

CHITIMACHA

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1. INTRODUCTION, PHONETICS

§1:1. There is only one person who can speak the Chitimacha language among sixty or so who constitute the present population of the tribe on Bayou Teche in southern Louisiana. In 1698, when first encountered by the French, the tribe numbered about 2600.¹ Soon after their first appearance in history, the Chitimacha engaged in a war of several years with the French and their Indian allies, and suffered heavily in killed and captured, the latter being sold into slavery. After the war, the tribe lived peacefully under the successive rule of France, Spain, and the United States. The smallness of the tribe at present is perhaps as much due to dispersion as to war and disease. The Chitimacha have been very conservative as to their language, which they continued to use in spite of close contacts with the French around them. In time, however, French came to be used more and more until, a few generations ago, only the more conservative families continued to use the Indian tongue as their principal language. The passing of the old language has taken place in a time when the French language was in turn being crowded out by English.

§1:2. Remarkable in the terminal history of Chitimacha is the purity with which it was preserved. Benjamin Paul, who died in 1934, used only one borrowed word when speaking Chitimacha, *kahpi* "coffee," not to speak of four names of non-native peoples, *kačen* "Accadian," *hespani* "Spaniard," *ʔinkiniši* "Englishman, American," *yah* "German." The last word was said to be based on the *ja* which characterizes the speech of Germans. It is seen that foreign sounds have been eliminated from these words, but on the other hand *l* and *r* are used in bird calls, as *čilink čilink čilink čiri · ·*, call of an unidentified bird called the chinsh, and *či · · ri · ·*, call of the robin. This is not to say that European contacts did not affect the Indian language. We find native names made to apply to new concepts, as in the case of *ka·nuš* "master white man," *ka·nuš niki* "Frenchman" <"genuine white man," *kiš ʔatin* "horse" <"large dog," *pu·p ʔatin* "sheep" <"large rabbit," *nanu ʔatin* "apple" <"large persimmon," *pe·špe·šn* "fluttering; ribbon." Especially interesting are words like *zo·t ʔatin* "turkey" <"large chicken," *yukš ʔatin* "wild cat" <"large cat," *waš·tik šandun* "buffalo" <"wild bovine," *suseygs ʔo·ži·pu* "opposum" <"woods hog." In these cases we may guess that the names of native animals were first transferred to newly introduced animals, and that the latter came

¹ Swanton's estimate, *Indian Tribes of the Lower Mississippi Valley and Adjacent Coast of the Gulf of Mexico* (Bureau of American Ethnology, Bulletin 43, Washington, 1911), p. 45.

to be so common that it was necessary to modify the term when referring to the native animals.

With regard to grammar Chitimacha shows no signs of influence by French or English, nor is there anything suggestive of internal disintegration, unless the presence of alternate equivalent forms is such a symptom. Since we have no record of the language before it came into extensive contact with French, we must judge on the basis of the present nature of the language. The grammatical structure, though not wholly different from that of modern Indo-European languages, is nevertheless quite distinctive, and the fullness of the grammar suggests that little has been lost.

In characterizing the purity of Chitimacha as spoken by Benjamin Paul, it must also be noted that the other recent speaker, Delphine Decloux, does interlard English words and frequently substitutes translation forms for proper native names, as *žah pinun* ("red bird") for *dipno* "cardinal." The speakers of a generation ago probably included careless speakers such as Mrs. Decloux, but there must also have been something of a tradition of unadulterated Chitimacha.

§1:3. Only one dialect of Chitimacha has ever been recorded. Duralde's vocabulary of 1803, Gatschet's material recorded in 1886, that of Swanton and the author's, both recorded in the 20th century, show hardly any differences, certainly nothing greater than certain minor differences found in the speech of Mr. Paul and Mrs. Decloux.

There are no closely related languages. If Tunica and Atakapa are related to Chitimacha, as Swanton is perhaps correct in suggesting,² the relationship is not a close one.

§1:4. A Chitimacha word consists of one or more syllables recognizable as a unit by prosodic and other phonetic features. The first syllable of a word, unless it is a monosyllable ending in a short vowel, has greater stress than medial and final syllables. Within the sentence, the words are grouped into phrases which have one of two intonational patterns, one characterized by high tone on the final syllable, the other by high tone on the penult (sometimes the antepenult) and a low-pitched ultima. The final syllable of a phrase is heavier than medial syllables not in word-initial position. All syllables have a single initial consonant and a single vowel or *m* or *n* as syllable nucleus; they may be open, ending in the vowel, or closed by a consonant or a series of consonants. Open syllables are lighter than closed ones, short-voweled syllables are lighter than those with long vowels. If an otherwise open syllable with short vowel is followed by an open light syllable, the consonant of the following syllable leans on the preceding, which is thereby closed, e.g., *pini-kank* "red (pl.)."

§1:5. The phonemes of Chitimacha consist of the following vowels, consonants, and phrase melodies.

² John R. Swanton, *A Structural and Lexical Comparison of the Tunica, Chitimacha, and Atakapa* (Bureau of American Ethnology, Bulletin 68, 1919).

Vowels, short: i, e, a, o, u; long: iː, eː, aː, oː, uː

Obstruent consonants, aspirates: p, t, c, č, k; ejectives: b, d, z, ž, g; oral spirants: s, š; glottals: ʔ, h

Sonorant consonants: y, w, m, n

Phrase-melodies: high-final ´; high-prefinal ˘

i and iː are high narrow front unrounded, except for minor variations due to position, particularly in that i is somewhat more open in closed syllables and in very light syllables. Similarly, u and uː are high narrow back rounded except for a parallel positional variation. a, aː and o, oː vary little in quality; the former is low back unrounded, the latter mid narrow back rounded. eː is a little lower than mid wide front unrounded. e has a range of quality between that of eː and mid narrow front unrounded. The open quality is found in phrase-final position and in the word initial syllable when followed by m, n, or h. In open syllables other than those mentioned the close quality occurs, and in closed syllables there is an intermediate quality.

The series of stops and affricates which may be called aspirates are mildly aspirated before vowels, heavily aspirated before consonants within the word, but not aspirated in word final position. Those called ejectives are lenis in articulation and marked by glottalization only in syllabic initial position; in syllabic final position, in which they occur only after vowels and sonorant consonants, the glottal closure comes before the oral closure. ʔ and h occur only immediately before or after a vowel, except that ʔ may also occur in word final position after a sonorant, e.g., neyʔ "earth." y and w occur only in contact with a vowel, except that they may be separated from a preceding vowel by h, e.g., kaːhw "tongs"; in the latter position they are voiceless. When m and n occur not flanked by a vowel, they make a syllabic nucleus, e.g., wayˌtm "winner, more so," but this is not true in a case like haymˌʔaːsiːg "lion" involving a preceding semivowel. n before a k or g in the same word has a palatal instead of a dental position, e.g., ʔinkinišingiš "just an American."

2. FORMATIONAL MECHANICS

§2:1. The principal morphological techniques are juxtaposition and suffixation. Juxtaposition is used in syntax, lexeme-building, and to a limited extent in inflection (i.e., for periphrastic inflection). Suffixation is used in inflection and to a limited extent in lexeme-building; also in syntax, in that certain postpositions are suffixed to the preceding word. In certain cases juxtaposed words may optionally be combined into a single unit, e.g., ʔišiš or ʔiš hiš "by me"; this process, used to a limited extent in syntax and to a greater extent in lexeme-building, may be called amalgamation. Suppletion serves in the function of inflection in some cases instead of the more usual suffixation. Irregularities, or nonuniform methods of formation, are quite common in some inflectional formations, such as noun and adjective plurals.

§2:2. Phonology.

§2:21. A peculiarity of Chitimacha is the presence of a number of cases of alternate equivalent forms, not different as to meaning. In most of the finite verb forms there are equivalent "brief" and "full" forms, as *getik* or *getiki* "I struck him," *geti* or *getiʔi* "he struck him," *getnuk* or *getnaka* "we struck him," *getna* or *getnaʔa* "they struck him," *gečuk* or *gečuki* "I shall strike him," and so on. Other types of alternations in verb forms are *getnakun* or *gedišnaka* or *gedišnakun* "we are beating him," *getuyi* or *getuymiş* "he used to beat him." In the adjective there are often three or more forms for the singular, as *žiwi*, *žiwgi*, *ži·niš*, *žiwa*, *žiwg(š)* "bad"; the plural of this adjective is either *ži·kank* or *ži·ki·g*. Equivalent alternation is not restricted to inflectional forms but is also found in the case of a few nouns and particles: *ka·nuš* or *ka·nš* "master, White," *yo·tiš*, *yo·tš* "roach," *segis*, *seygs* "interior, inside," *hinʔiš*, *hinš* "only," *ki·saktiš*, *ki·saktš* "on the left side."

