaries require the use of *yu* because they cannot take terminal suffixes like regular verbs. The auxiliary constructions with *lwi, yite, hii/yii* will be described in detail in 5.3. The purposive/obligational construction (2.35) specifically requires a predicate nominal construction—a fact which will be considered in 5.3.

The behavioral verb/auxiliaries then, and the stative verb *yu* in particular, have been shown to perform a crucial function in the syntax of adverbial and aspectual/modal expressions. The actual semantic impact of the behavioral verb is difficult to pinpoint outside the context of the whole construction. The stative verb *yu*, though, seems to appear in expressions where a stative, descriptive, or permanent connotation is desired. Some of the grammatical roles filled by *yu* can be filled by the cognitive verb *yi(i)*, which in these grammaticized roles also makes an ephemeral and hard to pin down semantic contribution.

5.23 The cognitive auxiliary *yi(i)*

The cognitive auxiliary *yi(i)* has been the subject of discussion in a number of different contexts (2.172, 2.25, 2.35, 3.2). The auxiliary *yi(i)* is related to the cognitive
verb yi meaning 'think' (2.25). The conditions under which the root vowel is shortened (from yii to yi) are described in 2.35, where it is shown that certain suffixes govern the shortening. The uses of yi that will be covered here are those which parallel uses of the behavioral auxiliaries and further support the claim that at some level the behavioral auxiliaries and the cognitive auxiliary constitute a class—the existential auxiliaries.

In general, the auxiliary yi is used in expressions of modality. Most cases of overlap between yi and (primarily) yu occur in modal constructions where yi is commonly used, but yu can be substituted. yi and yu are the auxiliaries found most often in expressions of counterfactuality, obligation, or irreality. yu, of course, has numerous nonmodal uses as well. yi, on the other hand, is pretty much limited to modal constructions. Even where the two types of auxiliaries overlap in function, they often show structural differences.

5.231 Infrequently, forms of the contrary to expectation auxiliary construction (usually yite) will be found with one of the behavioral auxiliaries replacing yi, but only where the semantics are appropriate. The only substitution to occur with any regularity is where yu replaces yi in an existential predication that is contrary to expectation. Consider the following examples:
(71) tu vqi-v-ch yute thipirv qyat-k yu-m (just
twoman-dem-sj CEx strong very-SS be-impf)
'She's a woman, but she's strong.'

(72) Jack tu kthyè-v-ch yute yu han-k war-ha (Jack
just doctor-dem-sj CEx good-SS Irr)
'Even though Jack is only a doctor, he can still
cure her.'

The next example appears to substitute wi for yi in a pro-
cletic construction (5.21234) that is also contrary to
expectation.

(73) nya-ch ny-v-'-wite '-qlyee-k '-yu-m (I-sj proc-
dem-l-CEx 1/3-dislike-SS 1-be-impf)
'I do it that way, but I don't like it.'

Example 74 is the identical construction with -i 'say' and
the two versions show the possibilities.

(74a) nya-ch ny-v-'-ite '-qlyee-k '-yu-m (I-sj proc-
dem-l-CEx 1/3-dislike-SS 1-be-impf)

(74b) nya-ch ny-v-'-i '-yite '-qlyee-k '-yu-m (I-sj
proc-dem-l-say 1-CEx 1/3-dislike-SS 1-be-impf)
'I say it like that, but I don't like it.'

These examples are rare, but do occur. The cognitive
auxiliary is more appropriate semantically, since the phrase
expresses the speaker's opinion about how his statement
will be perceived, based on what he judges his hearer's
expectations to be.

5.232 The usual form of a counterfactual clause in-
volves an auxiliary (usually yi) in final position suffixed
with -th and with -a, or switch-reference if it's followed by another clause (4.1). Sometimes a behavioral auxiliary will be substituted for yi, as below.

(75) qwaqt-v-a maa-k+wal wi/yi-th-m chkwiith-k yu-m
(meat-dem-Abs eat-SS+want do/Cog-Con-DS tough-SS be-impf)
'I want to eat this meat, but it's too tough.'

