A GRAMMATICAL SKETCH OF TUNICA

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1. INTRODUCTORY REMARKS

HE Tunica Indians¹ were always a comparatively small tribe and at the present time their numbers have been reduced to a mere handful living near Marksville, Louisiana. Of these, there is only one individual, Mr. Sesostrie Youchigant (born c. 1870), who has the ability to speak the language with any degree of fluency and it was from him that the grammatical and textual material on Tunica was obtained.² The present sketch, though completed first, is more or less a condensation of a larger grammar published in 1941, entitled Tunica (in Handbook of American Indian Languages, vol. 4, pp. 1–143). Two other manuscripts ready for publication are: Tunica Texts and A Dictionary of the Tunica Language (Tunica-English and English-Tunica).

To the reader who would prefer to get a general idea of the morphology of the language before taking up the phonetics, it is suggested that section four can be read before section two without hindrance to the understanding of the sketch as a whole.

2. PHONETICS

The unit phonemes, the syllabic phonemes, and the phrasal phonemes of Tunica are listed and described below.

§2:1. The unit phonemes.

§2:11. The vowels.

§2:111. Vocalic Table:

¹ In his book entitled Indian Tribes of the Lower Mississippi Valley and Adjacent Coast of the Gulf of Mexico (Bureau of American Ethnology, Bull. 43, 1911), Dr. John R. Swanton presents what is known of the history and ethnology of the Tunica (pp. 306–337). Swanton has also published a sketch of the Tunica language: The Tunica Language (International Journal of American Linguistics, vol. 2, pp. 1–29, 1923), based primarily on the notes of Albert S. Gatschet. Since Gatschet's notes were recorded in 1886, they contain many of the phonetic inaccuracies that were commonly made at that time. His material is particularly weak in that he did not record glottal stops. For this reason a better understanding of the phonetics of the language coupled with the great amount of new grammatical and text material obtained from Youchigant has contributed much toward making possible a fuller and more adequate analysis of the language.

² Most of my field work was done during the summer of 1933 under the auspices of the Committee on Research in American Native Languages. The same committee has also provided me with appropriations for the preparation of my three books on the Tunica language.

	Unrounded			D	D		
		Front		Mixed	Rounded Back		CK
High close Mid close	i	e				0	u
Low			€	a	э		

§2:112. Vowels occur after and between consonants but not after other vowels. Moreover, they may not initiate the syllable. While i, a, and u occur frequently in all positions, the remaining vowels are rare except in stressed syllables. All vowels are normally short, but vowels occurring in stressed syllables are somewhat lengthened, particularly if such syllables are open. Vowels occurring before n in the same syllable are nasalized, e.g., yu'nka "rope." All of the vowels are fully voiced in all positions except that u in phrase-final position after k or hk is voiceless in the event that the phrase-final melody is placed on the vowel of the penultimate syllable, e.g., 'i'manàhku "like me" (see: §2:31).

§2:113. i is a somewhat close high front vowel; e is a somewhat close mid front vowel; ϵ is a low vowel, slightly closer than the a of English cat; a is a low mixed vowel; \circ is a rounded low back vowel, but not quite so low as a in English all; o is a rounded somewhat close mid back vowel; u is a rounded somewhat close high back vowel. Examples: mi'li "red"; me'li "black"; ne'ra "ghost"; ?a'la "cane"; čo'ha "chief"; mo'lu "full"; pu'na "ball."

§2:12. Consonants.

§2:121. Consonantic Table:

	Bilabial	Labio- dental	Alveolar	Palatal	Mid- palatal	Glottal
STOPS Voiceless Voiced CONTINUANTS Voiceless Spirants Semivowels Nasals Lateral Trill	p b*	f*	t d* s n 1	č š y	k g*	, h

Note. In the above table phonemes occurring only in a few isolated words (of foreign or probable foreign origin) are followed by an asterisk.

§2:122. Consonants occur most frequently before and between vowels (e.g., lo'taku "he runs"), but they also occur after vowels (e.g., ti'riš "to her home") and before, between, and after consonants (e.g., ru'šta "a rabbit"; wi'šk?ohku "a robin").

Although every syllable, every word, and every phrase must begin in a consonant, only one consonant is permitted in these positions. In word- or phrase-medial position, clusters of two consonants are fairly common, clusters of three consonants are somewhat rare, while clusters of more than three consonants are not permitted at all. In phrase-final position not more than two consecutive consonants are permitted.

Most instances of word or phrase-medial double consonant clusters come under one of the following rules: 1) ? may be preceded by any consonant except itself (e.g., ču'h ? uhki "he spat"); 2) any voiceless stop may be preceded by any continuant except y, w, or m (e.g., wi'sta "sweet"; ši'lka "a blackbird"); 3) any consonant may be preceded by n, including n itself (e.g., yu'nka "rope"; ?unna'šiku "he leads them").

Most instances of word- or phrase-medial triple consonant clusters fall under the following rule: A double consonant cluster consisting of a continuant (except y, w, and m) plus a voiceless stop may be followed by ? (e.g., wi'šk ?ohku "a robin").

Occurrences of phrase-final consonants are fairly common but ?, s, y, and w are not permitted in this position. Occurrences of phrase-final clusters of two consonants (never more) are rare and always consist of h plus a voiceless stop.

§2:123. The voiceless stops p, t, č, and k are fortis in all positions and aspirated in all positions except before ? (e.g., in te'tit'? "a highway," the first and second t's are aspirated, the third, unaspirated). The voiced stops b, d, and g are lenis in all positions and occur only in words of foreign or probable foreign origin (e.g., 'i'ngrasa "an Englishman, American").

The voiceless spirants s, š, and h are fortis in all positions (e.g., so'su "muscadine"). The spirant f is found only in one stem ka'fi "coffee" (<Fr. café).

The semivowels y and w and the bilabial nasal m are voiced in all positions (e.g., ya'mawi "he dressed"). The alveolar nasal n, the lateral l, and the trill r, on the other hand, are voiced in certain positions but voiceless in others. Their voiced variants occur before and between vowels and before ? (e.g., $n\epsilon$ 'laku "he rolls"; ha'r ?uhki "he sang"). Their voiceless variants occur before any consonant except ? and in phrase-final position (e.g., ma'nku "four"; ?a'm ?ilta "both"; ta'rkuš "to the tree"; ši'kur, apocopated form of ši'kuri "knife").

§2:2. The syllabic phonemes.

The syllabic phonemes pertain to stress. There are stressed syllables and unstressed syllables, the former being distinguished from the latter by having an acute sign (') placed after their vowel, e.g., ha'raku "he sings." Although every word has one or more stressed syllables (e.g., 'u'run'a'hkini "I have whooped"), two stressed syllables may not occur consecutively. A further limitation is found

in the fact that a stressed syllable may not occur in phrase-final position.

§2:3. The phrasal phonemes.

- §2:31. The vowel of the ultimate syllable, or, in certain instances, the vowel of the penultimate syllable of the last word in every phrase is subjected to a phrase-final melody. The following melodies occur:
- 1) High, indicated by an acute sign (') placed over the vowel,³ e.g., ha'rakú "he sings."
- 2) Low, indicated by a grave sign (') placed over the vowel, e.g., ha'rakɔ'nì "he was singing, they say."
- 3) Rising, indicated by an inverted circumflex (*) placed over the vowel, e.g., ?i'mapăn "I, too."
- 4) Falling, indicated by a circumflex (*) placed over the vowel, e.g., šu'č?ikî "Shoot!"
- 5) Falling-rising, indicated by a tilde (*) placed over the vowel, e.g., hon "Yes."

In case the final vowel is u preceded by k or hk, the low and the rising melodies may be placed on the penultimate vowel, if desired, e.g., to'niku "the man," la'hontŏhku "early"; in this event the u is unvoiced (cf. §2:112). The remaining melodies, however, must be placed on the final vowel without exception, e.g., pi'takú "he walks."

§2:32. The high phrase-final melody is used only on the last syllable of the predicative word of a main clause in the indicative mode. This word must have this melody whether it stands in sentence-final position or not. Note to'nise'man, hi'p onta as against hi'p onta, to'nise'man "the people danced."

The low phrase-final melody is used as follows:

- 1) It occurs on the last syllable of the predicative word of a main clause in the quotative mode, e.g., hi'p onta'nì "they danced, they say."
- 2) It also occurs on the last syllable of the last word of every sentence unless that word is a predicative which requires some other type of melody, e.g., hi'p anta, to nise man. Note that two low phrase final melodies will occur in a sentence in the quotative mode unless the predicative word of the main clause is also the last word in the sentence. Note hi'p anta hi'p and hi'p and

The rising phrase-final melody is used as follows:

- 1) It occurs on the last syllable of the predicative word of a main clause in the interrogative mode, e.g., ka'tan, wi'yan "Where are you going?"
- 2) It also occurs on the final syllable of a phrase- or clause-final word (including predicatives in dependent clauses) unless such phrase- or clause-final word is also the last word in the sentence, e.g., to'nise'măn, hi'p onta'nì.

^a Note that the diacritics indicating the phrase-final melodies are placed over the vowel while the diacritic indicating stress is placed after the vowel.

The falling phrase-final melody is used as follows:

- 1) It occurs on the final syllable of the predicative word of a main clause in the imperative mode, e.g., hopi'?ikî "Come out!"
- 2) It also occurs on the final syllable of any exclamative word except hon, e.g., ?ahâ "No!" dâ "Now! Ready!"

The falling rising phrase final melody, however, occurs only with the one monosyllabic word, hon "Yes."

§2:4. Pause forms.

All stems having a stessed final syllable (i.e., monosyllabic stems and composite stems ending in a monosyllabic stem) have special pause forms (i.e., forms occurring only in phrase-final position). These pause forms add on an extra syllable consisting of ? plus a vowel having the same quality as the stem vowel plus an incremental consonant in plus the low or rising phrase-final melody, e.g., sa'?àn, sa'?ān "a dog" (<sa', context form); la'spiri'?ìn, la'spiri'?ìn, "a bank") (<la'spiri', context form).

