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THE POTAWATOMI LANGUAGE.

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THE POTAWATOMI LANGUAGE

A DESCRIPTIVE GRAMMAR

by

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PREFACE

The remnants of the Potawatomi tribe are now scattered from Mexico to Ontario, with the largest groups at Shawnee Oklahoma, Mayetta Kansas, and in northern Wisconsin. At Mayetta a large number of Kickapoo have practically dropped their own Algonkian dialect and have learned Potawatomi. Wherever any Algonkian-speaking Indians are found, from the Mexican Kickapoo community to the southern fringes of Ontario, at least one or two families of Potawatomi speakers will turn up. Potawatomi comes as near to being an Algonkian lingua franca as there is.

At the latest proto-historic times the tribe centered about the southern tip of Lake Michigan, but what evidence there is suggests that at an earlier period they were clustered about the Straits of Mackinaw, on both sides. The breaking up of the tribe is a relatively late event and only the slightest dialectic differences have developed.

Potawatomi shares many features with Ojibwa, and was for a long time thought to be either a dialect thereof or a dialect more closely related thereto than to any of the other Central Algonkian tongues. The present evidence would suggest rather that, until comparative work has gone much further, Potawatomi should be thought of as a language in its own right, no closer, so far as can now be seen, to Ojibwa than to, for example, Fox.

The present writer's field work with the language was done near Crandon, Wisconsin, in the summers of 1937 and 1938. The chief informant was Jim Spear, (JS), a Kansas Potawatomi who had migrated back to Wisconsin

some years before. His wife Alice told the stories which constitute the writer's body of texts. Another informant, Jim Alloway, told a few stories and was used in the first stages of the work, when the writer was analyzing the phonetics. In the Autumn of 1938, at Shawnee Oklahoma, it was possible to hear some local Potawatomi speakers, and a number of grammatical points were checked with Dennis Spear, Jim's brother, as informant. Early in the summer of 1938 the writer heard some Potawatomi on Walpole Island, Ontario.

About half of the expenses of the first summer's work, and all of the second summer's, were borne by the Social Science Research Council, to whom thanks are hereby extended. The field work in Oklahoma, incidental to which the final check-up was made, was financed by the Institute of Human Relations of Yale University, through the Department of Anthropology. The American Council of Learned Societies made it possible for the writer to remain at Yale during the first five months of 1939, preparing the present thesis.

A number of linguists have offered helpful criticism. Dr. Truman Michelson, before his death, offered some valuable suggestions; it was due to his encouragement that the Potawatomi problem was selected in the first place. Dr Morris Swadesh, Dr Edward Sapir, Dr George Trager, and Dr Murray Emeneau all offered criticisms and comments at various stages of the work. The last mentioned has supervised the writing of this thesis, and the writer tenders his sincere appreciation.

Most helpful of all, however, were the suggestions which came from Dr Leonard Bloomfield and from his writings on Algonkian languages, in particular a yet unpublished paper, "Sketch of Algonquian." The terms used for technical concepts and categories in the present grammar are in large part those which Dr.Bloomfield uses in this most recent synthesis.

The weakest point in the data on which the present grammar is based is the sub-analysis of stems. If §4 is clear, it is due not to the clarity of the writer's own material but to the fact that it is almost a translation, from General Algonkian into Potawatomi, of the equivalent section in Bloomfield's latest paper, mentioned above. Another rather weak point is the treatment of particles; for an adequate revision of this a very large body of accurate texts would be needed. There are also some minor sins of omission and commission.

The strongest point in the present treatment, the writer feels, is the morphophonemic section. By the devices introduced therein, an extremely complex, set of variations of forms of morphemes is shown to be fundamentally quite regular, and a much more efficient treatment of specific morphological points is made possible.

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Abbreviations;

JS Jim Spear, chief informant.
FP Forest Potawatomi; used for a form which JS claims is peculiar to Wisconsin, not used in Kansas.
others are explained in the text.

1. PHONOLOGY

1.1. Table of Phonemes.

Consonants:

short stops	p	t	č	k	ʔ
long stops	p·	t·	č·	k·	
short spirants		s	š		
long spirants		s·	š·		
nasals	m	n			
"semivowels"[1]	w		j		

Vowels:

i		o
	e	
ɛ		a

1.2. Prosody. Potawatomi has a minimum of significant phonetic features other than segmental phonemes. There are no tonemes nor tasemes. Statements, questions, and other types of utterance are not distinguished by intonation. However, at least in formal discourse, though perhaps less so in conversation(see §11.1), it is necessary to distinguish between a sentence-final intonation and a sentence-medial but phrase-final pattern. Both are characterized by pause and lowering of pitch, but these are more marked for sentence-final than for non-sentence-final phrase-final. The former will be indicated with a period (.), the latter by a comma (,).

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[1] This term is somewhat of a misnomer; see §1.9.

1.3. Junctures. Within a phrase certain segments will be joined together by what may be termed internal juncture, others by external juncture. These terms refer to the structure of consonant clusters and to syllabification. External junctures occur most freely between elements which are minimum free forms, or words -- the shortest elements which can, under proper conditions, function as complete phrases(§2.1). But the two criteria are not completely co-determinate. Thus the form ntɛp-nə·a I get to kill him is a single word, but contains an external juncture, comparable to that in mt·əkwap ntott·ənan I acquire a bow, which is two words. On the other hand, there is nothing in the phonetics of the expression kwɛ nwapma I see the woman to reveal that it is two words; the "ɛ nwa" is exactly like that within the single word mmɛnwa it is roomy. Words will be separated by spaces; certain elements within the word will be separated by hyphens(see §2.1) -- the hyphen is not a phonetic sign. But external junctures will be found to occur only between words or between word-parts separated by a hyphen.

1.4. Clusters. The relevant unit for the analysis of phonetic structure is therefore not the word, but the segment standing between two external junctures, or between one such and the beginning or end of the phrase. Such a unit must begin with a consonant or cluster, may end with consonant or cluster or vowel, and consists of an alternation of consonants or consonant clusters and single vowels; there are no vowel groups. The word non-syllabic will be used to indicate any consonant or group of consonants which stand between two successive vowels, or initially or finally in the segment. The three significant

positions for non-syllabics are initial, medial, and final. Since the greatest variety occur medially, it is convenient to describe the medial types first and thenddelimit the groups thereof which can stand initially or finally.

The permitted medial non-syllabics can be tabulated as follows:

1a) p t č k

1b) ʔ

2) p• t• č• k•

3) s š

4) s• š•

5) m n

6) w j

7) 1 plus 1, 2, 3, 4, or 5; except 1b plus 2, *tč, *tč•, *ʔʔ, and č plus 4.

8) 2 plus 5

9) 3 plus 1, except *sk

10) 3 plus 3 or 5, except the geminates *ss and *šš.

11) 4 plus 1 or 5; but of these —

12) s•k -- requires special treatment.

13) 5 plus 1, 2, 3, 4, or 5

14) 6 plus 1, 2, 3, 4, or 5

15) 1, 5, or 6 plus 9 or 12; this is the pattern, though many do not occur in the material so far analyzed.

16) 9 or 12 plus 1, 2, 3 or 5; the same comment applies here.

17) Any of the above plus 6; except *ww and *jj; some others

are not testified but would presumably be perfectly pronounceable.[1]

Of all these, only the following can occur initially; 1, 3, 4, 5, 6, 7, 9, 10, 11, 13, 14, 15, and the varieties of 17 having one of these as the element before the w or j. Final position is even more restricting, since here occur only 1, 3, 4, 5, 6 and 9.

When a word or word-part ending in a permitted final precedes one beginning in a permitted initial, the resulting combination cluster will in certain cases be a permitted medial type, in which case the juncture is internal; in others it will not be a permitted medial, and when this happens the juncture is external.

1.5. Syllabification. Here again the segment relative to which patterning is described is that standing between two external junctures or between one such and the beginning or end of the phrase. Each vowel constitutes the nucleus of a syllable, and no consonant does. The initial non-syllabic goes with the vowel following it, the final non-syllabic with that preceding it. A medial non-syllabic consisting of a single consonant other than a long stop or long spirant, or of such a short consonant followed by w or j, goes with the following vowel. For all other medial non-syllabics syllabification varies freely, the point of lowest sonority and stress coming optionally before the beginning of the entire non-syllabic, or within the first member (within the whole non-syllabic if it consists of a single long consonant), or, if the non-syllabic is a cluster not

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[1] In the notes is one form, njɛw?-tpə?kən four yards or miles, njɛw?-tpə?kas· four o'clock, with an anomalous cluster. This may have been misheard. See §8.

having a long stop or long spirant as its first member, at the end of that first member. If one unit of consonantal length be assigned to each consonant except the long stops and spirants, and two each to them, then one can say that for all medial non-syllabics except those first enumerated above the point of syllabic division falls optionally before, during, or after the first unit of consonantal length in the non-syllabic. Despite this variability, the first consonant in such a non-syllabic will be termed syllable-final.

JS, chief informant, would syllabify readily, but in doing so there would be certain distortions. Each word was made into a phrase, so that the phrase-initial and phrase-final sandhi alternants were actualized for every word instead of the phrase medial alternants for some, as was the case in more rapid and natural speech(see §2.2, §11.1). Initial preconsonantal w was made a syllable, either wə- or ʔo-. Normal syllabification as described here is based on JS's special performance and on observation of undistorted discourse.

Preconsonantal initial w and interconsonantal nasals have a greater sonority than the immediately adjacent sounds, and so give the impression of functioning as syllabics. In rapid speech the form ntɛp-ns·a I get to kill him may sound like three or four syllables, the second n frequently, the first more rarely, assuming syllabic function. In slow speech only the vowels stand out as really sonorous points. For these marginal cases the term semi-syllable might be

coined; but there is nothing in the phonetic patterning of the language which demands their special recognition.

1.6. Stops. The following table shows the range of variation of stops:

b	B	p	p^c	N^p	p·	$N·^p$
d	D	t	t^c	N^t	t·	$N·^t$
ǰ	J̌		č		č·	
g	G	k	k^c		k·	
		ʔ	$ʔ^v$			

The symbols in the same horizontal rows represent sounds made with approximately the same positions of articulation. That for the first row is bilabial. The d-t series is pronounced with the front edge of the tongue in contact with the roof of the mouth just behind the teeth, but in front of the alveolar ridge; though this is the typical position there can be a good deal of variation in the particular point at which contact is made without significantly altering the sounds produced. The č series are affricates, for which the front surface of the tongue, optionally excluding the portion immediately behind the tip, comes into contact with the roof of the mouth in front of, on, and behind the alveolar ridge; here again there can be some non-distinctive variation. The g-k series has contact between the rear of the tongue and the velum; there is no particular variation in this position depending on preceding or following vowels, and noticeably, from an English bias, no pronounced palatalization before the front vowels. The glottal series are pure, with no laryngeal or

other coloring.

The symbols in the same vertical column represent sounds with approximately the same manner of articulation. b, d, ǰ and g are fully voiced. Those in the second column are very slightly voiced, or voiceless, lenis, and unaspirated. The next are voiceless, relatively fortis, unaspirated, and the next voiceless fortis aspirated. Those written p·, t·, č· and k· are voiceless, considerably fortis, unaspirated, and long; they are more strongly enunciated than those of any other set. The symbols N^p and N^t both indicate closure of, followed by release of, the nasal passage; N^p has concomitant labial closure, N^t dental closure. $N{\cdot}^p$ and $N{\cdot}^t$ indicate the same sounds held longer, and slightly more fortis.[1] For the affricates there is no contrast between aspirated and unaspirated; the release is always spirantal. "Aspirate release" for $?^v$ means a slight murmur release with the quality of the vowel which preceded the ?, though optionally this may be practically absent. G is slightly spirantal.

b, d, ǰ and g only occur preceded by a nasal and followed by a vowel or semivowel:

ʔɛ-mbotᶜ he died

ndəǰja I go

nǰəmos·ɛ he is fastened

ngəǰaDəs I am glad[2]

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[1]Note that the letter N implies neither nasal resonance nor dental position of articulation, as used in this section. The symbol is used thus by Boas, F., "Handbook of American Indian Languages," BAE-B 40 pt 1, Introduction, p 20.

[2]Words are given in narrow transcription until each phonemic point has been made, thereafter in terms of the phonemic conclusions.

B, D, ǰ and G occur between vowels or semivowels:

mdamnaBo hominy, corn soup

ʔoDan town

nmaǰi I come

ʔɛ-Gi-wapᶜtɵkᶜ he saw it

p, t, k and ʔ occur initially before a vowel or semivowel, or medially before a vowel or semivowel if preceded by something other than a vowel or semivowel or nasal; or initially or medially before a non-homorganic nasal. ʔ also occurs after a nasal before a vowel or semivowel (like b, d, ǰ and g), and between vowels or semivowels (like B, D, ǰ and G):

pož̌o hello!

ʔɛs·pɵn raccoon

tawɛ he trades

ndɛpᶜtan I have enough of it

kiw they

ms·kwɛ blood

ʔazjan diaper, loin cloth

kᶜčɵpᶜʔɵwɛ he runs out

pnaǰa it is stale

ʔɛ-Gi-pnaǰakᶜ it was stale

ndɵnʔɵš̌·ma I bury him

ndɛʔikᶜ in my heart.

The aspirated stops occur in syllable-final before a consonant other than nasal; ɵr in absolute final; ʔᵛ occurs also in syllable-final before a nasal. Before a spirant, however, the aspiration

tends to be lost in the spirantization, and the stop might almost as well be analyzed as of the unaspirated variety:

ndɛpᶜtan I have enough of it

ndotᶜtᵊənan I get it

ndəkᶜkəs I hide

ʔɛ-Nᵗnəʔᵊšᵊəməkᶜ I buried him

psožɛ or pᶜsožɛ he is in a dull light.

č occurs both in the positions where the aspirated stops are found and those where the unaspirated varieties are found:

čo no

kᶜčəpᶜʔəwɛ he runs out

močma please

močkɛ nevertheless

wɛč-ksᵊənjakᶜ towards the north (this is an external juncture; therefore the č is final).

pᵊ, tᵊ, čᵊ and kᵊ are found non-initially, before a vowel, semivowel, or non-homorganic nasal:

nwiβpᵊɛma I sleep with him

ngwətᵊač I am frightened

nəčᵊimnən peas

ngəkᵊɛndan I know it

kᶜčitᵊmokᶜ they try

N^p, N^t, $N^{\cdot p}$ and $N^{\cdot t}$ occur only before homorganic nasals, in the clusters N^pm, N^tn, $N^{\cdot p}m$, $N^{\cdot t}n$. The short varieties are found initially and medially, the long ones only medially:

N^{p}matᶜsə he lives

ʔɛ-N^{t}nəzjan I am here

ndoD●N•^{t}nan I get it

A review of these distributions of stop types will reveal that the only cases of significant distinction in the same position are p• - t• - č• - k• versus p - t - č - k and N^{p} - N^{t} - versus N•P -- N•^{t}. Since it is primarily length which distinguishes these two pairs of types from each other, it seems proper to take that factor as the primary one in classifying the allophones into phonemes. Since all but the voiceless fortis unaspirated longs and the long nasal-release stops are relatively short, the latter two can be regarded as positional variants of one set of stop phonemes, hereafter written p•, t•, č•, and k•, and all the others as variants of a second set, hereafter written p, t, č and k. The limited distribution of the long stops might lead one to characterize them as defective. ʔ and ʔᵛ are in complementary distribution, and will henceforth be written ʔ; this phoneme goes with the short stops rather than with the longs.

Stops occur freely before homorganic stops; each of such a geminate cluster is released according to its normal variant for that position. Examples are to be found above.

1.7. Spirants. The variety of spirants is far less than that of stops. It is indicated in the following table:

z	Z	s	s•
ž	Ž	š	š•

The first row are approximately like the English s and z in position of articulation; the sides of the tongue are in contact with the roof of the mouth in such a way that the only passage left is a small one between the space just behind the tip of the tongue and the roof of the mouth in front of the alveolar ridge. For the "shibilants" friction is produced between a considerable area near the front end of the tongue and the roof of the mouth about the alveolar ridge; the sound is like the off-glide of the affricates described in §1.6. The first column are fully voiced; those in the second lightly voiced or unvoiced, in either case with light articulation, contact not being made vigorously; s and š are fully voiceless and with stronger contact and articulation; s· and š· are strongly articulated, voiceless, and long.

The varieties in the first three columns are in complementary distribution but in each position contrast with the variety in the fourth column. Therefore there are but two phonemes in each position, which after the examples in this section will be written as s and š, s· and š·.

z and ž occur between vowels or semivowels, or after a nasal before a vowel or semivowel:

ʔazjan diaper, loin cloth

požo hello!

mzezak horsefly

Compare:

ʔos·en his father

mčəmoš·ən he is stuck

mš·a it is big

Z and ž occur initially before a vowel or semivowel; sometimes a final spirant has this quality instead of that of s and š:

Zipə stream

žiw here

nkəžatəZ or nkəžatəs I am glad

Compare:

s·ən stone

š·əmš·ən feed me!

nos· my father

In all the other positions in which spirants can occur (see §1.4), s and š are found; e. g.:

snəkət it is hard

škotɛ fire

1.8. Nasals. m and n are always fully voiced. m is bilabial; n in position like t and t· (see §1.6), or, optionally, before k, in velar position like k; this assimilation takes place less freely before k·:

nməmačkona I hold him

nənə man

nkəšatəs I am glad

The quasi-syllabic functioning of nasals has been discussed in §1.5. Phonetically speaking, m· and n· are also found:

ntəm•ačkona I hold him

ntən•im my man, husband

The phonemic analysis of these presents a problem. m• and n• are phonetically like the long stops and spirants, in that in each case there is long closure and single release. In cluster patterning, m• and n• are like geminate stops (see §1.6), such as kk and kk•, in that both can occur initially or medially, but not finally, and none of them can be preceded in the same cluster by any other consonant, nor followed by any except w or j. The resemblance functionally of m• and n• to the long spirants is less, since the latter can occur also finally and can function in larger clusters. The functional similarity to the long stops is least of all, since the latter occur alone only medially, but quite freely in clusters. If the phonetic resemblances be thought most important, then m• and n• are unit phonemes; but if, as the writer thinks, the configurational data is more important, then despite the single release the long nasals are to be analyzed as clusters, mm and nn, like the geminate stops -- comparable in every way to mn and nm, which also occur, except that in mm and nn the first member has no separate release. This conclusion has been accepted in the orthography and in the discussion of consonantism.

1.9. w and j. Though w and j have, for convenience, been referred to occasionally in the foregoing as "semivowels," they are consonants in precisely the same sense as are the stops and spirants and nasals,

not sounds configurating partly as consonants, partly as vowels. They approximately like English w and y. Intervocalically they are enunciated rather lightly; in no position is either characterized by any friction. Within a single syllable every possible combination of w or j plus vowel or of vowel plus w or j occurs, except *wo and *ji; and in those conditions semivowel plus vowel gives the acoustic impression of a rising diphthong, vowel plus semivowel that of a falling diphthong. Final or interconsonantal ij and ow are hard to distinguish from i and o; the effect of the second element is rather to prolong the vowel sound than to produce a distinct glide from high to higher. This is truer of ij than of ow.

ʔajač more and more.

ʔasjan loincloth, diaper

ʔɛ-wi-tok•it he will wake up

ʔɛ-pwa-waptɔk he didn't see it

ntɔčk•osij I am small

knimʔɔtijmɔn we dance together

Initial preconsonantal w is actualized as short ɔ — vocalic though non-syllabic, not preceded by a glottal stop, not diphthongal. It might be described as a pre-labialization of the following consonant. The sound is phonetically as far from w in other positions as it is from the vowel o, but analyzing it as a variant of w permits the generalization that no phrase begins with a vowel. But see §1.5.

wkɔma chief

wkwɔs•ɔn his son

1.10. Vowels. a, o, ɛ and i are relatively long; ə is shorter, less stressed, and far more variable in quality. a has approximately the quality of the vowel in Chicago English calm or bàlm -- halfway between the first vowel of father and that of yawn or saw in the same English dialect. o is non-diphthongal, otherwise much like the vowel in English moan; a free variant is higher and more rounded. ɛ is as in mend; before j a bit higher. i is as in machine, but non-diphthongal. The frequently made distinction of "tense" versus "lax" apparently has no meaning for Potawatomi vocalism; all the vowels fall about midway on the scale tense-lax, if anything a bit nearer the latter pole, though this does not give rise to diphthongalization.

ə varies from the English sound in hut to that in hit, depending on the influence of surrounding phonemes. It is highest if preceded or followed by j. A preceding or following n, s, s·, č, č·, š, or š· makes it high but not so high as does j. Other consonants leave it fairly low; but w rounds it and brings it relatively far down. When followed by a glottal stop and a vowel or w or j, it tends to acquire the coloring of the element after the ʔ. Thus its actualization in any position is the result of the conflict of forces from before and behind, highest if "palatalizers" precede and follow, lowest if w precedes and follows.

čk·wajən it is short

wiwš·ən his old woman

ntəʔakməmən my snowshoes

nčikwən my knee

motəj bottle

ntəʔwənəs I am pretty

In final position ə is high and hard to distinguish from ɛ, particularly if postconsonantal w precedes:

čiptəpə he sits down

kmotə he steals

kkəkapwə he has something

1.11. Abnormal Phonetics; Interjections. A number of frequently used interjections do not conform in their phonetic structure to the phonemic scheme of the rest of the language. Presumably there is a well-patterned phonetic scheme for these marginal cases, but the examples forthcoming are not sufficient for a pattern analysis of it. To be noted particularly, however, are the presence of an h, of optional nasalization (which does not occur noticeably elsewhere in the language), and of distinctive intonation curves. The interjections which must be considered are:

ʔá·hã̂·w well! aha! then, next. The vowels are distinctly long. The acute accent indicates high pitch, the circumflex falling. The nasalization is sometimes obvious, sometimes lacking.

hə̃̂· Hm! So! The stable features are the intonation, the nasalization, and the h-opening. The vowel quality can vary, or an oral closure such as m or n may be held throughout the utterance.

hə̂w hello! (sometimes) goodbye!

wá´ what? what did you say? (high pitch and stress)

wá·t·ə́jâ· extreme surprise, as when meeting some one whom one has not seen for a long time.

2. MORPHOPHONEMICS

2.1. The Morphophonemic Problem. The segment of discourse standing between two period intonations is a sentence. The minimum constituents into which a sentence can be analyzed are morphemes. Any sentence consists of a succession of morphemes, some joined together loosely, others tightly, some modified not only mechanically by the surrounding morphemes but also productively by ablaut and reduplication.

But between the sentence and the morpheme there is an intermediate level of synthesis, that of the word. A word consists of one or more morphemes, and constitutes all or part of a sentence. Except for certain marginal cases the word is a well-integrated, distinct unit. Thus the word is the minimum free form; it can, under proper conditions, constitute a complete utterance, but contains at least one immediate constituent -- unless it is itself a single morpheme -- which is not so characterized. This is a difficult criterion to apply in some cases, and another supplements it. The phrasing of a sentence -- the placement of comma intonations -- depends considerably on rate of speech. In rapid discourse entire long sentences will have no internal breaks, whereas in slower speech, especially as when dictating to a linguist, comma intonations will be inserted much more frequently. But no matter how slow the speech no word will ever be broken. Therefore by the simple device of having the informant speak quite slowly a tentative word-division is obtained.

There are, as was indicated, some marginal cases. For example,

the interrogative particle nɵ can never occur alone, but only immediately following a finite verb. In slow phrasing, however, it is sometimes uttered separately. In such cases the treatment as word or as word-part, as reflected in the orthography and in the place in the grammar in which it is mentioned, is to a certain extent arbitrary. The element nɵ has been written as a separate word and is dealt with in §10 and §11.2; to regard it as a final position suffix would have made just as clear a presentation.

The word is <u>not</u> a phonological unit. This is made clear in §1.3; internal junctures may occur between words, and external junctures within them.