Example 76 shows yu substituting in an existential sentence.

(76) pahmi-v-ch '-yu-th-k+wal '-yii-m '-yu-ch-k
'-yu-m (man-dem-sj 1-be-Con-SS+want 1-think-DS
1-be-pl-SS 1-be-impf)
'I wish I were a man.'

5.233 Very rarely one of the behavioral verbs will replace hii/yii in one of the 'time for, ready to' nominal constructions (2.35) as below.

(77) '-yaam-h yu/yi-ch-v-a '-vlwi-k '-yu-m (l-go-Irr
be/Cog-Nom-dem-Abs 1-ready-SS 1-be-impf)
'I'm ready to go.'

(78) tyach '-hwal-h wi-o-ch vlwi-k yu-m (corn
1/3-plant-Irr do-Nom-sj ready-SS be-impf)
'It's time for me to plant corn.'

5.234 In one modal construction there appears to be a semantic principle governing the choice of yi vs. yu. Where an auxiliary is used with the dubitative suffix -mo, yi will almost always be used in an irrealis context and yu elsewhere. This choice is again consistent with the semantics of yi, since the irrealis construction is guessing
about the future.

(79) tarhar-ch-k yu-ch-mo (work-pl-SS be-pl-Dub)
    'They might be working.'

(80) 'wa '-yoov-k '-wi-mo (house 1/3-build-SS 1-do-Dub)
    'Maybe I built a house.'

There is some variation as well in the complicated, often nominalized constructions expressing perfects and counterfactuals. Counterfactual expressions typically use \textit{yi}, but sometimes a behavioral verb will be used, often with a nominalized verb. The following two sentences form a minimal pair, but it is not certain that the above generalization is being followed here.

(81) ny-tope-h yi-th-a yu-mo (1/2-help-Irr Cog-Con-Abs be-dub)
    'I could have helped you.'

(82) ny-tope-h yi-th-a yi-mo (1/2-help-Irr Cog-Con-Abs Cog-Dub)
    'I might have helped you.'

Expressions meaning 'should have' usually employ \textit{yi}, but sometimes a behavioral verb will be used. \textit{yi} always seems to require irrealis \underline{h} on the preceding verb, but the other auxiliaries don't, as shown by 84 below.

(83) ny-v-wi-h 'um-h yi-th-a yu-ma (proc-dem-do-Irr Neg-Irr Cog-Con-Abs be-Assr)
    'I shouldn't have done that.'
(84) nymi-nyu 'ich-maa-v-a '-e-k '-unuu-k '-wi-th-
nyu-1 '-yaam-k '-yu-o-ma (cat-dem s.t.-eat-dem-
Abs 1/3-give-SS 1-IncAux-SS 1-do-Con-Abs stem-Loc
1-go-SS 1-be-Perf-Assr)
'I should have fed the cat before I went away."

Notice in the following representative pair of sentences that the expression using -th in the 'used to be, but no longer is' perfect sense uses the predicate nominal form with -yu, while the counterfactual 'should' construction with -th uses yi with irrealis on the preceding verb.

(85) 'ich-pay-ch yu-th-ch yu-ma (s.t.-alive-sj
be-Con-sj be-Assr)
'It used to be a coyote."

(86) nya 'm-chqam-h 'um-h yi-th-ch yu-ma (me 2/1-
hit-Irr Neg-Irr Cog-Con-sj be-Assr)
'You shouldn't have hit me."

These examples should serve to demonstrate the auxiliary uses of yi that parallel the functions of the behavioral auxiliaries. These structural similarities support my claim that the cognitive auxiliary and the behavioral auxiliaries together form a natural semantic class. Taken together, these verbs represent the essential aspects of human existence--being, doing, saying, and thinking--and as such, play a major role in the syntax and semantics of the language.

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5.3 Modal auxiliaries

The modal auxiliaries form a class which is distinguished by two features. Semantically, the auxiliaries \textit{yite}, \textit{lwi} and \textit{hii/yii} are used in expressions of modality—insights into the speaker's feelings with respect to the basic predication. Unlike the adverbial auxiliaries which modify a predication in a more objective way, the modal auxiliaries reflect more closely the speaker's attitude towards the assertion. The modal auxiliaries constitute a natural class from a syntactic point of view as well. As a class they have the fewest verb-like properties of any of the auxiliaries, although there is some variation within the class.