§2:22. Suffixation and amalgamation are accompanied by phonological changes. The phonological changes connected with suffixation are not always consistent for all suffixes, but the changes for any given suffix are regular. The rules must then be stated partly in terms of the particular suffix, which is easily possible since the number of suffixes is limited. The most extensive regular inflectional formations are those of verb and adjective conjugation. The verb stem and the verbiform stem of the adjective do not occur alone, but always with suffixes. Furthermore, the phonology of suffixation obscures the ending of the stem itself. However, it is possible to abstract stem forms in such a way that it is then possible to state the combinations of stem final with suffix initial in terms of regular rules, leaving only a limited number of exceptions, irregular verbs. The verb stem ends either in a consonant, other than an ejective, or in a vowel. Monosyllabic stems end only in consonants. Vowel-finals of stems are either *i*, *a*, or *e* (never *o* or *u*) and the frequency of the three endings is in the order given. A number of the suffixes, called *iotizing suffixes*, have the effect of changing the stem-final vowel to *i*. Other suffixes cause the loss of stem-final *i*. If the suffix begins with a vowel, the stem-final vowel is lost. *ʔiš·* of the continuative contracts with a preceding vowel to *·a·š·*. Stem-final *t* is lost before *·č·* of the future singular. Postconsonantic final *t* is lost before initial *n* or *m* of suffixes.

The foregoing is not a complete statement of the phonology of suffixation but gives some of the more important changes and some idea of the nature of the process.

§2:23. The phonology of amalgamation is relatively uniform: a final short vowel of the preceding word is lost and certain consonant clusters are simplified; for example, *gituygi* "parched" < *giti* "dry" + *huygi* "good," *waštežin* "Sunday, week" < *wašta* "day" + *hežin* "holy," *kipinun* "mulatto" < *kipi* "body" + *pinun* "red," *gušdatin* "glutton" < *gušti* "food" + *atin* "large," *ʔo·ksži·niš* "thief" < *ʔo·ksni* "to steal" + *ži·niš* "bad," *ke·bup* "to bed" < *keʔe·b hup*. We may note that *h* never occurs after a consonant in the same word, so that the rule that *h*

is always dropped after a consonant is to be expected. Similarly, the rule that ʔ is contracted with a preceding aspirate to the corresponding ejective is in agreement with the rule that ʔ never occurs after a stop or affricate in the same word. On the other hand, the simplification of *kippinun to kipinun and * ʔo:ksnʒi:niš to ʔo:ksʒi:niš is not phonologically necessary (cf. kappa "light," ni ka'msn "malicious one").

§2:24. In syntax we observe a phenomenon of phonology which we may call contextual variation. Certain words vary in their phonetic form according to whether they occur in sentence-final or nonfinal position, and according to whether they are found in phrase-final or nonfinal position. All words ending in ʔ lose this consonant except in sentence-final position. Words of the form cvʔ , furthermore, lengthen the vowel in phrase nonfinal position; thus, hus ša ʔ "his mouth" but hus ša ki "in his mouth." Words having the vowels of their last two syllables separated only by ʔ , when in phrase nonfinal position, usually contract the vowel group into a single long vowel of the quality of the first vowel, e.g., henška ʔe "it is true," henška gan "it is not true"; ke $\text{ʔe}b$ "bed," ke $\text{ʔ}b$ ki "in bed." A final a in a polysyllable may be replaced by i except in phrase-final position, e.g., kiča "woman," kiči hup "to the woman." Word-final i y or u w i may be replaced in phrase nonfinal position by i ˙ or u ˙ , e.g., piya "cane-reed," piyi gan or pi gan "no cane-reed."

§2:3. Syntactic combination. In syntax words are put in sequence with no change other than contextual variation affecting certain kinds of words (see above), a limited amount of amalgamation, and some sibilant assimilation. Amalgamation in syntax is limited to combinations of pronouns with the postpositions hiš "by" and hup "to" and a few other combinations with hup: ʔišiš "by me," ʔišup "to me," ʔušiš "by us," etc. hu-hup "to the lake," ke-bup "to bed," ča·dup "to the bayou," si-tup "to the seashore," nusup "to the west," pegup "upward" (<pegis "up"), segup "inward" (<segis "inside"). With pronouns and occasionally with other substantives, there is sibilant assimilation of postpositions giš "just, only" and hiš to an s of the preceding word, e.g., hus gis "only he," hunksis "by them."

§2:31. The addition of postpositions is partly by juxtaposition, partly by suffixation. Some postpositions are always phonetically independent, e.g., kin "with"; some are always suffixed, e.g., (-n)k emphatic. In addition there are postpositions like (-n)giš which are suffixed after vowels, separate after consonants, e.g., kičangiš "only a woman," kič giš "only women." (-n)kš te:t "like" consists of a suffixed element and a following independent element, e.g., šuš-kš te:t "like a tree." Several postpositions have slightly different forms according to whether a consonant or a vowel precedes; they have an n after vowels that is absent after consonants; t is inserted after n, e.g., kamčin-tkš te:t "like a deer."

§2:32. Demonstratives vary in form according to whether they occur in the independent or proclitic position: proclitic sa "that," ha "this," ho "these," we "that, the"; independent sa:s or sa'ks, ha'š or ha'kš, ho'š or ho'kš, wey or weyš or weykš. Examples: sa yukš' hi $\text{ʔam}^{\text{ʔa}}$ "look at that cat," sa:s' hi $\text{ʔam}^{\text{ʔa}}$ "look at

that one." We may note in this connection that only proclitics (demonstratives and preverbs) and postpositions may have the phonetic form *cv*; the minimum form for other words is *cvc*.

§2:33. Phrasing has a bearing on syntax, in that it may help to indicate the syntactic relations of elements in the sentence. The phrases do not coordinate with the syntactic groupings completely, for elements spoken in separate phrases may be construed together and separate syntactic elements may be spoken in a single phrase. But there is a general correlation, such that phrasing may indicate relationships in otherwise doubtful cases. We may best show this with an example of sentences having the same wording but different phrasing:

we panš' kiš' hi geti'ʔi "That man' dog' thither he-killed-him'": "That man killed a dog"

we panš kiš' hi geti'ʔi "That man dog' thither he-killed-him'": "That man's dog killed him" or "He killed that man's dog"

we panš' kiš hi geti'ʔi "That man' dog thither he-killed-him'": "That man killed a dog"

The use of a phrase melody marks the phrase. The choice between the two phrase melodies depends on the make-up of the phrase. Thus the interrogative postposition *te* requires the high prefinal intonation. The interrogative forms of verbs and the simple imperative also take the high prefinal, and two exclamative particles take it. In all other cases the high-final intonation is used. Chitimacha contrasts with English and other European languages in using a rising intonation for statement and a falling one for interrogation.

§2:4. Verb inflection. There are differences in inflection as between the auxiliaries and the normal verbs. The inflection of the auxiliaries, while it involves recurrent features, is most easily indicated by a list of the forms. In the case of the normal verbs one can easily abstract a series of suffixes which make the different tense-mode and person forms. For present purposes, we select the two auxiliaries *hi(h)* "to be (in neutral or unindicated position)—sg." and *na(h)* "to be—pl." and the normal verb *get* "to beat." For brevity's sake we give one form for each entry of the paradigm, even in cases where there are two or more alternate equivalent forms. Abbreviations in the following are *sg.* = singular, *pl.* = plural, *F* = first person, *NF* = nonfirst person.

	<i>Aorist</i>		<i>Continuative</i>		<i>Usitative</i>	
sg. F	<i>hik</i>	<i>getik</i>	<i>ʔišik</i>	<i>gedišik</i>	—	<i>getuyki</i>
NF	<i>hi</i>	<i>geti</i>	<i>ʔiši</i>	<i>gediši</i>	—	<i>getuymiš</i>
pl. F	<i>naka</i>	<i>getnuk</i>	<i>ʔišnuk</i>	<i>gedišnuk</i>	—	<i>getuynuk</i>
NF	<i>na</i>	<i>getna</i>	<i>ʔišna</i>	<i>gedišna</i>	—	<i>getuymank</i>
	<i>Future</i>		<i>Necessitative</i>		<i>Conditional</i>	
sg. F	<i>hihčuk</i>	<i>gečuk</i>	<i>hihčukingš</i>	<i>gečukingš</i>	<i>hihčukiš</i>	<i>gečukiš</i>
NF	<i>hihčuy</i>	<i>gečuy</i>	<i>hihčuyingš</i>	<i>gečuyingš</i>	<i>hihčuš</i>	<i>gečuš</i>

pl. F	nahdinuk	gedinuk	nahdinakangš	gedinakangš	nahdinakaš	gedinakaš
NF	nahdina	gedina	nahdinangš	gedinangš	nahdinaš	gedinaš
	<i>Imperative</i>		<i>Hortative</i>		<i>Permissive ('let me . . .')</i>	
	ni hi	geda	?	getu	?	getku
	<i>Participle</i>		<i>Prior Participle</i>		<i>Gerundive</i>	
	hi'g	getk	—	getu't	sg. —	getmiš
					pl. —	getmank
	<i>Gerund</i>		<i>Personal Participle</i>		<i>Desiderative</i>	
sg. F	—	getka	—	getkite	higa	getga
pl. F	—	geta	—	?	?	geda
NF	hi'ʔi	geti	—	getite	—	—

So far as can be determined, the continuative-like forms of the auxiliary represent only an alternate mode of expressing the aorist; they are listed with the continuative in the table for the purpose of comparison.