All phrase or clause final words ending in a vowel (except predicative words in main clauses) also have special pause forms. These are made by the addition of the nasal increment together with the low or rising phrase final melody, e.g., to 'nise'màn, to 'nise'màn "the people" (<to 'nise'ma, context form). When such words end in a consonant, however, they cannot take the nasal increment; hence their pause forms are indicated solely by the fact that they have the low or rising phrase final melody, e.g., to 'nise'màt, to 'nise'màt "the people, on their part" (<to 'nise'mat, context form).

Predicative words of main clauses are marked as pause forms by the use of the high, low, or rising phrase-final melodies but cannot take the nasal increment even though they may end in a vowel, e.g., ha'rakú "he sings."

All examples of Tunica words quoted in this sketch are pause forms when their phrase-final melody is marked (e.g., ha'rakatí "she sings"); examples quoted without a phrase-final melody are context forms (e.g., ha'raka'ti "she sings"; see §3:26).

3. SANDHI

- §3:1. Because of widespread external sandhi phenomena, the smallest phonetic group of Tunica is the phrase, which may consist of a single word or of several words. In most cases a distinction is made between internal sandhi (morphophonemic changes operating when grammatical elements are combined into words) and external sandhi (morphophonemic changes operating when words are combined into phrases).
 - §3:2. Internal sandhi.
- §3:21. The most important morphophonemic processes employed in internal sandhi are vocalic contraction, vocalic assimilation, vocalic syncope, consonantic syncope, and stress losses and shifts.

- §3:22. There are two types of circumstances under which vocalic contraction may occur. The first of these is when an element ending in a vowel is combined with an element beginning in a vowel. In this case the following contractions occur:
- 1) a +a >a (e.g., nara'ni "it is a snake" 4 <na'ra "a snake" +a'ni, quotative enclitic particle).
 - 2) i, e, or $\epsilon + a > \epsilon$ (e.g., milé'ni "it is red" < mi'li "red" + a'ni).
 - 3) i+e>e (e.g., ?e'htini "it is mine" <?i' "my, mine" $+\cdot e'$ htini "it is . . .'s")
 - 4) u or a + a > a (e.g., mola'ni "it is full" < mo'lu "full" + a'ni).
 - 5) u + e > o (e.g., ?o'htini "it is his" < ?u "his" + \cdot e'htini).

The second type of circumstances under which vocalic contraction occurs is as follows: When a suffix beginning in h plus a vowel is attached to a polysyllabic (i.e., nonmonosyllabic) stem or word ending in a vowel, the h is lost and the vowels thus coming together contract. In this case the following contractions occur:

- 1) a+a>a (e.g., i'nimat "we, on our part" < i'nima "we" + hat "on . . . 's part").
 - 2) $i+a > \epsilon$ (e.g., $vu'w\epsilon t$ "he, on his part" < vu'wi "he" $+\cdot$ hat).
- 3) u+a>0 (e.g., ma'šopawi "he had already made" <ma'šu "to make" + hapa "to have already . . . ed" + wi "he").
- 4) i, a, or u+i>i (e.g., l_0 'tilawi "he was about to run" $< l_0$ 'ta "to run" $+\cdot$ hila· "to be about to ..." $+\cdot$ wi).

After a monosyllabic stem, however, the h is not lost and contraction cannot occur (e.g., ma'hat "you, on your part" <ma' "you" + hat).

- §3:23. There are two types of circumstances under which vocalic assimilation occurs. Under the first type it is found that when a suffix or an auxiliary verb beginning in ? is attached to a stem ending in a vowel, the vowel following the ? assimilates to the preceding vowel. If the vowel preceding the ? is in an unstressed syllable, it is syncopated (§3:25). The following assimilations occur:
 - 1) a after i, e, or $\epsilon > \epsilon$ (e.g., mi'l $\gamma \epsilon h \epsilon$ "not red" < mi'li "red" + $\gamma \alpha h \alpha$ "not").
 - 2) a after o or u > 0 (e.g., mo'l oho "not full" < mo'lu "full" $+ \sim$ aha).

Under the second type of circumstances requiring vocalic assimilation it is found that whenever the first vowel of an ahar group has changed its quality by contraction with or assimilation to a preceding vowel, the second vowel of the ahar group assimilates to the first, as follows:

- 1) a after $\epsilon > \epsilon$ (e.g., $t\epsilon' h\epsilon yaku$ "her brother" < ti "her" $+ \cdot a' haya$ "brother" $+ \cdot ku$, masc. sg. suff.).
 - 2) a after 0 > 0 (e.g., la'p? oho "not good" < la'pu "good" $+ \cdot$? aha).
- ⁴ Lit., "it is a snake, they say." To conserve space the quotative enclitic particle, which always means "they say," is usually not translated in the examples of its use which occur in this sketch.
- ⁵ Note that the term "enclitic particle" as used in this sketch is equivalent to the term "post-fix" used in the larger grammar, *Tunica*.

	Contraction or Assimilation			Contraction		on
First Vowel	i, e, €	a	u, o, ɔ	i, e	u	i, a, u
Second Vowel	a	a	a	e	e	i
Resulting Vowel	€	a	э	e	0	i

§3:24. Summary chart of vocalic contraction and assimilation.

§3:25. In the combination of grammatical elements into words a vowel in an unstressed syllable which would come to stand before ? is regularly syncopated, e.g., ?a'k?uhki "he entered" (<?a'ka "to enter" +?u'hki "he did").

In addition, stems ending in hki, ši, ni, li, or ri may syncopate the i (except when their penult is stressed) when they come to stand before a grammatical element beginning in a consonant, e.g., °2'škače'hkint $°\epsilon$ "a large pot" (< °2'škače'hkini "a pot" $+ < t°\epsilon$, augmentative suff.). This latter type of syncopation, though very common, is not obligatory and °2'škače'hkini $°\epsilon$ is therefore just as acceptable as °2'škače'hkint $°\epsilon$.

In the analyses of the examples quoted below a syncopated vowel is placed in parentheses.

- §3:26. The following types of consonantic syncope occur:
- 1) An h which would come to stand between a continuant and a voiceless stop is dropped, e.g., ta'halta "on the ground" (<ta'hal(i) "the ground"+ hta "on").
- 2) A k which would come to stand between an h and a voiceless stop is dropped, e.g., $ti'tiht^{\gamma}\epsilon$ "a river" (< ti'tihk(i) "a bayou" $+ \cdot t^{\gamma}\epsilon$).
- 3) An hk group which would come to stand before a continuant, other than h, is dropped, e.g., 'a'sume'li "Easter day" (< 'a'suhk(i) "day"+me'li "black"). When the continuant following the hk is h, the next rule applies.
- 4) An h which would come to stand after an hk group is dropped, e.g., yu'kihke'ra "you are cooking" (<yu'ki "to cook" + hk, habitual thematic suff., +he'ra "you (fem.) lie").
- §3:27. Every stem, whether monosyllabic or polysyllabic, has an intrinsic stress on its initial syllable. In addition, a few monosyllabic prefixes and a few disyllabic (but not monosyllabic) suffixes and enclitic particles have an intrinsic stress on their initial syllables. When grammatical elements are put together to form words, their intrinsic stresses are retained if possible, but since two stressed syllables may not occur consecutively, certain accommodations (consisting of stress losses and shifts) are necessary under certain circumstances. Other instances of stress losses and shifts are induced by the fact that two of the phrase-final melodies of Tunica do not permit a stress on the penultimate syllable of the word with which they are used. The following rules cover the conditions under which stress losses and shifts occur.

- 1) When a monosyllabic stem or a syncopated disyllabic stem is juxtaposed with another stem or combined with a disyllabic suffix or enclitic particle having an intrinsic stress, the second element loses its stress, e.g., po'?oki "she looked" (<po'"to look" + ?a'ki "she did"); ha'r?aki "she sang" (<ha'ra "to sing" + ?a'ki); po'kati "she looks" (<po' + ka'ti "she").
- 2) When a stem is combined with a monosyllabic prefix having an intrinsic stress, the stem loses the stress of its initial syllable, e.g., ta'naraku "the snake" (<ta', the articular pref., +na'ra "a snake" +-ku, masc. sg. suff.). In contrast, note 'una'raku "his snake" (<'u-"his" +na'ra +-ku).
- 3) When a monosyllabic stem is preceded by a monosyllabic prefix which does not have an intrinsic stress, the stress of the stem shifts to the prefix under the following circumstances: a) when the monosyllabic stem would stand in word-final position, e.g., ti'riš "to her house" (<ti>"her"+ri' "house"+ -š "to"); b) when the monosyllabic stem is juxtaposed with another stem or combined with a suffix having an intrinsic stress, e.g., ?u'yata'hkiš "his deerskin" (<?u "his" +ya' "deer"+ta'hkiš "skin"); ti'sasi'nima "her dogs" (<ti>"her"+sa' "dog" +si'nima, fem. du..pl. suff.).
- 4) When a stem or word having a stressed penult is combined with a suffix or enclitic particle which begins in a vowel and has an intrinsic stress, the stem or word loses the stress on its penult, e.g., mile'ni "it is red" (<mi'li "red" + α 'ni, quotative encl. part.). In contrast, note ši'hkale'ni "it is a rock" (<si'hkali "a rock" + α 'ni) wherein no loss of stress is required.
- 5) When a stem or word with a stressed penult has a prefix in front of it, the stress of its penult will shift to the prefix as soon as the stem or word is combined with an enclitic particle which begins in a vowel and has an intrinsic stress, e.g., te'mile'ni "it is red all about" (<te-"all about" +a'ni); ho'powe'ni "he looked out" (<hopo'wi "he looked out" +a'ni). In contrast, note, howe'sawe'ni "he jumped out" (<howe'sawi "he jumped out" +a'ni) wherein no shift in stress is required.
- 6) The high and the falling phrase-final melodies do not permit a stress on the penult of the words with which they are used. Hence when they are added to words having a stressed penult they cause the loss of the stress on this syllable, e.g., ha'rawihki "you have sung." In contrast, note ha'rawi'hkihč "when you have sung" wherein the rising phrase-final melody is used without causing loss of stress. As an example of the effect of the falling phrase-final melody, note popin "look!" (<po'pi "you look" +n, imperative encl. part.).
 - §3:3. External sandhi.
- §3:31. The most important morphophonemic processes employed in external sandhi are vocalic apocope, consonantic apocope, and stress losses. These processes function only within the phrase.⁶

⁶ In this sketch and in Tunica Texts words within a phrase are not separated by spaces, but

§3:32. When a word ending in a vowel is followed by a word beginning in ?, the final vowel of the first word is apocopated, e.g., to'nik'iyu'w'ik'ihč "if you give me the man" (<to'niku "the man" + 'iyu'w'ik'ihč "if you give me"). Unlike the similar rule applied in internal sandhi (§§3:23 and 3:25), vocalic assimilation does not accompany the application of the rule in external sandhi.