5.3.1 Identification

All three auxiliaries differ from regular verbs and auxiliaries in the verb suffixes they take and the markings on the primary verb preceding them. \textit{yite}, \textit{lwi} and \textit{hii/yii} (2.23, 2.34, 2.35) do not take switch-reference marking or regular verb terminal suffixation. Each requires another auxiliary to terminate the sentence. As far as the preceding verb is concerned, it never takes switch-reference marking before the modal auxiliaries. The modal auxiliaries differ as to their predilection for taking person marking. \textit{yite} almost always is inflected to agree with the subject of the lexical verb. \textit{lwi} can be person marked, but isn't frequently. The situation with \textit{hii/yii} is complicated and is explained in detail in 2.35—basically, the form \textit{yii} is sometimes inflected, but \textit{hii} never is.
(87) '-vo-ch-m-a 'lwi-(y)a '-yu-ch-ma (l-go-pl-Dir-Abs l-should-Abs l-be-pl-Assr)
   'We should have gone home.'
(88) Jack-ch kthar-v-a 'ich'-e hii-v-ch yu-m hi-ch-ch yu-m (Jack-sj dog-dem-Abs s.t.-give purp/obl.-
   dem-sj be-impf purp/obl-Nom-sj be-impf)
   'Jack was supposed to feed the dog.'
(89) l-tarhar-h yite '-yu-ma (l-work-Irr CEx l-be-Assr)
   'I should be working now (even though I'm not).'

Clearly, the morphology of the modal auxiliaries is not that of regular verbs, but the modals have more verbal
properties than any other kind. In fact, it is not unusual
(cross-linguistically) for modal verbs to be different
from regular verbs anyway. We will, then, briefly examine
the properties that set the modals apart from the other auxiliaries.

5.32 yite 'contrary to expectation'

The modal yite was described elsewhere as being
analyzable as multimorphemic. It functions, however, as an auxiliary belonging, of course, to the clause it follows.
yite can occur on a subordinate clause in a two-clause structure or on an independent clause. The verb preceding yite will not be suffixed unless it is irrealis, in which case it can take irrealis -h. yite indicates that the utterance of which it is a part somehow violates the expectations that the listener would have based on extra-
linguistic context or information within the clause.
(90) nya-ch'-swar-m '-yu-ch-h yite '-swar-h 'um-k
   '-yu-m (I-sj l-sing-DS l-be-pl-Irr CEx l-sing-
   Irr Neg-SS l-be-impf)
   'I can sing, but I don't.'

(91) ny-v-'-wi-h 'um-ra-k+wal '-yii '-yite '-yu-m
   (proc-dem-l-do-Irr Neg-ints-SS+want l-think l-CEx
   l-be-impf)
   'I really didn't mean to do it (but I did it
   anyway).' 

The behavioral auxiliary construction that often
follows yite in a main clause can be compared to the predi-
cate nominal auxiliary form described in 5.2122. Notice
that yite is like the predicate noun in that it doesn't
take switch-reference and the behavioral auxiliary is not
part of the Final Auxiliary Construction. This is demon-
strated by examples which show other terminal marking on yu
or plural subject -ch.

(92) Lynn-ch tarhar-h 'um-ra-h yite yu-ma (Lynn-sj
   work-Irr Neg-Ints-Irr CEx be-Assr)
   'Lynn doesn't have to work tomorrow (but she will
   anyway).'

(93) paach-ch yu-ch-a vlwi yite paach-a 'um-ch yu-m
   (people-sj be-Nom-Abs appear CEx people-Abs Neg-
   sj be-impf)
   'Those men look like Indians, but they're not.'

yite itself cannot take regular terminal suffixes; in other
words, no clause can end in the forms *yitema, *yitemoo,
*yitkyum, and so on.