§2:41. The interrogative is indicated for some of the paradigmatic forms by the addition of the particle *te* with high prefinal tone, for some of the forms by this tone without the postposition, e.g., *hi' te'* "Is he?" *getuymiš te'* "did he use to beat?" but *geti'* "did he beat?" *gečuki'* "will be beat?" *nana'* "are they?" Sometimes modification in form is involved, as in the last example.

§2:42. The conjugation of the normal verb includes a set of stem extensions, expressing voice, occurrence number, and first person object. The extensions are added to the verb stem and the extended stem is then conjugated in the same way as the basic stem, except for some irregularities. The following list gives the extensions in the order in which they are added. In each of the four groups the elements are mutually exclusive, but elements from each of the groups may be combined, e.g., *getpama'ki* "he caused him to beat for me."

- | | |
|--|--|
| 1) Causative <i>-pa-</i> | 3) indirective <i>-aʔ-</i> |
| 2) plural <i>-ma-</i> , plurimal <i>-mama-</i> | 4) F sg. object <i>-ki-</i> , F pl. <i>-kuy-</i> |

In several verbs, the causative is made by suppletion, as:

<i>wiš-</i> "to burn"	<i>ʔici-</i> "to burn . . ."
<i>tus-</i> "to hide"	<i>ʔiki-</i> "to hide . . ."
<i>gušt-</i> "to eat . . ."	<i>nokšte-</i> "to feed . . . to . . ."
<i>kačt-</i> "to drink . . ."	<i>hakte-</i> "to give . . . to . . . to drink"
<i>nu-p-</i> , pl. <i>tuw-</i> "to die"	<i>get-</i> , pl. <i>dema-</i> "to beat, kill . . ."

The last pair of words has suppletive plurals. Other cases of suppletive plural are: *čuw-*, *čuy-*, pl. *du-* "to go": *ʔeh-*, pl. *ʔuy-* "to arrive."

§2:5. Inflection of nonverbs. The adjective has a substantival singular and plural and singular and plural verbiform stems, the latter being inflected like verbs. The principal parts of the adjectives are formed in a variety of ways and there are often alternate forms. The element *-ka-* or something similar is frequently found in the plural both of the substantival and verbiform. A few examples:

ʔatin, ʔati(gi), pl. ʔatkapa, ʔatkin, ʔatkank; ʔati-, pl. ʔatka- "large"
 žiwīn, žiwī, žiwgi, ži-niš, žiwg(š), žiwa, pl. ži-kank, ži-ki-g; žiw-, pl. ži-ka-
 "bad"
 ʔužin, ʔuži(gi), pl. ʔužikank; ʔuži-, pl. ʔužika- "rotten"
 pinun, pl. pinikank; pi-hne-, piniwa-, pl. pinika- "red"
 bakkakn(iš), pl. bakkakmank; bakte-, pl. baktema- "flat"

§2:51. Nouns are uninflected except for about thirty of them, including relationship terms and some others referring to persons, which distinguish a singular and plural form. The only inflected noun not referring to a person is ʔuca, pl. ʔuc "oar." The plural formative is most often -kank or -kampa or -mank, but several other formations occur. Like ʔuca, pl. ʔuc are kiča, pl. kič "woman," kici nahžibu, pl. kič na-kš "girl," and ʔasi, ʔayš "man," with abbreviation used to indicate the plural. kiča, pl. kičkampa "wife" differs from "woman" in the plural. Some other cases are: hewʔu, pl. hewmank "nephew, niece"; ta-din, pl. ta-dinkank "younger sibling or maternal first cousin"; napšžank, napšžikank "Negro"; nada, pl. natga "chief, sheriff, judge"; ʔa-yʔ, pl. ʔa-yʔampa "mother"; ʔapš kiče, pl. ʔapš kičemank "married couple"; ʔamʔ, pl. ʔamkampa "female cousin of self or parent, sister of parent or grandparent"; gimniš pl. ginkgank "young woman."

§2:52. The numerals from "two" to "ten" make secondary forms by the addition of suffixes as kiškami-g "the seventh," kiškamink "the seventh time," kiškaminki "on the seventh (e.g., day)" <kišta "seven."

§2:53. The demonstratives, as stated in §2:32, distinguish a proclitic and an independent form. The two forms combined, one preceding and one following the modified word, make the emphatic, e.g., ha hana ha š "this house here." In addition there are locative and directional forms made by the addition of the postpositions -nki and -nk to the enclitic form, e.g., hanki "here," hank "hither." (These differ from postposition combinations with the independent form, e.g., ha š ki "in this one.") There is also inflection for number and position in the demonstrative of near deixis: ha "this" (neutral as to position), han "this (sitting position)," hač "this (standing)," ho plural. han and hač have no independent forms.

Some of the interrogative-indefinites also distinguish proclitic and independent forms. The differentiation is suppletive, e.g., ʔam panš "which person?" ʔuči "who?"

§2:54. Two particles are inflected for number: weytem, pl. weytemank "of that kind," kaye, pl. kayemank "alive." All remaining classes of words are uninflected.

§2:6. Lexeme building.

§2:61. Lexeme building is accomplished mainly by readaptation of lexemes, paradigmatic forms, or syntactic constructions to new uses without change of form. Examples: kiča "woman" > "wife"; pešmank "fliers" > "duck"; kiš ʔatin "big dog" > "horse." However, properly considered there is often a change in

volved, and we may recognize inflectional change, form fixation, order fixation. Our first two examples illustrate inflectional change. While "wife" and "woman" are homonymous in the singular, there is a difference in the plural. We must therefore say *kiča*, pl. *kič* "woman" > *kiča*, pl. *kičkampa* "wife." In the meaning "fliers," *pešmank* is part of the conjugation of *peš* "to fly," it is the plural gerundive. *pešmank* "duck" is uninflected, and like most nouns has the same form for singular and plural. The use of a plural adjective or gerundive as a noun not distinguishing number is fairly characteristic in the formation of names for plant and animal species.

Form fixation is a variety of inflectional change, and is illustrated by *kiš* "horse." Where the adjective "large" has several alternate forms (*ʔatin*, *ʔati*, *ʔatigi*), only one of these is ever used in the word for horse. From a multiform element we change to a uniform element. Such a case as the present one also involves inflectional change in another sense: while *ʔatin* as an adjective is singular, as part of the derived noun lexeme it is not capable of inflectional change.

Order fixation is involved in the case of composites (lexemes derived from syntactic constructions) if a construction of indifferent order comes to be used as a derived lexeme with fixed order. For example "they bury people" is either *ney nučmpuyna' panš'* or *panš' ney nučmpuyna'*; "cemetery" is *panš ney nučmpuyna* with the words always in this order.

§2:62. There are a number of cases of amalgamated composites. This of course serves to formally distinguish the composite from the construction from which it is derived. Another distinguishing mark is formal irregularities. An excellent example is *hanšaʔa* "door" if it is derived from *hana šaʔ* "house's mouth."

§2:63. Suffixation is used in lexeme building in one type of formation, called root extension. To certain roots are added certain suffixed root determinants. Special rules of phonetic combination apply to root extension, the most important of which is that *m* elides a preceding *n*, e.g., *šamt* "pl. go out" < *šan* + *mt*.

3. LEXEME CLASSES AND INFLECTION

§3:1. Under lexemes are included simplexes and composites. According to inflection and syntactic usage, they fall into a number of classes and our task now is to indicate the more important groups into which they fall, as a basis for further discussion of the grammar.

§3:11. We may first distinguish a fairly large class of words inflected for tense, number, voice, mode, and other features, some of whose forms are predicative, indicating a subject and in some cases also expressing or implying an object. This class may be called verbs. It has to be subclassified into auxiliary verbs and normal verbs, and normal verbs may be further subclassified according to basic aspect and voice.

§3:12. Very much like certain kinds of verbs is the adjective, part of whose inflection coincides with that of the verb, but which has two additional forms

called the substantival singular and plural. Moreover, it is precisely the substantival forms which are the most commonly used. A number of other lexeme types have in common the fact that they may serve the syntactic function of terms, a function which they share with certain forms of the verb. If we use the term substantives for all words having this function as their outstanding characteristic, we find that this class includes the following subclasses distinguished in details of inflection and syntax: adjectives, quantitatives, nouns, particle-nouns (lexemes which function like nouns and like particles), pronouns, demonstratives, interrogative-indefinites. Pronouns, particle-nouns, and most nouns are uninflected.