Words ending in hki, hku, ši, ni, li, or ri (unless they have a stressed penult) usually lose the i or u when followed by another word in the same phrase, e.g., ši'kurču'wihč "when he took a knife" (<ši'kuri "a knife" +ču'wihč "when he took").

- §3:33. When words which have lost a final i or u though apocope end in a consonant group hk, they may undergo consonantic apocope according to rules that are similar to the rules of consonantic syncope in internal sandhi (§3:26). The rules are:
- 1) A k which would come to stand between a continuant and a voiceless stop is dropped, e.g., ti'tihpi'r 'utak 'ahčá "it will turn into a bayou" (<ti'tihk(i) "a bayou" +pi'r 'utak 'ahča "it will turn into").
- 2) An hk group which would come to stand before a continuant is dropped, e.g., ka'nara'p'anč "if I kill something" (< ka'nahk(u) "something" +ra'p'anč "if I kill").
- §3:34. As in the case of the word, two stressed syllables may not occur consecutively within the phrase. Hence when an apocopated word having a stressed penult is placed before a word having a stressed initial syllable, the first word losses the stress on its penult, e.g., kat?u'na "where he sits" (<ka'ta "where" + ?u'na "he sits"). But if the second word does not have a stress on its initial syllable, the first word retains its stress, e.g., ?u'w?one'nì "He is a person" (<?u'wi "he" + ?one'ni "it is a person").

It will be noted that this rule for the loss of stress in the juxtaposition of words within the phrase is the reverse of the rule for the loss of stress that applies in the case of the juxtaposition of grammatical elements within the word (see §3:27, rule 1).

4. GENERAL REMARKS ON THE STRUCTURE OF THE LANGUAGE

§4:1. The Tunica language is mildly synthetic in structure. In its technique of synthesis it is for the most part agglutinative, but it also employs a limited amount of fusion. The morphological processes used are juxtaposition, affixation (prefixation, infixation, and suffixation), reduplication, and suppletion. Of these,

in the larger grammar, *Tunica*, they are so separated. Since all words within a phrase are actually run together without any break or pause, the writing without spaces is beyond question the more exact method of representation. However, in the larger grammar so much illustrative material was given that it was felt the use of spaces might make it easier for the reader to follow the details of analysis.

prefixation and suffixation, particularly the latter, are exploited to a greater extent than are the other processes.

§4:2. The structural elements of the word are a stem and one or more affixes. Stems may be primary or secondary. Secondary stems are built up by means of the formational techniques of affixation (i.e., the addition of an affix to a primary stem) and juxtaposition (i.e., the placing together of two primary stems). In either case the result is a new stem whose meaning is particularized from the sum of the meanings of the component elements. Once such a new stem has been formed, it may in turn serve as the basis for other new formations in the same way that a primary stem does.

Affixes are of two main types, derivational and syntactic. Derivational affixes, as indicated above, are added to primary stems to make secondary stems. Syntactic affixes are best subdivided into the inflective type and the noninflective type. Inflective affixes are always appended to stems while noninflective affixes may be appended only to formally complete words. Once the necessary inflective affixes are appended to a stem, the result is a word which is, by means of these affixes, fully defined as to its relation to other words within a phrase or sentence. Such affixes are employed extensively for purposes of inflection and define person, number, gender, possession, aspect, and, in one instance, modality. Noninflective affixes consist of the preverbs and the enclitic particles (postfixes). The former indicate direction of movement while the latter indicate a wider range of notions, including subordination, tense, and additional types of modality.

§4:3. The word classes of Tunica, which have been worked out on the basis of syntactic and inflectional considerations, are as follows: the independent personal pronouns, nouns, the interrogative indefinite pronouns, adjectives, the auxiliary verbs, active verbs, static verbs, adverbs, postpositions, quantitatives, comparatives, sentence connectives, and exclamatives. The inflected classes are the independent personal pronouns, nouns, and the three classes of verbs. The remaining classes, which some might prefer to group together as noninflected particles, are distinguished here because of definitive differences in syntactic usage (see §7:3).

5. INFLECTION

§5:1. General remarks on inflection.

Inflection is accomplished almost exclusively by means of syntactic affixes of the inflective type. However, suppletion and reduplication are employed in the inflection of the auxiliary verbs and the periphrastic inflection of active verbs is accomplished by juxtaposition with the auxiliary verbs.

The paradigmatic categories of the verb consist of the semelfactive, habitual, and repetitive aspects, and the conditional mode. Each of these categories comprises a separate paradigm and the inflectional categories of each paradigm consist of person, number, and gender.

Two paradigms of personal pronouns are distinguished, the dependent and

the independent. Here, too, the inflectional categories employed are person, number, and gender.

The paradigmatic categories of the noun are the indeterminative and the determinative. The former consists of a simple uninflected noun stem. The latter is marked by the use of the articular prefix or a pronominal prefix and, in addition, makes use of two embryonic case-categories, the subjective-objective and the locative. The subjective-objective category makes use of the two inflectional categories of gender and number. The locative category, however, is not inflected beyond what is required for all determinatives unless one should count the locative suffixes and the postpositions as individual inflectional elements.

With respect to the categories of person, number, and gender, the following remarks are pertinent. There are three persons (first, second, and third), three numbers (singular, dual, and plural), and two genders (masculine and feminine). Number distinctions are made in all three persons. Gender distinctions, however, are made in the second and third persons but not in the first. The independent personal pronouns and all of the types of personal pronominal affixes used with nouns and verbs are thus inflected for the following fifteen forms:

Singular	Dual	Plural
1	1	1
2M	2M	2 M
2F	2F	2F
3 M	3M	3 M
3F	3F	3F

§5:2. Pronominal inflection.

§5:21. Paradigm of the personal pronominal prefixes.

	Singular	Dual	Dual = Plural	Plural
1	71-		?in-	
2M	wi-		win-	
2F	hi-; he-		hin-; hen-	
3M	²u∕	?un∕		si-
3F	ti-		sin-	

Note. With the exception of the 3M forms, the dual and plural forms of this paradigm fall together. The 1D-P, 2MD-P, 2FD-P, and 3MD forms are made up of the corresponding singular forms plus the dual infix and The 3FD-P form appears to be related to the 3MP form in the same way.

An h is regularly inserted between a pronominal prefix (with the exception of those ending in n) and a stem beginning in a voiceless stop provided the stem has a stress on its first syllable. For example, one says 'ihti'rahči "my cloth" (< 'i-h-+ti'ra "cloth" +-hči, FS gender suffix) but 'i'kiku "my uncle" (< 'i-+'-ki "uncle")

+-ku, MS gender suffix). Between a pronominal prefix and a stem beginning in ? a consonant group -hk- is regularly inserted except after prefixes ending in n where only -k- is permitted. For example, one says ?ihk?a'lahči "my cane" (< ?i-hk- +?a'la "cane" +-hči) but ?ink?a'lahči "our cane" (< ?in-k- +?a'la +-hči). Moreover, when the pronominal prefixes are appended to a stem beginning in a vowel the vowel of the prefix contracts with this initial stem vowel (§3:22), e.g., ?o'siku "his father" (< ?u- +-e'si "father" +-ku).

The pronominal prefixes are used as possessives with nouns (§5:73) and as direct objects with active verbs (§5:543). In addition, they are used as grammatical objects (with the logical function of subjects) in the inflection of static verbs (§5:61).

	Singular	Dual	Dual=Plural	Plural
1 2M 2F	?i'ma ma' he'ma		?i'nima wi'nima hi'nima	
3M 3F	?u'wi ti'hči	²u'nima	si'nima	se'ma

§5:22. Paradigm of the independent personal pronouns.

Note. As in the case of the pronominal prefixes, all of the dual and plural forms of this paradigm fall together with the exception of the 3M forms.

Space does not permit a full analysis of this paradigm, but the reader will note at once that many of the forms are based on a stem *ma or *ama to which the pronominal prefixes are attached; he will also note that the sign of the dual is ninin place of the no characteristic of the pronominal prefixes.

The discussion of the uses to which these pronouns are put belongs properly to the section on syntax (§7:31).

§5:3. Verb inflection.

On the basis of certain fundamental differences in method of inflection Tunica distinguishes three classes of verbs: the auxiliary verbs, active verbs, and static verbs. Of these the active verbs are by far the most numerous class. The special inflectional peculiarities of each class are given in §§5:42, 5:51, and 5:61.

§5:4. The inflection of the auxiliary verbs.