The phonemic structure of many words and morphemes depends on their position in the total stream of discourse. Thus some words have different forms for phrase-initial or phrase-medial; others for phrase-medial as over against phrase-final. These variations may be ascribed to <u>external sandhi</u>. External sandhi changes are relatively simple and may be treated as modifications of <u>basic</u> forms which call for no complex non-phonemic system of orthography to record them. Thus the word for <u>woman</u> is basically k·wɛ, as in nwapma k·wɛ <u>I see the woman</u>; in phrase-initial the long stop is shortened; kwɛ nwapma <u>I see the woman</u>.

<u>Internal sandhi</u>, the alternation in form of morphemes depending on their position in the word and on the precise nature of the adjacent morphemes, is much more complex. It may best be approached through some examples. Consider the following pairs of forms:

nkətšəwɛ he wins a race
nnəktəšwɛ I win a race

ktəmočkɛ he is fishing
nkwətmočkɛ I am fishing

pmos·ɛ he walks
npəms·ɛ I walk

In each pair, the second differs from the first in having an initial element n- added, and in having a different internal structure for the remainder, though in each case similarities can be seen. These similarities and the precise nature of the differences are better revealed if the forms be written thus:

n ket šəwɛ
nnək təš wɛ

k təmočkɛ
nkwət močkɛ

p mos·ɛ
npəm s·ɛ

That is, certain vowels, and all the consonants except the w in nkwətmočkɛ, are constant, whereas other vowels appear in one form, fail to appear in the other. This alternation of form is mechanical; it depends entirely on the nature of the morphemes concerned and the order in which they occur. There are no such contrasting forms as, say, pmos·ɛ versus *pəmos·ɛ or *pəms·ɛ; if there were, then the alternation would be not mechanical, but a productive process, an ablaut.

Another set of internal alternations which must be dealt with is shown in the following pairs:

nmina I give it to him
kmiš you give it to me

nnəs·a I kill him
knəš· you kill me

Here the first of each pair starts with n-, and ends with -a, the second starts instead with k-; those of the first pair are further distinguished by an alternation between n and š before the final element (which is zero in the second form); those of the second pair have a comparable alternation between s· and š·.

Changes of these two types are so far-reaching in internal sandhi that it is convenient to devise a supplementary morphophonemic alphabet by which the apparent irregularities can be reduced to regularity. There are also minor discrepancies, which are not taken into account in the system of morphophonemics which will be used. Although in theory a system of symbols could be invented such that the lexical entry of each morpheme would tell precisely what form that element has in every single position in which it can possibly occur, in practice it is not efficient to do so; the much greater complexity of the morphophonemic description would more than outweigh the lexical and morphological gain. As an example of such a "really irregular" irregularity may be given the following(§7.4). The third person plural indicative ending for intransitive animate verb stems, -k, changes an immediately preceding ə to i; no other element does this. Thus kšatsə he is glad, kšatsik they are glad; but, with the plural imperative suffix which is also -k, kšatsək you be glad!

A further complication is that not all elements within a word are joined by internal sandhi; certain morphemes characteristically are

linked by external sandhi to the following element even though falling in the same word as does the latter. When forms are written in morphophonemic orthography(marked always by a root sign, √), internal sandhi is indicated byaa hyphen, external sandhi within a word by a "double hyphen" -- "=". All those elements between which internal sandhi applies must be dealt with as a unit; a = breaks this just as does the beginning or end of a word as a whole. In phonemic orthography points of external sandhi are marked by a single hyphen. To keep this relation clear the following table may be given:

basic		phonemic
√...-...	>	.....
√...=...	>	...-...
√... ...	>	... ...

The relation between sandhi and juncture(§1.3) is this: internal sandhi invariably gives rise to internal juncture. External sandhi, within a word or between words, may give rise to internal or to external juncture. Conversely; internal juncture within a word may be the product of internal or external sandhi; internal juncture between two words is the product of external sandhi; external juncture anywhere is the product of external sandhi.

External sandhi is treated in §2.2, internal sandhi in §§2.3-2.6. Because they are so intimately bound up with verb inflection, ablaut and reduplication are left to §7.1 and §7.2 respectively.

2.2. External Sandhi. There are many forms which alternate

between initial short and long stop. The long stop is found when the form is preceded in the same phrase by a form ending in a short stop, nasal, semivowel, or vowel; the short stop is found when the preceding form in the same phrase ends in anything else, or when the form in question is in phrase-initial. Thus nwapma k·wɛ I see the woman, but, altering the order of the words, kwɛ nwapma.

There are many forms which end in a long stop if the following form, in the same phrase, begins in a nasal or a vowel (for which see below), but in a short stop under all other conditions. Thus mək· nwapma I see the beaver, but nwapma mək.

In these cases it is necessary to assume the form with the long stop as basic, since there are others having a short stop in all positions; nwapma kak or kakʃnwapma I see the porcupine.

Within the phrase, after a form ending in a consonant, a prevocalic initial ʔ may be uttered very lightly or dropped altogether; ktəšjaməŋ ʔotan or ktəšjaməŋ we go to town. If the preceding form is one which ends basically in a long stop, then either the preconsonantal or the prevocalic sandhi variant thereof may be actualized when the ʔ drops; mək ʔotə, or mək otə, or mək· otə the beaver over there.

w cannot stand interconsonantally within the phrase. Thus there is a variation between wtək·wɛjoməŋ wapman he sees his wife, and wapman tək·wɛjoməŋ. The form with the w is basic.

There is free variation between phrase-initial prevocalic w or j and the same preceded by ʔ. Within the phrase the ʔ may be inserted

in some cases, as when the preceding word ends in a vowel or semivowel; in no case is the difference distinctive. However, since ʔ is a phoneme, it must be assumed that when it occurs it occurs. On this point orthography will diverge from the phonemic ideal and write the simple w and j in all cases.

All these variations apply equally to words and to forms which are parts of words but which are preceded or followed by external sandhi. The examples given so far are all of independent words. As a contrasting case may be given the following: wk·ɛw easily!, but wɛč-k·ɛw-piktəpɛš·ək why it breaks easily.

2.3. Internal Sandhi; Formulae and Symbols. The basic transcription of a morpheme, from which all its specific forms in actual occurrences can be predicted, is a formula. The unit symbols in formulae are morphophonemes; for these the same written signs will be used as for phonemes, with several additions. For convenience, since there is no danger of confusion, several terms used in phonology will be used here with parallel meanings; some morphophonemes are vowels, others consonants, there are syllables and non-syllabics in the formulae. Citations of formulae will henceforth be marked with a root sign (√), so that there will be no possibility of mistaking them for words.

In addition to the letters which are used both for phonemes and for morphophonemes, the following are used exclusively for the latter: ɑ, O, E, #, N, T·, T, S·.[1]

---

[1] This N of course has nothing whatsoever to do with the N used temporarily in §1.6.

ɑ and O may be termed weak vowels. They give rise sometimes to phonemic zero, sometimes to ə and o respectively; thus pmos·ɛ he walks and npəms·ɛ I walk both contain the stem √pɑmOs·ɛ. The other vowels are strong.

E is used as a final element in the formulae of noun stems where, if no suffix is added, it gives rise to phonemic zero, if a suffix is added it becomes ɛ; nk·at my leg, and nk·atɛn my legs both contain √k·atE.

is the equivalent always of zero phonemically, but morphophonemically functions as a consonant. Thus the word formula √kəšatɑsɑ# ends in a consonant, and reduces to kšatsə he is glad, just as √nɑkɑšatɑs reduces to nkəšatəs I am glad.

N, T, T·, and S· are used for the morpheme-final consonants which appear sometimes as n, t, t·, s·, sometimes as š, č, č·, š·; for examples see §2.1.

Formulae have a typical structure which is analyzable in terms of types of morphophonemes just as phrases and segments between external junctures are analyzable in terms of phonemes. No vowel clusters are permitted. The morpheme may begin and end with vowel or with non-syllabic. The only permissable non-syllabics in any position are types 1, 2, 3, 4, 5, 6, 9, 12, and the varieties of 17 having one of these as the prior element (§1.4). N, T, T· and S· occur only finally. # occurs finally, or alone (constituting an entire morpheme), or before a final w or j.

To say that only the non-syllabics specifically listed above can occur in formulae does not mean that every morpheme containing, in its actualized forms, a more complex cluster, is found in at least one actualization with that more complex cluster broken up and a vowel standing between its parts. The word ẘkiwnɛ I wallow around contains "kiwnɛ", which never appears in a form with a vowel between the w and the n, and cannot be further analyzed. But if "kiwnɛ" be formulated as √kiwɑnɛ, the rules for weak vowel loss (§2.5) will account for the loss of the ɑ in each case. This procedure would be arbitrary were it not for the fact that it gives a simpler typical form for the basic patterns of morphemes. On the other hand, there is never a vowel between the š and the k in words containing the element √ɑškOtɛ fire, and if it were assumed to be *√ɑšɑkOtɛ the rules for weak vowel loss would not explain the constant loss of that postulated second ɑ. By making the formulae as simple as possible, so far as non-syllabics are concerned, on the basis of the group of words which contain each morpheme, the simple statement of their form given in the above paragraph is made feasible; but it is not possible to eliminate some relatively complex clusters, such as šp, šk, and s·k, from them.

2.4. Internal Sandhi; Rules for Reduction. From morphology (§3-10) one determines what specific morphemes are to enter into a given word, in what order, with what types of sandhi, with what ablauting and reduplicating, and with what specific irregularities. From lexicon

one determines the precise form of each morpheme to be used. Given this information, the following series of operations reduces the succession of formulae to the desired word:

1) When the formulae have been placed in proper sequence the following alterations are made at the points of contact. If a weak and a strong vowel come together the weak one is dropped (but see §2.5 for the special treatment of morpheme-initial O). If two weak vowels come together, they merge into one, which is O if either is O, otherwise ɑ. When a morpheme ending in a consonant is followed by one beginning in a consonant, connective √ɑ is inserted. This is irregularly omitted in a few cases before a semivowel; see especially §8.

2) Before connective √ɑ and before an initial i of a following morpheme, the changeable N, T, T·, S· give š, č, č·, š·; before anything else they give n, t, t·, and s·. Before i, j changes to ʔ; before o, w changes to ʔ.

3) When 1) and 2) have been followed out there is obtained what may be termed a word formula -- a sequence of syllables much like that of an individual morpheme, still in terms of morphophonemes, not phonemes. On this formula,

3a) The process of ablaut applies, if the form is to be ablauted (see §7.1).

3b) The pattern of weak vowel loss operates; this is described in detail in §2.5.

4) The clusters resulting from the dropping out of weak

vowels are altered according to specific rules given in §2.6.

5) Reduplication occurs if the form is to be reduplicated; see §7.2.

From the point of view of external sandhi, the result of these operations is the basic form, and must be properly altered to suit its position in the phrase.

These "rules" are sets of operations which must be performed precisely in the order given if the proper result is to ensue. In the following examples are given first the unjoined morphemes, in the proper arrangement, then the results of each process in turn; only the final result, unmarked by a root sign, is a word in phonemes.

√n √nakataN √a
1) √n-a-nakataN-a
2) √nanakatana
3) √nnəktəna
4) nnəktəna I beat him in a race

√n √nakataN √wɛ
1) √n-a-nakataN-a-wɛ
2) √nanakatašawɛ
3) √nnəktəšwɛ
4) nnəktəšwɛ I win a race

√pam √j √k (changes previous ə to i)
1) √pam-a-j-a-k > √pam-a-j-i-k
2) √pama?ik
3) √pmə?ik
4) pmə?ik they are around here.

√kwatamoT √kɛ √#
1) √kwatamoT-a-kɛ-#
2) √kwatamočakɛ#
3) √kwtəmočk##
4) ktəmočkɛ he is out fishing.

√ɑnɑnɑ#w
1) √ɑnɑnɑ#w
2) √ɑnɑnɑ#w
3) √nənə#w
4) nənə man

√ɑnɑnɑ#w √k
1) √ɑnɑnɑ#w-ɑ-k
2) √ɑnɑnɑ#wɑk
3) √nən#wək
4) nənwək men

√nɑt √pɑk·ɑč √wɛp √N √a
1) √nɑt-ɑ-pɑk·ɑč-ɑ-wɛp-ɑ-N-a
2) √nɑtɑpɑk·ɑčɑwɛpɑna
3) √ntəpk·əčwɛpna
4) ntəpk·əčwɛpna I let go of him

√n √pɑk·ɑč √wɛp √N √a
1) √n-ɑ-pɑk·ɑč-ɑ-wɛp-ɑ-N-a
2) √nɑpɑk·ɑčɑwɛpɑna
3) √npək·čəwɛpna
4) npəkčəwɛpna I let go of him (notice short k)

2.5. Internal Sandhi; Weak-Vowel Loss. For the pattern of weak-vowel loss the formulae of words, or of parts of words which are joined to the rest by = (external sandhi), are subject to a dual division. In the first division fall morphophonemic disyllables with two weak vowels. In these the first weak vowel drops, the second stays. Thus:

√ki √tɑšɑ √j √t
1) √ki=tɑšɑ=j-ɑ-t
2) √ki=tɑšɑ=j-ɑ-t
3a) √ka=tɑšɑ=jɑt (ablauted)
3b) √ka=tšə-jət
4) ka-tšə-jət where he was

√ɑk·ɑ
1) √ɑk·ɑ
2) √ɑk·ɑ
3) √k·ə
4) k·ə, kə (depending on position) land.

All other types of words or segments fall in the second class.

In these, a final weak vowel drops; but a weak vowel followed by a final non-syllabic, or by a non-syllabic which stands final because a final weak vowel has dropped, is always retained. In the rest of the formula a different pattern operates: in any series of one or more syllables containing weak vowels, each alternate one, beginning with the first, loses the vowel. This pattern of alternation is interrupted by a syllable containing a strong vowel, or by a weak vowel of the final syllable which is being retained according to the first part of this rule, or by a =. To the examples given in §2.4 may be added the following:

2) √ačatɑmo#j
4) čɵtmo chipmünk

2) √nɑkiwɑnɛ
4) nkiwnɛ I wallow around

2) √nɑčač·amO
4) nčač·am I sneeze

2) √čač·amO#
4) čač·amo he sneezes

Morpheme-initial O requires special treatment. When preceded by an element ending in a consonant, it is retained or dropped according to the normal pattern, but if retained the next syllable may nevertheless be thought to stand second in a series, and may also retain its vowel. Thus:

2) √nɑtOtɑt·ɑnan
4) ntott·ɵnan or ntotɵt·nan I acquire it

2) √nɑtOkɑmam
4) ntokmam or ntokɵmam my chief

Loss of the next vowel is, in these conditions, perhaps more usual than retention. When not preceded by any element with which it must join in internal sandhi, O changes to w, but this necessarily counts as a "weak-vowel loss" for the operation of the pattern:

2) √Okɑma
4) wkəma chief

2) √ʔɛ=Otɑt·ɑnɑman
4) ʔɛ-wtət·nəman I acquired it

There are no cases of morpheme-initial O falling after a morpheme, in the same internal sandhi segment, which ends in a strong vowel.

Non-initial O in morphemes is treated precisely like ɑ. It must be noted that both o and ə, strong morphophonemes, also occur in formulae, being retained under all conditions:

2) √t·ət·ɛ
4) t·ət·ɛ it is ripe

2.6. Internal Sandhi; Simplification of Clusters. Except for the changes specifically mentioned here, clusters resulting from the loss of weak vowels may be assumed to remain unchanged — that is, each consonantal morphophoneme resolves to the phoneme which is written with the same letter, and # resolves to nothing.

Interconsonantal w and j, and postconsonantal final w and j, drop:

2) √piwapɑkwE
4) piwapək iron

2) √pok·ɑma#j
4) pok·ma plum, peach

2) √kwɑtɑmočɑkɛ#
4) ktəmočkɛ he is out fishing

A postconsonantal w or j of the second of the two morphophonemic non-syllabics that are coalescing is retained:

2) √nɑkwɑtɑmočɑkɛ
4) nkwətmočkɛ I am out fishing

As prior elements, long stops are shortened except before nasals and w and j. As second elements, they are shortened after ʔ and spirants. In all other positions they retain their length:

2) √nɑtɔtɑt·ɑnan
4) ntotət·nan I acquire it

2) √nɑpɑk·ɑčɑwɛpɑna
4) npəkčəwɛpna I let go of him

√sk gives s·k:

2) √nɑpisɑkonɑjɛ (form not certain)
4) npis·konjɛ I undress

√s(·)s(·) and √š(·)š(·) give s· and š· respectively:

2) √was·ɑs·o#
4) was·o he shines

In rapid speech n frequently appears as m before p and p·, though more frequently before the former; m changes to n before t and t·, but not to n (that is, ŋ) before k and k·. In slow speech only the change of n to m before p occurs:

2) √ʔɛ=nɑpot
4) ʔɛ-mpot he died

Since the last change is regular it will always be written. The other changes, however, are free variants and will be written in the morphophonemically basic form -- nt from √nɑt, etc.

√ww and √jj give ʔw and ʔj respectively:

2) √wɑwapɑman
4) ʔwapman, hence (by external sandhi) (ʔ)wapman he sees him

√šks may be left so or altered to s•ks; this is a free variation and the transcription will take the basic form:

2) √paškɑsɑkɑn
4) paškseken or pas•kseken gun

The geminate stops, pp, pp•, tt, tt•, and kk, kk•, are sometimes reduced to longs, p•, t•, and k•. This is more frequent with the labials than with the dentals, more frequent with the latter than with the velars, and apparently is more regularly done when the two are within the same morpheme than when one is final in one morpheme, the other initial in the next -- 'final' and 'initial' after the operation of weak-vowel loss. The same simplifications may take place between a final stop and an initial one separated by =:

1) √nɑt-ɑ-pɑpa-matɑs
4) nteppamates or nte•amates I travel

2) √kɔki=Osamɑkwam
4) usually k•iwsamkwam, when in phrase-initial kiwsamkwam you overslept (see §3.2)

1) √n-ɑ-tɛp=pɑʔ-a
4) ntɛp-peʔa or ntɛp•eʔa I escape from him

The simplification of kk and kk• is to be found mostly in word-initial, as in the second example above.

3. MORPHOLOGICAL PURVIEW

In the present section are given the various patterns of organization of morphemes into words. In the patterns, ± means sometimes present,

and the factors controlling the presence or absence are presented in the commentary; + means always present; following the entry - means joined to the following element by internal sandhi, = means joined thereto by external sandhi. At the first mention of a particular type of morpheme or morpheme-group it is underlined and explanation, when necessary, is given. Examples are given for each type of formation, and references to the portions of the morphology which deal in detail with the formations in question.

A. Patterns by which bound forms are formed from bound forms.

1) $\pm$ root(s)
   $\pm$ medial(s)
   $+$ final(s)
   $>$ stem (bound form).

There are also unanalyzable stems. Except for these, by postulating zero finals, it is possible to generalize that every stem has at least one root or medial and at least one final.

Stems are either nominal or verbal; this is determined by the final, since many roots and medials occur in both nouns and verbs. Noun stems fall into gender classes, animate and inanimate; it is not clear to what component part gender is due. Most names of animate entities are animate in gender, and most inanimate entities have inanimate names, but there are some discrepancies; see §6.1.

Noun stems which contain a root are independent, those which

contain no root are dependent(§6.2). Independent stems have both unpossessed and possessed themes(see below), wheras dependent nouns have only the latter.

Verb stems fall into four selective categories, depending on the final; transitive animate, inflected for an animate subject and and an animate object, transitive inanimate, inflected for an animate subject and an inanimate object, animate intransitive, with an animate subject only, and inanimate intransitive, with an inanimate subject only. For these four classes will be used hereafter the abbreviations ta, ti, ai, and ii. Of ii there is a subclass, alike morphologically, but different from the rest syntactically in that they can take no explicitly mentioned subject; the impersonals; for example, mnokiškot it is a nice day. This characteristic depends rather on root or medial than on final. For ta see §7.3, ai §7.4, ti §7.5, ii §7.6; for all, §7.1 and §7.2.

Formation by pattern 1) is primary derivation; see §4. Examples:

Root plus final:

√n- + √apo > √napo drink, inanimate noun

Root plus medial plus final:

√pǫm- + √at- + √ǫs > √pǫmatǫs live, ai verb

Medial plus final:

√os·- + √zero > √os· father, dependent noun

2) + stem
   -
   + final
   >
   derived stem (bound form)

This pattern is the one for secondary derivation; see §4. To a considerable extent the same finals are used for primary and secondary derivation, but there are some differences. Thus from noun stems are formed derived noun stems, particularly the diminutive and pejorative(§6.5):

√natwɛ snake + √s· > √natwɛs· little snake

From nouns are formed verbs(§4.3, §4.7):

√ɑs·ɛma(#j) tobacco + √k·ɛ > √ɑs·ɛmak·ɛ prepare tobacco(ai)

From verbs, nouns(§4.2):

√pɑmɑn ta have a pet + √akɑn > √pɑmɑnakɑn a pet, domestic animal

And from verbs, verbs(§§4.3-4.7):

√wapɑm ta see + √aj > √wapɑmaj ai be seen (the verb with passive meaning is an animate intransitive)

There is one case of secondary derivation which uses the pattern

3) + prefix
   -
   + noun stem
   >
   derived stem (bound form)

Thus(§4.3):

√O + √os· father > √O'os· have a father(ai)

The unpossessed theme of a noun stem is homonymous with it. √ɑs·ɛma(#j) tobacco; e. g., singular flexion (see below) s·ɛma.

The possessed themes are formed on the following pattern:

4) + personal prefix(§5, §6.6)
-
+ noun stem
-
± possessive derivative suffix(§6.6)
-
± personal suffix(§6.6)
>
possessed theme(bound form)

Dependent themes reject the possessive derivative suffix in forming their possessed stems; other stems accept or reject it in a complicated way dealt with in §6.6. By the selection of one of the three personal prefixes and of one or none of the two personal suffixes possessed themes are formed designating the person and number category of a possessor, which may then be made explicit(for details see §6.6.). These categories recur elsewhere and it is convenient to have a system of abbreviations for them. The following will be used:

1 first person singular
2 second person singular
3 third person singular animate
0 third person singular inanimate
3' obviative animate(see below)
0' obviative animate(only in ii verbs; see §7.6)
12 first person plural inclusive (person addressed included)
15 first person plural exclusive
25 second person plural
35 third person plural animate
05 third person plural inanimate

First and second person references are always animate. Not all of the above distinctions are made for possessor; 3, 0, 3' and represented indifferently by the form for 3; 35 and 05 are merged. Examples:

√n- + √os·ᵃ + √nan > √nos·ᵃman our(15) father
√k- + √os·ᵃ + √wa > √kos·ᵃwa your(25) father

A very small number of compound nouns are formed on the pattern

5) + root
=
+ noun stem
>
compound noun stem (bound form)

E. g.:

√wap= white + √kɑno#w eagle > √wap=kɑno#w white eagle(§6.3)

B. Patterns by which free forms are formed from bound forms.

The inflection of noun themes is on the pattern

6) + theme
=
+ paradigmatic suffix(es)
>
noun (free form)

The flexions thus formed are singular(3,0), plural(35,05), plural vocative, and, for animate themes only, obviative(3') and second obviative(3"). All but the last are formed with a single suffix, the last by adding the obviative suffix twice. There is also a singular vocative flexion which is homonymous with the singular(3,0) except for a few kinship terms. For flexions see §6.7, for the vocative §6.9.

√nos•ɑnan + √zero > √nos•nan our(15) father(3)
nos•ɑnan + √k > nos•nanək our(15) fathers(35)

Obviation is a syntactical device which is reflected in noun and verb morphology. If two animate third person entities are to be mentioned in the same short context, the less important is placed in the obviative form; a third may be put in second obviative. The

vocatives are forms of direct address. Singular and plural need no special comment.