§3:13. The remaining word classes are most difficult to classify. They are almost without exception uninflected, and serve a variety of syntactic functions. They can be divided fairly readily, according to position of occurrence, into proclitic, postclitic, and independent particles. The proclitics are fairly homogeneous, being used with verbs to indicate direction and other modifications of the action or state; we may call them preverbs. The postpositions include those that express qualifying relations (relating one syntactic element to another in such a way as to qualify the first, e.g., A in B), inclusional relations (indicating that the second entity is included with the first, whether expressed or implied), predication of the governed element, modification of the governed element. Independent particles include interpolative elements, like exclamatives, imitatives, and sentence words; predicative elements, which predicate something; and modifying particles, including elements that stand in the predicate and modify the subject and modifiers of the verb and sentence. Some independent particles have more than one function which gives them characteristics of more than one subclass; usually it is still possible to assign such an element to one group to which it seems more characteristically to belong. There is a class of elements used both as postpositions and as independent modifiers, and these are called postpositive-independents.

§3:2. Entity number and position. These inflectional categories are found in different word classes, and so it is convenient to give them separate treatment.

§3:21. Inflection for entity number is found in the subject and in the first person object of verbs, in adjectives, some nouns, one demonstrative, and two particles. The numbers distinguished are singular and plural. The singular applies to a single entity, e.g., *we paš' ʔap čuyiʔi'* "The man, he came," or to a continuum including a mass of small things conceived as a continuum, e.g., *we ku-kš' kas ču-šiʔi'* "the water, it is receding," *gasma' no-gš hin'* "the corn, it is ripe," *we po čiš' pehnem' načpa-ši'* "The leaves of that herb, it cures fits." The plural applies to two or more entities, whether referred to by a single noun (plural, if an inflected noun) or by a combination, e.g., *we paš' ʔap dutnaʔa'* "The people,³ they came," *we paš ne' we kiči ne' ʔapš wa-čminaʔa'* "The man and the woman, they married."

³ Not explicitly plural.

§3:22. A generic reference, applying to a whole class of entities may be either singular or plural. If an independent pronoun is used it is *hus* "he, she, it" or hunks "they," except that a singular reference to people may be expressed by *him?* "thou." Examples: *to·tuš' že·m' hapšžepi gayši'*, *husk' ša· gayši'* "The cuckoo doesn't build a nest, he doesn't sleep," *panš pinikankš' siksiš' dempi gayšna'a'* "The Indians do not kill eagles," hunks' *hin'iš' hi hokma·šna'a'* "They leave them alone," *nenču' u' gušču·š'* "if you eat too much."

§3:23. Position, horizontal, vertical, and neutral, is indicated in the auxiliary verbs and in one demonstrative (*han, hač, ha*). In addition several verbs made up of root plus determinant and expressing movement distinguish position in the determinant, but they show only horizontal and vertical position, e.g., *huhdi* "to enter horizontally," *huhčwa* "to enter vertically."

The literal meanings of the positions come rather infrequently into play. Instead there are affective meanings which tend to be more prominent.⁴ When applied to persons, the horizontal or lying position is derogatory or abusive and the vertical, in a milder way, is respectful. The unspecified position, being affectively neutral, is the most commonly used. *nu·pk pen* "he lies dead" should properly be said only of an animal. Applied to a person it would be very disrespectful. Instead one should say *nu·pk hi' i* "he is dead" or even *nu·pk či' i* "he stands dead." The range of nuances of the horizontal position includes insult, sarcasm, disparagement, joking, abuse, defiance. To the example given we may suggest the following additional illustrations: a person says disparagingly *ni·ki·g peken* "I am horizontally sick," someone says defiantly *hankipeken* "Here I am (whether you like it or not)," *han haksigam' žah ni ša'o·niš' ka·či kas hukuntinkš te·t' učka·ši'* "This horizontal young fellow is treating me as the mocking bird (did in) fooling the owl" (this was stated by Mr. Paul in telling a story to make fun of "this horizontal young fellow"). That the actual literal meaning of the positions has little effect on usage in connection with persons is shown by the fact that one can say such things as *nuhčwi·g peken* "I am horizontally standing." The root plus determinant verbs use the vertical forms for both polite and neutral reference in contexts where the affective element might enter in other contexts; they are used literally more often than the auxiliaries of corresponding position.

§3:3. The verb.

§3:31. The tense-modes of the verb include five finite tense-modes of time and aspect, the future, the aorist, the periphrastic aorist, the continuative, the usitative; two derivative finite modes, the necessitative (I, you, etc., must . . .) and the desiderative, limited to the first person and expressing "I, we want to . . ."; four evocative modes, calling for action, the imperative, the polite imperative, the hortatory (let's . . .), and the permissive (let me . . .); four relational modes, the

⁴ Morris Swadesh, *Chitimacha Verbs of Derogatory or Abusive Connotation with Parallels from European Languages* (Language, vol. 9, Baltimore, 1933, pp. 192 ff.).

participle, the personal participle, the prior participle, and the conditional; two term-reference modes, the gerund and the gerundive. The future states that action will take place in the future, the other simple finites refer to the present-past time period. The periphrastic aorist of all verbs and the simple aorist of static verbs refers to the existence of a state. The aorist of active verbs makes a simple reference to an action. The continuative and the usitative are virtually limited to active verbs; when one finds them used with static verbs, they seem to be synonymous with the aorist. The continuative refers primarily to an action in progress either in the present or at some time in the past. The usitative expresses a customary or usual action.

The point of departure in the use of the future and the aorist tenses may be either the present or some contextually indicated time, e.g., *ču·čuk'* "I'll go," *hi te-ti'ʔi' hi ču·čuyi'* "He said he'd go," *hi te-ti'ʔi' hi čuyi'ʔi'* "He said, he had gone." The future is also used to state the consequence of an unreal condition, e.g., *ni wopmakiču·š'* *we wa·bit'* *hi ʔa'ʔik'* "If he had asked me, I would have given him the money." Another important function of the future is the indication of purpose or desired action in subordinate clauses, e.g., *wey ʔučik'* *we paňš' ne·mpičuki'* "I did it, I would scare that man" = "I did it to scare that man," *gihčuk'* *him hi ču·čuy'* "I want you to go," *ʔun kun'* *tuptiki'* *guščuk'* "I found something to eat" ("I found something I'd eat").

The derivative finite modes and the evocative modes are self-explanatory. Of the relational modes, the participle expresses an action as related temporally, causally, or otherwise to the superordinate verb, e.g., *paňš ʔami·g' hi čuyi'ʔi'* "Seeing the man, he left" may mean "he left when, while, because, although, by means of the fact that he saw the man." If the subject of the participle is different from that of the superordinate verb, this may be indicated by the use of the personal participle, e.g., *huhčwite'* *kap nuhčwiki'* "He entering, I arose." The prior participle expresses a temporal relation, referring to an action or state that precedes that of the superordinate verb, e.g., *gasma' gastu·t' his kečti'ʔi'* "After having planted corn, he waited." The meaning of the prior participle is within the range of meaning of the simple participle, but is explicit where the latter is general. The conditional expresses a condition whether unreal and purely hypothetical or actually possible, e.g., *hanki' hihču·š'* *natmičuk'* "If he were here I'd tell him" or "If he's here I'll tell him." The time of the condition is indifferent and can be past, present, or future. Our illustrative sentence, in the appropriate context, might have to be translated, "if he had been here," or "if he will be here."

The gerund has three syntactic functions: 1) term-reference, 2) complement to certain verbs, 3) finite. In the last meaning the gerund is somewhat equivalent to the aorist but its range of use tends to be more restricted, for it is preferred only in clauses governed by a postposition and in relative clauses, e.g., *nučmpakanki* "when I worked" or *wašta nučmpaka* "the day I worked." Furthermore, the temporal meaning is more general than that of the aorist, so that we should per-

haps define nučmpakanki as "during my work." For the other two syntactic functions of the gerund, only the nonfirst person is used and it has nonpersonal meaning. In term-reference the action of the verb or something produced by it is referred to as a term and the syntax of terms applies, e.g., ?iš nučmpa' gaypi?i' "I lost my work." The gerund also serves to complement certain verbs including giht- "to want," kap nacpikma- "to begin," kaniwi- "to try," e.g., gušti gihti?i "he wants to eat."

The gerundive makes a term referring either to a subject or object of the verb, necessarily the former in the case of an intransitive verb but to either in the case of a transitive. It may refer to a one-time subject or to a habitual doer of the act, thus našmam "hunter" in the senses "one who hunted, is hunting, is or was in the habit of hunting." The same word may mean "a hunted thing"; in reference to the object the gerundive implies that the action has been (successfully) completed.

§3:32. A fundamental subclassification of normal verbs is that into active and static, according to whether the meaning has to do with action (change) or state. Active verbs express resultant state in the periphrastic aorist, e.g., nu pi?i "he died," nu pk hi?i "he is dead," geti?i "he killed him," getk hi?i "he has killed him." The static verb expresses state in the aorist; its periphrastic aorist has the same meaning, and may be more frequent than the simple aorist. The continuative and usitative tenses of static verbs is not ordinarily used. On the other hand a complete active inflection (usually marked by the preverb kap) is possible in the inceptive meaning, e.g., hamči g hi?i or hamči?i "he has it," kap hamči?i "he gets it," kap hamča šī "he is acquiring it," hamčpuymiš "he used to get it." A few further examples of static verbs will serve to indicate the nature of the class: ka kwa- "to be able; to know, to understand . . ." ti kst- "to hate, dislike . . ." ka kte- "to extend across," ga še- "to be bent, inclined, dishonest," si? "to have an odor."