There is an interesting construction involving *yite that reveals a property of the perfect/inferential construction that doesn't show up with other verbs. The perfect/inferential portrays a state of affairs as the inference of the speaker. The speaker concludes that such is the case. This construction with *yite indicates circumstances exceed the speaker's expectations about them, based on inference. Examples of this expression make the semantics quite clear.

(94) pa wa-m-sii-m pem-m m-yite m-yu-o-ma (person *think-DS be:gone-Dir 2-CEx 2-be-Perf-Assr)
   'You're even drunker than I thought.'

The interesting thing about this combination of *yite and the perfect/inferential is that the absence of switch-reference on *yite adds to the potential for ambiguity of the subject of the perfect/inferential auxiliary construction. As an auxiliary, it should take the same subject marking as the main verb, which it does in 94. But within the perfect/inferential is an implicit subject—the subject of the inference (that is, the inferential act) which is often the speaker, as in 94. Possibly since *yite doesn't take switch-reference, the ambiguity is manifested in the fact that the auxiliary of the perfect/inferential can be marked to agree with either the subject of the main verb (as an auxiliary) or can agree with the person making the inference (as a separate clause). The examples below show these
possibilities.

(95) ma-ch pa m-kyul m-yite 'yu-o-ma (you-sj
person 2-tall 2-CEx 1-be-Perf-Assr)
'You're even taller than I thought.'
(96a) ma-che vge m-han m-yite 'yu-o-ma (you-sj *
2-pretty 2-CEx 1-be-Perf-Assr)
(96b) ma-che vge m-han m-yite m-yu-o-ma (you-sj *
2-pretty 2-CEx 2-be-Perf-Assr)
'You're even prettier than I thought you'd be.'

If the person doing the inferring is someone other than
the speaker, then another clause is introduced, which may
or may not use the perfect.

(97) Bonnie-ch qe han yite Pam-ch ny-v-yu-k yii-ma
(Bonnie-sj * pretty CEx Pam-sj proc-dem-be-SS
think-Assr)
'Bonnie is even prettier than Pam thought.'

As far as ordering relations, **yite** is usually the
final auxiliary in the clause to which it belongs. It is
followed by the perfect/inferential, as we've seen above,
and it can be followed by the **hii/yii** 'purposive, obliga-
tional' predicate nominal form, though the reverse is also
true.

5.33 **lwi** 'should'

**lwi** is similar to **yite** in that it generally requires
the same sort of behavioral auxiliary construction to end a
sentence. As a modal auxiliary **lwi** (rarely, **vlwi**) means
'should' or 'should have'. **lwi** is frequently followed by
the vocalic increment -a when it terminates a sentence. 
\textit{lwi} is sometimes marked to agree with the subject of the 
lexical verb, but not as regularly as \textit{vite}.

(98) 'vo-ch-m-a 'lwi-a 'yu-ch-ma (l-go-pl-Dir-Irr 
 1-should-a 1-be-pl-Assr)
  'We should have gone home.'

(99) 'ich-m-thii-ee 'um-a m-lwi-a m-yu-ma (s.t.-2/3-
  drink-again Neg-Irr 2-should-a 2-be-Assr)
  'You shouldn't drink anymore.'

Rarely, a sentence will end with the form \textit{lwi(y)a}. The
verb preceding \textit{lwi} is marked with irrealis -h.

(100) 'wilvt-k 'yaam-ch-a \textit{lwi-a} (l-hurry(pl)-SS 1-
  go-pl-Irr should-a)
  'We should have left sooner.'

Even though \textit{lwi} sometimes occurs sentence finally, it can
never take the terminal suffix -ma, -mo, or the Final
Auxiliary Construction.

Some examples occur with \textit{lwi} replacing \textit{hii/yii} in the
predicate nominative 'obligational' construction.

(101) nya-ch 'yaam-a \textit{lwi-ch-ch} 'yite 'yu-ma (I-sj 
  l-go-Irr should-Nom-sj l-CEx 1-be-Assr)
  'I should have gone.'

\textit{lwi}, then, has a number of features in common with \textit{vite}
and, as we shall see, with \textit{hii/yii}.