From noun stems locative particles are formed by three patterns:

7) + locative particle
=
+ unpossessed noun theme
-
+ locative suffix
>
locative particle (free form)

8) + noun theme
-
+ locative suffix
>
locative particle (free form)

9) + noun theme
-
+ paradigmatic suffix for obviative flexion
-
+ locative suffix
>
locative particle (free form)

For these see §6.8. The last given pattern forms the obviative locative; this and the product of pattern 8), the simple locative, might be regarded as flexions rather than as derivatives.

√čik= + √ɑtop·ɑwɑn + √k > čik-top·wənək by the table
√čiman + √k > čimanək in the canoe
√wɑtɑk·ɑk·om + √k + √k > wtəkk·omnək in his kettle("kettle" is animate; it is therefore made obviative when in a possessed form with a 3 possessor)

There are also unanalyzable or partially unanalyzable locative particles, treated also in §6.8. For example, nam-pjɛk underwater, in which √nam is comparable to √čik in the above example; √pjɛk is found only as the second element in formations of this kind, and is not analyzable into noun stem plus locative suffix.

10) + possessed noun theme
-
+ paradigmatic suffix(es)
-
+ preterital suffix
>
noun (free form)

This forms a possessed noun in which the possessive relation is one no longer existing at the time of speech, due to something which has befallen the possessed entity(§6.10). Thus:

√nos•- my father + √zero + √pɔn > nos•pɔn my deceased father.
√nɔčimanɔm- my canoe + √zero + √pɔn > nčimanmɔpɔn the canoe I had, used to have

Verbs of the four classes are inflected through three modal systems. The paradigmatic suffixes used differ for the different classes of verb and for the mode. The organization of elements in the different modes varies somewhat, so they must be given separately:

11) ± personal prefix(§5)
-
± preverb(s)(§7.1)
=
+ stem
-
+ paradigmatic suffixes
>
verb in indicative mode (free form)

Personal prefixes are used except in third person intransitive forms; therefore ii verbs, which have only third person forms, never use personal prefixes. For the suffixal details see §§7.3-7.6:

√n- + √tɛpɛ + √nɑS•- + √a > ntɛp-ns•a I get to kill him

Among the preverbs found in indicative forms are several with tense-like meanings, √ki past, √wi future; some with modal meanings, as in the example; most of them are mutually exclusive, but this is not entirely true.

The indicative mode is used for statements and some questions in ordinary conversation; other questions use an equational construction with a participial verb; see §11.2 and §11.9. The paradigmatic suffixes include elements determining the status of the verb as affirmative or negative; together with the personal prefixes, the suffixes delimit the person and number category of subject and, if transitive, of object. Certain forms also contain a preterital element, relegating the reference of the verb to a time prior to the time of speech and indicating that the action or state referred to no longer exists(cf pattern 10) above). The various elements of the total suffix can be segregated to a certain extent but not analyzed into set layers, each with a specific function; see §§7.3-7.6.

12) + stem
-
+ paradigmatic suffix
>
verb in imperative or prohibitive mode(free form)(§§7.3-7.6)

A verb in one of these two modes has always second person subject; therefore ii verbs do not have these forms. The unanalyzable suffixes both delimit the person and number of subject and object, when any, and specify the mode as imperative or prohibitive. The two modes are used for affirmative and negative commands respectively:

√pja- + √n > pjan come here(2)!
√pja- + √k•ən > kəko pjak•ən don't come here(2)!

The particle kəko in the second form is always used pleonastically with prohibitive forms.

13) ± preverb(s)(§7.1)
=
± inserted words(§7.1)
=
± negative prefix(§7.1)
=
+ stem
-
+ paradigmatic suffixes(§§7.3-7.6)
>
verb in a conjunct mode(free form)

The simple conjunct forms, with no preverbs, may be termed the dependent, its principal use being in certain types of dependent clauses; it also functions as a hortatory. With the initial preverb √ʔɛ and the same regular conjunct endings the forms are narrative; this mode is the predominant one in story-telling or other hearsay narration. With ablaut of the first element, be it preverb or stem(see §7.1), and with different endings for certain person-number categories, the participial, a verbal noun, is formed. There are, for indicative and conjunct forms, three ranks for preverbs; some are restricted to use in the participial, or in the conjunct, or in the indicative, while others can be used in both indicative and conjunct. Among the latter are the tense elements mentioned above under pattern 11). In the position marked "inserted words" can be placed words which are morphologically entirely unrelated to the verb, bearing to it, in the sentence, some syntactical relation. The negative prefix is used for negative forms, omitted for affirmative. Like the indicative, the conjunct has special preterital forms.

√pja- + √t > pjat if he would only come!(dependent)
√ʔɛ= + √ki= + √pwa= + √pja- + √t > ʔɛ-ki-pwa-pjat he didn't come(narrative; the first two elements are preverbs, the third the negative prefix)
√ki= + √pja + √t (ablauted)> kapjat the one who came (participial)

The verb stem, in any mode, can be reduplicated(§7.2), giving an iterative form; the meaning is sometimes rather intensive or continuative. ʔɛ-ki-mamikatwat they fought continually together, stem √mikat reduplicated to √mamikat.

Numeral complexes bear some similarities to those for nouns and verbs, but can best be dealt with separately; see §8.

For many nominal and particular ideas there are a number of substitution forms; see §9. These are particularly important in clauses of the equational type; see §11.2 and §11.9.

There remain some uninflected elements unaccounted for. These are dealt with in §10, except insofar as they are mentioned adequately elsewhere.

4. DERIVATION

4.1. Roots, Medials, and Unanalyzable Stems. As indicated in §3, there are many stems which appear only in one function, nominal or verbal, and cannot be further analyzed. For example, √ɑta/ɛ (for "a/ɛ" see §7.4) live, dwell, as in ʔɛtat where he lives, his home (participial construction); √pja/ɛ come; √koki ai dive into water; √wis·ɑn ai eat; √miš ti eat. With the collection of a larger body of textual material some of these may, of course, prove to be analyzable.

There are in some cases pairs of root and final or medial and final with similar meaning and similar or identical form. Since the vast majority of elements are limited to one position, it is nevertheless preferable to regard identical root or medial and final as homonyms than as the same element used in different positions. As examples of such pairs may be given:

medial √k·atɛ leg, final √katɛ, √kata/ɛ
√k·atɛ leg(inanimate dependent noun stem); nk·at my leg
√kɑkanɑkata/ɛ ai be long-legged

medial √t·ɑwɑkE ear, final √t·ɑwɑka/ɛ
√t·ɑwɑkE ear(inanimate dependent noun stem); nt·ɔwɔk my ear
√mɑmakɑt·ɑwɑka/ɛ ai be big-eared

root √minE berry, final √mɑn
√minE berry(inanimate independent noun stem)
√minɑk·an seed(inanimate independent)
√mɑk·ɑtɛmɑn blackberry(inanimate independent); cf √mɑk·ɑtɛ ii be black

root √wikɑwamE house, final √wɑkɑmɑkwE
√wikɑwamE house(inanimate independent)
√nɛkɑtoš·awɑkɑmɑkwE barn(inanimate independent); cf √nɛkɑtoš·a#j horse

root √ɑnɑnɑ#w man, final homonymous
√ɑnɑnɑ#w man(animate, independent)
√tɑpak·ɑnɑkɛwɑnɑnɑ#w lawyer(animate, independent); cf √tɑpak·ɑnɑkɛ ai hold council. The √w is a connective element but the range of its function is not known.

root √k·wɛ woman, final homonymous;
√k·wɛ woman(animate independent)
√mɑčɑkɑk·wɛwɑš· (pejorative final superadded) first-born woman; cf √mɑčɑkɑk·owɑs· first-born man

For the most part finals and roots and medials are not related in this way. The functions of finals are treated in detail in §§4.2-4.7. Here may be given some examples of roots and medials:

root √kaš warm
√kašat·ɛ ii be hot(not of the weather)
√kašat·ɛ ii be hot weather
√kašasO ai be hot
√kašapos· ti heat a liquid
√kašas ti warm up food
√kašatas ai be glad

root √pam moving around
√pamas·a/ɛ ai fly
√pamOs·ɛ ai walk
√pamaška/ɛ ai flyfly
√pamatas ai be alive
√pamatak·a/ɛ ai swim along

root √kak having something
√kakašk ti have, hold
√kakanako?w ta bury with something(?)
√kakatas ai be rich

root √kak hide
√kakato ti hide
√kakan ta hide
√kakasO ai hide
√kakanako?w ta bury with something(? see above)

root √kak· think, decide
√kak·a?w ta appoint, choose
√kak·apjɛ? ta mark
√kak·ɛnam ta know, be acquainted with, recognize

More than one root can be present in a stem. Thus:

√nako?w ta bury, cover up
√kakanako?w ta bury with something; see above

√wapan ii be morning, be tomorrow
√pamawapan ii be almost morning
√pjɛwapan ii be becoming morning

√mjɛwE road
√čikwɛmjɛwE rainbow -- "thunder-road"; cf √čikwɛ thunder

Examples of medials, including some occurring in the foregoing forms:

medial √ak·w wood
√šakwak·wE pine tree
√wɛpak·wi ai throw something; swing an axe

medial √at exist, be
√kašatɑs ai be glad
√pɑmatɑs ai be alive
√pɑmatɑk·a/ɛ ai swim along
√kɑkatɑs ai be rich

medial √ɛn think
√kɑk·ɛnatɑm ai think
√nɛnatɑm ai remember
√Onɛnatɑm ai forget

medial √wɛ, √wɛwɛ, √wɛwɛk sound
√ɑšɑwɛ ai say so, tell so (may not belong here)
√ɑnɑwɛwɛkɑs ai make a noise
√ɑnɑwɛwɛkɑt ii make a noise

medial √čɛ round object
√at·ɑpɑčɛwɛpɑn ti and ta roll
√pitɑkɛčɛ? ti roll in
√miš·ɑčɛpok·ɑma(#j) peach
√pikɑčɛs·ɑ́ko#j stump, old stump, log

Other examples of these roots and medials and others will be found in the following sections, devoted primarily to finals.

4.2. Noun-Forming Finals. The diminutive and pejorative suffixes are accompanied by irregularities of sandhi so similar to those of the paradigmatic suffixes that they are dealt with in §6.5 instead of here. Among the various other noun-forming finals may be mentioned the following:

1) √#w, √#j, √#wE, added to roots or medials to form stems; probably present in the following and others like them:

√ɑnɑnɑ#w man
√sipɑ#wE stream, creek
√ɑškOtɛ(#j) fire
√Očak·ɛ#j stump
√šati#j spearhead, arrowhead

These elements have a relatively complicated behaviour in flexion; see §§6.4–6.8.

2) √n, forming a noun of instrument from ai verb stems.

It is mainly added to ai verbs in √kɛ, and the √-ɛ drops. The diminutive form as √as·, with the same loss of √-ɛ. For ai verbs not ending in the final √kɛ, a final √-ɛ changes to √-a:

√kwatamočakɛ be fishing; √kwatamočakan fishhook
√ak·atɛnakɛ braid hair; √ak·atɛnakan a braid of hair
√sikamɛ'akɛn spear something; √sikamɛ'akan spear
√tak·Opačakɛ tie things; √tak·Opačakan anything to tie things with; e. g., a hairribbon

√katakɛ prepare a garden (√-kɛ is not the final √kɛ); √katakan field

√kwatamočakas· a little fishhook

A number of nouns that apparently end in this have no comparable verb form listed:

√kapakOk·wɛ'akan lid
√kapakočakan apron
√atop·awɛkan tablecloth
√wak·a'akan fence
√was·ɛčakan window

3) √akan; related to the above;

√paman ta take care of as one cares for a domesticated animal; √pamanakan a domesticated animal

4) √wan; also related to the above;

√Omanaškano ai eat a feast; √Omanaškanowan meat at a feast
√nakamO sing ai; √nakamOwan song
√napwak·a ai be smart; √napwak·awan education; intelligence; shrewdness
√nima'atij ai dance together; √nima'atijawan a dance
√pjɛwiwaš ai carry a pack; without the √pjɛ, √wiwašawan pack, bundle
√wis·an ai eat; √wis·anawan food
√jačamo talk; √jačamowan story

Here also there are some nouns with no listed related verb:

√atop·awan table
√wɛpa'awan paddle, oar
√matotowan steam, vapor; but cf matoto' ta give a sweat-bath to

5) √k·an instrument, means; added to noun roots:

√minE berry; √minɑk·an seed
√ɑškOtɛ fire; √ɑškOtɛk·an flint-and-steel

6) √mɑn berry, grain (cf §4.1). The prior element varies:

√mɑk·ɑtɛ ii be black; √mɑk·ɑtɛmɑn blackberry
√mɑs·kwa ii be red; with unclear sandhi √mɑs·komɑn red raspberry
√tɛ?ɑmɑn strawberry; the first element is a root √tɛ?; cf the medial √tɛ?E in the stem √tɛ?E heart
√ɑnɑč·imɑn pea; first element uncertain
√ɑt·ɑkɑmɑn acorn; first element reappears in √ɑt·ɑkɑmɑšE √oak-tree, and √ɑt·ɑkɑpɑkwE leaf
√mɑtamɑn corn may belong here; the first element would be obscure if this analysis were made

7) √apo liquid (inflection irregular, see §6):

√napo drink, liquid
√mɑtamɑnapo corn soup or hominy
√siw sour, as in √siwɑn ii be sour; √siwapo cidar
√tɑk·apoja ii be cold (of a liquid only)
√kɑšapos· ti heat a liquid
√ɑpɑpawinapokɑtakɛ ai go around dirtying water

The element √apa in the following forms may be related:

√kas·kɑnapakwɛ be thirsty ai
√nɑkapawɛ ai dissolve

4.3. Intransitive Finals.

1) ii √mɑkɑt is used freely with any ii stem, being superadded to those which can stand without it. But the following ii stems have it as their only final, so that it always remains:

√ɑjɑmɑkɑt be here; cf ai √jɘ, √j be here
√pjɛmɑkɑt come; cf √pja/ɛ ai come
√nomɑkɑt do
√pjɛnomɑkɑt come to happen
√nɑpomɑkɑt die; cf √nɑpo ai die

2) √#w forms ai verbs of being from animate nouns:

√mɑk•o bear; √mɑk•o#w be a bear
√nɛkɑtoš•a#j horse; √nɛkɑtoš•ajɑw be a horse

3) Ai verbs of having are formed by zero final, but with the prefix √O; there are some irregularities in adding this:

√ničɑnɑs• child; √Oničɑnɑs• have children
√os• father(dependent); √O⁹os• have a father
√otan village; √Ototan have a village

4) Ai verbs of producing are formed from nouns with the final √k•ɛ:

√ɑs•ɛma(#j) tobacco; √ɑs•ɛmak•ɛ prepare tobacco
√wiwɑšɑwɑn pack, bundle; √wiwɑšɑwɑnɑk•ɛ make up a pack
√wikɑpáš• bark; √wikɑpiš•ɑk•ɛ collect bark
√kikos• fish; √kikos•ɑk•ɛ catch fish
*√nɑs•ɑwa⁹ --; √nɑs•ɑwa⁹ɑk•ɛ put feathers on arrows

Cf √wɑnɑkwE hole, √wɑnɑk•ɛ dig a hole, which suggests a fusion at an earlier period in the development of the language.

5) Ai verbs of action on indefinite object are formed with √kɛ, with various modifications of the preceding final. Ti √to changes to √ta before it:

√mačito ti take; √mačitakɛ ai take something
√naš•Onačɑto ti destroy; √naš•Onačɑtakɛ destroy something

Ta √w changes to √a:

√mɑčɑnɑw compete with; √mɑčɑnakɛ compete with someone
√nɑnat•ɛw ask; √nɑnat•akɛ ask for someone, ask someone
√mikɑčɛwit•ɑw work for; √mikɑčɛwit•akɛ work for someone

6) Ai verbs of action on indefinite object are formed with √wɛ from ta stems;

√wɛpi⁹ ta run away from; √wɛpi⁹ɑwɛ run away
√nok•aN ta hire; √nok•ašɑwɛ ai hire something done
√nɑkɑtɑN ta win a race from; √nɑkɑtɑšɑwɛ ai win a race
√ɑ, √N say; √ɑšɑwɛ say so(cf§4.1)
√nita⁹ ta send for something by; √nita⁹ɑwɛ send for something

√ɑpɑ?ɑwɛ ai run towards a goal; cf √tɛpɑpɑ? escape from ta
√tawɛ ai sell, trade; cf √tam ta sell to

7) Ai √ɑs, ii √ɑt are used in primary derivation, forming animate and inanimate intransitive pairs of stems from the same root:

√mjanɑs ai be ugly; √mjanɑt ii be bad
√pinɑnakwɑs ai be clean; √pinɑnakwɑt ii be clean
√ɑšɑwɛpɑs ai experience something; √ɑšɑwɛpɑt ii do something
√wɛnɑp·ɑnɑs ai be easy; √wɛnɑp·ɑnɑt ii be easy
√ɑnɑwɛwɛkɑs ai make a noise; √ɑnɑwɛwɛkɑt ii make a noise
√?ɑwɑnɑs ai be pretty; √?ɑwɑnɑt ii be good

Other pairs of finals so used are:

8) Ai √ɑs, ii √ja:

√wiščɑkɑs ai be strong; √wíščɑkja be hard ii

9) Ai √n, ii √ɑn, with the prefinal √S·. No precise pairs, but:

√mɑčɑmoš·ɑn ai be stuck
√pjɛkwaš·ɑn ai come out of the water
√nɑkɑpjɛš·ɑn ai melt away (like ice)
√nɑkaš·ɑn ai stop
√pɑmɑkaš·ɑn ai make a track
√pikɑtɑpɛš·ɑn ai break one's head
√ɑp·ɛkɑš·ɑn ai fall
√šɑkɑš·ɑn ai lie
√ɑšɑš·ɑn ai lie there, lie thus
√ɔčɑš·ɑn ai be underneath

√tɑkɔs·ɑn ii be put with something
√kwɑkɑnɑs·ɑn ii be mouldy
√wɑwɑnɑs·ɑn ii be not fixed right
√p·ɛk·wɛs·ɑn ii be loose

10) Ai √ɑs with no ii correspondent; among may are these:

√pɑmɑtɑs ai live
√šošɑs ai be smooth, slick

11) Ii √ɑn with no ai correspondent, particularly in impersonals:

√kɑmɑwɑn ii be raining
√nɔtɑn ii be windy

12) ai √čɑn, in the three forms

√kwičɑn ai lie in water; cf √kwito ti leave in water
√Otɑkočɑn ai fall; cf the following, and √Očɑš·ɑn ai be underneath
√kočɑn ai hang, be suspended

13) ii √tɛ;

√tɑk·Opɑtɛ ii be tied up
√kišɑkɑtɛ ii be dry
√pɑtɑkɑtɛ ii be there, here

There are various less important ia finals; √i in √tok·i wake up, cf √tok·ɑn ta awaken, and in √wɛpak·wi swing an axe, possibly in √mači go away; √a/ɛ in √nis·a/ɛ fall down, cf √nis·ɑwɛpɑnɑmɑw ta throw something down to, or in √ɑšɑtɛ?a/ɛ think, decide, cf √jɑpáxɑtɛ?ɑm ta keep one's mind on; √tɑs as in √kɑk·ɛnɑtɑm know something, cf √kɑk·ɛnɑm ta know, √kɑk·ɛnɑt ti know; √t·ɑm as in √kačit·ɑm try, cf √kačit·ɑw ta try, test.

With slightly more concrete meanings can be mentioned the following:

14) √Os·ɛ ai walk, by foot:

√pɑmOs·ɛ ai walk; cf √pɑmatɑs ai live
√?akɑmOs·ɛ ai go on snowshoes; cf √?akɑm snowshoe
√ɑp·it·Os·ɛ ai take one's time in walking

15) Ai √kwam sleep; only in

√Osamɑkwam ai oversleep; cf √OsamɑkɑtasO ai be too angry

16) Ai √pɑt·o run:

√pɑmɑpɑt·o ai run along; cf √pɑmOs·ɛ walk
√kwɛpɑmɑpɑt·o ai run past, run by
√pɑpamɑpɑt·o run around; cf √pɑpamatɑs ai travel
√pɑpɑt·o run over somewhere; cf √pɑšoškwɑs·a/ɛ slip in the feet
√kiwɑt·apɑt·o ai run around; cf √kiwɑt·a?omɑko ai ride around horseback
√pikɛpɑt·o ai be exhausted from running; cf √pikɛjɛk·wɑs ai be exhausted
√kwapɑt·o ai run out of the water; cf √pjɛkwaš·ɑn ai come out of the water
√kiwɛpɑt·o ai run back; cf √kiwɛ ai go home

17) Ai √aška/ɛ motion

√pamaška/ɛ ai fly
√nakaška/ɛ ai stop; cf √nakaš·an ai stop
√pikaška/ɛ ai be broken, tumble-down; cf √pikašk ti wear out

18) Ai √ak·a/ɛ motion

√pamatak·a/ɛ swim along
√apapamatak·a/ɛ ai swim around
√kašɛk·a/ɛ ai be a fast runner; cf √kašɛ?w ta hit or strike lightly; the former word apparently means "hit the ground lightly," hence move fast over it.
√manowatak·a/ɛ ai have a war dance

4.4. Intransitive Finals; Reciprocals. The ai reciprocal finals are √at and √atij. For the most part these are added regularly, either being used with any transitive animate stem:

√kwas· ta fear; √kwas·at, √kwas·atij ai fear each other
√kakaN ta hide; √kakonat(ij) ai hide each other
√moš·a? ta feel; √moš·a?at(ij)
√naka? ta lose; √naka?at(ij)
√naS· ta kill; √nas·at(ij)
√kašapakasw ta heat; √kašapakaswat(ij)
√nako?w ta bury; √nako?wat(ij)
√kanoN ta talk to; √kanonat talk to each other; other form not testified, but probably possible
√kašipək·anɛn ta scratch the back of; √kašipək·anɛnat (same comment)

Roots which take ta √m, ti √t, or ta √am, ti √at (see §4.7), drop the √m or √am before adding the reciprocal finals:

√wapam see; √wapat(ij)

Stems with a final √aw behave in various ways. In some cases the form is made with connective √a added, and then the resulting √awa changes to √O; the ending after this is √tat(ij):

√mak·aw ta find; √mak·Otat(ij) find each other
√nak·wɛškaw ta meet; √nak·wɛškOtat(ij)
√nis·kik·aw ta bother, disturb; √nis·kikOtat(ij)
√witok·aw ta play with, have a liaison with; √manowitok·Otat(ij) be good to each other

If this is to be regarded as the regular method, then the following is irregular:

√mačɑnɑw compete with; cf √mačɑnakɛ ai compete with someone;
√mačɑnat compete with each other

For the following there is no corresponding ta verb on record:

√ɑmačɑtotat abuse each other
√mikat fight together
√wiwɑtij have intercourse
√nimɑ'ɑtij dance together
√jaš·ɑtonɑmat trade with each other; but cf √jaš·ɑtoN ti trade; parallel with this a ta *√jaš·ɑtonɑmɑw trade something to would be expected, from which the reciprocal form would be made; the ta form is not on record but is probably perfectly possible.

4.5. Intransitive Finals; Reflexives. The reflexive is formed from ta verbs by adding the final √ɑtɑsO or √ɑtɑso. The former is added when the resulting pattern of weak vowels is such that the second ɑ will stay; otherwise the latter:

√kwɑs· ta fear; √kwɑs·ɑtɑso/O
√kakɑN ta hide; √kakɑnɑtɑso/O
√moš·ɑ' ta feel; √moš·ɑ'ɑtɑso
√nɑkɑ' ta lose; √nɑkɑ'ɑtɑso/O
√nɑS· ta kill; √nɑs·ɑtɑso/O
√kašɑpɑkɑsw ta heat; √kašɑpɑkɑswɑtɑsO
√nɑko'w ta bury; √nɑko'wɑtɑsO
√nos·kwɑm ta lick; √nos·kwɑmɑtɑsO
√moškɑnɑN ta fill up; √moškɑnɑnɑtɑsO

Stems in √m or √ɑm may drop that:

√wɑpɑm ta see; √wɑpɑtɑsO

Stems with final √ɑw are irregular:

√mɑk·ɑw ta find; cf ti √mɑk· find; √mɑk·ɑwɑtɑtɑso or √mɑk·ɑtɑtɑso
√notɑw ta hear; cf ti √not hear; √notɑtɑso.