§3:33. All verbs are inflected for person and number of the subject. Singular and plural number are distinguished and first and nonfirst persons. The latter includes reference to either second or third person and the actual reference in particular situations depends on the context. Ambiguity may be avoided by the use of the personal pronouns him? "thou," was "you," hus "he," hunks "they," but apparently the possibility of confusion is not as great as one might suppose, for sentences without independent pronouns are very common.

Some of the tense-modes have less than the full number of person-number distinctions. There is a nonpersonal participle, much more commonly used than the personal which distinguishes neither person nor number. The prior participle, too, is nonpersonal. The personal participle and the gerund do not distinguish singular from plural in the nonfirst person. The same is true of the imperative, which does not have a first person. The desiderative has only first person forms, the permissive has only a first person singular, the hortatory only a first person plural. The gerundive distinguishes number but not person.

§3:34. All the finite modes with the exception of the desiderative have interrogative forms. The relational modes and the term reference modes are subject to interrogation by means of the postposition *te'*, as are nonverbal lexeme classes, e.g., *nučmi'g te' kač huygi kap ?ehi'* "Was it by working that he became rich?" *našmam te'* "Is he a hunter? was it hunted?"

§3:35. Normal verbs are inflected for a set of notions which may be called occurrence number and which include a singular, a plural, and a plurimal. In contrast with entity number, applying to the subject, occurrence number is more intimately connected with the nuclear meaning of the verb, indicating the number of times the action or state takes place or exists. Occurrence plurality applies either to a series of recurrences, e.g., *we ?ukš' we kiča gahmi'* "the snake bit the woman (several times)," or to a number of simultaneous occurrences, e.g., *demina?a* "they killed them." In the latter meaning it is closely related to entity number, for a plural subject or object may imply occurrence plurality. As a matter of fact we find that intransitive verbs tend to have plural occurrence number with plural subject and transitive verbs usually have plural occurrence number with plural object.

Occurrence singular refers to one instance, plural to more than one instance. The plurimal implies a great many or more than one might expect. Its meaning cannot be stated in terms of a definite number but is a matter of subjective emphasis. The use of the plural is far from consistent; one finds cases of plural occurrence referred to by a singular.

§3:36. Two voice modifications may be applied to normal verbs, the causative and the indirective. The former introduces a new subject, the causing subject, which is indicated as exerting inducing or permissive influence on the subject of the action or state, e.g., *geti* "he beat him," *getpi* "he caused (allowed) him to beat him," *huhčwi* "he entered," *huhčupi* "he had him enter." The indirective, limited to active verbs, indicates that the action is performed for the sake of some one, e.g., *našma?i* "he hunted for his sake," *tuča?i* "he cooked for him," *tučpa?i* "he caused him to cook for him." Note that the causative may be indirectivized.

§3:37. Transitive verbs are those that imply an object, e.g., *tuči-* "to cook . . ." Some verbs imply two objects, e.g., *nošte-* "to feed . . . to . . ." *?a?i-* "to give . . . to . . ." In some cases there is reason to assume an implied object in verbs which require a postposition when the object is expressed, as *natma?-* (*čun*, *hup*) "to tell (about . . . , to . . .)": *natmi* "he told him about it," *paš hup' neka čun' natmi'* "he told the people about the devil."

If the object of a transitive verb or of a causative or indirective is first person, this is expressed as part of the inflection, e.g., *geti* "he beat him," *getki* "he beat me," *ni'kpaki* "he made me sick," *natmaki* "he told me," *natmakuyi* "he told us." When more than one object is implied by the basic verb, context indicates which of the objects is represented by the first person object, e.g., *waštik' ?ap ?a:ki?i'* "he gave me a cow." In the case of a causative or indirective, the first person object is

preferentially the object of the causation or indirection, e.g., tučpaki "he made me cook it," tuča·ki "he cooked it for me."

§3:38. Certain verbs express a first person subject as an object, e.g., dadiwaki' "I feel cold," nu·pkiču·š "if I die." These verbs, which may be called deponent, refer to bodily states or bodily changes; further examples: kap ʔašiše· "to become wearied," kap ʔagihte· "to be greedy," wokt· "to taste, feel . . ." teki· "to suffer pain," šaʔ· "to sleep, fall asleep," ga·ste· "to shiver." The normal inflection may be used as well as the deponent.

§3:39. Auxiliary verbs are much more limited in inflection than normal verbs. Like static verbs they lack the continuative and usitative tense-modes but also lack the gerundive. They lack voice inflection and do not make an inchoative. They may be said to show occurrence number, in that there are separate stems for singular and plural. The three singular auxiliaries are distinguished by notions of position: hi(h)· "to be (neutral or unindicated position)," či(h)· "to be (standing)," pe(h)· "to be (lying)." The plural na(h)· does not show this differentiation.

§3:4. Substantives.

§3:41. The adjective inflection includes verb-like forms as well as substantival forms. The verbiform inflection is like that of static intransitive verbs except that plural occurrence number is not found. The existence of primary substantival forms and the preponderance of their use, even in cases where the verbal forms could be used, distinguishes the adjective from the static intransitive. "He is good" is almost always huygi hiʔi, rather than the finite verbal form huyiʔi. As a matter of fact the use of adjective verbiforms is essentially confined to a few of the inflectional categories as the hypothetic tense-mode (huyču·š "if it is good," one also says huygi hihču·š) and the causative voice (huypi "he made it good," also huygi ʔuči).

Like that of Latin, the Chitimacha adjective is a substantive and not a mere modifying particle as the English adjective. huygi really means "a good one" rather than "good." ʔasi huygi means "a man, a good one" rather than "a good man" and huygi hiʔi means "he is a good one" rather than simply "he is good." This interpretation is based on the fact that the adjective has the same syntactic functions as the noun, thus with the foregoing examples compare panš ʔasi "a male person" and ʔasi hiʔi "he is a man"; further compare huygi' ʔap čuyi' "a good one came," with ʔasi' ʔap čuyi' "a man came" and huygi ʔinži "a good one's father" with ʔasi ʔinži "a man's father."

§3:42. The noun is uninflected except that a number of nouns make a plural (see §2:52). Its syntactic functions have been indicated in connection with the discussion of the adjective. We may recognize a special subclass of nouns referring to age and sex, e.g., ʔasi, pl. ʔayš "man," which, as illustrated above in panš ʔasi "male person," are very frequent in the syntactic function of postposed appositive modifier, but this function is not restricted to these nouns.

Another subclass is constituted by nouns referring to relationship and located

parts, which are not used except with a preceding possessive modifier, e.g., ?iš ?inži "my father," ?iš keta "my friend," we hana ?apš kudihn "the region around that house, that house's environs." Such nouns may be called dependent nouns. A unique instance of the class is ?eypi, which is used only with pronouns to refer to anything contrasting with a similar entity already in the context, e.g., ?iš waši' him ?eypi hi waytm' ?atkapa' "My hands are larger than yours."

§3:43. Quantitatives include the numerals from one to ten, pu:p "hundred," pu:p ?ašinžada, pl. pu:p ?ašinžatka ("old hundred") "thousand," ?apš nehe "half" (also "middle"), ?aniš ke "a few, a small part," ?aniš te' "how many? how much?" ?upinak "both," ?o:nak "all," huynak "the entire." They are much like the adjective and noun in syntactic usage. Only the numerals from two to ten are inflected; they make an ordinal (e.g., ?upkami:g "the second one"), a temporal ordinal (?upkamink "the second time"), and a temporal locative (e.g., wašta ?upkaminki "on the second day"). The ordinal corresponding to "one" is the adjective šama "new, fresh." pu:p and pu:p ?ašinžada are used only with numerals, e.g., pu:p ?ungu "one hundred."

The word for "one" is also used in the sense of "some," whether singular or plural is referred to. A paired reference is by repeated ?ungu or by wa?a "other," e.g., panš ?ungu . . . panš ?ungu or panš wa?a "some person (people) . . . (an) other person (people)."

§3:44. Particle-nouns are lexemes of locative reference, which differ from ordinary nouns in syntactic function by the fact that they may also function as postposed or independent relaters, e.g., hana segis "the inside of the house, inside the house," segis hi?i "he is inside." The class includes haktiš "side, direction; in the direction of," hisgis "under part; under . . ." kamis "hind part; behind . . ." samis "front part; in front of . . ." pegis "top, over . . ." and a few others. There are location nouns which do not behave in the same way syntactically, the locative relation being expressed by a postposition, e.g., hana keta-nki "beside the house."