5.3.4 \textit{hii/yii} 'purposive/obligational'

The various characteristics and analytical problems
pertaining to \textit{hii/yii} and the purposive and obligatory
construction were discussed at great length in 2.22 and 2.35. We will confine ourselves here to a summary of the syntactic facts about hii/yii that lead to its inclusion in the class of modal auxiliaries with lwi and yite.

The construction with hii/yii is like that for lwi and yite in that it cannot end in a verbal terminal suffix, but requires a behavioral auxiliary. hii/yii, however, is not unmarked, but rather is suffixed with the -ch subject marker, making the construction a predicate nominal. In addition, the construction includes a -v demonstrative suffix or a -ch nominalizer before the subject marker.

(102a) 'hat ny-kkav-o-m cha m-wa m-yii-v-ch yu-m (horse 1/2-bu-y-App-DS top 2-sit 2-Cog-dem-sj be impf)

(102b) 'hat ny-kkav-o-m cha m-wa yi-ch-ch yu-m (horse 1/2-bu-y-App-DS top 2-sit Cog-Nom-sj be impf)
'I bought a horse for you to ride.'

102 shows that yi(i) can be person-marked to agree with the subject of its clause. The verb preceding this construction ends in irrealis -h or nothing.20 The nominalized construction with hii/yii is usually the last verb phrase in a sequence of auxiliaries. The negative verb 'um usually precedes the hii/yii phrase; unuu and yite can either precede or follow. The 'be time for/be ready for' construction, where the nominalized form of hii/yii precedes the verb ylwi, has special properties that are described in 2.22.

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5.4 Adverbial auxiliaries

5.4.1 Identification

The class of adverbial auxiliaries is made up of auxiliaries that modify the primary predication by adding information that is not aspectual or modal, but is peripheral to the objective content of the assertion. The adverbial auxiliary constructions are much more like the regular auxiliary construction than the modal auxiliaries. As a class, the adverbial auxiliaries have a number of syntactic features in common. They all take regular verb endings, including all terminal suffixes. They are typically the last auxiliary in the string and, as such, appear to be more directly modifying the entire predication, as an adverb often does. Consonant with this is the fact that they don't generally take person-marking, with the exception of hupuk 'be first'. Also, the verb that precedes the adverbial auxiliary does not take switch-reference. These auxiliaries cannot be the main verb in a clause, except for 'um, under the special conditions stated below. All but perhaps hupuk require -h 'irrealis' on the primary verb that precedes them, at least part of the time. These auxiliaries almost seem to be becoming suffixes on a verb—only the rare instances of person-marking keep their position as separate verbs. All things considered, this class seems closest to being like higher verbs rather than auxiliaries—higher verbs that require a clausal complement. Sporadic person marking agreeing with the subject of the
primary verb and lack of definitive marking on the primary verb mitigate against this claim. Historically, the syntactic status of these verbs may have been less ambiguous. The five verbs are briefly reviewed below.

5.42 mat 'apparently'

The verb mat (2.31) indicates that the assertion is based on conclusions drawn from circumstantial evidence of some sort.21 The verb takes all regular verb suffixes, but does not take personal prefixes. It can, however, be suffixed with the -ch plural marker to agree with a plural subject. Consider the following examples:

(103) hme-v-ch yu-h mat-k yu-m (boy-dem-sj be-Irr apparently-SS be-impf)
     'Looks like it will be a boy.'

(104) nyu-v-wi-ch-a mat-ch-ma (proc-dem-do-pl-Irr apparently-pl-Assr)
     'They should be able to do it that way.'

(105) ma-ch ny-m-wi-h mat-ra-k m-yu-m (you-sj proc-2-do-Irr apparently-Ints-SS 2-be-impf)
     'You really should be able to do it.'

Notice that the verb preceding mat requires -h 'irrealis', even when the assertion is not in the future. -ma 'assertive' is used very frequently with mat because of its semantic appropriateness.