§5:41. The primary paradigmatic categories of the auxiliary verbs are the semelfactive and repetitive aspects and the conditional mode. Each verb has a separate paradigm for each of these notions except that the causative auxiliary lacks a repetitive paradigm; each paradigm is inflected for the person, number, and gender of the pronominal subject. The basic paradigm of each verb is its semel-

factive one and the repetitive and conditional paradigms are formed from this basic paradigm according to regular rules (§§5:45 and 5:46).

§5:42. The special inflectional peculiarities of the auxiliary verbs may be summarized as follows: 1) Their semelfactive paradigms are all irregular and this fact precludes the possibility of setting up any general rules for their construction. While the pronominal element referring to the subject can often be isolated, this is not invariably the case. In some cases this element is a pronominal prefix (§5:21), in other cases it is an inflectional ending of the semelfactive paradigm of the active verb (§5:521), and in still other cases it is not to be isolated. 2) Certain of these irregularities in inflection are caused by the use of suppletion, a process not used by any other word-class of the language. While most cases of suppletion involve number only, a few cases involve person or gender or both. 3) Reduplication is regularly employed in the formation of the repetitive paradigms of these verbs, and like suppletion, is not employed elsewhere in the language. 4) All of these verbs are used in the periphrastic inflection of active verbs (§5:522) although all but the causative auxiliary may also be used independently.

§5:43. Due to the irregularities exhibited by the semelfactive paradigms of these verbs, each auxiliary except la'ka (an anomalous plural verb) is referred to by its 3MS semelfactive form. The complete list of the auxiliary verbs is as follows:

'u'hki "he is, was; he exists, existed"

'u'ra "he lies, lay; he is, was in a lying position"

⁹u'na "he sits, sat; he dwells, dwelt; he is, was in a sitting position"

²u'sa "he comes, came; he is, was coming"

'u'wa "he goes, went; he is, was going"

-?u'ta "he causes, caused"

la'ka "they live, lived; they dwell, dwelt; they are, were living, dwelling" (an anomalous third person plural verb).

The definitions given above cover the semantic range of the independent usage of these verbs; the semantic range of their dependent usage is a separate problem (§5:523).

§5:44. Semelfactive paradigms of the auxiliary verbs.

§5:441. ?u'hki "he is, was; he exists, existed."

	Singular	Dual	Plural
1	?a'hkini	?i'nihki	?ɔ'n?iti
2M	wi'hki	wi'nihki	?ɔ'nawi'ti
2F	hi'hki; he'hki	hi'nihki; he'nihki	?ɔ'nahi'ti; ?ɔ'nahe'ti
3M	?u'hki	?u'nihki	?ɔ'nta
3F	?a'ki	si'nihki	?ɔ'nasi'ti

	Singular	Dual	Plural
1 2M 2F 3M 3F	°a′rani wi′ra he′ra °u′ra °a′ra	?i'rana wi'rana he'rana ?u'rana si'rana	na' [?] ara na' [?] ara

§5:442. ²u'ra "he lies, lay; he is, was in a lying position."

Note. This paradigm lacks plural forms for 1, 2M, and 2F; possibly the 1, 2M, and 2F dual forms could be used to supply the lack. It should also be noted that the 3M and 3F plural forms are identical. The paradigm of the immediately following auxiliary has the same peculiarities.

§5:443. ?u'na"he sits, sat; he dwells, dwelt; he is, was in a sitting position."

	Singular	Dual	Plural
1 2M 2F 3M 3F	?a'nani wi'na he'na ?u'na ?a'či	?i'nana wi'nana he'nana ?u'nana si'nana	°u′k°era °u′k°era

§5:444. ?u'sa "he comes, came; he is, was coming."

	Singular	Dual	Plural
1	?a'sani	?i'nasa; ?i'nsa	?i'tani
2M	wi'sa	wi'nasa; wi'nsa	wi'tani
2F	he'sa	he'nasa; he'nsa	he'tani
3M	?u'sa	?u'nasa; ?u'nsa	?a'tani
3F	?a'sa	si'nasa; si'nsa	si'tani

§5:445. ⁹u'wa "he goes, went; he is, was going."

	Singular	Dual	Plural
1	%a′ni	?i'yana	?i'taši
2M	wi'ya	wi'yana	wi'taši
2F	he′ya	$h\epsilon'$ yana	he'taši
3 M	²u′wa	²u′wana	²a′taši
3F	²a′ta	si'yana	si'taši

	Singular	Dual	Dual=Plural	Plural
1 2M 2F 3M 3F	-?a'tani; -hta'ni -wi'ta -he'ta -?u'ta -?a'ta	-³u'nta	∘i'nta -wi'nta -he'nta -si'nta	-?a'nta

\$5:446. - ?u'ta "he causes, caused."

Note. With the exception of the 3M forms, the dual and plural forms of this paradigm fall together. It should also be noted that the 3FS form is homonymous with the 3FS form of the auxiliary verb given immediately above. The forms of this paradigm never stand alone but are used only in the inflection of causative active verbs (§5: 532). Of the two 1S forms had in is used only in causative semelfactive paradigms while -?a'tani is used only in causative habitual paradigms.

§5:447. The anomalous auxiliary verb la'ka.

The verb la'ka is anomalous in that it is exclusively a third person masculine and feminine plural verb meaning "they live, lived; they dwell, dwelt; they are, were living, dwelling." It is classed with the auxiliary verbs because, like them, it has a repetitive form made by reduplication (§5:45).

§5:45. The repetitive paradigms of the auxiliary verbs.

The repetitive paradigms of these verbs are used both as repetitives and as usitatives. As has already been pointed out, the causative auxiliary lacks a repetitive paradigm. The formation of the repetitive paradigms of the remaining auxiliary verbs is accomplished by reduplication which is applied to the inflected semelfactive forms of these verbs according to the following rules:

- 1) With the exception of the plural forms of vu'ra and vu'na, the reduplication consists in repeating the first consonant and vowel of the inflected semelfactive form and in shifting the stress to the reduplicated element, e.g., va'vaki "she used to exist" (rdpl. form of va'ki, 3FS of vu'hki, §5:441); wi'wisa "you keep, kept coming" (rdpl. form of wi'sa, 2MS of vu'sa, §5:444); la'laka "they always dwell, used to dwell" (rdpl. form of la'ka, §5:447).
- 2) The repetitive forms of na'?ara and ?u'k?era (the plural forms of ?u'ra and ?u'na, respectively) are made by reduplicating the first consonant and vowel of the element *-?ara, giving the forms na'?a?ara "they always lie, used to lie" and ?u'k?e?era "they always sit, dwell, used to sit, dwell," respectively.

§5:46. The conditional paradigms of the auxiliary verbs.

The conditional paradigms of these verbs are formed according to the following rules:

1) With the exception of the 1S forms, the fusional conditional forms of the auxiliary verbs (in all persons, numbers, and genders) are made by the insertion of a ? between the last consonant and vowel of their corresponding semelfactive

- forms, e.g., wi'hk'i "if you exist" (smlf. form: wi'hki, 2MS of 'u'hki, \$5:441); 'i'yan'a "if we go" (smlf. form: 'i'yana, 1D of 'u'wa, \$5:445).
- 2) The 1S fusional conditional form of ?u'wa follows the rule given above and is accordingly, ?a'n?i "if I go" (smlf. form: ?a'ni, §5:445). The 1S form of .?u'ta is made by replacing the 1S semelfactive ending .ni with a special conditional form .?an, thus: .hta'?an "if I cause" (smlf. form: .hta'ni, §5:446). The 1S fusional forms for the remaining auxiliaries do not occur in the available material. Non-fusional conditional forms for them, however, may be formed according to the rule given below.
- 3) Alternative nonfusional conditional forms for all of the auxiliary verbs may be made by the addition of the conditional enclitic particle k?i to the semelfactive forms of these verbs. Such alternative forms are used just as often as are the fusional forms. For example, a form like wi'yak?i "if you go" (<wi'ya, 2MS smlf. of ?u'wa, +k?i) occurs just as often as the equivalent fusional form wi'y?a.
- §5:47. A few examples of the independent use of the auxiliary verbs are given below.
- ta'riki'čun, 'una'nì. "He was sitting in the house." ('una'ni < 'u'na, 3MS smlf. of 'u'na, +a'ni, quotative encl. part.)
- ta'wakăku, $^{9}u'^{9}uhk\epsilon'ni$. "(There) used to be a commander." ($^{9}u'^{9}uhk\epsilon'ni < ^{9}u'^{9}uhki$, 3MS repet. of $^{9}u'hki$, $+^{2}ui$).
- ta'rkuki'čun, le'yutan, wi'yan ahč "if you go straight into the woods" (wi'yan hč < wi'yan a, 2MD cond. of u wa, + hč, subordinating encl. part.)
 - §5:5. The inflection of active verbs.
- §5:51. Active verb stems fall into two main categories, the noncausative and the causative. Moreover, both categories fall into five subclasses: the intransitive, the transitive, the impersonal, the transimpersonal, and the personificative. All active verb stems are inflected for pronominal subject while transitive and transimpersonal stems undergo additional inflection for pronominal object. The distinction between noncausative and causative stems is maintained only in the type of subjective inflection each uses (§5:52 and 5:53); in objective inflection the two types fall together.

Unlike the stems of auxiliary and static verbs, the stems of active verbs may be used independently; in this usage they are infinitives.

The primary inflectional categories of both noncausative and causative verbs are the semelfactive, the habitual (also used as a progressive), and the conditional. The repetitive aspect may be expressed only periphrastically (§\$5:522 and 5:523). In noncausative verbs inflection for pronominal subject is accomplished by suffixation (§5:521) or by juxtaposition (§5:522). In causative verbs, on the other hand, inflection for pronominal subject is accomplished exclusively by juxtaposition (§5:531).

§5:52. The subjective inflection of noncausative active verbs.

§5:521. The nonperiphrastic inflection of noncausative verbs is accomplished by the use of the three sets of inflectional endings characteristic of these verbs, namely, the semelfactive set, the habitual set, and the conditional set. These are given below.