4.6. Intransitive Finals; Passives. There are two finals with which an ai verb with a passive meaning may be formed from a ta verb. The first is √aj. This is added with no irregularities whatsoever; only forms for third person subject, however, can be made with it:

√wapam ta see; √wapamaj be seen; wapmajo he is seen
√nako?w ta bury; √nako?waj be buried; nko?wa?ik they are buried

The other is √ačakasO, √akasO, √asO. The rules governing the choice of form are not clear. The last form appears only in

√nako?w ta bury; √nako?wasO be buried

The following have the second form:

√mak·aw ta find; root √mak·; √mak·akasO be found
√nis·awepan ta throw down; √nis·awepanakasO be thrown down
√paškasw ta shoot; √paškaačakasO be shot
√kašapakasw ta heat; √kašapakasakasO
√miN ta give to; √minakasO
√čipa?w ta hit, punch, strike; √čipa?akasO

It is to be noticed, in the last example, that a postconsonantal final √w drops before this ending.

The following have the first form; the ta final is dropped before adding it:

√wapam see; √wapačakasO be seen
√kakaN ta hide; √kakačakasO be hidden
√moš·a? ta feel; √moš·ačakasO be felt
√naka? ta lose; √nakačakasO
√naS· ta kill; √nas·ačakasO
√nišok·amaw ta help; √nišok·amačakasO

The following is similar, though the final √-s· may not be strictly a final:

√kwas· ta fear; √kwačakasO be feared

The stems formed with this final are not restricted as to subject of

the inflected form; nwapčɔkas I am seen, wapčɔkaso he is seen.

Somewhat similar to this in form is the final √ačakatɛ with which are formed, from ti verbs, ii verbs with passive meaning. The final of the ti stem is replaced by it:

√wapat ti see; √wapačakatɛ be seen; wapčɔkatɛ it is seen
√wɛp·ot ti hit; √wɛp·očakatɛ
√nat ti go fetch; √načakatɛ
√manat ti smell; √manačakatɛ
√pjɛto ti bring; √pjɛčakatɛ
√pokapato ti tear up; √pokapačakatɛ
√pwit·o ti wait for; √pwičakatɛ

4.7. Transitive Finals. Transitive finals frequently go in pairs, forming a comparable ta and ti stem from a single root or group of roots and medials; for other Algonkian languages they have been termed instrumentals. This term does not seem particularly appropriate for Potawatomi.

1) ta √ʔ, ti √t·o

√nakaʔ ta lose; √nakat·o ti lose
√pwiʔ ta, √pwit·o ti, wait for
√wikačaʔ ta, √wikačat·o ti, try, test

2) ta √N, ti √t and √to

√tak·Opan ta, √tak·Opato ti, tie, fasten; cf ii √tak·Opatɛ be tied up
√kakaN ta, √kakato ti, hide; cf ai √kakasO hide
√mačiN ta, √mačito ti, take; cf ai √mači go.
√ap·ɔkan ta, √ap·ɔkat or √ap·ɔkato ti, throw down; cf ai √ap·ɔkaš·an fall
√jap·waN ta, √jap·wat ti, dream about; cf √jap·wa/ɛ dream
√naN ta, √nat ti, go get, fetch

3) ta √m, √am, ti √t, √at (in many forms impossible to determine which). A great many, including:

√tɛpɑm ta, √tɛpɑt ti, say the truth about; have enough of
√čakɑm ta, √čakɑt ti, eat up, consume
√jačɑm ta, √jačɑt ti, talk about, tell on
√wapɑm ta, √wapɑt ti, see

4) ta √n, ti √n

√ɑt·əpačɛwɛpɑn ta and ti, roll along
√Otɑtɑn ta and ti, get, acquire, take

5) ta √ɑ?w, ti √ɑ?

√kiškɑ?w ta, √kiškɑ? ti, cut
√nɑko?w ta, √nɑko? ti, bury

6) ta √ɑsw, ti √ɑs

√kašapɑkɑsw ta, √kašapɑkɑs ti, heat
√paškɑsw ta, *√paškɑs ti (not well testified), shoot

7) ta √t·ɑw, ti √t· from ai stems, relating an action to an object; before these the final √tɑm or √t·ɑm of an ai stem drops:

√ai kačit·ɑm try; √kačit·ɑw ta try something on, test
√mok·it·ɑw ta, √mok·it· ti, start out after
√nak·wɛt·ɑw ta, √nak·wɛt· ti, answer; cf possibly
√nak·wɛsaka?ɑm ai be excused, √nak·wɛškɑw ta meet
√tɛpwɛt·ɑw ta, √tɛpwɛt· ti, believe

8) ta √ɑškɑw, ti √ɑšk

√tɑkɑškɑw ta, √tɑkɑšk ti, kick

Not paired are

√pikɑšk ti wear out
√pokɑšk ti break
√šaš·akwɑšk ti mash with the feet; cf √šaš·akwɑm ta chew
√ɑkɑ̆ɑšk ti have, hold

√mjanɑškɑw ta hurt, kick, injure; hurt from the inside -- as, e. g., food or medicine or poison
√nɑk·wɛškɑw ta meet

9) ta √ɑk·ɑw, ti √ɑk·

√ɑtɑšik·ɑw ta, √ɑtɑšik· ti, play with, fool around with

10) Ta √m forms a verb relating an action to an object, from an ai stem. The ai final is so usually dropped that the formation probably should be thought of primarily as primary derivation, rather than secondary derivation. In some of the cases there is a comparable ti form with √t; perhaps, therefore, this final is not to be distinguished from that listed above as 3).

√nap ai look, glance; √napɑm ta have look sɑfto one
√japačɑtɛ'a/ɛ ai think of something; √japačɑtɛ'ɑm ta thinkoof
√kak·ɛnɑtɑm ai know something; √kak·ɛnɑm ta know; so with may stems containing the medial √ɛn think
√janɑmɑs ai have hard luck; √janɑmɑm ta crowd, harass
√tawɛ ai sell; √tam ta sell to

11) Ta √ɑmɑw forms a double-object verb; the direct object is not expressed in the morphology and may be either gender; the morphologically indicated object is an indirect object, in meaning, and animate. Ti √to and √t·o drop the √o :

√nis·ɑwɛpaN ta throw down; √nis·ɑwɛpanɑmɑw ta throw something down to or for
√ak·jɛnɑm ta hold, retain; √ak·jɛnanɑmɑw hold for, retain for
√mak· ti find; √mak·ɑmɑw ta find for
√nat·o ti kill; √nat·ɑmɑw kill for
√as·wɛN ti divide up, partition; √as·wɛnɑmɑw ta divide up for

Two double-object verbs are formed otherwise:

√mačito ti take; √mačitɑw take something for
√naš·Onačɑto ti destroy; √naš·Onačɑtakɑw ta destroy things for

5. PERSONAL PREFIXES

Personal prefixes are used in the formation of possessed themes from noun stems, and in the inflection of all types of verbs, except ii, in the indicative mode. In all these cases the rules controlling the selection

of one of the three prefixes are as follows:

> If the entity to which the prefix refers includes the second person, the second personal prefix is used. If that entity excludes the second person, but includes the first, the first personal prefix is used. If it includes neither, the third personal prefix is used.

"Entity" means possessor in the case of a possessed noun theme, subject or object in the case of a verb. Thus if a possessor is 2, 12, or 15, the second personal prefix is used, if 1 or 15, the first, if 3 or 35, the third. If subject or object of a transitive animate verb is 2, 12, or 25, the second person prefix is used; etc. The distinctions of person and number not made by the prefix are made, in the case of possessed noun themes, by the personal suffix (see §6.6), in the case of verbs, by the paradigmatic endings (see §§7.3-7.6).

The form of the prefixes varies, depending on the constellation of morphophonemes at the beginning of the element to which they are added. An element beginning in a weak vowel takes 1 √nɑt, 2 √kɑt, 3 √wɑt. Elements beginning in a consonant take either those forms or 1 √n, 2 √k, 3 √w. A few noun stems begin in a strong vowel; these take only the latter forms.

√čiman canoe
nčiman or ntəčiman my(1) canoe(θ)
kčiman or ktəčiman thy(2) canoe(0)
wčiman or wtəčiman his(3) canoe(0)

√ɑk·ɑk·O bucket (animate noun)
ntəkk·om my(1) bucket(3)
ktəkk·om thy(2) bucket(3)

wtəkk·omən his(3) bucket(3')
ntəkk·omnan our(15) bucket(3)
ktəkk·omrən our(12) bucket(3)
ktəkk·omwa your(25) bucket(3)
wtəkk·omwan their(35) bucket(3')

√ipɑtɛ tooth
nipət my(1) tooth(0)
wipət his(3) tooth(0)

√os· father
nos· my(1) father(3)
ʔos·ən his(3) father(3')

√wapɑm ta see
kwapma you(2) see him(3)
kwapmək he(3) sees you(2)
kwapɛm you(2) see me(1)
kwapmən I(1) see you(2)
nwapma I(1) see him(3)
nwapmək he(3) sees me(1)
wapman he(3) sees him(3') (√wɑw- by internal sandhi gives ʔw-, which by external sandhi gives (ʔ)w-, which is written arbitrarily but more simply as w-; see §2.2)
wapməko he(3') sees him(3)

There are two special sandhi features to be noted. After the personal prefixes with the firms √n, √k, √w, but not as a general rule of internal sandhi, element-initial √ʔ- changes to √t-; element-initial √j- freely remains or changes to √t-:

√ʔakɑm snowshoe
ntakməm my snowshoe; or ntəʔakməm

√jatɑs·ok·an story
wjats·ok·an or wtats·ok·an his story; or wtəjats·ok·an.

√jakwatɑs ai be crazy
njakwatəs or ntakwatəs I am crazy; or ntəjakwatəs

√ʔa preverb intentive(see §7.1)
nta-maci I am going to go away

6. THE NOUN

6.1. Gender. Nouns referring to human beings, animals, and entities thought by the Potawatomi to be alive -- spirits, ghosts, and the like -- are animate. The name of a living entity does not become inanimate when the entity dies -- a dead man is still referred to by the same animate noun as a living. All nouns except those of the above type, and the specific marginal cases mentioned below, are inanimate.

Border-line cases which are animate include first body-parts; all but the following are inanimate:

√Ok·ɑtɑn vagina, vulva[1]
√mɑk·ɑtɑkɑn fur
√mɑs·kwati#j anus
√mikwɑn feather
√nɑkwikɑn wing(dependent)
√nɑškɑtɛj bird's tail(dependent)
√nɑš·ɑwɛj scrotum, testes(dependent)
√ɑs·ɑj hide, skin(possessed themes by suppletion, from √ɑs·am)
√šɛj hide, skin, rind(dependent)
√šikɑn hip(dependent)
√(O)škišɑkO eye[2]
√tonɑk·os·ɑwɛj kidney(dependent)
√wɑk·ajɑpɑtɛ#j circle of teeth, jawful of teeth
√winɑnO fat, grease

Some botanical terms are inanimate; the animate ones are:

√kɑtɑwɑn log
√kišɑški#j flat cedar tree
√ɑkOčɛs· bean
√mɑk·ɑtɛmɑn blackberry
√mɑsɑt·ɑkwE ear of corn
√mɑs·komɑn red raspberry

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[1]This may be wrongly analyzed; it may be properly √k·ɑt##, dependent, wk·ɔtɔn her vagina; it did not occur in texts but was obtained from an informant.

[2]A morphophoneme or group thereof enclosed in parentheses is optionally present or absent; thus there are two stems for "eye"; √OškišɑkO and √škišɑkO.

√maš·iməm apple
√mətaməm corn-grain; corn
√mət·əkwE tree, stick, log(in the latter meaning may be inanimate; this is not quite clear)
√miš·əčɛpok·əma(#j) peach
√Onəkɛk·O, Onəkɛk·wE tree-bark
√pok·əma#j plum, peach
√əp·ək·jə cattail
√šəkwak·wE pine tree
√əškopjE cedar
√ət·əkəməšE oak tree
√wapətə#j mushroom, toadstool
√wapətok·ɛ#j mushroom, toadstool

Finally, there is a miscellanious collection of things which are animate despite their actual nature; all things about which there could be any doubt are included in the following list:

√čikwɛ thunder (may class as a "spirit" and be animate for that reason)
√ʔanək·ot cloud; man's name (FP)
√ʔašpəkO bluff; high hill along a river
√ʔɛmək·wan big spoon for cooking or serving
√kis·əs·O sun, month (possibly inanimate for the latter)
√konjE snow
√ək·ək·O bucket
√ək·əšəjɛpəwis·ən breakfast
√ək·əti#j kettle
√mək·omjE ice
√məs·kopwakən red clay pipe, peace pipe
√məs·kwapəko(#j) penny
√mət·əkwap cow
√ənəko(#j) star
√napək·owakən string of beads; necktie; handkerchief tied around the neck
√pəkonəjəwis·ən evening meal
√potaʔakon mortar
√Opwakən pipe
√Osawəšonəja#j gold money; when inanimate means gold things
√əs·əpjE fishnet
√əs·ɛmə(#j) tobacco (perhaps this should be listed as botanical)
√šomikwɛ ~~fishnet~~ snake
√təpək·əkis·əs·O moon
√Otapəjən wagon, cart
√tɛwɛʔəkən drum
√wapəkən clay
√wɛt·ək·ək·O brass kettle

6.2. Dependency. Dependent noun stems are much less common than independent ones. They include two categories, semantically speaking; body parts and terms of relationship. The only dependent theme which falls in neither of those groups is

√ipE arrow

Not all body parts are dependent; √mas·kwati#j anus, √(O)škiškak eye, √pačakwan penis are examples of independent body part names. The dependent ones are:

√čašE nose
√šikwan knee
√ipatE tooth
√ijow body
√kač·anačE thumb
√k·anatapE skull
√k·anE bone
√k·atan vagina, vulva[1]
√(O)k·ak·a#wE chest, breast
√k·atE leg
√(O)k·onE liver
√k·wɛkan neck
√masatE stomach
√načE hand
√nakwikan wing
√nak·E arm
√anamakan shoulder
√naškatɛj bird's tail
√naš·awɛj scrotum
√nokan hip
√pakakanakan ankle
√pip·is·atɛ?E lung
√p·akɛkan rib
√satE foot
√sawanakwE tail
√sɛkananawakan tongue
√as·kwɛnačis· little finger
√as·kwɛsatis· little toe
√šɛj hide, skin; rind of a fruit
√šikan hip
√š·ak·E belly
√čak·wan limb of a tree(perhaps should be listed above with the stem for arrow)
√tapE head

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[1]See footnote 1 in §6.1(p 59).

√tɑt·ɑkakwɑn backbone
√tamɑk·ɑn chin, jaw
√tɛ?E heart
√tonE mouth, lips
√tos·kwɑn elbow
√t·ɑs·E navel
√t·ɑwɑkE ear
√winɑs·ɑs·E hair
√winɛtɑpE brain

Whether all "terms of relationship" are to be regarded as dependent or not depends on one's precise definition of "terms of relationship." No kinship term can stand in an unpossessed form. But in addition there are some other dependent nouns which are not strictly kinship terms but do express a relation; e. g., √ik·an friend, √ɑj pet. The list follows:

√ič- fellow -- (see §6.3)
√ik·an friend
√iw wife
√iwɑš·, √iwəš· (pejorative of the above, see §6.5) general term of derogatory address
√kwɑs· son
√kjɛ#j mother
√ɑk·wɛm sister
√mɑs·ɛ#j older sister
√mɑš·omɑs· grandfather
√mɑš·omɛ#j stepfather; FP paternal uncle
√ɑnɑwɛmakɑn relative
√napɛm husband
√nɛnɛjɑm mother
√ničanɑs· child
√noš·ɛ#j stepmother; FP maternal aunt
√ok·Omɑs· grandmother
√os· father
√sɑkwɑs· maternal aunt
√sɑkwɑs·ɑs· mother-in-law
√s·ɑsɛ#j older brother
√šanɑs· father-in-law
√šɑš·ɛ#j older brother
√š·ɑmɑs· niece -- sister's daughter
√š·imɛ#j younger sibling
√tanɑs· daughter
√tɛtɛ#j father, "dad"
√ti?ɑkwam pet horse, pony
√wičɑ?ɛ#j spouse
√ɑj pet

6.3. Noun Compounds. Noun compounds are formed by prefixing a root to a noun stem, with external sandhi between them. Thus all noun forms containing an external juncture, except locatives (see §3 and §6.8) are marked as compounds; others, in which the difference between internal and external sandhi would not be apparent in the resultant forms, are not always safely classified as compounds or as derivations with more than one root; the latter, as seen in §4.1, also occur. As examples may be given:

√ɑp·ɑšk black(?)
√mɑ?wɛ(#j) wolf; √ɑp·ɑšk=mɑ?wɛ(#j) lion; singular p·ɵšk-m?wɛ.
√kɑno(#j) eagle; √ɑp·ɑšk=kɑno(#j) black eagle; singular p·ɵšk-kno.

√wap white
√wap=kɑno(#j) white eagle
√wap=konoškwɛ#j or √wapɑkonoškwɛ#j rat
√wap=to#j, √wapɑto#j mushroom, toadstool

In case of doubt as to analysis forms have been analyzed as derivations with more than one root rather than as compounds.

The most productive type of compound is that with first element √ič. This is a medial, not a root, in that it cannot stand initially; a personal prefix must precede it; when prefixed to a noun stem it forms a dependent stem meaning ". . . fellow-. . ." -- that is, it modifies the possessive relation between the possessor and the possessed entity from one of actual property to one in which the form expresses membership in a single group of the possessor and the possessed.

√ ?ɛs·ɑpɑn raccoon
wič-?ɛs·pɵnɵn his fellow-raccoon(s) -- "he" being also a raccoon

√ɑnɵš·ɑnapɛ Indian
nič-nɵš·napɛtɵk O my fellow Indians! (an Indian speaking)

6.4. Classification of Noun Stems. In §2.1 it was pointed out that the system of morphophonemics which reduces to rationality most of the apparent irregularities of the language leaves a certain residuum of unreduced odd forms which it is more efficient to mention specifically than to deal with by complicating the symbolism further. The greatest number of these are found in noun formations. The formulae of noun stems, of course, are derived from their paradigms. If the formulae are so constructed that a particular group of the forms in each paradigm are regular, others are irregular. If others are taken as basic in constructing the formulae, then a still different set of irregularities will result. The most efficient treatment bases formulae on the flexions -- singular, plural, obviative, second obviative, plural vocative; it is this which has been done, and the presentation which follows is based thereon.

For purposes of describing suffixational irregularities the following classification of stems is useful:

1) The stem √ɑk·ɑ land, and all longer stems having this as the final element except for a zero final.

2) The three stems √mɑs·kwɛ blood, √pɑkwɛ dust, and √ɑnwɛ bullet.

3) Stems ending in a strong vowel (other than the above); e. g.:

√šomikwɛ smile

4) Stems ending in √#j:

√mɑtɑmosɛ#j old woman

5) Stems ending in a consonant other than √#j:

√nɑkɑmOwɑn song

6) Stems ending in √E or √jE, including those in postvocalic √wE, but not those in postconsonantal √wE:

√tɑpE head

7) Stems ending in √#wE:

√sipɑ#wE stream

8) Stems ending in postconsonantal √wE other than those in √#wE:

√nak·ɑnɑškwE reed

9) Stems ending in √0:

√winɑnO fat, grease

Some stems have forms so as to fall into two of the above categories -- in other words, are pleomorphs. Thus, much more frequent than 3) or 4), are stems falling either in 3) or in 4):

√mɑnato(#j) snake, spirit

There is likewise some variation between 8) and 9), e. g.:

√mɑt·ɑkwE or √mɑt·ɑkO tree

In the following sections on suffixation the various types of stems are referred to by numbers followed by single closing parentheses -- 3), 3)-4) pleomorph, and the like.

6.5. Diminutives and Pejoratives. The final for the diminutive is √s·:

3), 4), and 3)-4) pleomorphs: In the recorded cases the final √#j, whether used always or only sometimes in the plural, is dropped in adding √s·:

√natwɛ snake; √natwɛs• little snake
√waposo rabbit; √waposos• little rabbit

5) Stems in a consonant add √ɛ before the √s•:

√wiwin horn; √wiwinɛs• little horn
√ɑnɑmoš• dog; √ɑnɑmoš•ɛs• puppy

But themes in the finals √kɑn or √k•ɑn substitute therefore √kas•, √kas•:

√nak•ɑn mat; √nak•as• little mat
√Onakɑn dish; √Onakas• little dish

6) √E and √jE are maintained:

√mjɛwE road; √mjɛwɛs• trail

8) Postconsonantal √wE changes to √O:

√wanɑkwE hole; √wanɑkos• little hole

What stems of types 1), 2), 7) and 9) is not known for no examples occur in the material. The irregularities, if any, might well parallel those for the √k locative (see §6.8) and √m possessive derivative (see §6.6).

The diminutive derivative normally implies simply diminution — child, baby; road, trail; house, hut; and the like. In the following cases there is a more drastic change of meaning:

√mɑt•ɑkwE, √mɑt•ɑkO tree, stick, log (animate);
√mɑt•ɑkos• twig (inanimate)
√pɑkanE walnut; √pɑkanɛs• hazel-nut
√ɑšɑkOtɛ(#j) fire; √ɑškOtɛs• match
√wapɑkonoškwɛ(#j) rat; √wapɑkonoškwɛs• mouse

Diminutive derivatives maintain the gender of the underlying stem. The first of the four examples above is the only exception, and it is not an exception if, as is possible, the underlying stem in the meaning log -- that is, not a living tree -- is inanimate.

The final for the pejorative is √šː:

3) 4) and 3)-4) pleomprphs; the form with √#j is used:

√was·akonɛto#j flower √was·akonɛtojaš· bad-smelling flower

5) Regular:

√jataːs·ok·an story; √jataːs·ok·anaš· bad story

6) The √E or √jE drops in some cases:

·√mjɛwE road; √mjɛwaš· bad road

In some others, the √E becomes √ɛ and √j is added:

√ipatE tooth; √ipatɛjaš· bad tooth

8) The one available form from a stem of this type is:

√wanakwE hole; √wanakojaš· bad hole

9) like 8):

√ak·ak·O bucket; √ak·ak·ojaš· bad bucket

Pejoratives maintain the gender of the underlying stem. In one case a difference in meaning other than simple belittling results; the stem √iw, which is medial plus final zero, appears only in the form wiwɛn his wife(3-3') and in a pejorative derivative √iwaš· or √iwəš·, which is used freely, not in the meaning wife, but as a half-jesting derogatory term of feference for anyone.

6.6. Formation of Possessed Themes. The personal prefixes and two personal suffixes delimit completely the number and person of the possessor of a possessed theme. The rule for use of prefix has been given in §5; the second personal prefix is used for 2, 12 and 25, the

first for 1 and 15, the third for 3, 3', 3", 35, 0, 05. There are two personal suffixes, one used when the possessor is plural and includes the first person, the other when it is plural and excludes the first person. Thus, tabularly:

possessor	prefix	suffix
1	√n, √nat	--
2	√k, √kat	--
3, 3', 3", 0	√w, √wat	--
12	√k, √kat	√nan
15	√n, √nat	√nan
25	√k, √kat	√wa
35, 05	√w, √wat	√wa

Thus:

√Okoma chief; with noun in singular flexion, obviative when necessary:
ntokmam my(1) chief(3)
ktokmam thy(2) chief(3)
wtokmamon his(3') chief(3')
ktokmamnan our(12) chief(3)
ntokmamnan our(15) chief(3)
ktokmamwa your(25) chief(3)
wtokmamwan their(35) chief(3')

It is to be noticed that according to the rule for obviation(§3, under pattern 6)) when the possessor of an animate noun is 3 or 35 the noun must be obviative.