(106) 'lwi-v-ch pahmi-v-a chkyo-h mat-ma (snake-dem-sj man-dem-Abs bite-Irr apparently-Assr)
     'It looks like the snake bit the man.'
mat can be followed by the habitual construction, *yite*, and *'ukwa*.

5.43 chat 'almost'

The verb chat 'almost' (2.32) also takes all the regular verbal suffixes and requires -h 'irrealis' on the preceding verb. There are very few examples of chat showing personal affixes and some where forms with personal affixes were reflected by the speaker.

(107) '-yaam-ra-h chat-k '-yu-ny (l-go-Ints-Irr almost-SS l-be-prf)

'I almost went.'

(108) '-u-h chat-k '-yu-m (1/3-see-Irr almost-SS l-be-impf)

'I almost got to see it.'

(109) ma-ch Lynn m-mii- o chat-k m-yu-m (you-sj Lynn 2/3-cry-App almost-SS 2-be-impf)

'You almost made Lynn cry.'

5.44 'um 'negative'

The negative verb 'um (2.33) always occurs with the preceding verb suffixed with -h 'irrealis', but never with switch-reference. 'um itself takes all the regular verb suffixes.

(110) nya-ch Lynn '-chqam-h 'um-k '-yu-m (I-sj Lynn 1/3-hit-Irr Neg-SS l-be-impf)

'I didn't hit Lynn.'

(111) kwivo-h 'um-ra-ma '-yii-k '-yu-m (rain-Irr Neg-Ints-Assr 1-think-SS l-be-impf)
'It's not going to rain, I think.'

'um' looks even more like a higher verb than mat and chat, since it can occur with personal prefixes and the applicative -o- (see 2.33). 'um' is never person-marked except when used as the main verb representing an elliptical clause. 'um' then takes the personal prefix in a different form than is normal. The regular prefix is followed by the vowel -a, as shown below, when 'um' is used elliptically, without its complement.

(112) Lynn 'tope-h 'yite 'a-'um-a-k '-'unuu-k '-'yu-m
(Lynn 1/3-help-Irr 1-CEx 1-Neg-Irr-SS 1-Incaux-SS 1-be-impf)
'I can help Lynn, but I won't.'

5.45 (hu)puk 'be first'

The verb (hu)puk 'be first' (2.26) is used to indicate that an event occurs first in a sequence of events. The initial syllable (hu-) can apparently be deleted or be realized as aspiration following the lexical verb. (hu)puk takes all the usual verbal suffixes and is frequently inflected to agree in person with the subject of the primary verb. The primary verb is usually bare, but rarely will be marked with -k 'same subject'.

(113) '-u(h) puk-k '-vo-m-k '-'yu-m (l/3-see first-SS l-go-dir-SS 1-be-impf)
'I saw her and then I went home.'
(114) ma-ch 'm-chqam m-puk-k m-yu-ny (you-sj 2/l-hit 2-first-SS 2-be-prf) 'You hit me first.'

(115) pi-k yu-m 'ich-rav-k puk-k' (die-SS be-impf s.t.-hurt-SS first-SS) 'He got sick first and died.'

(116) nya-ch 'yaam-k hpuk-k'-yu-ny (I-sj 1-go-SS first-SS 1-be-prf) 'I left first.'

5.5 Locational auxiliaries

5.5.1 Identification

Of the set of locational auxiliaries proposed for Proto-Yuman, Tolkapaya only shows reflexes of two—*k'wa 'make a noise, express' and *(u·)niw 'be there(pl)'. The Tolkapaya auxiliaries that correspond are ukwa 'sense, feel' and unuu 'incompletive'. I am including in this set the auxiliary war 'additional', since it has similar structural properties and is not semantically incompatible with the reconstructed common meaning of the locational construction. Examples of each auxiliary are given below.

(117) nya-ch 'kwaw-k 'unuu-k'-yu-m (I-sj 1-talk-SS l-IncAux-SS 1-be-impf) 'I'm talking.'