The Semelfactive Set of Noncausative Inflet	ctional Endings:
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	Singular	Dual	Plural
1	ni	-?i'na	~i'ti
2M	-?i	-wi'na	~wi'ti
2F	-?a	-hi'na; -he'na	~hi'ti; ~he'ti
3M	-wi	-?u'na	~ta
3F	-ti	-si'na	~si'ti

The Habitual Set of Noncausative Inflectional Endings:

	Singular	Dual	Plural	
1	-ka'ni	-hk?i'na	·hkºi'ti	
2M	-ki	-wi'na	·wi'ti	
2F	-ka	-hi'na; -he'na	·hi'ti; ·he'ti	
3M	-ku	-hk?u'na	·ka'ta	
3F	-ka'ti	-si'na	·ṣi'ti	

Note. A number of the inflectional endings of the habitual paradigm are identical with those of the semelfactive paradigm, viz., the 2MD, 2FD, 3FD, 2MP, 2FP, and 3FP. While it is possible to trace an interesting historical connection between the semelfactive and the habitual endings, space does not permit such a digression in the present sketch.

The Conditional Set of Noncausative Inflectional Endings:

The conditional set of endings are based on the semelfactive set in much the same way that the conditional paradigms of the auxiliary verbs are based on their semelfactive paradigms (§5:46). The rules for the formation of the conditional endings are as follows:

- 1) With the exception of the 1S, 2MS, and 2FS forms, the conditional endings are made by the insertion of a ? between the last consonant and vowel of the corresponding semelfactive endings, e.g., -w?i, 3MS cond. ending (cf. -wi, corresponding smlf. ending); -?i'n?a, 1D cond. ending (cf. -?i'na, corresponding smlf. ending).
- 2) The 1S conditional ending is -?an, consisting of an element -?a-, plus the semelfactive ending -ni which is always apocopated to -n in this case.
- 3) The 2MS and 2FS forms are 'ik' and 'ak' i, respectively, and are made up of their corresponding semelfactive endings plus the conditional enclitic particle 'k' i.

- 4) With the exception of the 2MS and 2FS forms (whose only conditionals are nonfusional) there are alternative nonfusional conditional forms for all persons, numbers, and genders which consist of the semelfactive endings plus the enclitic particle $\frac{1}{2}$ k?i.
- §5:522. The periphrastic inflection of noncausative verbs is accomplished by placing the stem of an active verb in front of the semelfactive, repetitive, or conditional paradigms of any of the auxiliary verbs except the causative. In addition the notion of the habitual aspect may be expressed by placing a semelfactive form of an auxiliary verb after an active verb stem which has been extended by the habitual thematic suffix hk. However, this suffix cannot be used before an inflected form of the auxiliary verb of hki.
- §5:523. When the auxiliary verbs are used in periphrastic inflection their primary meanings are subdued or lost entirely. The special meanings assumed by each auxiliary under these circumstances are as follows:
- 1) The auxiliary ${}^{9}u'hki$ (§5:441) is regularly employed to express the notion of priority in time. It covers the simple past tense, the present perfect tense and the past perfect tense. Smlf. ex.: ha'tikǎn, ya'k ahkinî. "I have come back again." (ya'k ahkinî "I have come back" <ya'ka "to come back" +a'hkini, 1S smlf.). Repet. ex.: pi'hkayunsa'hkun, ču' u'hke'nì. "He always took one copper." (ču' u'hke'nì "he always took" <cu' "to take" +u' uhki, 3MS repet., +a'ni, quot.).
- 2) The auxiliary verbs ?u'ra (§5:442) and ?u'na (§5:443) are used to express the notion of durativity. Two types of durativity may be expressed, the immutable and the mutable. To express the immutable durative either of these auxiliaries is used with a nonhabitual form of an active verb stem (i.e., any stem which is not extended by ·hk·). To express the mutable durative either of these auxiliaries is used with the habitual theme (formed by the suffix ·hk·) of an active verb. Examples of the immutable durative are: te'tĭn, ho'n?ɔra'nì, ta'nahtaha'lùht. "(There) was a path going down under the bank." (ho'n?ɔra'ni "it (lit., she) was going down" <ho'nu "to descend" +?a'ra, 3FS smlf. of ?u'ra, +-a'ni); pi'h?una'nì. "He stayed hidden" (<pi'hu "to hide" +?u'na, 3MS smlf., +-a'ni). In the first example note particularly that the path does not undergo any change by virtue of its "going down"; instead, it stays perpetually in a "going down" position.

Examples of the mutable durative are: hi'puhk 'ura'nì, ho'wàš. "He was dancing outside." (<hi'pu "to dance" + hk, habitual suff., + 'u'ra + a'ni); pi'tahk 'una'nì, se'hiyu'rùhč. "He was walking all day long." (<pi'ta "to walk" + hk + 'u'na, 3MS, + a'ni).

A repetitive example occurs in $\frac{1}{6}$ mahk $\frac{1}{2}$ ara'nì. "It (the fire) would burn and burn." ($<\frac{1}{6}$ ma "to burn" $+\frac{1}{6}$ hk $+\frac{1}{2}$ ara, 3FS repet. of $\frac{1}{2}$ u'ra, $+\frac{1}{6}$ and).

3) The auxiliary verbs ⁹u'sa (§5:444) and ⁹u'wa (§5:445) retain their literal meanings (§5:43) in periphrastic inflection. They are widely used with active verb

stems expressing the idea of a change of position, such as, ho...pi' "to emerge," <code>?a'ka</code> "to enter," ho'nu "to descend," sa'ka "to cross." When <code>?u'sa</code> and <code>?u'wa</code> are used with such active verb stems they express the notion of hitherward and thitherward direction, respectively, so that <code>?a'k?usa</code> means "he comes, came in" and <code>?a'k?uwa</code> means "he goes, went in."

- §5:53. The subjective inflection of causative active verbs.
- §5:531. The inflection of causative verbs is always periphrastic. The semel-factive, habitual, and conditional paradigms require the use of the causative auxiliary. Other types of periphrastic inflection (involving the use of the other auxiliaries) are also possible with causative stems provided certain special formational rules are applied (§5:533).
- §5:532. The component elements of the semelfactive, habitual, and conditional paradigms of causative verbs are as follows:
- 1) A causative stem plus the semelfactive paradigm of the causative auxiliary (§5:446) makes up the semelfactive paradigm of a causative verb, e.g., $^{9}u'r^{9}uta$ "he whooped" ($<^{9}u'ru..c.$ "to whoop" $+^{9}u'ta$, 3MS). (Note that $^{9}u'ru..c.$ is to be read $^{9}u'ru$, causative active verb stem.)
- 2) A causative habitual theme (<a caus. stem + suff. hk-) plus the semelfactive paradigm of the causative auxiliary makes up the habitual paradigm of a causative verb, e.g., 'u'ruhk'u'ta "he whoops, would whoop" (< 'u'ru . . c. + hk-+ 'u'ta).
- 3) A causative stem plus the conditional paradigm of the causative auxiliary ($\S5:46$) makes up the conditional paradigm of a causative verb, e.g., ?u'r?ut?a "if he whoops" (<?u'ru..c.+.?u'r?a, 3MS cond.).
- §5:533. In case it is desired to use one of the other auxiliary verbs with a causative stem the following rule applies: A causative theme (<a caus. stem + the caus. thematic suff. <n·) is placed in front of the semelfactive, repetitive, or conditional paradigms of any noncausative auxiliary verb, e.g., <n'run'n'hki "he has whooped" (<n'ru . . c . + <n· + <n'rhki, 3MS). The special meanings of the noncausative auxiliaries when used with causative stems are the same as when they are used with noncausative stems (§5:523).
- §5:534. A synopsis showing the chief differences in inflection as between a noncausative and a causative stem is given below.

Stem	Noncausative	Causative
	pa'ta "to fall"	pa'ka c. "to reply"
3MS smlf.	pa'tawi "he fell"	pa'k ⁹ uta "he replied"
3MS hab.	pa'taku "he falls"	pa'kahk ⁹ u'ta "he replies"
3MS past	pa't?uhki "he has fallen"	pa'kan ⁹ u'hki "he has replied"

- §5:54. The inflection of the subclasses of the active verb.
- §5:541. As has already been pointed out, both noncausative and causative

verbs fall into five subclasses: the intransitive, the transitive, the impersonal, the transimpersonal, and the personificative. While none of these subclasses makes use of any special inflectional elements, each of them (except the transitive) is restricted in a different way as to which of the total number of inflectional elements it may use. The essential characteristics of each of these subclasses are presented in the following paragraphs.

§5:542. Intransitive verbs may be inflected only for pronominal subject and the rules for the subjective inflection of active verbs already given cover all that can be said of the inflection of this subclass.

§5:543. Transitive verbs are inflected not only for pronominal subject but also for pronominal object. Inflection for pronominal subject is the same as for intransitive verbs. Inflection for pronominal object is accomplished by the use of the pronominal prefixes (§5:21) or by the use of the reciprocal prefix (?a- before all stems except those beginning in ?; before the latter, ?ak-). Examples of the objective inflection of transitive verbs are: $?ihp\epsilon'k$?uhkí "he has hit me" (<?i-h-, 1S pron. pref. used as obj., $+p\epsilon'k$?uhki "he has hit"); $?ap\epsilon'k$?unihkí "they have hit each other" (<?a-, reciprocal pref., $+p\epsilon'k$?unihki "they (MD) have hit").

§5:544. Impersonal verbs may be inflected only for third person feminine singular subject. Any of the 3FS inflectional endings and any of the 3FS forms of auxiliary verbs may be used. This 3FS subject implies an impersonal agent, as in, ti'hikati'sihkun, pi'ratihe "when it got to be seven years" or "seven years later" (pi'ratihe "when it got to be" < pi'ra "to get to be" + ti, 3FS smlf. ending, + he, subordinating encl. part.).