The only irregularity of sandhi for the personal suffixes is that √nan changes to √na before the plural vocative paradigmatic suffix √tak (§6.9). Thus:

ntokmamnatek O our chiefs!

For the formation of possessed themes there remains to be discussed only the use or non-use of the possessive derivative suffix √m, and the irregularities of sandhi which its use involved; but this is the most complicated item of all. Dependent stems reject it, as do the following independent stems:

√čač·amasakan sneezing medicine
√čikwɛ thunder
√čikwɛmjɛwE rainbow
√ɑ?amosəs·an beehive
√?anak·ot cloud; FP man's name
√?apatosis· half-breed
√?asajan loin-cloth; diaper
√?ašpakO bluff; high hill along a river
√kačipasowan belt, waist
√kapakOk·wɛ?akan lid
√kapakočokan apron
√kapOti#j trousers
√katakan field
√kwatamočakan fishhook
√ak·ačakak·wɛ?akan parasol, porch
√ak·ak·ašɛwapatɛ#j burnt stump
√ak·amas·akan axe
√ak·ašajɛpawis·an morning meal, breakfast
√ak·atɛnakan braid of hair
√mak·atɛpiwapakwE black iron(?)
√mamok·amawikawamE summer house
√mas·kopwakan red clay pipe; peace pipe
√mat·akaškOtɛk·an fire-drill
√mat·akwap bow
√mat·akwɛjapjE bowstring
√miš·anikwakan eyebrow, eyelash
√miš·atamak·anakan small beard in center of chin
√mowačE faeces(?)
√nakamOwan song
√nanawanačakan middle finger
√nanoš·ɛpas·awan ear-ring
√nɛkatoš·awakamakwE barn
√nɛs·ɛkwapatɛ?awan pin
√no?akananačE first finger
√notakačakan musical instrument (other than a drum)
√pačakwan penis
√pakamas·akan axe
√pakanɛs· hazel-nut
√pakonajawis·an evening meal
√pakwɛ?as·an chip of wood
√pakwɛškas· cracker
√apak·wačakan roof, top
√paponašiwakan winter house
√paškasakan gun
√pisakamawakan coat
√pota?ašKwan pestle
√pota?akan mortar
√potawakan flue, chimney
√Opwakan pipe

√sɛkapanawan braid of hair
√sikamɛ?akan spear
√sisapanikwakan tear (in eye)
√as·ɛma(#j) tobacco
√šakwak·aminak·an pine seed
√šati#j spearhead, arrowhead
√šiš·ikat·akan urine
√aškamOtE sack, bag
√(O)škišakO eye
√aškOtɛk·an flint-and-steel
√aškwatɛmE door, doorway
√tak·anakan cradle
√tak·Opačakan anything to tie things with; e. g., hairribbon
√tɛwɛ?akananima?atawan drum dance
√atop·awan table
√atop·awɛkan tablecloth
√at·ɛkamašE oak-tree
√wak·a?akan fence
√wak·ajapatɛ#j circle of teeth, jawful of teeth
√jačamowan moral story
√japata?awan cane
√jatas·ok·an story
√jɛnakačamowan funny story

Forms with √ič(§6.3) reject √m.

All other noun stems may use √m; certain ones always do. Animate names of people and animals or spirits, and the botanical animates listed in §6.1, must use it. Others for which it is compulsory are the following:

√Očak·ɛ#j stump
√?as·akamakwE moss, evergreen
√kis·as·O sun, month
√kišakwE day, sky
√kokapanakan basket
√konjE snow
√kotakok·wan chain over fire from which to hang pots
√kwawakan forked sticks which support the rod which holds the chain over the fire
√ak·ak·ašɛ#j coal, charcoal
√ak·ati#j kettle
√ak·watak·a#wE hill
√mak·amjE ice
√manaš·ɛ(#j) island
√mapas·E lake

√mas·kwapako(#j) penny
√mas·kwɛ blood
√mas·kwɛkas· red flannel, red rag
√maškak·o#wE medicine
√matamɑnapo#j hominy, corn soup
√mat·akwakak·ɑ timber, woods, forest
√mišaško#wE grass, weed
√motɔj bottle
√ɑnako(#j) star
√napO#wE, napo#j drink
√nɛkok·ɑ#wE trash, dirt
√ɑpakawajan cloth
√pakanE walnut
√pakwɛ(#j) ashes, dust
√pak·wak·watwE ball
√pɑnawakok·ɑ#wE sand
√pikačɛs·ako#j stump, old stump, log
√piwapakwE iron
√Osawašonaja#j gold things; gold money
√sipɑ#wE creek, stream, flowing water
√sisapak·watwE sugar
√siwano#wE grape
√siwapo#j, siwapO#wE cidar
√as·anjE stone, rock
√as·apapjE rope, thread
√šakaka?akan button
√šeš·ak·ɑ dirt
√šapanakan needle
√šɛnawɛkan bell, sleighbell
√aškOtɛ(#j) fire
√aškOtɛs· match
√šomikwɛ smile
√šonaja#j money, coin, dollar
√aš·o?akan paint, housepaint
√tak·apwE well
√tɛ?aman strawberry
√at·akaman acorn
√at·akapakwE leaf
√wanak·wak·ɑ#wE ditch
√wanakwE hole, well
√wapakan clay
√wapaškok·ɑ#wE swamp
√wapawajan blanket
√was·akonɛto#j flower
√was·ɛčakan window
√awawE egg
√winanO fat, grease
√wiwašawan pack, bundle

These groupings are not based on forms as they appear in texts, but on the induced behaviour of the informant. However, in this there was a considerable amount of fluctuation. Dependent stems definitely rejected √m always, and the animates mentioned before the last list definitely had to have it. But for stems not falling on one of these two categories, JS would reject a particular word with √m one day, a few days later accept it. One may venture the guess that actually any stem except those of the two specifically restricted categories can optionally accept or reject √m, and that the groupings which are given above are the results of accident in adducing the forms. In any case, the listings must be taken as quite tentative.

The method of joining √m is to be dealt with by type of stem.

1) 2) The four stems in these two types, together will all having these as their last members save for a zero final, change the final vowel to √i before √m:

√ɑk·ɑ land; √ɑk·im[1]
√mɑs·kwɛ blood; √mɑs·kwim
√pɑkwɛ dust; √pɑkwim
√ɑnwɛ bullet; √ɑnwim

3) 4) and 3)-4) pleomorphs. Stems ending in a strong vowel that add √m without modification(if, indeed, there are any such), those ending in √#j that do likewise, and pleomorphs ending in either for the addition of √m, may be considered regular:

√mɑs·kwati#j anus; √mɑs·kwatijɑm
√ɑ?amɔ(#j) bee; √ɑ?amom or √ɑ?amojɑm

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[1]The forms given with √m are given without personal prefixes or suffixes; for the actual possessed themes the latter would have to be affixed, as described in the first part of this section (§6.6).

But there also stems which end only in a vowel, but which may suffix √#j before √m; others which have to do so; some which end always in √#j for the plural but may optionally drop it before √m; and so forth.

The following stems in √#j may optionally drop it before √m:

√Očak·ɛ#j stump
√kakakaš·i#j crow
√kwak·watɛ#j grasshopper
√ak·ati#j kettle
√matamosɛ#j old lady
√mišakanakwɛ#j bat
√napo#j drink (and other stems containing the final √apo)
√nɛkatoš·a#j horse
√pikačɛs·ako#j old stump, rotten log
√Oškanawɛ#j young man; vassal
√šonaja#j money
√wapaškakano#j white eagle
√wapato#j mushroom, toadstool
√wapatok·ɛ#j mushroom, toadstool
√wɛmat·akoši#j Frenchman
√wištaja#j blacksmith

The following end in √#j which must drop before √m:

√ačatamo#j chipmunk
√katatɛ#j otter
√ak·ak·ašɛ#j coal, charcoal

The following pleomorphs must retain the √#j before √m:

√kikapɛ(#j) boy
√miš·ačɛpok·ama(#j) peach
√nišotɛ(#j) twin
√apanočɛ(#j) child
√potɛwatami(#j) Potawatomi

The following two pleomorphs, on the other hand, must drop the √#j before √m:

√ma?wɛ(#j) wolf
√anako(#j) star

Lastly, the single stem √šomikwɛ regularly adds √#j before √m.

As in the case of the acceptance or rejecting of √m, the existence

of these different functional categories must be taken rather as indications of a state of considerable flux, than as being water-tight compartments.

The following two stems deserve special mention; the first adds √m in a quite irregular manner, the second, ending in a strong √ɵ, is a very rare type:

√ɑk·wɛ woman; √ɑk·wɛjom
√ɑp·ək·jə cattail; √ɑp·ək·jɛm

5) Stems of this type are numerous, and most of them quite regular:

√kikos· fish; √kikos·ɑm

Three insert √i before the √m, the last given having also the regular form.

√ɑkɑčɛs· bean; √ɑkɑčɛs·im
√mɑtamɑn corn, ear of corn; √mɑtamɑnim
√šɑmakɑnɑš· soldier; √šɑmakɑnɑš·im or √šɑmakɑnɑš·ɑm

Quite a number in the finals √kan, √k·ɑn, √mɑn, √wɑn (see §6.2) add √Om, most having also the normal forms:

√mɑk·ɑtɛmɑn blackberry; √mɑk·ɑtɛmɑnOm only
√was·ɛčɑkɑn window
√kokɑpɑnɑkɑn basket
√šɑpɑnɑkɑn needle

√ɑk·wɑčɑtɑjɛpɑwɑn chair; √ɑk·wɑčɑtɑjɛpɑwɑnOm or √ɑk·wɑčɑtɑjɛpɑwɑnɑm
√kwawakan forked sticks over fire
√mɑk·ɑtɑkɑn fur
√nɑkwɑpɑčɑkɑn snare, net, trap
√nak·ɑn reed mat
√šapak·owakan necktie, handkerchief around neck, scarf
√siwat·akan salt
√šɑkɑkaʔɑkɑn button
√šɛnɑwɛkɑn bell
√wɑpɑkɑn clay

One in √kᵕan adds √OmE:

√mišakan leather, set of harness;
√mišakanOmE or √mišakanam

Three stems in postvocalic √#w resemble those in √#wE, q. v. below:

√kano#w eagle (also √kano#j); √kanom
√paškak·a#w cow; √paš·ak·im
√anana#w man; √anánim or √ananijam

6) √E and √jE usually change to √i before √m:

√(o)čɛt·E sinew; √(o)čɛt·im

The following, however, simply drop the √E or √jE:

√mak·omjE ice; √mak·omam
√mapas·E lake
√minE berry, blueberry
√amjɛwE road
√pakanE walnut
√awajas·E meat
√wikawamE house
√mačatas·E socks, leggings

And one is completely irregular:

√awawE egg; √awawanOmE

7) Stems in √a#wE change all of that to √i:

√sipa#wE stream; √sipim

One three stems have √#wE preceded by something other than √a;

their behaviour is as follows:

√mišaško#wE grass, weed; √mišaškom
√siwano#wE grape; √siwanom
√napO#wE drink; √napom

8) Postconsonantal √wE changes normally to √o:

√šakwak·wE pine tree; √šakwak·om

The exceptions are:

√kišakwE day, sky; √kišakim
√tak·apwE well; √tak·apim
√masat·akwE ear of corn; √masat·akwem or √masat·akom

9) Stems in √O change that to √o:

√ak·ak·O bucket; √ak·ak·om

Pleomorphs, except the √(#j) kind, require special mention.

They are:

√OčɛpAk·wE root	√OčɛpAk·om
√OčɛpAk·E	√OčɛpAk·im
√ʔas·akAmAkwE moss, evergreen	
√ʔas·akAmAk●E	√ʔas·akAmAkOm
√mAt·AkwE tree, stick, log	
√mAt·AkO	√mAt·Akom
√wikApiš·(E) bark	√wikApiš·Am
	√wikApiš·●m
√OnAkɛk·wE tree bark	
√OnAkɛk·O	√OnAkɛk·om

√napO#wE drink (likewise all other stems containing √apo)
√napo#j √napom, √napojAm

6.7. Flexions. The singular flexion is formed by adding zero (not √#, but simply nothing); the plural for animates with √k, for inanimates with √n; the obviative with √n. The second obviative is formed by superadding √n to the obviative.

√mAt·AkwE, √mAt·AkO tree
~~√~~mt·əkok, mt·əkwɛk trees(35)
mt·ək tree(3)
mt·əkon, mt·əkwɛn tree(s)(3')
mt·əkonən, mt·əkwɛnən tree(s)(3")

√k·atɛ leg
nk·at my leg(0)
nk·atɛn my legs(05)

√Okɑma(#j) chief
*ktokmamnan our(12) chief(3)
ktokmamnanək our(12) chiefs(35)
ktokmamnanən our(12) chief(s)(3')
ktokmamnannən our(12) chief(s)(3")

√ɑk·ɑ land, earth, dirt has the plural √ak·iwɛn. Stems having this as the final element, of such a morphophonemic structure that the initial √ɑ of the √ak·ɑ drops, have the same plural ending; but if the morphophonemic structure is such that that √ɑ remains, or if the √k· comes to be preceded by a strong vowel, then the plural is √k·wɛn. Thus:

√ mat·ɑkwakɑk·ɑ timber, forest; mt·əkwakk·iwɛn
√pɑnawɑkok·ɑ sand; pnawkok·wɛn

√ kwɑs· son has a regular plural formation; for example, with 1 possessor, nkwəs·ək my sons; but it also forms an irregular plural, as in nkwəs·əjək my sons. The obviative formations are comparable. This irregularity does not appear in those possessed themes in which a personal suffix is used. Similar is √os·əs· grandchild; nos·əs·ək or nos·əs·əjək my grandchildren.

Although pleomorphs of the √(#j) type can form obviatives with either stem endings, those with the √#j retained are inclined to be avoided; from √mɑk·o(#j) bear, mk·ojən(3') and mk·ojnən(3") are possible, but are normally replaced by mk·on and mk·onən. Other types of pleomorphs, listed at the end of §6.6, can form flexions with either stem form.

For the obviative locative, see §6.8.

6.8. Locatives. The three patterns for the formation of locative particles from noun stems are 7), 8) and 9) in 3. The joining of the

locative suffix, √k, to stems and themes is accompanied by some irregular sandhi, which may be dealt with first.

1) 2) The final vowel changes to √i, as in adding √m.

√ɑk·ɑ land; √ɑk·ik

3), 4), and 3)-4) pleomorphs. There may be the same type of fluctuation here as in the case of √m, but the forms available do not reveal it. Examples are:

√ɑškOtɛ(#j) fire; √ɑškOtɛk
√kɑpOti(#j) pants; √kɑpOtik, √kɑpOtijɑk

5) Most consonant stems are regular:

√čiman canoe; √čimanɑk

The following add √ak:

√tos·kwɑn elbow; √tos·kwɑnak
√k·wɛkɑn neck
√nɑkwikɑn wing
√p·ɑkɛkɑn rib
√šikɑn hip
√tɑt·ɑkakwɑn backbone

Two add √ik, one as a variant of the regular form:

√tamɑk·ɑn chin; √tamɑk·ɑnik
√wapɑkɑn clay; √wapɑkɑnik or √wapɑkɑnɑk

6) These regularly change the √E or √jE to √i before √k; as before √m:

√čašE nose; √čašik

But some, like some of type 5), add √ak, the √E or √jE dropping:

√ipɑtE tooth; √ipɑtak
√ɑškɑmOtE sack
√t·ɑwɑkE ear
√mɑs·ɑtE stomach

It is to be noted that all the stems taking √ak, except the word for sack, are dependent body-part names.

Some in √E or √jE drop that before √k:

√ɑmjɛwE road; √ɑmjɛwɑk
√pɑkanE walnut
√ɑškwatɛmE door
√ɑwɑjas·E meat
√ɑwawE egg
√wikɑwamE house

Although √tɛ?E heart forms its locative regularly, e. g., ntɛ?ik in my heart, the stem √pip·is·ɑtɛ?E lung has the quite irregular alternate locative √pip·is·ɑtɛjɑk.

7) Stems ending in √ ɑ#wE drop all of that and add √ik:

√(O)k·ak·ɑ#wE chest, breast; √(O)k·ak·ik

8) Postconsonantal √wE regularly changes to √o before √k:

√mɑt·ɑkwE tree; √mɑt·ɑkok

Two drop the √wE and add √i, one as an alternate to the normal √ok:

√tɑk·ɑpwE well; √tɑk·ɑpik
√šɑkwak·wE pine tree; √šɑkwak·ok or √šɑkwak·ik

9) These are regular:

√ɑk·ɑk·O bucket; √ɑk·ɑk·ok

Pleomorphs:

√Očɛpɑk·wE root	
√Očɛpɑk·E	√Očɛpɑk·ik only
√wikɑpiš·(E) bark	√wikɑpiš·ɑk only
√napo#j drink	√napojɑk only
√napO#wE	

Since √wE changes to √o before √k, the √wE-√O pleomorphs could not

show the distinction in the locative unless an irregular change, such as to √i, took place; none such are recorded.

The obviative locative is formed by superadding, quite regularly, √k to the obviative:

√ɑk·ɑk·O bucket
√ɑk·ɑk·on the other bucket(3')
√ɑk·ɑk·onɑk > kək·onək in the other bucket

Locative particles formed from noun stems by pattern 7)(§3) are paralleled by a number of such particles in which the part of the word after the external sandhi joining is not a noun stem with locative suffix, but an element which in some cases does not turn up in other forms at all. The post important such posterior element is √ɑjɑkwan, as in čik-jəkwan alongside of something. Most of the elements found in composition with this can also be used in pattern 7), but not all. There are also √pjɛk water, suppletive to √napiš· water, which is the regular noun stem; √ɑk·ɑmɑk ground, either suppletive to √ɑk·ɑ earth, dirt, land or actually a form of it; √ačɑwɑn estream.

√čik alongside
čik-jəkwan alongside of something
čik-pjɛk on the shore (i. e., alongside of the water)
čik-wikwamək by the house

√ʔitɑw on both sides
ʔitwə-jəkwan back and forth; on both sides
ʔaʔitwə-jəkwan (reduplicated) on both sides
ʔaʔitəw on both sides of something
possibly with nouns, but no cases recorded

ʔapto-jəkwan halfway

ʔašwɛ-jəkwan beyond

ʔipə-jəkwan over there; cf, with the same meaning, ʔipə

kiwt·a-jəkwan around; around and around

√k·wɑT, √k·wɑč on top of
k·wəč-jəkwan on top
k·wət-pjɛk on the surface of a body of water
kəwət-k·əmək on the ground
k·wətačwən upstream, up north(in this case must be internal sandhi, since external would give * k·wət-ʔačwən)
k·wət-pək on the roof
k·wəč-top·wənək on the table

mč·i-jəkwan down below; cf, with the same meaning, mč·ik

√nam under
nam-jəkwan underneath
nam-pjɛk under water
nam-k·əmək underground
nam-top·wənək under the table
nam-mt·əkok under the tree

naw-jəkwan, nanaw-jəkwan in the middle; cf, with the same meaning, nawɛš

pamɛ-jəkwan on one side of something

√piT, √pič in
piš-jəkwan inside; cf pitək indoors
pič-tk·əpik in the well

sakčə-ɬəkwan outside, outdoors

škwɛ-jəkwan on the edge

wči-jəkwan towards something (cf preverb √wɑčɑ, §7.1)

Thus the only prefixes actually testified for in composition with noun stems are √čik, √k·wɑT, √nam, and √piT; some of the others doubtless can be used also in that way. Those in changeable √T use the changed form before √ɑjɑkwan and actual noun stems.

With √k·wətačwən, mentioned above, can be compared nis·ačwən downstream.

Severable unanalyzable locative particles look as though they contained the locative suffix √k:

škwɛjak behind, afterwards
kamɛjək beyond a body of water
nək·mək everywhere
špəmək on high, above

Other locative particles are mentioned in §9; a few may be mentioned here:

ʾajap·ən in the same place
kpəč on the edge of a body of water
kwɛp·mə beyond something
nɛjap back
nikan ahead
pɛš·oč close, nearby

Most of these and the others not treated here or in ~~section~~ §9 are unanalyzable; but with nikan ahead compare √nikani lead, be head man.

6.9. Vocatives. The vocative plural is formed quite regularly, the ending being √tɑk. Before this (§6.6) the plural first person suffix √nan becomes √na; otherwise joining is regular:

ntokmamtək O my chiefs!
ntokmamnatək O our chiefs!

It would not be necessary to recognize the singular vocative as a distinct flexion at all, were it not for the presence of a small number of highly irregular forms of direct address for kinship terms; except for these, the singular is used for direct address to a single person. The irregular ones are:

√os· father	nos·ə O my father!
√ok·Omɑs· grandmother	nok·o
√wičɑʾɛj spouse	nwičʾɛ

√nɛnɛjɑm mother	nnɛnɛ
√mɑš·omɑs· grandfather	nməš·o
√š·imɛ#j younger sibling	nš·i
√sɑkwɑs· maternal aunt	nsəko
√ɑk·wɛm sister	ntək·wɛmɛ

6.10. Preterit. To any possessed noun, as it stands fully formed and inflected, the suffix √pɑn may be added(§3, pattern 10)); sandhi is internal and normal:

nos·pən my deceased father
nčimanməpən the canoe I had(but no longer have)
ktokmamnankəpən our former chiefs

The discussion of the meaning of √pɑn given in §3 was complete; nothing need be added here. The forms are not frequent, but this may be due to the relative rarity of appropriate semantic situations rather than to any purely linguistic factor.

7. THE VERB

7.1. Ablaut, Preverbs, and Inserted Elements. In forming participials (§3, pattern 13)), the first syllable of the morphophonemic formula of the participial complex, whether it is a stem syllable or that of a preverb, is ablauted. The schedule of ablauting is this:

√a	remains unchanged
√ɛ	remains unchanged
√i	becomes √a
√o	becomes √a
√ɑ	becomes √ɛ
initial √ɑ	becomes √ʔɛ
initial √O	becomes √wɛ

Certain preverbs have irregular ablauted forms; these will be mentioned

at the appropriate places below.

Examples:

√wapɑmawat ablauted
wapmawat the one they see

√nɛmOt ablauted
nɛmot the one who breathes

√ki=nɑpot ablauted
ka-mpot the one who died

√nok·anɑk ablauted
nak·anək the one I hired

√nɑpot ablauted
nɛpot the dead one

√ɑšɑ=čɑkɛt ablauted
ʔɛš-čəkɛt how he does it

√wɑčɑ=wɑk·ɛw=pikɑtɑpɛš·ɑk ablauted
wɛč-k·ɛw-piktəpɛš·ək why it breaks easily

As indicated in §3, there are three ranks of preverbs; they may be discussed by rank, beginning with those which occur initially in the resulting complex.

A. Preverbs of the First Rank.

1) √ʔɛ narrative prefix; stand first in a conjunct complex with regular conjunct paradigmatic endings. It may be followed by most, but not all, of the second and third rank preverbs. This prefix is homonymous with the change of initial √ɑ, and there is some evidence suggesting that Potawatomi speakers do not keep the two entirely distinct -- the identity of form has led to a fusion of meaning. Examples will be found above and below.