§3:45. The personal pronouns are ?iš "I," ?uš "we," him? "thou," was "you," hus "he, she, it," hunks "they." Their syntax is more restricted than that of the noun, for they cannot be preceded by a possessive modifier (cf. we panš ney "that person's land") and have only one modifying function, that of preposed possessive, e.g., ?iš hana "my house."

§3:46. There are three demonstratives, two for near and far deixis (ha "this," sa "that") and one for contextual reference (we "that aforementioned"). All the demonstratives distinguish a proclitic, an independent, and an emphatic form (see §2:54). The inflection includes a locative and a directional, e.g., hanki "here," hank "hither." ha alone is further inflected for position in the singular of the enclitic and has a distinct plural.

§3:47. Interrogative-indefinites have a very irregular differentiation of forms. The meanings to be distinguished are a) interrogative (?učī "who?"), b) selective interrogative (?aštem "which one?"), c) indefinite (neš kun "someone"), d) indefi-

nite unknown (ʔuči ke "someone or other"), e) indefinite hypothetical or indifferent (ʔaštemin "anyone at all"), f) negative (ʔuči +negative). There are special forms for inanimate reference: a) ʔam ("what?"), b) ʔaštem (same as an.), c) ʔun kun, ʔam, d) ʔam ke, e) ʔamin, f) ʔun kun or ʔamin +neg. The proclitic form is ʔam for (a) to (c), (d) ʔam . . ke, (e) (?), (f) ʔamin . . +neg. The proclitics do not distinguish animate and inanimate.

§3:5. Postpositions.

§3:51. Qualificative postpositions express spatial location, direction, temporal location, means, purpose, and other relations, used in connection with terms, or with predications, e.g., hana-nki "in the house," we hana huhčwi-nki "when he entered the house." Many of them have more than one function. The most important postpositions are: (-n)ki 1) spatial location "at, in, on, among . . ." 2) temporal location, used with terms, "at, in, during . . ." or predications "while when . . ." 3) partitive "of, from, among . . ."; kin 1) reciprocal location or mutual participation "with . . .," 2) "in connection with, in the matter of . . ." 3) "and . . ." (this is an inclusional relation); hup 1) movement "toward, to . . ." 2) communication, bestowal "to . . ." 3) location "near, in the region of, facing the direction of . . ." 4) temporal location "at about . . ."; hiš 1) indicating subject of an active verb, 2) "by means of . . . instrument, material"; čun 1) "for the sake, benefit of . . . , substituting for . . .," 2) "in order to get . . ." 3) with expressions of mental and communicative process "about concerning . . ." 4) with expressions of quality indicating basis of comparison or person whose judgment or needs are considered "by reference to . . . , in the estimation of, for . . ." 5) "because of, on account of . . ." with gerund "because . . ." 6) temporal duration "for . . . time"; (-n)kite-t "since, after . . ."; gan ki "before . . ."; (-n)kš te-t "like . . . , as . . . is, does," with numerals "approximately," with adjectives "rather, fairly . . ." with expressions of temporal location "approximately . . ."

§3:52. Inclusional postpositions indicate that the governed element is to be taken with some other element, expressed or understood, thus ne in ʔasi' kiči ne' "a man and a woman," kiči ne' "a woman also." kin, otherwise a relational postposition meaning "with . . ." may also be used in this way. When the elements combined are expressed ne or kin may be expressed with one or all of them, e.g., ʔasi' kiči ne, ʔasi, ne' kiči ne' (note that ʔasi ne' kiči kin' or ʔasi kin' kiči ne', as well as ʔasi' kiči kin or ʔasi kin' kiči kin', are possible). The postposition (-n)gis "only" is one of negative inclusion, and may be translated ". . . and nothing else": hi šaniš "in excess" is used in numeral constructions, as hey zi husa' husa hi šaniš' "ten five', five in-excess": "five tens and five" = "fifty-five." nak is used at the end of enumerations in the meaning "and so forth."

ne and giš are frequently used as emphatic elements, in which case their force may be suggested by "even" and "just." nehe is used in an emphatic or reflexive sense with pronouns. (-n)k(š) is a mildly contrastive emphatic, its meaning being

something on the order of “. . . on the other hand.” Perhaps to be included here is a postposition *-š* which is quite common at the end of phrases, but which seems to have no meaning at all.

§3:53. There are four predicational postpositions: *hugu* “it is . . .” *te* “is it . . .?” *gan* “it is not . . .” *-ga* “how about, what of . . .?” The last-mentioned is rarely used, being found mainly in an exchange of greetings; to *huygi hi* *te* “Are you well?” one responds *huygi’* *’išk’* *him ga’* “I am well (or some other response), how about you?” *gan* is not solely predicational having also the modifying and relational meanings of “not” and “without . . .” The most characteristic and important function of the first three predicational postpositions may be called that of selective predication. They are added to one of the syntactic segments of an otherwise complete predication and draw the logical emphasis of the predication to that element, e.g., *’iš hiš’* *wey* *’akik’* “I saw that,” *’iš hiš* *hugu’* *wey* *’akik* “It was I who saw that.”

§3:54. There are a few postpositions which modify the term they govern. These are: *weytem*, pl. *weytemank* “of that kind, nature,” *wa’ne* “strange, foreign, different,” *niki* “genuine.” These elements differ from adjectives and other substantives in that they are never used independently. *weytem* is the only inflected postposition.

The postposition *keystigi* “very” is used with modifiers, especially adjectives, to express high degree, e.g., *huy* *keystigi* “very good.”

§3:55. There are a few particles, called postpositive-independents, which are used either as postpositive relaters or as independent modifiers, e.g., *hana nugus’* *hi čuyi’i’* “he went behind the house,” *nugus’* *hi ču-ši’* “he was going along behind.” Other such particles are: *niwis* “to one side,” *pan ki* “before . . . , first” *hi waytmiš* “more than . . . is, does, more than one does to . . . , more, most.”

§3:6. Preverbs. Except for a few special usages, the particles called preverbs are used only with verbs, which they always precede. There are seven freely used preverbs, as follows: *’ap* “hither,” *hi* “thither”; *’apš* 1) “returning hither” 2) “moving together” 3) reflexive, reciprocal, 4) “moving about, round and round, at random”; *kas* 1) “moving back thither” 2) “reversing a process” 3) “apart”; *kap* 1) “up” 2) inchoative of adjectives and static verbs; *ni* 1) “down” 2) used with the imperative 3) with substantives, in a meaning not understood; *his* 1) “redoing” 2) “doing in response.” In addition to their free use, the preverbs occur as a fixed element of many verb composites, e.g., *his he-čt-* “to meet, join . . .” *kap* *’o’ni-* “to deprive . . . of . . .”

§3:61. There is a considerable stylistic emphasis on the indication of direction of action by means of preverbs, particularly as to the directions “hither” and “thither.” “He struck him” is usually expressed as *’ap geti* or *hi geti* according to the direction in which the action is conceived as moving.

§3:62. A sequence of preverbs does not occur. If a preverbal meaning is to

be expressed with a verb already having a preverb as a bound composite element, the phenomenon of preverb displacement may take place: the free preverb is used and the bound one omitted, e.g., "he came and met me," might be expressed as ʔap he-čtki although the preverb his is otherwise a necessary part of the verb "to meet."

§3:7. Independent particles.

§3:71. Interpolative particles, which are syntactically independent interpolations not directly construed with other elements in the context, include: a) sentence words, like ʔe-he "yes," gayi "no," huyukt "very well," huya' "thanks," nito "let's go"; b) exclamatives, like ʔi-ha' excitement, admiration, fear, kap ʔišt impatience, mahy "presto!" indicating a very sudden effect; c) imitative vocables, as ye-pye:p sound of fluttering, ku-psku:ps song of the cuckoo, wa sound of the cricket.

§3:72. There are a few particles, called predicative particles, which express predication, like verbs, but lack inflection. They are not restricted as to person and number of subject. The predicative particles are: ka-kun "is able, has permission, reason to . . ." (may be complemented by a verb gerund); ka-han "is unable, is not permitted to . . ."; ʔiška 1) "says . . ." 2) occasionally used for kunugu quotative particle; ʔamta' "What is it?"; weyđšin, sa-đšin "that is all" (indicating the end of a story or account).

§3:73. Modifying particles show quite a range of meanings and syntactic functions. First of all there are a few particles which serve as predicate modifiers: kaye, pl. kayma "alive," toktok "scattered about, pell-mell," suksuk "atremble," žeyt "straight," kap ʔungunk 1) "without difference, alike, equal," 2) heterogeneous ones "together," 3) "just as well, equally satisfactory." Like English "afire," "aglow," "alone," and the like, these elements modify terms, but only in the predicate.