§5:545. Transimpersonal verbs may likewise be inflected only for 3FS subject. In addition, however, they must be inflected for pronominal object by means of the pronominal prefixes, e.g., $s\epsilon'$ mapăn, $siho't^{\gamma}ok\epsilon'$ nì. "They, too, have become extinct," i.e., "an impersonal agent has finished them" ($siho't^{\gamma}ok\epsilon'$ ni "they have become extinct" $< si\cdot$, 3MP pron. pref., +ho'tu "to become extinct" + ra'ki, 3FS of ru'hki).

It will be noted that impersonal verbs are to intransitive verbs as transimpersonal verbs are to transitive verbs.

§5:546. Personificative verbs may be inflected only for 3MS subject. These are without exception verbs meaning "to rain," "to snow," "to hail," and the like. They are called personificative verbs because in Tunica mythology the Thunder Being (who is personified as a man) is thought to control this type of weather manifestation, hence, sa'č'uhkí "it has rained" (<sa'či "to rain" + $^{\gamma}$ u'hki) carries the implication that "he (i.e., the Thunder Being) has rained."

§5:6. The inflection of static verbs.

\$5:61. Static verb stems are inflected by means of the pronominal prefixes (\$5:21) and may not be used without them. Grammatically speaking, these prefixes must be construed as objects, but logically speaking they may be interpreted as subjects, e.g., 7i'yaší "I am angry" (< 7i-, 1S pron. pref., + -ya'ši "to be angry").

A number of static verb stems begin in vowels and in this case the vowel of the prefix contracts with the initial vowel of the stem, e.g., %o'htini "he owns; it is his" (< %u, 3MF pref. + %e'htini "to own, to belong to . . . ").

§5:62. Certain static verbs may have special inchoative forms which contain not only a pronominal prefix but also a 3FS subjective element, i.e., either a 3FS inflectional ending (normally attached to active verb stems, §5:521) or the 3FS form of the auxiliary 9 u'hki. Ex.: 9 iya'š 9 ekí "I became angry" ($<^{9}$ i· + 9 a'ši + 9 a'ki, 3FS of 9 u'hki). Due to the fact that inchoative forms contain an element which must be construed as the grammatical subject, the pronominal prefixes are construed as grammatical objects not only in the inchoative forms but in the non-inchoative forms as well, even though in the latter case there is no element which can be construed as a grammatical subject.

It will be noted at once that the inchoative forms of static verbs are constructed like transimpersonal active verbs (§5:545). The difference between the two types lies in the fact that while transimpersonal verbs cannot be used without an expressed 3FS subject, all static verbs have noninchoative forms in which no expressed grammatical subject may be used (§5:61).

§5:7. Noun inflection.

§5:71. The paradigmatic categories of the noun are the indeterminative and the determinative. The indeterminative category consists of the simple uninflected noun stem, e.g., ru'šta "a rabbit, rabbits." The determinative category, however, is marked by the use of the determining prefixes and the relational suffixes. These are as follows: the articular prefix (§5:72), the pronominal prefixes (§5:73), the gender-number suffixes (§5:74), and the locative suffixes (§5:75). An unmodified noun in the determinative category is preceded by the articular prefix or a pronominal prefix and is followed by a gender-number suffix, a locative suffix, or a post-position. Thus the articular prefix and the pronominal prefixes are mutually exclusive, and the gender-number suffixes, the locative suffixes and postpositions are likewise mutually exclusive.

§5:72. The articular prefix has the force of a definite article. It regularly appears in the form ta's before all noun stems except those beginning in ? or t. Before stems beginning in ? it takes the form to with consequent loss of the steminitial? Before stems beginning in t the articular prefix is usually omitted haplologically, though instances of the use of ta's also occur. Examples: ta'ruštaku "the rabbit" (<ta's+ru'šta "a rabbit" + <ku, MS suff.); to'niku "the man" (<t>+ <*vo'ni "a person" + <ku); to'rahkiku "the ice" (<to'rahki "ice" + <ku) or ta'torahkiku "the ice."

All proper nouns must always be used with the articular prefix, e.g., ta'wišimi'liku "Red River" (<ta'+ wi'ši "water" + mi'li "red" + ku).

⁷ Nouns in the indeterminate category are not defined as to number; therefore they may be translated either as singulars or as plurals, whichever the context demands. To conserve space, however, they are hereafter translated as singulars only, rather than as both singulars and plurals.

Possessed noun stems (§5:73) cannot occur without the pronominal prefixes. Since the pronominal prefixes and the articular prefix are mutually exclusive, it follows that these noun stems cannot take the articular prefix.

§5:73. The pronominal prefixes (§5:21) may be used with any noun stem, when desired, to denote its possessor, e.g., ?uhčɔ'haku "his chief" (< ?u·h·, 3MS pref., +čɔ'ha "a chief" +ku). In addition, there are a special class of nouns, known as possessed nouns, which refer to entities conceived to be inalienably possessed and this class of nouns cannot be used without pronominal prefixes, e.g., ?o'siku "his father" (< ?u·, 3MS pref., +e'si "father" +ku). Most possessed noun stems are body-part terms or terms of relationship. It should also be noted that many possessed noun stems begin in a vowel and in this case the vowel of the prefix contracts with the initial vowel of the stem (§5:21).

§5:74. The gender-number suffixes indicate not only the gender and number of the noun but also the subjective-objective case. These suffixes are as follows:

	Singular	Dual	Dual=Plural	Plural
M F	∕ku ∕hči	-?u'nima	-si'nima	∕se'ma

Note. The same feminine form is used both as a dual and as a plural.

Examples: ta'čɔhaku "the chief" (<ta',+čɔ'ha "a chief" +ku); ta'čɔhə'u', nima "the (two) chiefs"; ta'čɔhase'ma "the (several) chiefs"; ta'nisarahči "the girl" (<ta',+ni'sara "a young person" +hči); ta'nisarasi'nima "the (two or more) girls."

§5:75. The locative suffixes are 'hta "on" and 'š(i) "to, at," e.g., ta'halta "on the ground" (<ta' +ha'li "ground" + hta); ta'riš "to the house" (<ta' +ri' "house" + \cdot š(i)). As has already been noted, the locative suffixes, the postpositions, and the gender-number suffixes are mutually exclusive.

§5:76. The salient features of Tunica noun classification are as follows: All nouns are either masculine or feminine. This classification into masculine and feminine may be termed the outer or "grammatical" classification. The criteria needed in determining the gender-class of any given noun, however, reflect an inner or "teleological" classification which is based on a certain few selected natural characteristics of the entity to which the noun refers. These are conveniently grouped into a set of interweaving dichotomies as follows:

	Animate		vs.	Inanimate
Human	vs.	Nonhuman		
Male vs. Female		Male vs. Female		Integral vs. Continual

Before one can determine the gender-class of a given noun, then, one must answer the questions raised by the above sets of dichotomies; in addition, one must know whether the noun is to be used in the singular, dual, or plural number class. The

singular number class, moreover, is subdivided into 1) true singulars and 2) collectives. The rules of classification based upon the above criteria are as follows:

- 1) Nouns referring to human or nonhuman male animates in the sg., du., or pl. number are masculine in gender, and nouns referring to human or nonhuman female animates in the sg., du. or pl. number are feminine in gender, e.g., ta'čɔhaku "the chief"; ta'čɔha'u'nima "the (two) chiefs"; ta'čɔhase'ma "the (several) chiefs"; ta'nisarahči "the girl"; ta'nisarasi'nima "the (two or more) girls."
- 2) Nouns referring to human male and female animates in the collective, du., or pl. numbers are masculine in gender, e.g., ta'čahtaku "the Choctaw (as a tribe)"; ta'nisar 'u'nima "the young people (a pair)"; ta'čahtase'ma "the Choctaws (several individuals, male and female)."
- 3) Nouns referring to nonhuman male and female animates in the du. number are masculine, but nouns referring to nonhuman male and female animates in the collective or pl. number are feminine in gender, e.g., ta'yorum'ah'u'nima "the beasts (a pair)"; ti'sahči "her dogs (as a collective)"; ti'sasi'nima "her dogs (as individuals, male and female)."

It will be noted that it is only in connection with the last two rules that the dichotomy of human vs. nonhuman has significance.

In a number of cases the gender classification of nouns referring to inanimates is arbitrary, but the following rules take care of the majority of inanimate nouns:

- 4) Most nouns referring to integrals in the sg. number, and only such nouns, are masculine in gender, e.g., ta'šihkaliku "the stone." However, some nouns referring to integrals are feminine in gender, e.g., ta'rihči "the house," and since no rules can be made to cover these instances, the classification of such nouns is to be considered arbitrary.
- 5) All nouns referring to continuals in the sg. number are feminine in gender, e.g., ta'wišihči "the water."
- 6) Integrals which are classed as masculine in the sg. are likewise classed as masculine in the du., e.g., ta'šihkal'u'nima "the (two) stones." In the pl. number integrals are classed as feminine, regardless of whether they are masculine or feminine in the sg., e.g., ta'šihkalsi'nima "the stones"; ta'risi'nima "the houses."
 - 7) Nouns referring to continuals are not dualized nor pluralized.

6. STEM FORMATION

- §6:1. Verb stem formation.
- §6:11. Verb stem formation as a productive process occurs most widely with active verb stems. The most important elements used are the purposive suffix and the thematic suffixes.
- §6:12. The purposive suffix is wan "in order to . . ." It is added to active verb stems (infinitives) and the resultant form may not be inflected, e.g., te'hin hke'nì, hko'sawàn "he went around (the deer) in order to skin it" (hko'sawan "in order to skin it" < hko'sa "to skin . . ." + wan).