2) √ʔa. First rank, in conjunct or indicative, in the latter case with the shorter forms of the personal prefixes. In the indicative it appears primarily in forms which include the speaker in the subject, though not always so, and expresses intention; it might therefore be called the intentional or intentive. In the conjunct it has a similar meaning, involving the will of the people being talked about. It appears before only the element √ki of the second rank, and that only in the indicative. In the conjunct the few examples available have it followed by √tǎšə of the third rank:

*nta-šja ʔotanək I am going into town
nta-ki-šja ʔotanək I was going to go into town.
ʔa-tše-ns·awat in order for them to kill him

3) √kə is used only in the indicative, with the shorter form of the personal prefixes, and only in forms in which the speaker is included in the subject; it indicates assent to a request; other meanings were not determinable:

nkə-wapma OK, I'll see him as you ask

4) √kəkoʔ, indicative only, quickly; no other preverbs used:

nkəkoʔ-ns·a I kill him quickly

5) √nətoʔ, indicative only, try; no other preverbs:

nnətoʔ-ns·a I try to kill him

B. Preverbs of the Second Rank. There are only two of these, and they are both of a tense character:

6) √ki, past tense, in indicative or conjunct. In the indicative it means simply past time; in the narrative it makes a more specific and definite reference to the past than does the form with no tense prefix.

Many elements of the third rank can appear after √ki, with or without √ʔɛ:

ki-pjɛ he came(indicative)
ʔɛ-ki-pjat he came(conjunct, narrative)
ʔɛ-ki-tšə-nimʔətijwat while they danced together(narrative)
ʔɛ-ki-wə-čiptəpət he went to sit down(narrative)
ka-mpot the one who died(participial)

7) √wi, future tense. In the indicative this connotes that a certain event is expected, though not that the speaker's own will or desire, nor that of the subject, is particularly involved in the expectation(cf √ta above). In the narrative it may imply simple expectation, or vague intent or desire, or ability, if that has been questioned.

wi-pjɛ he's going to come(indicative)
ʔɛ-wi-pjat he was going to come(narrative)
ʔɛ-wi-šə-ns·awat they were going to kill him thus(narrative)

C. Preverbs of the Third Rank.

8) √p·ič· when, while, inasmuch as; narrative mode only:

ʔɛ-p·ič-tpəwɛwat inasmuch as they were holding council

Compare with this the root √p·iT·, with much the same meaning, as in ʔɛ-p·it·ačmowat they were talking at that time.

9) √tɑšɑ where, while, how(means or manner); ablaut to √ʔɛtɑšə, the final vowel being retained. Appears only in conjunct forms, primarily in participials:

ka-tšə-jət where he was(participial)
ʔɛtšə-mik·wɛntək where he remembered(participial)
ʔɛ-ki-tšə-nimʔətijwat while they danced together(narrative)
ʔa-tšə-ns·awat how they might then kill him.
ʔɛ-tšə-wtankwɛnət where they had a town(narrative)

10) √ɑwɑ, going to, on the way to -- that is, actual motion to the place where a thing is to be done; indicative and narrative:

kkə-wə-nim?ətijmən let's be on our way to dance together (indicative)
?ɛ-ki-wə-čiptəpət he went to sit down(narrative)
?ɛ-ki-wə-pmaks·ot he went to lie down(narrative)

11) √kikiš after, already; conjunct only; in participial, or after √?ɛ:

?ɛ-kikiš-tɛpmat he had already had enough
kakiš-pšinat after he had skinned him

12) √ɑnɑ when, then, until the time that; only recorded for narrative, without tense elements:

?ɛ-nə-kač·ijət then he was small
?ɛ-nə-pjat then he came

13) √wɑčɑ, change to √wɛč; why; towards; participial only:

wɛč-k·ɛw-piktəpɛš·ək why he breaks easily
wɛč-k·ɛw-nkapawɛk why he melts easily
wɛč-ks·ənjak towards where it isccold
ka-wčə-pjat why he came

14) √wɛp inceptive; indicative, without preverbs of first and second rank, and narrative:

nwɛp-ns·a I start to kill him
?ɛ-ki-wɛp-tpomawat they started to hold council about him
?ɛ-ki-wɛp-pitkɛwat they started to come in
?ɛ-wɛp-nkapawɛt he started to melt

15) √ɑšɑ thus, so, how; indicative and conjunct. There is also a root √ɑšɑ in verbs; and the ablaut change of both of these, √?ɛšɑ, resembles √?ɛ plus √ɑšɑ; the analyses have not cleared up all the possible cases of homonymy.

?ɛ-šə-nkotwət he lived alone thus(narrative?)
?ɛ-šəčkɛnət he was doing things thus(narrative)

ki-šə-čikkatɛno he lay thus with one leg up in the air (indicative)
ka-šə-wɛpət ʔɛ-ki-šə-tɛʔat how he had done it, that way he had in mind (participial; narrative); i. e., he thought of how he had done it

Inserted elements, placed after preverbs of the third rank, before the stem or, if present, the negative prefix, are independent words which could, with perfect grammatical correctness, be placed before or after the entire verb form proper. The difference of meaning is not detectable:

wɛč-k·ɛw-piktəpɛš·ək why he breaks easily; participial, with wk·ɛw easily inserted.
kakiš-ʔi-šətɛʔat after he thought this thus; participial, with ʔi this(O) inserted.
ʔɛ-ki-wškə-čis·pənawat they pinched him the first time; narrative, insertion wškə first.
wɛč- nkom mɛkwa š·ak·ijək -jəwak why there are still today crawdads; participial; nkom today, mɛkwa still, š·ak·ijək crawdads(35), this last the subject of the verb.

Inserted elements do not appear in indicative forms.

7.2. Reduplication. Initial stem reduplication produces a form the meaning of which is iterative, intensive, continuative, or habituative; the first is probably the most typical meaning. Sometimes non-initial roots show reduplication, and there are traces of it in particle morphology. The present description is of the active, living process as it appears in verb morphology.

When the formula of a verb form has been reduced by dropping out the proper weak vowels and modifying the resulting clusters, as described in §2, the first phonemic syllable of the stem will consist

of non-syllabic plus vowel. The reduplication is of this syllable, and the reduplicating syllable stands before the reduplicated one. The reduplicating syllable has the same non-syllabic as does the reduplicated syllable. If that non-syllabic is of type 1, 3, 5, 6, or a sub-type of 17 with 1, 3, or 5 as the first element (see §1.4), then the vowel of the reduplicating syllable is the ablaut of the reduplicated vowel, according to the schedule given at the beginning of §7.1. If the non-syllabic is of any other type, then the vowel of the reduplication is ə. A reduplicated stem with a non-syllabic calling for ə in the reduplication can only take the longer form of the personal prefixes (§5). In the following examples, in the unreduced forms a hyphen precedes the stem:

nɑ-wapɑta?ɛ reduplicated >
nwawapta?a I show it to him regularly
nɑ-wɛpɑna reduplicated >
nwɛwɛpna I leave him repeatedly
nɑčipɑtɑp reduplicated >
nčačiptəp I sit down
nɑ-koki reduplicated >
nkakoki I dive in often
nɑtɑ-mɑmačɑkona reduplicated >
ntəmməmmačkona I hold him tight
nɑtɑ-pɑsɑtakɛ reduplicated >
ntəpsəpsətakɛ I keep my mind on it constantly
nɑtɑ-čɑk•osij reduplicated >
ntəčk•əčk•osij I am very short

In some cases reduplication produces an aberrant change in meaning. Thus, the word for sit, stem √čipɑtɑp, reduplicates, as shown above, to mean sit down. From the stem √nipɑw be standing comes the reduplicated form √nanipɑw stand up; this in turn can be reduplicated to √nananipɑw stand up repeatedly.

7.3. Transitive Animate Suffixation. Ta themes end in a consonant, and with a few slight exceptions which will be pointed out at the proper times the same sets of endings are used with all themes.

Indicative Endings. It is convenient to group transitive animate indicative forms as follows: direct forms are those having 1 or 2 in the subject but not in the object, or 3 or 35 subject and 3' object. Inverse forms are those having 1 or 2 in the object but not in the subject, or 3 or 35 object and 3' subject. The major reference of a direct form is its subject, of an inverse form its object; the minor reference the object of the direct form, the subject of the inverse. The remaining forms are I-thee and thou-me forms.

The suffixal elements of direct and inverse forms can be organized into the following series, beginning next to the theme:

1) For direct, √a; for inverse √ɑkO.

2) For negative status, √s·i.

3) For a first person plural major reference, √mɑn in direct forms, √nan in inverse, but √mɑna in either before the element √pɘn. For a non-first person plural major reference, √wa; this changes to √mɑwa before √pɘn in direct forms.

4) For the preterit, √pɘn; before √k or √n this becomes √pɘnin.

5) For an obviative minor reference, √n; for 35, √k; but these cannot be added to direct forms containing √mɑn or √mɑna.

There are two special sandhi features in inverse forms:

1) The stem final √maw merges with √aka to give √maka.

2) Theme-final postconsonantal √w merges with √aka to give √oka.

The direct forms thus built up are:

1-3	1-3'	1-35
2-3	2-3'	2-35
	3-3'	
12-3		
15-3		
25-3	25-3'	25-35
	35-3'	

And the inverse forms:

3-1		35-1
3-2		35-2
	3'-3	
3-12		35-12
3-15		35-15
3-25		35-25
	3'-35	

Below are presented, arranged in this same order, the indicative direct and inverse forms of √wapam <u>see</u>:

nwapma	nwapman	nwapmak
kwapma	kwapman	kwapmak
	wapman	
kwapmamən		
nwapmamən		
kwapmawa	kwapmawan	kwapmawak
	wapmawan	
nwapmək		nwapməkok
kwapmək		kwapməkok
	wapməkon	
kwapməknan		kwapməknanək
nwapməknan		nwapməknanək
kwapməkwa		kwapməkwak
	wapməkwan	

And in the preterit:

nwapmapən	nwapmapəninən	nwapmapəninək
kwapmapən	kwapmapəninən	kwapmapəninək
	wapmapəninən	
kwapmamənapən		
nwapmamənapən		
kwapmamwapən	kwapmamwapəninən	kwapmamwapəninək
	wapmamwapəninən	
nwapməkpən		nwapməkpəninək
kwapməkpən		kwapməkpəninək
	wapməkpəninən	
kwapməkmənapən		kwapməkmənapəninək
nwapməkmənapən		nwapməkmənapəninək
kwapməwapən		kwapməwapəninək
	wapməwapəninən	

It will be noticed that the personal prefixes, above and in forms yet to be given, are used according to the rule given in §5; and that in certain cases it is a difference of prefix which distinguishes two or three forms; nwapma I see him, kwapma thou seest him.

It is possible that the element for preterital forms should be formulated as √apan, and that it should be postulated as being joined to what goes before by external sandhi, not internal. This would account for the retention of the ə in "pən" in all forms, and may actually be the historically justifiable statement; descriptively it does not seem to matter. Forms will be written without the hyphen, as above.

Examples of the irregularities in inverse forms: √nis·awɛpanamaw throw down to or for; nnis·wɛpnəmwa I throw it down to him, but nnis·wɛpməmak he throws it down to me. √kiškO?w cut; nkišk?wa I cut him, but nkišk?ok he cuts me.

Where there is no form for an obviative reference, that for the 3 reference is used; similarly where a 35 form is lacking. Thus 12-3 and 15-35 are used indifferently for a 3, 3', or 35 object.

The I-thee and thou-me forms are more difficult to analyze. They are presented in the following table; in the first column are the affirmative forms, in the second the negative, in the third and the fourth the preterit affirmative and negative:

1-2	√ɑn	√ɑs·ɑnon	√ɑnɑnapən	√ɑs·ɑnonɑnapən
1-25	√ɑnɑm	√ɑs·ɑnonɑm	√ɑnɑmɑwapən	√ɑs·ɑnonɑmɑwapən
15-2(5)	√ɑnɑmɑn	√ɑs·ɑnonɑmɑn	√ɑnɑmɑnɑwapən	√ɑs·ɑnonɑmɑnɑwapən
2-1	√--, see below	√s·i	√napən	√s·inapən
25-1	√ɑm	√s·im	√mɑwapən	√s·imɑwapən
2(5)-15	√jɑmɑn	√s·imɑn	√mɑnapən	√s·imɑnapən

The ending for 2-1 is nothing, but a final √N, √T, √T·, √S· changes to š, č, č·, š· respectively.

Analysis:

1) For negative of I-thee forms, √ɑs·ɑno; of thou-me, √s·i.
2) For I-thee forms, vɑn; for thou-me, nothing.
3) For 1-2 and 2-1, zero(not #), as remarked on above; but before √pən, √na. For 1-25 and 25-1, √ɑm, but before √pən, √mɑwa. For any reference to 15, √mɑn; before √pən in I-thee forms this changes to √mɑnɑwa, and in thou-me forms √mɑna; further, in thou-me forms when neither preceded by √s·i nor followed by √pən, √jɑmɑn.
4) For preterit, √pən.

The same contraction of √wɑ to √O occurs with these as with inverse forms; and the contracting √ɑ may be either connective √ɑ or the initial morphoneme of a suffix.

Paradigm, with √wapɑm:

Affirmative, non-preterit:

kwapmən
kwapmənəm
kwapmənmən
kwapən
kwapmən
kwapməjmən

Negative, non-preterit:
kwapmɘs·non
kwapmɘs·nonɘm
kwapmɘs·mormɘn
kwapmɘs·i
kwapmɘs·im
kwapmɘs·imɘn

Affirmative, preterit:
kwapmɘnonapɘn
kwapmɘnnɘmwapɘn
kwapmɘmmɘnwapɘn
kwapmɘnapɘn
kwapmɘmwapɘn
kwapmɘmnapɘn

Negative, preterit:
kwapmɘs·nonnapɘn
kwapmɘs·nonnɘmwapɘn
kwapmɘs·nonmɘnwapɘn
kwapmɘs·inapɘn
kwapmɘs·imwapɘn
kwapmɘs·imnapɘn

The 2(5)-15 ending √jɑmɑn may contract, optionally, with a preceding √ɑ which is retained, to give √ijmɘn; thus an alternative to kwapmɘjmɘn you see us is kwapmijmɘn.

Notice that since 2 is involved in all thee and thou-me forms, the personal prefix is √k- throughout.

Imperative Endings. The following table is complete:

	Imperative	Prohibitive
2-3(5)	√--, see below	√ak·ɑn
25-3(5)	√ɑk	√ak·ɛk
2-1	√š·ɑn	√š·ik·ɑn
25-1	√š·ɑk	√š·ik·ɛk
2(5)-15	√š·ɑnɑk	√š·ik·ak

The ending for 2-3(5) in the imperative is like the indicative 2-1, a nothing which changes a changeable √N etc to š etc.

Certain internal resemblances can be recognized, such as the √k· in all the prohibitive forms, but the forms are too few to make subanalysis worth while.

wapɔn	wapmak·ɔn
wapmɔk	wapmak·ɛk
wapmɔš·ɔn	wapmɔš·ik·ɔn
wapmɔš·ɔk	wapmɔš·ik·ɛk
wapmɔš·nɔk	wapmɔš·ik·ak

Conjunct Endings. No classification into direct, inverse, and the like, is feasible for conjunct. The endings of the non-preterit, except the special participial forms, are given in the following table; the numerals on the side refer to subject, along the top to object:

	1	2	3	3'	12	15	25	35
1		√ɑnan	√ɑk				see below	√ɑkwa
2	√jɑn		√ɑt			√jak		√ɑtwa
3	√t	√ɑk		√at	√ɑnɑk	√jɑmɑt	√ɑnak	
3'			√ɑkot					√ɑkwat
12			√at					
15		√ɑnak	√ɑko				√ɑnak	
25	√jɛk		√ɛk			√jak		√ɑkwa
35	√wat	√ɑk·wa		√awat	√ɑnɑk	√jɑmɑt	√ɑnak	

There are two forms for 1-25; after a theme in which the weak vowel before the last consonant drops, the form in √ɑnɑko; after a theme in which the final consonant is preceded by a strong vowel, or by a weak vowel which is retained, the form is √ɑnɑnɑko.

The form for 35-2 may possibly be √ɑkɑk·wa instead of √ɑk·wa.

The 3(5)-25 ending √jɑmɑt may contract with a preceding retained √ɑ to ijmɛt, like the indicative 2(5)-15 form √jɑmɑn mentioned above. This is true also for 3-1 √jɑn, and holds as well when the preterital element is added.

The preterit forms are made by suffixing √pən to these endings, except that:

1) Endings in a final √t drop that and add √p·ət -- 2-3 √apəət, 3-1 √p·ət, 35-1 √wap·ət, etc.

2) The two endings in final √n drop that; 2-1 √japən, 1-2 √anapən.

The following paradigm uses the stem √min 'give to' which brings out the difference between the endings which begin in a consonant and those which begin in a vowel; the narrative forms are given:

	1	2	3	3'	12	15
1		ʔɛ-minman	ʔɛ-minək·			
2	ʔɛ-mišjən		ʔɛ-minət			ʔɛ-mišjak
3	ʔɛ-mišət	ʔɛ-minək		ʔɛ-minat	ʔɛ-minnək	ʔɛ-mišjəmət
3'			ʔɛ-minkot			
12			ʔɛ-minat			
15		ʔɛ-minnak	ʔɛ-minko			
25	ʔɛ-mišjɛk		ʔɛ-minɛk			ʔɛ-mišjak
35	ʔɛ-mišwat	ʔɛ-mink·wa		ʔɛ-minawat	ʔɛ-minnək	ʔɛ-mišjəmət

	25	35
1	ʔɛ-minnənko	ʔɛ-minkwa
2		ʔɛ-mintwa
3	ʔɛ-minnak	
3'		ʔɛ-minkwat
15	ʔɛ-minnak	
25		ʔɛ-minkwa
35	ʔɛ-minnak	

The participial endings differ from the conjunct only in forms with 3' or 35 subject; of these it was only possible to collect the following: 35-1 √čak, 35-2 √ak·ak, 35-12 √anakak, 35-15 √jamačak, 35-25 √anakak, and 35-3' √ačak.

Irregularities. The stem for tell, say so to is a pleomorph, √ɑ and √ɑn. Indicative forms are made with the second stem:

ntəna I tell him
ntənək he tells me

What the 2(5)-3(5) imperative forms are is not known; the other imperatives can be made with the second form of the stem. Conjunct forms are made sometimes with one, sometimes with the other:

ʔɛ-nat he said to him
ʔɛ-kot the other(3') said to him(3)

This last gives the impression of consisting of prefix plus suffixes, without a stem. The only possible basis underlying the selection of one or the other form of the stem is that if two strong, or weak but retained, vowels, would come together otherwise, the form with √n is used.

7.4. Animate Intransitive Suffixation. Ai stems must be classified as follows for presentation of suffixation:

1) Stems in a strong vowel, √O, or a consonant:

√kas·ɑkɑmi start running
√čakɑnɛ be bereaved
√kɑk·ja be old
√pɑmɑpɑt·o run along
√čipɑtɑp sit
√kas·kɑnasO whisper

The vast majority of ai stems belong to this class.

2) Pleomorphs in √a and √ɛ:

√nis·a/ɛ fall down

These use the theme in √ɛ for all third person indicative forms --

singular or plural or obviative, affirmative or negative, preterit or non-preterit,-- the stem in √a in all other cases. The element "a/ɛ" need not be thought of as a special morphophoneme which appears as √a in certain cases, √ɛ in others, but simply as a convenient way of writing the two similar stems of the pleomorph.

3) Stems ending in the element √j, √jə; for these see the end of this section.

4) Stems in the finals √tɑm and √t·ɑm:

√nɛnɑtɑm think

5) Stems ending in the prefinal and final √š·ɑn:

√mɑčɑmoš·ɑn be stuck

6) Three irregular stems requiring special mention:

√pɑs·ɛhonO have a split mouth(i. e., hair-lip)
√sakɑ'ɑm go out
√Osamɑkwam(O) oversleep

Indicative Endings. The negative suffix precedes personal endings, which then take their usual forms for a stem ending in a strong vowel. It is √s·i; 4) √tɑm and √t·ɑm give √tɑs·i and √t·ɑs·i, all other junctures are regular.

1), 2). The endings are as follows:

	non-preterit	preterit
1	√--	√napən
2	√--	√napən
3	√#, √wak	√pən, √wipən
3'	√n, √win	√pəninən, √wipəninən
12	√mɑn	√mɑnapən
15	√mɑn	√mɑnapən
25	√m	√mɑwapən
35	√k, √wik	√pəninək, √wipəninək

Analysis:

1) For 1 and 2, zero; but √na before √pən.
For 12 and 15, √mɑn, which becomes √mɑna before √pən.
For 25 √m, which becomes √mɑwa before √pən.
For 3, 3', and 35, nothing.

2) For the preterit, √pən; if something further is added, √pənin.

3) For 3, nothing; for 3', √n; for 35, √k.

But to this must be added the following special remarks:

1) The non-preterit 3 form takes optionally the suffix √# or the suffix √wak.

2) Forms for 3, 3', and 35 aside from non-preterit 3, insert √wi before the ending if the weak vowel pattern is such that an √ɑ or √O, connective or part of the theme, immediately preceding it will be lost; otherwise the form without √wi is used.

3) The 35 ending √k causes a preceding √ɑ or √ə to change to √i.

4) Stems ending in √ɑ?O change that to √o? for non-preterit 1 and 2.

√kas·ɑkɑmi <u>start</u> <u>running</u>; non-preterit:

nkas·kəmi
kkas·kəmi
kas·kəmi or kas·kəmiwak
kas·kəmin
kkas·kəmimən
nkas·kəmimən
kkas·kəmim
kas·kəmik

preterit:
nkas·kəminapən
kkas·kəminapən
kas·kəmipən
kas·kəmipəninən
kkas·kəmimnapən
nkas·kəmimnapən
kkas·kəmimwapən
kas·kəmipəninək

√kas·kɑnɑsO whisper:
kas·knəsə or kas·knəswak he whispers
kas·knəswik they whisper

√kɑšatɑs be glad:
kšatsik they are glad

√kwas·kɑsɑ?O jump:
nkwas·kso? I jump

√nis·a/ɛ fall down:
nnis·a I fall down
nis·ɛ he falls down
nis·ɛpəninək they have fallen down
nis·ɛs·ipəninək they have not fallen down

Stems in √tɑm and √t·ɑm differ from those of types 1) and 2) in their suffixation only in the following points:

1) The forms for 3, 3', and 35, except for non-preterit 3, have couplets just as do those for theme of types 1) and 2); when the √ɑ of √tɑm or √t·ɑm is retained the forms have √wi, when it is lost they have, not zero, but √o.

2) Before √na, √mɑn, and √m (and their variants, √mɑna and √mɑwa), √tɑm and √t;ɑm change to √ta and √t·a. Thus preterit 1 √tanapən etc.

3) The form for non-preterit 3 is zero, not √#.

√ɑnɛnɑtɑm think; non-preterit:

ntənɛntəm
ktənɛntəm
nɛntəm or nɛntəmwak
(obviative ?)
ktənɛntəmən
ntənɛntəmən
ktənɛntam
nɛntəmwik

preterit: ntənɛntanapən
ktənɛntanapən
nɛntəmpən
nɛntəmpəninən(?)
ktənɛntamnapən
ntənɛntamnapən
ktənɛntamwapən
nɛntəmpəninək

√pɑs·wɛtɑm make an echo:
ps·wɛtmok they make an echo
ps·wɛtəm he makes an echo

Stems in √š·ɑm have the following peculiarities:

1) As with stems in √tɑm and √t·ɑm, forms for 3, 3' and 35 other than non-preterit 3 show variation between √o and √wi, instead of between zero and √wi as with the first stems considered.

2) Preterit 1 and 2 have √š·ɑnapən.

3) Like those in √t(·)ɑm, non-preterit 3 ends in zero, not √#.

√mɑčɑmoš·ɑm be stuck:
mčəmoš·ən he is stuck
mčəmoš·nok they are stuck
ntəmčəmoš·napən I have been stuck

√ɑp·əkɑš·ɑm fall:
pəkš·ənwik they fall

The theme √pɑs·ɛtonO have a hair-lip is only irregular -- that is, only differs from other themes in √O -- in taking no suffix for non-preterit 3; thus ps·ɛton he has a hair-lip. √Osamɑkwam(O) shares this peculiarity in the indicative; it has some irregularities in other modes where √pɑs·ɛtonO is regular. √sakɑ?ɑm has 3 sakəm he goes out, 12 ksak?amən, 15 nsak?amən, 25 ksak?am, and the same stem changes in the preterit forms.