Connectives particles include wetk "then, and so," very frequent in narrative, tutk "then, thereupon," tewe "however, but, nevertheless, in spite of that, at any rate." These elements are similar in function to numerous other particles which modify the predication, including temporal particles, e.g., hačiʔi "now"; particles of cause and purpose, e.g., weyži-g "therefore," hacc ʔungu "expressly for that," hinš čun "in vain," ʔam ʔuč "why?"; modal particles, as ʔaška "perhaps," huš optional imperative element, nidik "it seems," kunugu "it is said" (sometimes used for ʔiška "he says . . ."). Particles of spatial location and direction e.g., ʔanžit "where?" pekup "up," nuk "outside," either modify the verb or the predication. Particles of manner and means include: ʔašt ʔučig "how?" weyt "thus," žuwa "quickly." ʔašt expresses either manner, in the meaning 1) "how?" or degree 2) "to what extent" as a modifier of modifiers. nenčuʔu "too much" and ʔapš kanime "enough" modify either verbs or modifiers. hinʔiš "just, only" is an inclusional modifier applying to predications and compares with giš used with terms.

4. SYNTAX

§4:1. The sentence. The sentence is made up of one or more predications, but the compound sentence is not common. Instead subordination, particularly participial subordination, is used. For example, a closely connected sequence of events is commonly put into a series of participial clauses except for the last one, which is expressed as the main clause, e.g., *ʔiš susbi ʔiš gampni ne' gaptk', hu·hup' ču·g', hu·tanki' nahpi·g', gastank hup' našmi·g' ču·g', žuʔunk' kamčin getiki'* "Taking my gun and my ammunition, going to the lake, crossing over in a boat, I hunted toward the north, and soon killed a deer." The same device is used in the connection of ideas into a subordinate group, e.g., *we nuš gaptk', him susbi' wey hiš' hi ka·temi·g', wetk' našmi·g' ču·cu·š', ʔaštkaŋki ʔo·nak' ʔun kun gecuy'* "Taking that stone, rubbing your gun with it, if you then go hunting, you'll soon kill something."

Insofar as compound sentences are used, they are not formally marked except by prosody, e.g., *hana hup' čuyiʔi nenču wa·ksti', hi ʔehiʔi'* "He went to the house, he arrived too late." The particles *wey ži·g* "therefore" and *tewe* "nevertheless" are found in the second member of a compound sentence, but the same elements are used in unipredicational sentences also. The most frequent type of compound sentence is that involving an interjectional element as one of its units, e.g., *ʔe·he' ʔučpi ka·han'* "Yes, I can do it," *ʔi·ha' kap toh ʔiši' ʔi'* "Oh, it's breaking."

§4:2. The predication. There are normal predications and interjectional predications. Normal predications include predicator predications, characterized by a finite normal verb or a predicational particle, and predicate predications, in which the nuclear predication is indicated in a predicate modifier.

From the point of view of self-containedness, there are full predications and complementive predications. Complementive predications are answers to questions and corrections of or additions to previous statements, such as: *ʔaštkaŋki' ču čuy'—waštmenk'* "When will you come?"—"Tomorrow"; *hoku' ʔuči' ʔi', ʔam ni kihcpuyna ne'* "He made a mortar. Also a pestle." Some interjectional predications are complementive in nature in that they are intelligible only if the context indicates their application; thus, *ʔe·he* "yes," *gayi* "no," *huyukt* "very well."

§4:21. Interjectional predications are made up of a single element, a sentence word, an exclamative, or an imitative. We may also class vocatives as interjectional predications. These are made up of terms (§4:3) whether simple or complex in structure. Sometimes the postposition *ne* is used to mark the vocative, e.g., *him haksigam ne' ʔam ʔuči' sanki'* "You young fellow, what are you doing there?"

§4:22. The normal predicator predication has as its nuclear and sometimes its only component, a finite verb or verbiform adjective or a predicational particle (§3:72). The nucleus contains, expressed or implied, a pronominal subject and object. The subject and object may be expressed by explicit terms, which then stand in apposition to the pronominal references of the verb. The subject of an active verb may be specifically marked by the postposition *hiš*. For some verbs the object is also marked by a postposition (§3:37). There may also be modifiers of the verb

and of the predication as a whole. Certain verbs and particles, as *ka·kwa-* "to be able," *giht-* "to want," *ʔapš kaniwi-* "to try," *kap nacpikma-* "to begin," *ka·kun* "is able," *ka·han* "is unable," take a verbal gerund as a complement. In this case the superordinate verb does not have an object and the gerund may have one; the gerund may also have modifiers or a gerund complement, but does not have a subject aside from that of the superordinate verb.

§4:23. The essential element of a predicate predication is a predicate element, which may in all cases be regarded as a modifier. The fact of predication may be specifically indicated by an auxiliary verb or a postposition, but the sentence is complete without such an element, thus "it is a dog" is either *kiš hiʔi'* or simply *kiš*. If interrogation is to be indicated, there has to be an explicit predicator, either *kiš te'* or *kiš hi' te'* "Is it a dog?" Likewise if other tense-modes than the aorist are to be specifically indicated, an auxiliary is necessary, as *ʔatin hihčuy* "it will be large." In addition to the predicate and the predicator, there may also be an explicit subject and predication modifiers, e.g., *ʔiš' nada' da·t'* "I am now chief," *hus' ču·ču·š', huygi'*, "If he comes it is good."

§4:24. Predications serve directly as main propositions of sentences or, with or without relaters, as modifiers (see §4:36, 4:1). There are, furthermore, predication-like constructions whose verb is in a relational mode; we may call these relational predications. Such constructions have the same syntax as finite-verb predications, but differ from these in that they can only function as modifiers and this without the addition of relaters. If the verb is a gerund, the construction can serve only as the complement of a suitable governing verb.

§4:25. The order of the segments of the sentence, the verb, verb-complement, the subject, the object, modifiers, is mainly indifferent. A preverb, functioning as a modifier of a verb, precedes it immediately except in the case of a few verbs allowing an object term to intervene, thus *kap paš pinikank teyi* "He became an Indian." A gerund complement ordinarily precedes its governing verb immediately, but occasionally follows it immediately. One rule is fairly rigid: the parts of a syntactic segment are generally kept together. An exception is a quotation functioning as an object of a verb of communication, e.g., *ʔiš keta', hi te·tiʔi, ʔučičuk' him čun'* " 'My friend,' he said, 'I'll do it for you'."

Though the order is not rigid, there are some general tendencies. The nuclear verb or predicate tends to come last. The subject usually precedes the object, the latter tending to come just before the verb. Modifiers come in between or at the beginning. These general tendencies are almost regular in dependent clauses preceding the main verb. If a postposition governs a predication, it is attached to the verb, which stands last.

§4:3. The term. Term is the designation for the type of syntactic element that serves as the subject and object of verbs. With relating postpositions they form modifiers and are in the predicate used without explicit relaters as modifier. There are two kinds of term constructions, quotations and term-nucleus terms.

The former type consists of anything given as a repetition or an imitation of an utterance or other sound. Such terms function in syntax only as the object of verbs or particles or communication, thought, sound production, e.g., *huygi hi' te' hi te'ti'* (or *ʔiška'*) "How are you?" he said"; *ye:pye:p ʔučiʔi'* "It went flap-flap." Otherwise terms are made up of a nuclear term with or without modifiers.

§4:31. There are uninuclear terms, with one nucleus, and plurinuclear, or compound terms. The units in a compound term are put in sequence without any formal mark of the relationship, or the postpositions *kin* or *ne* are used, e.g., *kiš ʔatin* (*ne, kin*) *waštik* (*ne, kin*)' *hamčmiʔi'* "He had a horse and a cow." A special case of the compound term is that in which one of the units is negated, e.g., *panš pinikank gan' ka'nuš' ʔučiʔi'* "Not an Indian (but) a White man did it." We may term as anaphoric compound term the case of one of the elements being referred to in the inclusional postposition instead of being explicitly included, e.g., *panš pinikank ne'* "the Indians also" (i.e., "the Indians in addition to those already mentioned"), *panš pinikank giš* "only the Indians" (i.e., "the Indians and no one else").

§4:32. The nucleus of a term may be any kind of substantive or a verbal gerund or gerundive. The possible modifiers include preposed possessive or demonstrative (mutually exclusive), postposed appositional, following relative. If the nucleus is a demonstrative, it may be modified only by a relative construction, e.g., *weyš' ha hananki' namkina'* "they who live in this house." If the nucleus is a pronoun, it cannot have a preposed possessive or demonstrative but may have postposed appositionals and relatives, e.g., *ʔuš panš' ha hananki' namkinada'* "We people who live in this house." Any other nucleus may have the full range of possible modifiers, and, indeed, there may be more than one postposed appositional, e.g., *we panš ʔayš ʔatkapangiš ke-ta' šuš hup' dutna ʔa'* "Those eight large male persons who went to the woods."