§6:13. The thematic suffixes fall into two classes, the restricted and the non-restricted. An active verb stem plus a restricted suffix results in a theme which may be inflected only periphrastically. An active verb stem plus a nonrestricted suffix, however, results in a theme which may be inflected in all of the ways in which an active verb stem may be.

The two most widely used thematic suffixes are hk, the habitual-progressive suffix, and n, the causative suffix. Both are restricted. The rules for their use have already been discussed in connection with the inflection of active verbs (for hk, see §\$5:522 and 5:523; for n, see §\$5:533 and 5:534). There is also another restricted suffix, namely tahk "to repeatedly . . .; to be constantly . . . ing," e.g., name'katahk n' namely tahk. "to repeatedly . . .; to be constantly . . . ing," e.g., me'katahk n' name' nam

- §6:2. Noun stem formation.
- §6:21. Secondary noun stems are of three main types: 1) augmentativized or diminutivized stems, 2) composite stems, and 3) agentives.
- §6:22. Augmentativized and diminutivized noun stems are derived from primary noun stems by means of the augmentative suffix $t^{2}\epsilon$ and the diminutive suffix $t^{2}\epsilon$ and the diminutive suffix $t^{2}\epsilon$ ($t^{2}\epsilon$); ya'ruhto'hok), respectively, e.g., ru'štat' $t^{2}\epsilon$ "a sheep" ($t^{2}\epsilon$); ya'ruhto'hok or ya'ruhto'hok "a hatchet" ($t^{2}\epsilon$); ya'ruhto'hok, $t^{2}\epsilon$); ya'ruhto'hok).
- §6:23. Composite noun stems are formed by juxtaposition and are of two main types:
- 1) noun stem plus adjective stem composites (e.g., ?o'nrowa "a white person" (<?o'ni "a person" +ro'wa "white").
- 2) noun stem plus noun stem composites (e.g., ya'nerana'ra "an ocean snake (mythical)" (<ya'nera "an ocean" +na'ra "a snake").
- §6:24. Agentive noun stems are derived from active verb stems by means of the agentive prefix ta' (not to be confused with the articular pref., §5:72, with which it is homonymous), e.g., ta'hara "a singer" (<ta' +ha'ra "to sing").

7. SYNTAX

- §7:1. The sentence.
- §7:11. Sentences may be simple, compound, or complex. Compound sentences are rare. Complex sentences, however, are quite common and consist of a main clause and one or more dependent clauses which are always indicated by having one of the subordinating enclitic particles attached to their predicative word.
- §7:12. The syntactic elements of the sentence are a predicative word, an independent subject, an independent object, a predicate modifier, a predicate com-

plement, and a sentence connective. Every sentence (except those consisting of an exclamative, §7:39) must have a predicative word and may consist of only this word (see next paragraph).

The predicative word may be a substantive (§7:31), an adjective (§7:32), or any one of the three classes of verbs (§7:33), e.g., ši'hkalí "it is a stone"; yu'pahtá "it is cold"; ha'r' uhkí "he sang."

The independent subject (i.e., a word used as subject as opposed to the subjective pronominal element of the verb) and the independent object (i.e., a word used as object as opposed to the objective pronominal element of the verb) may be any substantive (§7:31), e.g., $^{9}u'$ win, $^{1}h'^{2}$ uhkí "he danced" (with $^{9}u'$ wi "he," an independent personal pronoun, used as independent subject); toʻniku, $^{1}h'^{2}$ uhkí "the man danced" (with toʻniku "the man," a noun, used as independent subject); $^{9}u'$ win, $^{9}uhp\epsilon'k^{3}$ ahkiní "I hit him" (with $^{9}u'$ wi used as independent object); toʻniku, $^{9}uhp\epsilon'k^{3}$ ahkiní "I hit the man" (with toʻniku used as independent object).

Predicate modifiers are of three types:

- 1) Adjectives, which are used as modifiers of nominal predicatives, e.g., ta'yoronĭku, 'o'nilapú "the Tunica are good people" (la'pu "good," used as modifier of the nominal predicative 'o'ni "people").
- 2) Comparatives, which are used as modifiers of adjectival and static verb predicatives, e.g., ta'kafihč, la'pupanú "the coffee is very good" (pa'nu "very," used as modifier of the adjectival predicative la'pu).
- 3) Adverbs and adverbial phrases, which are used as modifiers of auxiliary or active verb predicatives, e.g., ?u'nana'nì, hɔ'wàš "they were sitting outside" (hɔ'waš "outside," adverb, used as modifier of the auxiliary verb °u'nana'ni "they were sitting"); ta'riki'čun, ?a'k 'uwa'nì "he went into the house" (ta'riki'ču "in the house," adverbial phrase, used as modifier of the active verb 'a'k 'uwa'ni "he entered").

Predicate complements are substantives (§7:31) and are used as complements of static and transimpersonal verb predicatives, e.g., hi'čut'en, 'uhpi'r'ake'nì "he became an eagle" (hi'čut'e "an eagle," used as the complement of the transimpersonal verb 'uhpi'r'ake'ni "he became").

Sentence connectives are used to establish a loose conjunctive, contrastive, or disjunctive connection between a sentence and the sentence that precedes it, e.g., hi'nahk?hčat, ta'yoronĭku, ta'hč?ihi'pùhč, hi'pukɔ'nì "For this reason the Tunica dance the Sun-dance" (hi'nahk?hčat "therefore, for this, that reason").

§7:13. The following rules and tendencies of word order should be noted:

- 1) If a sentence connective is used it precedes all the other elements of the sentence (see the last example above).
- 2) The predicative word of either a main or a dependent clause tends to take clause-final position, to 'kate'kahaku, yu'kawihe, ta'hieut' ehe, 'a'ehe'nì "When the orphan boy arrived, the eagle was not there." (yu'kawihe, predicative word of the dependent clause to kate'kahaku, yu'kawihe; 'a'ehe'ni, predicative word of the

main clause ta'hičut'řěhč, 'a'čéhé'nì). This order is not too rigidly adhered to since predicate modifiers often come last, as in 'a'k'uwa'nì, ta'riki'čùn "he went into the house" ('a'k'uwa'ni, predicative word). See also 6) below.

- 3) The independent subject tends to precede all other syntactic elements in the clause except the sentence connective, e.g., ta'ruštāku, tɔ'mahkāku, 'uhpé'k'uhké'nì "Rabbit hit the alligator" (ta'ruštāku, independent subject). Hence if both an independent subject and an independent object occur in the same clause, the latter will normally follow the former, as in the sentence just quoted wherein tɔ'mahkaku is the independent object.
- 4) Adjectives must always immediately follow the noun they modify, e.g., ta'yoronĭku, 'o'nilapú "The Tunica are good people."
- 5) Comparatives must always immediately follow the adjective or static verb they modify, e.g., ta'kafihč, la'pupanú "The coffee is very good."
- 6) Predicate modifiers (i.e., adverbs or adverbial phrases) usually immediately precede or immediately follow the verb they modify. If there is only one predicate modifier either order is equally good, e.g., ta'rkuki'čun, 'a'k'uwa'nì "he went into the woods" (ta'rkuki'ču "in the woods") or 'a'k'uwa'nì, ta'rkuki'čun. On the other hand, if there are two predicate modifiers, one will ordinarily precede the verb while the other will follow it, e.g., ta'rkuki'čun, 'a'k'uwa'nì, la'hontòhku "he went into the woods early" (la'honto'hku "early").
- 7) A predicate complement usually precedes the verb it complements, e.g., hi'čut ṽen, vuhpi'r vake'nì "he became an eagle."

§7:14. Summary chart of word order.

	SC	PM	IS	IO	РМ	PC	PW	РМ
1							pi'tahk?una'nì. He was walking.	
2						lo'ta To run	wiwa'năn. do you want?	
3					ho'wăš, Outside		howe's?uhke'nì. he jumped out.	[hɔ'wàš.]
4				ya' [?] ăn A deer			?uwe'n?uhke'nì. he found him.	
5			ta'ruštăku, Rabbit				?u′š?εpa′nì. he was glad.	
6			to'nĭku, The man	ta'yak the deer			?ura'p?uhke'nì. he killed him.	
7	h-hč Then		?u'wĭn, he		ma'hon just		?una'nì, he was sitting	?u'rìš. at home.
8	h-hč Then	ha'tikăn, again	ta'ruštăku, Rabbit	to'mahkak Alligator		?uhpe'kawan to hit him	yako'nì. he was doing.	

- §7:15. In sentences of two or more clauses the dependent clauses usually precede the main clause, e.g., ta'yāku, pa'tawihč, ta'yarɔ'hpanyu'kawihč, 9 uhkɔ'sawante'hin 9 uhk ϵ 'nì. "When the deer fell, when he got near the deer, he went around (it) in order to skin it." (ta'yāku, pa'tawihč, first dependent clause; ta'yarɔ'hpanyu'kawihč, second dependent clause; 9 uhkɔ'sawante'hin 9 uhk ϵ 'nì, main clause.)
- §7:16. The following are the circumstances under which agreement in person, number, and gender is essential:
- 1) Between an independent subject and the pronominal subjective element of the verb of which it is the subject, e.g., ta'nisarahč, ha'rakatí "the girl sings" (3FS subjective element 'ka'ti agreeing with the feminine singular noun ta'nisarahč "the girl").
- 2) Between an independent object and the pronominal objective element of the verb of which it is the object, e.g., i'măn, $ihp\epsilon'k'uhki$ "he hit me" (1S objective element ih agreeing with the 1S independent personal pronoun i'ma).
- 3) Between the nominal possessor of a noun and the pronominal possessive element attached to the noun that is possessed, e.g., to'nik'u'rìhč "the man's house" (3MS possessive element 'u- agreeing with the masculine singular noun to'niku "the man").
 - §7:2. The preverbs and the enclitic particles (postfixes).