Imperative Endings. These are; imperative 2 √n, 25 √k; prohibitive 2 √k·ɑn, 25 √k·ɛk. √tɑn and √t·ɑn drop the √n, giving √tɑn, √tɑk, √tɑk·ɑn, √tɑk·ɛk; and similarly with √t·ɑn. Stems in √s·ɑn are regular, so also apparently the three irregulars listed under 6).

√pja/ɛ come:
pjan come here(2)!
pjak come here(25)!
kɛko pjak·ən don't come here(2)!
kɛko pjak·ɛk don't come here(25)!

Conjunct Endings. For regular stems (types 1) and 2):

	non-preterit	preterit
1	√jan	√japan
2	√jɑn	√jɑpən
3	√t	√p·ət
3'	√nɑt	√nɑp·ət
12	√jɑko	√(jɑ)kopən
15	√jak	√jakɑpən
25	√jɛk	√jɛkɑpən
35	√wat	√wap·ət

Analysis: The preterits are formed by adding √pən to the endings of the non-preterit forms, with the following provisos (with which compare those in the formation of the conjunct preterit of transitive animates, §7.3):

1) Final √t drops, and instead of √pən, √p·ət is added.
2) Final √n drops; for 1 √pan instead of √pən is then added.

√pja/ɛ come:

ʔɛ-pjajan	ʔɛ-pjajapan
ʔɛ-pjajən	ʔɛ-pjajapən
ʔɛ-pjat	ʔɛ-pjap·ət
ʔɛ-pjanət	ʔɛ-pjanp·ət
ʔɛ-pjajko	ʔɛ-pja(j)kopən
ʔɛ-pjajak	ʔɛ-pjajakpən
ʔɛ-pjajɛk	ʔɛ-pjajɛkpən
ʔɛ-pjawat	ʔɛ-pjawap·ət

Stems in √š·ɑn have only two peculiar forms in the conjunct; 3 and 3' non-preterit are √at and √anɑt respectively:

√mačɑmoš·ɑn be stuck:
ʔɛ-ki-mčɑmoš·nat he was stuck

Stems in √tɑm and √t·ɑm have quite a different system of endings, which must be presented separately: the forms as given in the following table include the final √m of the √t(·)ɑm except where it is dropped:

	nonpreterit	preterit
1	√man	√mapan
2	√mɑ(jɑ)n	√mɑ(jɑ)pɑn
3	√k	√kɑp·ɑt
3'	√mɑnɑt	√mɑnɑp·ɑt
12	√mɑ(jɑ)ko	√mɑ(jɑ)kopɑn
15	√mak	√makɑpɑn
25	√mɛk	√mɛkɑpɑn
35	√mɑwat	√mɑwap·ɑt

The significant features in which this set differs from that for regular stems are: the dual nature of the √m, which seems at once part of the stem final √t(·)ɑm and of the paradigmatic suffix, and which is lost completely in non-preterit and preterit 3, √k taking its place; and the instability of the syllable √jɑ in a greater number of forms. Except for 3 preterit, where to the non-preterit form in √k √p·ɑt is added, the formation of preterit from non-preterit can be described exactly as for regular stems.

√nɛnɑtɑm think:

ʔɛ-nɛntɑman	ʔɛ-nɛntɑmapan
ʔɛ-nɛntɑm(j)ɑn	ʔɛ-nɛntɑm(jɑ)pɑn
ʔɛ-nɛntɑk	ʔɛ-nɛntɑkp·ɑt
ʔɛ-nɛntɑmnɑt	ʔɛ-nɛntɑmnɑp·ɑt
ʔɛ-nɛntɑm(jɑ)ko	ʔɛ-nɛntɑm(jɑ)kopɑn
ʔɛ-nɛntɑmak	ʔɛ-nɛntɑmakpɑn
ʔɛ-nɛntɑmɛk	ʔɛ-nɛntɑmɛkpɑn
ʔɛ-nɛntɑmwat	ʔɛ-nɛntɑmwap·ɑt

√pɑs·ɛtonO is regular in the conjunct. √OsamɑkwamO has the following paradigm:

ʔɛ-wsamkwamjan	ʔɛ-wsamkwamjapan
or -man	
ʔɛ-wsamkwamjən	ʔɛ-wsamkwamjəpən
or -mən	
ʔɛ-wsamkwak	ʔɛ-wsamkwamp·ət
or mot	
ʔɛ-wsamkwamnək	ʔɛ-wsamkwamnəp·ət
ʔɛ-wsamkwam(jə)ko	ʔɛ-wsamkwamjəkopən
ʔɛ-wsamkwamak	ʔɛ-wsamkwamakpən
ʔɛ-wsamkwamɛk	ʔɛ-wsamkwamɛkpən
ʔɛ-wsamkwamwat	ʔɛ-wsamkwamwap·ət

Thus this stem seems to follow the analogies both of the √t(·)ɑm stems and the regular ones. The forms given are those which were produced by the informant at several different times; in more time possibly even other alternates would turn up.

√sakɑʔɑm has the same forms as √OsamɑkwamO except the following three preterit forms; 1 ʔɛ-sakʔəmapan, 2 ʔɛ-sakʔəmpən, 3 ʔɛ-sakʔəkpən; preterit 3' is not known.

The participial has endings differing from the conjunct set for 3' and 35. The latter, 35, is √čɑk except for themes in √t(·)ɑm, which become √tɑkɑk and √t·ɑkɑk. Themes ending in a consonant with a pattern of weak vowels such that the weak vowel just preceding the final consonant will drop, and themes ending in a vowel, take √nɑčɑn for 3'; this includes those in √t(·)ɑm when the √ɑ in it drops. All others take √nɑnɑčɑn for 3'.

kas·kəminčən the other one who starts running(3')
čaptəpnənčən the other one who is sitting(3')(stem √čipɑtɑp)

√Osamɑkwam(O) has the 3' participial wɛsamkwamnɔnčɔn, 35 wɛsamkwakɔk.

Stems in √j, √jɔ are quite regular, except that there is a rather unpredictable variation between √j and √jɔ. This is perhaps a matter for sub-stem analysis(see §4) rather than for consideration here. The stems with √jɔ are:

√jajɔ be here, stay here
ntɑjɔ I am here
ʔɛjɑjɔjan I am here

√pɑmɑjɔ be around, "stick around"
pmɔʔik they are around here

√nɑmɑjɔ get a short way (on a journey, e. g.)

Those with √j are:

√kač·ij be small
nkač·ij I am small
kač·ijɔ he is small

√čɑk·osij be short

√mɑtakwaj have a good time(if this, indeed, does contain √j)

√šij do something in a certain way

7.5. Transitive Inanimate Suffixation. There is a twofold classification of the stems:

1) Vowel stems, which include also a number which actually end in consonants:

√pjɛto bring
√mjanɑškakO be sick from
√nat fetch

2) Consonant stems, including all others:

√wɛp·ot hit
√wapɑt see

There is no form in the indicative for 3' subject, as there is for ai and ta stems. In certain subject-forms there is a special form for plural object (inanimate, of course), but its use is always optional; the form without special modification can be used with either 0 or 05 object.

Indicative Endings. The negative suffix is √s·i, which is added as usual in first position after the stem; the stem plus negative suffix functions as a vowel stem for further suffixation.

Suffixation is then of elements in the following order:

1) Consonant stems add √a, vowel stems nothing.

2) For first person plural subject, √mɑn; before √pən, √mɑna.
For non-first person plural subject, √nawa.
For singular subject, √n; before √pən, √na.

3) For preterit, √pən; if anything further is added this takes the form √pənin.

4) For plural object, √n; but this cannot be added to forms containing √mɑn or √mɑna. Thus 05 object can have a special form for all subjects except 12 and 15.

npjɛton I bring it
nnatən I fetch it
ntəmjanškakon I am sick from it
ntəmjanškaknən I am sick from them
wɛp·otan he hits it
waptanawapəninən they(35) have been seeing them(05)
waptəs·inawapəninən they(35) have not been seeing them(05)
nwɛp·ots·in I don't hit it

Imperative Endings. The imperative forms do not distinguish the number of the object. The endings are; imperative 2 √n, 25 √k, prohibitive 2 √k·ɔn, 25 √k·ɛk -- precisely like those for intransitive animates.

pjɛton go bring it!(2)
natɔk go fetch it!(25)
kɛko wɛp·otk·ɔn don't hit it!(2)
kɛko waptɔk·ɛk don't see it!(25)

Conjunct Endings. The conjunct endings for vowel stems are precisely like those for regular animate intransitive stems, and the list need not be repeated(see §7.4). Plurality of object can only be specially noted for forms with 1, 2 and 12 subjects; endings √janɑn, √jɑnɑn, and √jɑkon respectively -- the endings for the singular plus √n.

The conjunct endings for consonant stems are, in turn, like those given in the table in §7.4 for ai stems in √t(·)ɑm. Here again the forms for 1,2 and 12 subjects can add √n for 05 object.

The conjunct preterits are given in the same two tables. None of these distinguish 05 object.

ʔɛ-ki-pjɛtojan I brought it
ʔɛ-ki-mjanškakot he was sick from it
ʔɛ-ki-natjak we(15) fetched it
ʔɛ-ki-wɛp·otɔk he hit it
ʔɛ-ki-waptɔmwat they saw it

The special participial endings, also, are entirely like those of intransitive animates:

waptɔmčɔn the other who sees it(3'-0)
wɛp·otnɔnčɔn the other who hits it(3'-0)

7.6. Inanimate Intransitive Suffixation. The types of stems are:

1) Regular stems, ending in a vowel, including pleomorphs of the √a/ɛ type:

√wawɑjɛja be round

2) Stems in the stem final √n, which fuses with the endings:

√wapɑn be morning

3) Stems in the stem final √t, which likewise fuses:

√ʔɑwɑnɑt be good

4) Stems in the stem final √mɑkɑt, which also fuses:

√wiškɑjamɑkɑt be hard

In the indicative affirmative C, C' and C5 are distinguished, in the indicative negative there is an indifferent form for C and C5 in the non-preterit, two separate forms therefor in the preterit. In the conjunct C and C5 are merged, C' being kept distinct; in conjunct preterit C and C5 have separate forms, though there is none for C'. There may also be a few other distinctions made, but other forms could not be procured by questioning and do not appear in the texts recorded.

Indicative. For regular stems the endings may be analyzed as follows:

1) For the negative, √s·ɑnon; before √pɛn, √s·ɛno.

2) For C, nothing.
For C', √nɑn.

3) For preterit, √pɛn; if something further is added, √pɛninɛ

4) For 05, √ton, but after √penin, √n.

But this analysis is based on such a small number of paradigmatic forms that the endings themselves had better be listed also:

	non-preterit	preterit
affirmative;		
0	--	√pən
0'	√nan	√nanapən
05	√ton	√peninan
negative;		
0	√s·anon	√s·anopən
05	√s·anon	√s·anopəninən

The stem final √n fuses with the endings to give the following set of forms:

aff 0	√n	√nopən
0'	√nan	√nanipən
05	√non	√nopeninan
neg 0	√s·anon	√s·anopən
05	√s·anon	√s·anopəninan

√t fuses as follows:

aff 0	√t	√topən
0'	√tan(an)	√tananipən
05	√ton	√topeninan
neg 0	√s·anon	√s·anopən
05	√s·anon	√s·anopəninan

And √makat gives:

aff 0	√makat	√makatapən
0'	√makatan	√makatananipən
05	√makaton	√makatapeninan
neg 0	√makas·anon	√makas·anopən
05	√makas·anon	√makas·anopəninan

The irregularities are only slight, and leave a great deal of resemblance in the various comparable forms, but they are quite confusing and the table is clearer than any analytical statement could be.

Intransitive inanimate verbs of course have no imperative forms; the latter must have a second person subject and there are no second person forms for ii verbs.

Conjunct.

	non-preterit	preterit	participial
regular stems			
O	√k	√kapən	
O5	√k	√kapəninan	√kak
O'	√nananak		
fused with √n			
O	√k	√kapən	
O5	√k	√kapəninən	√kak
O'	√nənak		
fused with √t			
O	√k	√kapən	
O5	√k	√kapəninan	√kak
O'	√tananak		
fused with √makat			
O	√makak	√makakap·ət	
O5	√makak	?	√makakak
O'	√makananak		

The following analytical comments may be offered: the stem final √n fuses by disappearing, giving the same ending as for vowel stems; the final √t of √makat acts like √t, which acts like √n; except that √t remains in non-preterit O' √tananak; and that the final √t of √makat drops in non-preterit O' √makananak and in preterit O' √makakap·ət.

Examples:

wawjɛja it is round
wawjɛjanən the other is round
wapnopən it has been morning
wənton they are good
wiškjamkəs·nopəninən they haven't been hard
ʔɛ-wawjɛjak it(or they) are round
ʔɛ-ki-wapkəpən it had been morning
wənkək the good ones
ʔɛ-ki-wiškjamkəkp·ət it has been hard

8. NUMERALS

The basic stems for numerals, from which all their forms can be derived, are

1 √nɑkɔt
2 √niš
3 √nɑs·
4 √njɛw
5 √njanɑn
6 √nɑkɔtwatɑs·
7 √no?ɑk
8 √šwatɑs·
9 √šak
10 √mɑtatɑs·

The cardinal numerals from one to ten are these. 3 is irregularly ns·wɛ; in all other forms the stem √nɑs· is unmodified. 6, 8 and 10 affix final √o -- nkotwats·o, šwats·o, mtats·o; elsewhere this is omitted. When further elements are added to 7 and 9, these suffix √tɑs· by external sandhi; the same element is used for cardinals higher than ten (multiples, that is; not 17, 26, 125 etc) when another suffix is being superadded. Before suffixes beginning with a √w, √njɛw drops its final √w.

Cardinal 20, 30 and 40 are formed with √wapɑt·ɑk -- nišwapt·ək, ns·wapt·ək, njɛwapt·ək. 50 to 90 use √omɑtɑnɑnɑ# -- njannomtənnə, nkotwats·omtənnə, no?ək-ts·omtənnə, šwats·omtənnə, šak-ts·omtənnə.

Cardinal hundreds suffix √wak; nkotwak, nišwak, ns·wak (connective √ɑ being omitted), njɛwak, njannwak(again omitting connective √ɑ), nkotwats·wak(again), no?ək-ts·wak(again), šwats·wak(again), šak-ts·wak(again).

Cardinal thousands use √os·ɑk; nkotoś·ək, niš̆os·ək, ns·os·ək njɛ?os·ək, njannos·ək, nkotwats·os·ək, no?ək-ts·os·ək, š̆wats·os·ək, š̆ak-ts·os·ək.

Compound cardinal numerals place the highest decimal first, and prefix to each but the first an element √š̆ɑt, √š̆ɑč̆, √š̆ɑš̆, by external sandhi. One and seven, and their multiples by ten, take the form √š̆ɑč̆; eight and nine, and their decimal multiples, take √š̆ɑš̆; the rest take √š̆ɑt. So, with the simple numerals from one to ten, š̆əč̆-nkot, š̆ət-niš̆, š̆ət-ns·wɛ, š̆ət-njɛw, š̆ət-njanən, š̆ət-nkotwats·o, š̆əč̆-no?ək, š̆əš̆·wats·o, š̆əš̆·ak, š̆ət-mtats·o. Notice that in the forms with eight and nine the final √š̆ of the prefix joins with the initial √š̆ of the stem into a single long š̆·; the forms might be written etymologically as š̆əš̆-š̆wats·o, and š̆əš̆-š̆ak, but the phonetics are as indicated in the former transcription. 7321 is no?ək-ts·os·ək š̆ət-ns·wak š̆ət-niš̆wapt·ək š̆əč̆-nkot.

Adverbial numerals, meaning "so many times," are formed with √k; nkotək once, niš̆ək, ns·ək; š̆ak-ts·ək, nine times, š̆wats·wak-ts·ək eight hundred times. For the √tɑs· in this last example, see the second paragraph of the present section. √k is added to the last member only of a compound number.

Forms meaning so many bagsful are formed with √oškɑn. ns·oškən three bagsful, mtats·o š̆ət-niš̆oškən twelve bagsful.

Forms meaning so many pieces are formed with √wapjɛk. ns·wapjɛk three pieces.

Forms meaning so many miles or so many yards, depending on context,

are made with √tapa?akan, √otapa?akan. The latter is used with numerals from five on up; njannotpə?kən five miles. The final √t of √nakOt irregularly drops; nkotpə?kən one mile. It is apparently added with external sandhi; two miles is niš-tpə?kən, and four miles, with an anomalous cluster found nowhere else in the language, njɛw?-tpə?kən.

The suffix √tapaŘakas·, √otapa?akas·, which looks like a diminutive formation from the last, means so much o'clock. The irregularities of juncture are as with √tapa?akan. mtats·o šeč-nkotpə?kas· eleven o'clock.

Ordinals may be formed with the prefix √?ɛk·o; ?ɛk·oniš the second. But for the first wškəča and nɛt·əm are used. The so-called cardinals have either cardinal or ordinal meaning.

A particle meaning so-many years is formed by adding √kon or √kowan; the latter is used if the pattern of weak vowels is such that the first √a will drop, otherwise √kon. nkotwats·okwən for six years (duration). A verb, ii, used usually in the conjunct, is formed by adding √konakat or √kawanakat, the selection being on the same basis. Thus nɛktwats·okwənək it being six years (ago)(participial).

9. SUBSTITUTIONS

Some substitutions are in syntactical function nominal, others are particular. It is convenient, to deal with them together. Either the formation of a set of substitutes is so transparent as to need no

special mention, or the number in the set is so few as to make analysis inefficient; therefore for the most part they are presented as words, not formulae.

Personal Pronouns. The class meaning of this set of substitutions is emphasis of person and number category of an animate entity.

1 nin	15 ninan
	25 kinan
2 kin	25 kinwa
3 win	35 winwa

In these, the initial elements √n, √k, and √w are recognizable as either being the personal prefixes or related to them, the final elements √nan and √wa as personal suffixes (similar forms also occurring in verbal paradigmatic suffixes); but the stem element, √in or √i, does not reappear elsewhere.

Demonstratives. There are two sets of demonstratives. The first has as its class meaning slight emphasis, or identification, of person, number, and gender in the third person. The other set has the class meaning "that specific thing over there in sight" -- though not, however, specifically proximal or distal.

3	ʔc	ʔote
3'	ni(w)	note
35	ki(w)	kote
0	ʔi(w)	ʔote or [illegible]
05	ni(w)	note
locative	ši(w)	šote

The parenthesized w's remain or drop freely. There is a third demonstrative, ʔako, distal-visible, uninflected for person, number, and gender.

The above demonstratives, plus the second-position particle tše, and the following list of interrogative substitutes, are used as the first term in equational predications(§11.9):

tənitše what? who?
wɛknitše what?
nitšewi why?
wɛkni what? for what reason?
nimətše what? why?
(tə)nip·itše whatɛ́?
tənip·i when?
nitšeši how? in what way?
wɛni(tše) who?

All these, also, are seen to involve the element tše. The element te of ʔotə etc recurs in a number of these forms. All contain ni, which may be the interrogative element. On the formation of these words see the end of §10.

Indefinites; wəjɛ someone(sometimes 3' wəjɛjən, 35 wəjɛjək). wɛkwɛntək somebody or something. kɛko something. wik·a sometime(?) nkoči somewhere.

All-Inclusives; čajɛk everything, all(inanimate). čak wəjɛ everybody. čak kɛko everything. pənɛ always.

Nul-Inclusives: čowəjɛ nobody. čokɛko nothing. čonkotɛʔnɛ neither one(gender indifferent). čowik·a never. čonkoči nowhere.

Also may be mentioned the following three, which seem to fall into none of the above categories: mčɛš a great many. nɛʔiš both. ʔanət some, a few.

10. PARTICLES

Particles with locative meaning are dealt with in §6.8.

Temporal particles include, besides those given as substitutions in §9, a number such as

p•i now
wik•ap•i finally, at length
wik•a sometime(?) late(?)
čowik•a never
wawik•a now and then
wtop•i right now
pəp•ič• once in a while
ʔimәs•ə "once upon a time"
nakač soon
nkom today
wnako yesterday

In contrast to the last two words, the form for tomorrow is not a particle but an ii verb, √wapɑn.

Certain particles are used always, or usually, with certain verb forms. Thus:

nə interrogative;pplaced immediately after indicative verbs when no interrogative substitute is used.

čo not; alone; or with negative status of indicative; or with particles used with other modes.

kɛko don't!; alone; or with prohibitive mode verb.

močma please!; alone, or, usually, with imperative verb.

kiš•pən if; with dependent mode only.

nakɛna or kɛna would that . . .; with dependent mode.

jɛtək "it is doubtful that . . ." with dependent.

p•ič• when with narrative.

There are three particles which serve as conjunctions; ʔi(w)tšə and so, and, then, next -- a Biblical "and"; tšə, mild disjunctive; and mine and, with. The first of these must be kept distinct from the group of two words ʔi(w) tšə the one(C) that . . ., in equational predications.

There are two particles, perhaps three, that function as predicators in equational predications(see §11.9); jɛ, s·əwi, perhaps s·ə. There may be others also.

Finally, the vast majority of particles function as adverbs of manner, in the broadest sense, ʔiws·ə completely, wənats·ək several times(cf numeral adverbs, §8), nəš· very, much, mamwɛč must, kwəpəč maybe, mamta can't, ʔajač more and more, wk·ɛw easily, kət·ə(n) sure enough(when a prediction is verified), pk·an differently; and so on.

The technique of particle formation, apart from the formation of locatives from noun stems, and of adverbial numerals from numeral stems, is the stringing together of shorter particles by external sandhi. Since each of the shorter elements can usually appear in other contexts, or, sometimes, alone, each gives the impression of being a free form; at the same time the modification of meaning involved is sometimes so great that the new formation seems like a single unit, a unitary word. It is therefore hard to decide whether two write some of them as single words or as groups of words. Thus, for example, šə means how, so, thus; ʔi šə na means so, thus, nəš· šə na for no particular reason, šə nəš· p·i in precisely this manner, šə nə s·ə šə more or less; šə na is frequently placed after other elements apparently simply for emphasis -- nkotək šə na so once . . .; kət·ən šə na . . . sure enough . . .. "nəš·", appearing above in some of the šə forms, recurs in nəš· nə kɛ for a reason. p·i recurs in

many words of temporal significance, and in the preverb /p•iT• (§7.1) while, during, inasmuch as. With the data at present available it is not possible to untangle all these particles and particle complexes in such a way as to reveal the precise meaning of each unit and the ways in which those meanings are modified in the complexes.

11. SYNTAX

11.1. Introduction; Style. Morphology dealt with the formation of bound forms from bound forms, and of free forms from bound forms. In the present section the formation of free forms from free forms will be treated. But some marginal cases must be included here. Inserted forms in conjunct verb complexes bear a purely syntactical relation to the other elements in the sentence, and their location in the middle of a complex which is otherwise composed of bound forms seems to be rather a matter of word order than of actual difference in word formation. But beyond this: some purely morphologically constructed relations are so precisely analogous to syntactic forms that they must be dealt with in the present section in connection therewith, though formally treated in the foregoing sections.

Before proceeding to syntax proper it is necessary to deal with a number of matters of style.

The first of these is tempo variation. The normal rate of speech

is rather deliberate. To a naive listener with an English-speaking background the tempo of such normal speech would seem quite usual. Under conditions of emotional strain the speed may increase; conversely, under some abnormal conditions, particularly those involved in dictating to a linguist, it markedly decreases. However, these differences in tempo do not particularly influence the duration of syllables and words; rather they cut down on, or increase, the number of comma intonations, and the length of the pauses at those points. This has been mentioned before; see §2.1.