(118) 'ich-'rav-k 'ukwa-k '-yu-m (s.t.-1-hurt-SS l-sense-SS 1-be-impf) 'I feel sick.'
(119) 't@rhar-k 'war-k 'yu-m (l-work-SS l-additional-
SS l-be-impf)
'I'm still working.'
As can be seen in the examples above, the structure of these
auxiliary constructions is identical to that of a sequence
of switch-reference-marked clauses. In addition, the set of
locational auxiliaries takes normal terminal marking for
verbs. In the above cases, the terminal marking that is
used is the F.A.C. which employs the set of Behavioral
auxiliaries. Schematically the Locational auxiliary con-
struction is as follows:

(120) inflected primary verb-(Asp/Mod)-k inflected
localational auxiliary - X

Since the basic construction is invariable for each of
these three verbs and since they have been described at
length elsewhere (2.114, 2.13, 2.21) I will confine this
section to justifying the inclusion of war.

5.52 war as a locational auxiliary

As mentioned earlier (5.12) Langdon includes the
auxiliary *kwa with the locational auxiliaries on the basis
of syntactic similarity alone. On these grounds, the
Tolkapaya auxiliary war is equally appropriate. I think a
case can also be made for war being semantically compatible
with the other locational auxiliaries in Yuman.

Langdon describes the locational auxiliary construc-
tion as an aspectual structure that refers to an ongoing
event or action in progress (1978: 9). The Tolkapaya
auxiliary war, which, when used without affixation translates as 'still', views an event as being part of a sequence of events. As such, it refers to the continuance or recurrence of a situation, without specifying whether the situation has been interrupted. In other words, war indicates the continuance of an event, but doesn't distinguish the concept 'still' from 'again'. This meaning seems perfectly consistent with the semantics ascribed above to locational auxiliaries.

5.6 Summary

In summary, Tolkapaya has been shown to have a rich system of auxiliaries which can be subclassified according to syntactic and semantic similarity. The auxiliary construction types form a continuum from those that conform to the canonical shape of the Yuman auxiliary (the existential and locational auxiliaries) to those that depart from it radically, but must be considered auxiliaries nonetheless (the modal auxiliaries). The auxiliaries also vary along a scale of how verb-like they are—from the adverbial auxiliaries which are almost like higher verbs to the less verb-like modal auxiliaries and the nominalized versions of the existential auxiliaries. The semantics contributed by these constructions were shown not to be confined to the marking of aspect, but included modality and adverbial modification as well, and were dependent on the degree of grammaticization. Further study is needed on this crucial part of the grammar to determine if the various ordering
relationships among auxiliaries in multi-layered constructions shed any light on the classification of auxiliaries in Tolkapaya.
NOTES

1 "Objective content" is Langacker's (1977) term for the objective situation that is described by a sentence, as distinguished from other levels of a sentence, such as the existential predication, the modal which qualifies a predication, tense/aspect, and the performative level.

2 See Munro 1979: 1.

3 That is, the type of auxiliary construction in Tolkapaya that is a reflex of the reconstructed Proto-Yuman auxiliary construction.

4 Some of these properties do not conform to the typical properties of Yuman auxiliaries cited in Langdon 1978.

5 Cf. the habitual construction (2.15).

6 To limit the proliferation of confusion regarding these labels and for lack of a rubric that better captures the commonality of the three verbs in Tolkapaya that belong to the set of Locational verbs, I am retaining Langdon's label. The literal connection with location for the Tolkapaya verbs, of course, does not exist, with the exception of *u·niw. The term "existential", which was proposed in
Langacker 1975 is being used to refer to the special class of auxiliaries 'be', 'do', and 'say' (which I am calling 'behavioral' auxiliaries, following Langdon 1978) and the cognitive auxiliary yi(i). I chose the term "existential"--which originally was applied to the set 'be', 'do', and 'say' alone, to refer to the cognitive auxiliary as well, because this label seems to me to reflect the basic, essential, "existential" properties of human existence: being, doing, saying, and thinking. I am reserving the term 'behavioral' for the auxiliaries 'be', 'do', and 'say' which need to be distinguished from the cognitive auxiliary on independent (i.e. nonphilosophical) grounds.

7Of course, this claim does not refer to the opposition -i/Ø, the absolutive or short form described in 1.21.