§4:33. There can be only one preposed modifier, either a simple demonstrative (proclitic form) or a term standing in a possessive relation to the following nucleus. The possessive relation is indicated only by position, e.g., *we ʔasi ʔinži* "that man father" = "that man's father." The relation called possessive is of quite a wide range, including relationship of ownership, part, kinship, association generally, e.g., *ʔiš hana* "my house (which I own, or occupy, or which I have charge of)," *ʔiš kut* "my head," *ʔiš keta* "my friend," *ʔiš nučmpa* "my work." The term serving as preposed modifier is generally of limited complexity, never having a relative modifier and tending to have but few postposed appositionals. There is, however, a substitute form of construction in which there is no limitation on the complexity of the possessive construction. The device consists of summarizing the possessive in a third person pronoun which then immediately precedes the nucleus, e.g., *we panš kiš ʔatigi' we pu:p geti' hus kut'* "That man's large dog who killed the rabbit, his head." The same device may be used to avoid ambiguity as to what is the nucleus, thus *we panš ʔatigi'* would normally be taken to mean "that

large man"; to express "that man's large one" one would say *we paš' hus ?atigi'* "that man, his large one."

§4:34. A postposed appositional may serve a noun, an adjective, a gerundive, or a quantitative, e.g., *paš kiča* "person woman" = "female person," *paš kač huyniš* "a rich person," *paš nu·pn* "a dead person," *paš ?o·nak* "all people." As already indicated there may be a series of postposed appositionals, in which case they follow the general order indicated, e.g., *paš kič nu·pn ?o·nak* "all the dead women." There may be more than one adjective or gerundive, but such complicated constructions are infrequent. In the expression of number, the quantifier may be either a simple numeral for the numbers up to ten, or a numeral construction for numbers above ten.

§4:35. The tens from twenty to ninety are expressed by a numeration of *hey ži* "ten," e.g., *hey ži ?upa* "twenty." The hundreds from 100 to 900 are expressed by a numeration of *pu·p* "hundred," e.g., *pu·p ?ungu* "a hundred," the thousands by a numeration of *pu·p ?ašinžada*. The numbers between the even tens and hundreds are expressed by adding to the nearest lower ten or hundred, the particle *patniš* "in excess" being used to indicate the addition, e.g., *hey ži hatka' meša patniš'* "six tens, four over" = "sixty-four." An additional feature of numeral usage is that the numerated term frequently takes the postposition *giš* ("just") before the numeral or numeral construction, e.g., *paš giš hey ži ?upa' ?upa patniš'* "twenty-two people."

§4:36. A relative modifier consists of a predication referring to the modified term. One may use in this function any predication which might be made involving the modified term, usually as subject or object, but occasionally also in other relations, as, for example, the object of a postposition. The relation of the term to the modifying predication is not explicitly indicated. Examples:

- we paš' we nučmpa ?uči'i'* "the man (who) did that work"
- we hana' ?iš ?akik'* "the house (which) I saw"
- we paš' hunks ni ti·kmiš'* "the man (who was) their leader"
- we hana' hu·h si·h ki'* "the house (which is) on the edge of the lake"
- we hana' namkinaka'* "the house (in which) we lived"

When the term has the subject relation to the relative modifier, the whole construction has the form of a predication, thus the first, third, and fourth examples. In other cases word order or the nonuse of relaters identifies the construction. In any event, the larger context indicates the function. The term with relative modifier is like other term constructions. It may even be governed by a postposition, as *we paš' we nučmpa ?uči·hiš' ?o·nak' wey čun' natmi'i'* "The man who did that work, told all about it."

§4:4. Modifiers of predications and verbs; predicate modifiers.

§4:41. Elements and constructions which may serve as predication modifiers include: independent particles, term plus postposition, predication plus postposi-

tion, relational predication (one involving a verb in a relational mode), a future-tense predication expressing purpose. Examples: hanki nučmik' da:t "I work here now"; wey čun' nučmik' "I work on account of that"; hunks' šušejanki' wa:žikinanki' nučmik' "While they played in the enclosure, I worked"; hana ʔakstk' ʔiš yaʔa' hi ʔaʔik' "Buying a house, I gave it to my child"; wey ʔučik' him waččuk' "I did it, I'll tease him" = "I did it to tease him."

§4:42. Verb modifiers are not always distinguishable from predication modifiers. Expressions of time, cause, and attendant circumstance probably always modify the predication as a whole. Expressions of direction and manner modify the verb, and expressions of location usually do. Verb modifiers then include: independent particles, preverbs, the direction and location states of demonstratives, term or predication plus postposition; examples: weyt ʔuči "he did it thus"; hi čuyi "he went away"; hank ʔap čuyi' "he came here"; him-up hi čuyi "he went to you"; šuš žita šinks te:t' ʔučiʔi' "He acted as though he were cutting trees."

§4:43. Predicate-modifiers include some syntactic elements like those used as verb and predication modifiers, e.g., hanki hiʔi "He is here," ka:čpankš te:t' "(He is) like a stick." There are a few particles used only as predicate-modifiers (§3:73), as kaye "alive." In addition, terms of all kinds are used. In this case there is an implicit relation between the subject and the predicate term, a relation of identity, class, inclusion, or the like, e.g., ʔiš hiki "It is I," yukš hiʔi "it is a cat." And finally a modified term construction, made up of a simple nuclear term, referring to a body part, with a simple appositional modifier, may be used in an implicitly changed sense to characterize an individual. For example, kut ʔatin hiʔi may mean either "it is a large head" or "he has a large head."

5. LEXEME BUILDING

§5:1. New lexemes are made mainly from paradigmatic forms of other lexemes and from syntactic constructions. The composite tends not to be complicated, most often consisting of two words. The lexeme-building process of root-extension, is limited in scope.

Secondary lexemes are found in all or most of the lexeme classes, but only nouns and verbs have any great number of instances. The present treatment, for the sake of brevity, is limited to these word classes.

§5:2. Noun formations. The types of formation are mentioned and examples given. Nouns derived from simple nouns: waštik name of a dog <"cow," kiča "wife" <"woman," nuš "earthenware" <"rock." Nouns from adjectives: gasda "north," gasti "catarrh" <gasti "cold," ša:čniš name of a town from ša:čn(iš) "empty," ʔižiti "bile" <ʔižitem "yellow." Nouns from gerundives and gerundive constructions: pešmank "duck" <"fliers" (pl.), kučmank "knuckles, fist" <"butters, punchers," may gušmam "mosquito hawk" <"mosquito eater," šuš hacmam man's name <"wood measurer." Nouns from gerunds and gerund constructions: ʔu:šti "clothing" <ʔu:št- "to dress," kučpa "hat" <kuci- "to cover up . . . , to get

covered," kut paktmpa "scissors" <kut "head" + paktma- "to shave (pl.) hair." Nouns from possessive noun + nuclear noun construction: hihmu nema "beeswax," suseygs ʔo· ži· pu "opossum" <"woods hog," kiš panʔ name of a month <"dog month," wams ʔukš "watersnake" <"catfish snake," nehti poʔ "sarsparilla" <"bruise medicine." Nouns from noun + appositional modifier construction: nanu ʔatin "apple" <"large persimmon," ku· pinun "wine" <"red liquid," ča· d pinun "Red River" <"red bayou," neyt hapinniš "cigar" <"rolled tobacco," nu· p niki "yam" <"genuine potato." Nouns from noun + relative modifier: siksi čaka ʔatin "eagle of a certain variety" <"eagle (who has) a large breast," po· ko· gamkin "golden rod" <"herb (which has) long stems," nakti kas šagiti "apron" <"dress (which) hangs," denu wa· hyti "bullfrog" <"frog (which) asks."

Most of the formations are from syntactic terms. We also find nouns derived from predications, e.g., ša· hken ʔapš žakšžepuynaʔa "weave-tightener" <"they tighten baskets," panš ney ʔnučmpuynaʔa "cemetery" <"they bury people," makta kap šahi "trousers" <"the rump goes in," keta šakšmank <"(it has) scored sides."

§5:3. Verb formation.

§5:31. Root-extension affects a limited number of root elements, denoting mainly direction of movement, as: *huh- "indoors," *šah- "into an enclosure or container," *šan- "out," *ni- "into water," *ku(y)- "into a vehicle," *nen- "out of water, out of a vehicle," *neh- "down," peh- "on," and several others. The determinants, which are also limited in number, express manner of movement or transportation, as: -čwa- "moving erect, walking," -di- "moving horizontally, crawling," -duwi- "rushing, moving violently" -čt- "to carry . . ." -tgešt- "to dump . . ." Examples of derived verb stem from the root *huh- are: huhčwa- "to walk indoors," huhdi- "to crawl indoors," huhduwi- "to rush indoors," huhčt- "to carry . . . indoors," huhgtgešt- "to dump . . . indoors."

§5:32. Composite verbs are derived from verb constructions. Elements commonly found coupled with verbs in this way include preverbs, nouns, adjectives, ša· gušt- "to kiss . . ." <"to eat mouth," na· kšt za· t- "to play cards" <"to spear (with) paper," ney nučma- "to bury . . ." <"to fix earth," ni huyi wa· hyte- "to ask to be excused" (<ni + "to ask good"), huyi ʔučī- "to benefit . . ." <"to do a good thing."