The preverbs and the enclitic particles are discussed in connection with the section of syntax, first, because they are appended only to formally complete words, and secondly, because for the most part the rules for their use are based on the syntactic classification of the words to which they are attached.

- §7:21. The preverbs may be attached to any predicative word (§7:12), e.g., teha'hpaya'nì "there was noise all about" (<te-, preverb meaning "about, all about" +ha'hpaya'nì "there was noise"); tewe'sasite'nì "they were jumping about" (<te-+we'sasite'nì "they were jumping"); te'mile'nì "it was red all about" (<te-+mile'nì "it was red"). The remaining preverbs are ki-"in, into," ho-"out, out of," and ha-"up."
- §7:22. There are some thirty enclitic particles expressing the future tense, various modes, negation, and a variety of other notions. Some of these may be used with any predicative word while the use of others is restricted to a single word class. Some of the modal and tense enclitic particles used with verbs require that the verbs be in the semelfactive aspect. One of these is kahča, denoting the future

Note 1. The explanation of the abbreviations used in the chart opposite is as follows: SC, sentence connective; PM, predicate modifier; IS, independent subject; IO, independent object; PC, predicate complement; PW, predicative word. In addition h-hc is an abbreviation for hinya'tihc "then, now" and the word ho'was "outside" is once placed in brackets to show an alternative position for the predicate modifier.

Note 2. The translations of the analyzed sentences are as follows: 1) pi'tahk?una'nì. "He was walking." 2) lɔ'tawiwa'nān. "Do you want to run?" 3) hɔ'waš, howe's?uhke'nì (or) howe's?uhke'nì, hɔ'waš. "He jumped outside." 4) ya'?ān, ?uwe'n?uhke'nì. "He found a deer." 5) ta'ruštāku, ?u'š?epa'nì. "Rabbit was glad." 6) to'nīku, ta'yak?ura'p?uhke'nì. "The man killed the deer." 7) hinya'tīhč, ?u'wĭn, ma'hon?una'nì, ?u'rìš. "Then he was just sitting at home." 8) hinya'tīhč, ha'tikān, ta'ruštāku, tɔ'mahkak?uhpe'kawanyakɔ'nì. "Then Rabbit tried to hit Alligator again."

tense, e.g., lo't'inak 'ahča' "we shall run" (<b't'ina "we run," smlf. aspect, +k'ahča). In general it can be said that all of the enclitic particles have their own peculiarities and restrictions as to usage, and, for this reason there will not be space to do more than list the most widely used ones. They are: k'ahča, future tense; k'i, conditional mode (see §\$5:46 and 5:521); pa, concessive mode; ki, imperative mode; n, interrogative mode; a'ni, quotative mode; 'aha and aha, negation ('aha being used with certain word-classes, aha with certain others); 'stuk'bho" to be unable to . . . "; hč "when, as, after," i.e., general subordination; 'skan "although," contrastive subordination; 'ama "and," coordination; hat "on . . . 's part"; nahku "resembling, like . . . "; tahki "nothing but . . . "; pa "too, also."

In certain cases more than one enclitic particle can be attached to the same word and in this event the order of the elements is fixed. For example, 'a'ni, quotative mode, must always come last in a sequence of enclitic particles, e.g., pa'nuwištuk'oho'nì "he could not get past, they say" (<pa'nuwi "he got past" + 'štuk'oho "to be unable to . . . " + 'a'ni).

§7:3. The syntactic uses of the word classes.

The word classes of Tunica (cf. §4:3) are the independent personal pronouns, nouns, the interrogative indefinite pronouns, adjectives, the auxiliary verbs, active verbs, static verbs, adverbs, postpositions, quantitatives, comparatives, sentence connectives, and exclamatives. These are discussed below in this order.

- §7:31. The independent personal pronouns (§5:22), nouns (§5:7), and the interrogative indefinite pronouns (ka'nahku "something, anything, what"; ka'ku "someone, anyone, who"), which must be distinguished as separate word classes on the inflectional level, may be classed together as substantives on the syntactic level. Substantives are used in the following ways:
- 1) As predicative words, e.g., ${}^{9}u'w$ ${}^{6}h$ 6 "it is not he" (${}^{9}u'w$ "he" + ${}^{9}a$ ha "not"); ti'slinahč ${}^{6}n$ "it was the Stone Witch" (${}^{5}t$ slinahč "the Stone Witch" + ${}^{2}a'n$ i, quot.); ka'nahkup ${}^{9}a$ há "there is nothing" (${}^{5}k$ a'nahku "something" + ${}^{5}p$ "aha "no . . . ").
- 2) As subjects of predications, e.g., 'u'w'one'nì "he is a person" ('u'wi "he"; 'one'nì "it is a person"), to'nĭku, ho'waš'una'nì "the man was sitting outside" (to'niku "the man"); ka'kun, 'uwi' 'ut'ahč "if anyone hears him" (ka'ku "anyone").
- 3) As objects of transitive and transimpersonal verbs, e.g., ⁹i'măn, ⁹ihpe'k- ⁹uhkî "he has hit me" (⁹i'ma "me").
- 4) As objects of postpositions, e.g., ta'riki'čùn "in the house" (<ta'ri "the house" +ki'ču "in").
- 5) As complements of transimpersonal and static verbs, e.g., ⁹u'win, ⁹ušpi't⁹oke'nì, ti'hčìn "he forgot her" (ti'hči "her," used as the complement of the static
 verb ⁹ušpi't⁹oke'nì "he forgot"); ⁹u'wăn, ⁹uhpi'r⁹ake'nì "he became a hoot owl"
 (⁹u'wa "hoot owl," used as the complement of ⁹uhpi'r⁹ake'nì "he became").
 - §7:32. Adjectives are used in the following ways:

- 1) As predicative words, e.g., te'sĭnč, mil ϵ 'nì "her head was red."
- 2) As modifiers of nouns and interrogative indefinite pronouns, e.g., ta'yoronĭku, ?o'nilapú "the Tunica are good people" (?o'ni "people," modified by la'pu "good"); ka'nala'puyu'k ?ĕnč "if I cook something good" (ka'nahku "something," modified by la'pu).
- §7:33. The auxiliary verbs and the static verbs are always inflected and must always be used as predicative words, e.g., ${}^{9}u'$ naná "they (two) are sitting" (aux. vb.); ${}^{9}e'$ rusá "I know" (st. vb.). Active verbs, when inflected, are also used as predicative words, e.g., ${}^{9}ihpe'k{}^{9}uhki$ "he has hit me." Uninflected active verbs (i.e., infinitives), on the other hand, are used as static verb complements and then only when the implied subject of the infinitive is the same as the logical subject (grammatical object, §5:6) of the static verb, e.g., ${}^{1}b'$ tasi'waná "they want to run" (${}^{1}b'$ ta "to run"; si'waná "they want").
- §7:34. Adverbs are always used as verbal modifiers, e.g., hi'hčin, 'uná "he is sitting here" (hi'hči "here"); hé''', ya'kawik''ahčá "he will come today" (hé''', eš "today"); hi'štahahk'', u'''uwa'nì "he still keeps on going" (hi'štahakhi "still, yet").
- §7:35. Postpositions always govern substantives, e.g., ?i'marɔ'hpànt "beside me" (rɔ'hpant "beside . . . "); ta'hkəraha'yihtàn "on the table" (ha'yihta "on, on top of . . . "). Postpositional phrases (i.e., postpositions plus the substantives they govern) are used as predicate modifiers, e.g., ?i'marɔ'hpănt, ?u'k'ihčân "sit beside me!"

There are some postpositions which may be used both as adverbs and as postpositions. Note ha'yiš, na'r'ata'nì "she flew above" (ha'yiš "above") as against ta'riha'yiš, na'r'ata'nì "she flew above the house" (ha'yiš "above . . . ").

- §7:36. Quantitatives include the numerals and ho'tu "all." They are used as follows:
- 1) In all the ways that substantives are used, e.g., sa'hkun, 'uhta'p'eke'nì "she caught one" (sa'hku"one, "used as an independent object), ho'tun, lu'p'onta'nì "all of them died" (ho'tu "all," used as an independent subject).
- 2) As modifiers of nouns, e.g., kohk?e'nihkun, ma'riwihč "when he picked up three turtles" (?e'nihku "three," modifying ko'hku "turtle").
- 3) As modifiers of active verbs, indicating the number of times an event takes place, e.g., i'lin, $ihp\epsilon'k$, uhki "he hit me twice" (i'li "two, twice").
 - §7:37. Comparatives are used in the following ways:
- 1) As modifiers of adjectives, e.g., la'pupanú "it is very good" (pa'nu "very," used as a modifier of la'pu "good"); yu'pahtari'kiní "it is too cold" (ri'kini "too . . . ," used as a modifier of yu'pahta "cold").
- 2) As modifiers of those static verbs whose meaning permits it, e.g., ?iš?e'papanú "I am very glad" (pa'nu "very," modifying ?iš?e'pa "I am glad").
- §7:38. Sentence connectives are used as sentence or word conjunctives, contrastives, and disjunctives, e.g., hi'nahkuht, 'uwa'ni "Then he went on."

(hi'nahkuhč "then, after that"); hi'nahkuškăn, haka'l ? ϵk ϵ'nì "Nevertheless she stood up." (hi'nahkuškan "nevertheless, in spite of that"); ?a'hak ?ĭhč, wihp ϵ'kanik²ahčá "Otherwise I shall hit you." (?a'hak ?ihč "otherwise, if not, or"); ?on ?i'lĭn,
²a'hak ?ĭhč, ?e'nihkŭn, simi'rukɔ'nì "He would swallow two or three people."

§7:39. Exclamatives are always used as little sentences within themselves. They include true exclamatives, such as ?ahâ "No!" dâ "Now! Ready!" hōn "Yes" and also imitatives, such as yuwénš imitating the sound of cicadas, čuwí, imitating the call of the killdeer.