8Margaret Langdon has pointed out to me that this usage might well be a main verb usage of the behavioral verb, rather than an auxiliary construction. If the behavioral verb phrase were a separate clause, it's not clear what it would mean. Also, if it were a normal clause in switch-reference sequence, the switch-referenced clause should take -k 'same subject', rather than -m, since it agrees with the behavioral verb clause in personal reference.

9Langdon 1977b, however, treats the 'say' constructions as a separate topic.

10This term is used in Hockett 1960 to refer to this property of the speech signal--one of the "design features" of language.
The normal verb form for 'sleep' is smaa; the derived stem for 'dream' is tsmaach. For some reason, the form that always shows up in the punctual construction for 'sleep' (i.e. 'fall or drop off to sleep') is smaachv. The y may be the demonstrative suffix, but why -ch? This does not happen with any other verb to my knowledge.

At least, in the limited set of examples of this construction that is where the auxiliary phrase occurs. I have not had the opportunity to determine whether or not it can be moved around.

Jim Copeland and Phil Davis have suggested to me that these auxiliary phrases might be ways to 'topicalize', in effect, or emphasize the action. A similar phrase without the intensifier -ra can be used in sentences where non-subject NP's are fronted for topicalizing purposes. Although I have not had the opportunity to study this in detail, my vague impression is that an auxiliary phrase consisting of an appropriate behavioral auxiliary + (same subject) -k + (vocalic increment) -a can be inserted preceding any NP that the fronted NP must displace ('hop over'). For instance,

(i) J.P. wi-k-a Allen-che qwaqt-a qech-m 'kwa-v-m chkyat-o-k wi-ny (J.P. do-SS-Voc Allen-sj meat-Abs small-DS knife-dem-Asso cut-App-SS do-prf) 'It was for J.P. that Allen cut a small piece of meat with a knife.'

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This phrase is probably optional, for added clarity and emphasis. The next example is a case where a recipient of the action is fronted—grammatically, the indirect object, since the causative object is grammatically the direct object (agrees with verb). Technically, the prominence of two nouns is usurped by the fronted noun.


'It is J.P. that Pam made Bates see; J.P. was shown to Bates by Pam.'

Notably, English pseudo-cleft constructions that functionally focus on the action are typically rendered in Tolkapaya with the auxiliary phrase in second position, after the subject, just like the 'deliberate' construction. For example,

(iii) nya-che wi-k-a Bonnie tnyurv-a '-e-m-k '-wu-m (I-sj do-SS-voc Bonnie letter-Abs 1/3-give-Dir-SS 1-do-impf)

'What I did was write a letter to Bonnie.'

These constructions certainly bear further investigation.

14 Munro 1974 originally and in Munro 1977.
15 See, for instance, Kendall 1972 for Verde Valley.
16 See 2.161 for this affective use of -ma.
17 This predicate noun form is apparently derived from the noun pahmi 'man' which is never seen any where else as multimorphemic, as the intervening person marking shows it must be here. The noun may consist of pa 'person' and hmi
'male'. The latter can be compared to the word for 'belt' hmi. 33 is a compound noun kthar 'dog' + han 'real' = 'coyote'.

One interesting little glitch has to do with the appearance and movements of the pa morpheme in these examples. Its identity is open to question since it cannot be identified as the plural object pa (it occurs on intransitives) or (probably) the word 'person' (')pa (the construction isn't appropriate to a relative clause) as Munro (pers. comm.) points out. Since this point is probably extraneous to the main topic at hand, the identity of pa will be passed over in silence.

Verde Valley, for instance, as described in Kendall 1976.

But see the related discussion in 2.35.

Margaret Langdon tells me that the cognate in Diegueno is a full-fledged verb mat which means 'to think erroneously'.
APPENDIX

Index of grammatical morphemes and constructions

This index includes most of the grammatical morphemes and constructions described in the preceding morphemes. The ordering is as follows: a, ch, e, ee, h, i, k, l, m, n, ny, o, p, s, t, th, v, w, y, '). Suffixes follow prefixes.
** indicates morphemes never glossed separately.

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