The second is the distorted form which words assume when being sung. Very little data is at hand on this, but the abnormality seems to be a morphophonemic one; weak vowels in the formulae which are normally not actualized are present in the sung form of the words. Thus, to give the safest example, the word ʔɛs·pən raccoon, formula √ʔɛs·cpɑn, is sung ʔɛs·əpəno. This suggests that a greater knowledge of the singing technique might shed light on the precise psychological status of the morphophonemic formulations for which, at present, only the claim of descriptive simplicity is made.

The most important fact of style, however, is the contrast between conversation and narration. Ordinary conversation is the give and take of words which accompanies, rather than replaces, everyday activity. Narration is the monologue style of an individual telling a story, be it about himself or about a mythical hero, the only requirement being that the stream of speech coming from that individual is the thing of

central importance at the moment, rather than an accompaniment for something else. Conversational style is marked by the predominance of the indicative and the imperative modes, and by a partial or complete disappearance of the distinction between comma and period intonations. Narrative style, on the other hand, has the narrative as its principal mode of predication, and commas and periods are clearly distinguished. Where indicative and imperative forms appear in narration they are in quotations or parenthetical comments.

This last stylistic contrast is obviously of considerable importance syntactically. Most of the texts upon the analysis of which the present section on syntax is based are stories in narrative style. Many important details of conversational style are not known at all. Therefore what follows applies primarily to syntax in narrative style.

11.2. Types of Clauses. The unit of predication is not the sentence but the clause; a sentence consists of at least one clause, but frequently more than one. A clause is either minimal or full. A minimal clause consists of a single word; a vocative noun, a particle, or an interjection. A full clause is equational or regular. Either of these may be complete or elliptical, except that an imperative clause, which is a subtype of regular clause, is always complete. A full clause is the same thing as a predication, which is the same

thing as an independent nexus; but there are clauses which are not predications, and nexuses which are not independent and therefore likewise not predications.

As examples of minimal clauses may be given the following:

nmə̌š·o Grandfather! (calling)

čo ntəkk·ɛntas·in, nmə̌š·o. I don't know, grandfather

kɛko. Don't!

kɛko, kin kkə-ns·ə̌čkas. Don't, you'll be killed!

ʔahaw. Well well!

ʔiwtšə nkotək ʔɛs·pən ʔɛ-ki-mk·əwat ns·wɛ ʔɛs·pənən, nkot ʔɛ-ki-nis·wɛpnat, minə nkot, ʔahaw tšə ni ns·wɛ ʔɛ-ki-kč·ə-mikatwat. One time the coon found three coons, he threw down the first one, and another, by golly! with the third one he fought hard.

Thus it is seen that a minimal clause may function as an entire sentence or as a clause within a larger sentence. All the examples but the last are from conversational style; in narrative style a minimal clause suggests parenthetical comment by the narrator. In the last example ʔahaw functions as a clause, yet it also in a sense serves as an opener for the full clause which follows it, since tšə but, which cannot appear in first position in the clause, is hung onto it.

Since minimal clauses consist only of a single word their analysis is complete when the types of words which can constitute them are mentioned. On the other hand, full clauses consist of one or more words and involve various syntactical relations which must be dealt with

one at a time. The following two clauses are respectively equational and regular:

ʔiw tšə jɛ ʔi wɛč-mpot. That is why he is dying.

ʔɛ-ki-nišok·məwat ʔos·ən. He helped his father.

Full clauses may be made into interrogatives. Interrogative clauses occur only in conversational style; therefore interrogative regular clauses have the verb in the indicative. The interrogative is formed in regular clauses by placing the particle nə after the verb:

wki-nišok·məwa nə ʔos·ən. Did he help his father?

Equational predications are interrogative when the first term of the equation is an interrogative substitution:

nitšəwi jɛ ʔi wɛč-mpot. Why is it that he is dying?

But an interrogative substitution may stand as a complete clause and sentence:

nitšəwi. Why?

11.3. Subject, Object, Predicator. A syntactical construction involving a verb in finite or participial mode is a nexus, as is one involving a predicative particle. A syntactical construction not involving a predicator or a participial is junction. In the present section are dealt with the principal types of nexus in regular clauses; subject-verb and object-verb. Subject and object may be referred to together by the indifferent term reference.

When a reference made by the morphological elements within a verb is third person or obviative, the area defined by the gender and person and number categories is still wide. Thus the form wapman, standing alone as a clause, says that he(an animate third person) sees him(a second animate third person), but not whether the he and the him are people or kettles or trees. Therefore such an internal reference may be termed implicit. The reference is made explicit if a nominal form in the right gender and person and number categories is added. Such a nominal form may be a noun in a flexion (not locative or vocative), a nominal substitution, a participial, a numeral, or a junction of the types dealt with below (§§11.5-11.7).

The situation is otherwise if the reference within the verb is to first or second person. In this case the animate gender and the person and number delimitation suffice to make completely precise the entity to which reference is made; it is the speaker, or the person spoken to, or both. Therefore a first or second person reference within a verb is explicit. An added substitute (personal pronoun) can only emphasize the reference, and may be said to stand in extraposition with that explicit internal reference.

kiš·pən pwa-ne·at niw p·əšk-m'we, kin kwi-ne·əko.
If you do not kill the lion, you yourself will be killed.

An imperative predication has a verb in the imperative or prohibitive

mode. In both of these modes only second person subject forms exist; therefore the subject of such a predication is always explicit; an added word emphasizing the subject always is in extraposition with the internal subject.

The impersonal ii verbs take no added word as a subject reference. Since formally they are like other ii verbs it is probably best to analyze them as containing an internal subject, rather than as constituting subjectless predications; but the implicit-explicit contrast obviously has no meaning.

11.4. Participials. The internal organization of a participial construction is precisely like that of a regular clause -- it has references, implicit or explicit, and is subject to particle modification. But it is not a clause, not an independent nexus; it is a nominal form. By changing the verb in a regular clause into the participial mode the entire clause is nominalized and performs in its larger context the same roles that any other nominal form can play. The nominalization may be primarily of subject or of object, or, in the case of equational predications, of a preverbal idea. Thus mačjan I, eating, or what I eat; wɛč-mpot why he dies.

Some participials, however, have come to have fixed meanings, take no added reference words, and function syntactically precisely as nouns, though their morphology remains verbal. Thus pas·kek is the only word for clothing; ʔɛtat his house -- "where he lives."

Participials are particularly important in equational predications; see §11.9.

11.5. Junction; Possession. Possession is pure junction which nevertheless resembles nexus very much. A possessed noun, thus, shows within itself the category of possessor, and the latter is explicit if first or second person, implicit if third; an added word in the first case is in extraposition, in the second constitutes the explicit possessor.

The possessor of a possessed noun may itself be a possessed noun, so that forms like the following are quite possible:

nos· ʔok·məs·ən tənnimnən my father's grandmother's husband; i. e., my(1) father(3), his(3) grandmother(3'), her(3) husband(3").

The possessor of husband is 3 instead of 3' because there is no distinct form for 3' possessor; but the possessive relations are quite clear, since husband is 3".

11.6. Other Junctions. There are four other types of junctions; those involving quantifiers are left for the next section.

The first is an attribute-head group in which the head is noun, or participial, the attribute a demonstrative substitution: ʔotə nənə that man over there. In this type of junction demonstratives of the first type presented in §9 serve almost as articles, with a meaning that ranges from full demonstrative force down to practically zero: ʔo nənə the man.

The second is an attribute-head group in which both parts are nouns.

This is not common, appearing mainly in story-titles or names of story characters. Thus mt·ək nənə Log-Man; wapkən pwakən Clay-Pipe; wapkən pwakən jats·ok·an story of Clay-Pipe. The last example contains two such junctions, the third word being head for the first two as attribute, and the second being head for the first as attribute.

The third is a similar construction with the attribute placed second and joined with the particle minə and, with. ʔo nənə minə wtək·wɛjomən ʔɛ-ki-pjat. The man with his wife he came. The ungrammatical translation brings out the fact that this construction is a matter of attribution rather than of conjunction; the added noun wtək·wɛjomən does not alter the person and number category of nənə, the verb being in third person singular form.

Lastly there is a junction in which a noun stands in extrapcsition with another nominal form; again an ungrammatical English rendering brings out the effect:

> ʔiwtšə ʔo nəš·napɛ ʔɛ-ki-pwa-kk·ɛnmat niw təʔɛs·pənmən,
> mə·kwɛkas· ʔiw ʔɛ-ki-pk·əškannək. So the man could not pick out his own coon; the red rag it had fallen off.

11.7. Junctions Involving Quantifiers. The cardinal numerals nkot, niš, nə·wɛ, etc, have cardinal or ordinal meaning depending on context. They are nominal forms. When one of these functions as the head in an attribute-head relation of the first type described in §11.6, the demonstrative substitution serves to delimit person, number, and gender, the numeral being incapable of varying to specify

those categories. Thus ʔo nsʻwɛ the third(3), niw nsʻwɛ the third or the three(3'), kiw nsʻwɛ the third ones or the three(35), ʔiw nsʻwɛ the third(0), niw nsʻwɛ the three or the third ones(05).

The same numeral forms may function as attributes, the head being a noun; nsʻwɛ ʔɛsʻpənən three coons(3') or the third coon(3').

The numeral forms meaning "so many sacksful," and "so many pieces," may be used alone, the substance being understood, or with an attributive noun usually placed after the quantifier. Gender is determined by the attribute, present or understood. "One sackful" is plural, syntactically, if it contains something which is in pieces and there is more than one such piece -- berries, ants, etc. Thus nkotoškən one sackful of berries.

The syntactical function of the numeral forms for "mile" and "o'clock" are not known.

11.8. Particle Modification. Except for those that function as connectives and predicators, particles are adverbs, of time, place, or manner. Thus kətʻə šə na mpowak sure enough he's dead, in which the form kətʻə šə na is a particle group with the unitary meaning "sure enough," verifying predications.

Locative derivaties from nouns have the same syntactic function; ʔipə čik-pjɛk ʔɛ-ki-šjat he went over there on the shore, ʔipə čik-topʻwənək ʔɛ-ki-šjat he went over there by the table; ʔipə is "over there," čik-pjɛk "on the shore," čik-topəwənək "by the table." But

when two locatives are used together, the second may simply be a noun in singular flexion; ntəšja nam-jəkwan top•wən I go underneath the table is as acceptable as ntəšja nam-jəkwan top•wənək. In cases like the former the locative particle seems like a preposition.

Nouns in a non-locative flexion may also function as adverbs with a non-locative meaning:

ms•kwɛkas• ʔɛ-ki-napk•otnat. He tied a red rag around the other's neck.

mk•əsən ʔɛ-ki-nis•wɛpnəmwat. He threw the shoe down to the other.

In the first example the verb is a ta verb meaning to tie something around the neck of; the object is implicit; ms•kwɛkas• red rag, inanimate, though in the English translation it sounds like an object, is simply a noun functioning as an adverb of means, specifying what it is with which the neck is tied. In the second example the verb is a ta double object verb, the morphologically marked object being again implicit; mk•əsən, shoe, inanimate, is semantically the direct object, syntactically simply a particle of manner or instrument. In cases such as these the adverb might be termed a pseudo-object.

Adverbial numerals are adverbs; nkotək means once in either of the English senses, either not twice or the vague at one time.

Finally, subordinate clauses with verb in dependent mode are adverbs within the clause to which they are subordinated; see §11.17.

11.9. Equational Predications. The pattern for equational predications

is first term, predicator, second term. The first term may be any nominal form other than a participial, or possibly even a participial. The predicator is a particle, which may be omitted; if omitted the clause is elliptical; The second term is invariably a participial construction:

> ʔiw tšə jɛ ʔi wɛč-kʷɛw-piktəpɛšʷək pwakən nkom topʷi. That is the reason why a pipe breaks so easily up to this day.
>
> ʔiw sʷə nkom nišək ʔɛtnəsjan ʔɛ-mpojɛk. This today is the second time I have been around for the death of one of you.
>
> waposo sʷəwi ʔo ʔɛščəkɛt. Rabbit is the one who is doing it.

The predicators are respectively jɛ, sʷə, and sʷəwi. The first term in the first two is ʔiw, O demonstrative substitute, in the last waposo Rabbit. The second term in the first example is all that comes after jɛ; ʔi modifies the entire participial construction which follows it; pwakən pipe is subject of the participial, nkom təpʷi up to this day is a particle group, and wkʷɛw easily, a particle, is inserted in the participial itself. The syntax of the second term of the second example is not entirely clear; it is from conversational style (quotation in a story). ʔɛtnəsjan is I being here; nkom today and nišək second time are particle modifiers; ʔɛ-mpojɛk is narrative mode, which seems to play a subordinated role in clauses in conversational style, though the precise relation is not clear. The second term in the third example is ʔo ʔɛščəkɛt the one-who-is-doing-it-thus.

11.10. Grouping of Clauses. All the ways in which words are put together to form clauses have now been discussed. Next it is necessary to treat the linking of clauses.

The most obvious way to link clauses is to include them in a single sentence; clauses within a single sentence are more closely connected than those divided by period intonations. It is hardly necessary to give examples of this.

11.11. Elliptical Clauses, Minimal Clauses, and Extraposition. A minimal clause included within a sentence has a close connection with one of the adjacent clauses, either that before it or that after it. A good case is the word ʔahaw in the example analyzed in §11.2. The same comment applies for elliptical clauses, and mine nkot in the same example is a case. mine is a connective, nkot is explicit object of a verb which is not given in this clause, but which can only be the same as the verb in the clause before this one, ʔɛ-ki-nis·wɛpnat.

An element in extraposition may constitute a clause, closely linked to that containing the element with which it is in extraposition. This is true in the case of vocatives in extraposition with imperatives or other finite forms; otherwise there is no distinction between extrapositions that constitute clauses and those that do not:

pjan, mməš·o. Come here, Grandfather!

11.12. Pivoting. An interesting type of linking is found in

sentences like the following:

ʔiwtšə ʔɛ-nə-mkəknot ʔo ʔɛs·pən ʔɛ-ki-nišok·məwat ʔɛ-kiws·ɛnət. So when-he-grew-up the coon he helped him hunt.

The three clauses are coordinate. In rapid speech (as indicated by the transcription given here) the three are uttered as a single phrase. The form ʔo ʔɛs·pən is in the proper flexion to function as subject both of the verb preceding it and the verb following it, and lacking a comma pause before it or after it there is no way whatsoever to tell that it goes with one clause or with the other. In the mind of the speaker it may actually be assigned to one or the other, but it may possibly be structured in his mind as the analyst, having no objective clue, must interpret it; namely, as going with both. Such an element, standing between two predicators, having a syntactical relation to each, and not being marked off from either by a comma, may be termed a pivot. A pivot binds the two clauses between which it stands more closely than they would be bound without the pivoting. The pivot need not, as it does in the above example, perform the same function in both clauses; witness:

ʔɛ-ki-nišok·məwat ʔos·ən ʔɛ-kiws·ɛnət. He helped his father hunt.

Here the pivot is object of the first verb, subject of the second.

ʔɛ-jɛ-pməpt·ot ʔo ʔɛs·pən ʔɛ-ki-wapmat ʔamon ʔɛ-kočnənət. As he ran along, Coon, he saw a beehive hanging down.

ʔo ʔɛs·pən is subject of the first and second clauses; ʔamon is object of the second, subject of the third.

11.13. Sequence of Person. Both within the clause and between clauses different entities are kept distinct by referring to them with forms for different personal categories. In the expression nos· ʔok·mes·ən tənnimnən my father's grandmother's husband, "my" is 1, "father" 3, "grandmother" 3', and "husband" 3". One cannot quite make the generalization that in a group of connected clauses no two distinct entities can be in the same person; this is the tendency, but the available morphological forms do not permit it to work out completely; nor is it necessary for clarity. Thus observe:

ʔiwtšə ʔo ʔɛs·pən ʔɛ-ktəkoait nək·o mt·əkwɛn,
wičʔɛs·pənən ʔɛ-mk·ewat, ʔɛ-nis·wɛpnəmwat
niw nəš·napɛn, nək·o ʔɛ-ns·at ʔo nəš·napɛ.
So the coon would climb a tree, find his
fellow coons, would throw them down to the
man, customarily the man would kill them.

The subject of the first three verbs is the same 3 entity, raccoon. The object of each of the three verbs is in the obviative, although they refer to different entities; but in each case the object is made explicit with a nominal form that is not a substitution but means itself, so that there is no danger of confusion. The last verb has a new third person subject, which is made explicit and so cannot be confused with the third person subject of the previous verbs. The only possible danger of confusion is in the identity of the implicit obviative object of the last verb; it could conceivably be either "tree" or "fellow coon," but obviously in the semantic circumstances there is no danger of misinterpretation.

In a form like ʔɛ-ki-nišok·məwat ʔos·ən ʔɛ-kiws·ɛnət he helped his father hunt, or, without the ʔos·ən, "he-helped-the-other, the-other-hunted," the change of person gives the effect of subordinating one clause to the other, at least in the English translation. But in the Potawatomi form the two are coordinate; this close linking of idea is the type of thin rroduced with the mechanism of person sequence.

Inanimate nominal ·ds have no obviative forms, but ii verbs do, and when an ii verb occurs in obviative form the secondary nature of the idea it expresses is emphasized:

čowik·a sakəč ʔɛ-wi-šjat ʔɛ-kməjannək. He would never go outside when it was raining.

ʔɛ-kməjannək means it(O') was raining; the obviative form gives the idea of subordination.

11.14. Sequence of Tense. All narrative mode forms refer to past time. The form with no tense preverb and that with the preverb √ki are approximately the same in meaning except when used together; that with √wi implies intention, frequently intention not carried out. But when used in adjacent clauses, there is a sort of linking of meaning of these three "tenses," so that the past followed by the present will imply that the first even not only preceded the second in time, but that it was possibly responsible for the occurrence of the second; while the future, following past or present, will have the intentional meaning emphasized:

ʔiwtšə škəč nɛʔiš ʔɛ-ki-nis·awat, ʔɛ-kč·ə-mikatwat.
So after while both fell to the ground, then fought together strenuously. (past, present)

mt·ək ʔɛ-kkəkapwat, čo tšə mamta ʔɛ-wi-wɛp·otwat, ʔɛ-pwa-kk·ɛnmat niw təʔɛs·pənmən. He had a stick, but couldn't use it, since he couldn't recognize his own coon. (present, future, present)

In this last example the sequence of tenses is such that the first clause gives the circumstances, the second the unfulfilled desire, the third the reason for frustration.

11.15. Pseudo-Subordination. Certain particles and preverbs have meanings which semantically subordinate the clauses in which they appear. The subordination is real in the sense that clauses with these elements would not constitute complete utterances, but must have another clause to hang onto; but it is not comparable to that for which the term subordination is reserved, since there a distinct mode is used, while here so far as the verbal complex itself is concerned the verb of the apparently subordinated clause is entirely comparable to that of the apparently major clause.

ʔitšə ʔɛ-pjat ʔipə ʔankonojən ʔɛ-tšəwtankwɛnət. So he went there where the ants had their village.

ʔɛ-jɛ-pməpt·ot ʔo ʔɛs·pən ʔɛ-ki-wapmat ʔamon ʔɛ-kočnənət. As he ran along, Coon, he saw a beehive hanging down.

In the first example the second clause contains ʔipə there and the preverb √tɑšɑ there, where; the latter gives it the subordinate idea. In the second example √jɛ in the first verb means as, while.

11.16. Quotation and Parenthesis. In narrative style, indicative

or imperative verb forms mark a quotation or a parenthetical comment of the narrator. A quotation which does not contain a verb, of course, may not be recognized as such except by the semantics.

> ʔitšə ʔɛ-p·ič-tpəwɛwat ʔišə nkot ʔɛ-k·ətot "nkɛk·ɛntan knəpəč wa-napnənko," ʔɛ-nat. So as they held council one spoke thusly; "I know, perhaps, what we should do," he said.

In this case and in many others the beginning and end of the quotation are carefully marked by placing a narrative mode form of a verb meaning to say immediately before and after the quotation, almost like spoken quotation marks; in this case, ʔɛ-k·ətot he said before, ʔɛ-nat he said to them after.

The following is an example of a parenthetical comment inserted in a story; after making this aside the narrator continued by repeating the same thing in narrative mode, as a part of the story proper:

> ki tšə ʔjajkɛnwik tšə kiw, čo ki-k·ɛnmas·in niw təʔɛs·pənmən. They were just the same size, those ones, you see; he couldn't recognize (which one was) his own coon.

The added "you see" brings out the tone of the parenthesis.

11.17. Subordination. Only one construction can be termed subordination in the true sense; a dependent mode construction, with or without the introductory particle kiš·pən, in either case meaning if . . . Such a construction is an adverb within the clause to which it is subordinated:

> (kiš·pən) pwa-pjɛtojən, kwi-ns·əko. If you don't bring them, you will be killed.

11.18. Word Order. A survey of the examples which have been given in the grammar up to the present point will give a fairly good idea of typical word order. Certain general principles can be adduced:

1) There are certain elements which have a relatively fixed position. They need not all be enumerated here, since whenever an element with this characteristic has been given the facts of its position have been given too. But, for example; the interrogative particle na always follows a verb immediately; kɛko don't, when not used alone, immediately precedes a prohibitive verb form; tšə, mild disjunctive, stands second in the clause, never first. The elements in most junctions have a fixed order; ʔo nəš·napɛ and nəš·napɛ ʔo mean two different things, the Indian, and an Indian, he . . . The elements in equational predications do not vary from the order first term - predicator - second term.

2) Elements the syntactical connections of which are morphologically marked vary most in position; subject, verb, and object (not pseudo-object) can occur in almost any order relative to each other, or with particles and words in other relations to them separating them.

3) There is a principle of emphasis. So far as other rules will permit, elements to be emphasized are placed first. For example, the extraposed ms·kwɛkas· in ms·kwɛkas· ʔiw ʔɛ-ki-pk·əškannək the red rag it had fallen off is emphasized by its position.

4) Finally, there is a principle of adjacence. Except for forms controlled by other rules, two elements which go together are put next to each other, though this principle does not in itself determine which shall fall first, and, if no other principle does, there will be variation.

12. TEXT

In the following text each word is numbered on its first appearance, and analysis is given at the end. Each sentence is lettered, and syntactical analysis precedes the morphological treatment.

(a)(1)ʔimɵs·ɵ (2)ʔo (3)nɵš·napɛ
Once upon a time a certain(3) Indian(3)

(4)ʔɛ-ki-pmɵnat (5)ʔɛs·pɵnɵn. (b)nɵš·napɛ
he(3) had him(3') as a pet raccoon(3'). The Indian(3)

(6)tšɵ ʔo (7)wɛniʔkɛt (8)ki-jawɵ. (c)(9)ʔiwtšɵ
so he(3) he(3) going trapping he(3) was there So

(10)ʔɛ-nɵ-mkɵknot ʔo (11)ʔɛs·pɵn (12)ʔɛ-ki-nišok·mɵwat
when he(3) grew up the(3) raccoon(3) he(3) helped him(3')

(13)ʔɛ-kiwɵ·ɛnɵt. (d)ʔiwtšɵ (14)ʔɛ-ki-k·ɛnwačʔat, (15)mɵ·kwɛkas·
he(3') hunted So he(3) marked him(3') a red rag(0)

(16)ʔɛ-ki-napk·otnat. (ɵ)ʔiwtšɵ ʔo ʔɛs·pɵn
he(3) put around his(3') neck So the(3) raccoon(3)

(17)ʔɛ-ktɵkosit (18)nɵk·o (19)mt·ɵkwɛn, (20)wičʔɛs·pɵnɵn
he(3) climbed customarily a tree(3') his(3) fellow coons(3')

(21)ʔɛ-mk·ɵwat, (22)ʔɛ-nis·wɛpnɵmwat (23)niw
he(3) found them(3') he(3) threw them down to him(3') the other(3')

(24)nɵš·napɛn, nɵk·o (25)ʔɛ-nɵ·at ʔo
the Indian(3') customarily he(3) killed [illegible](3') the(3)

nɵš·napɛ. (f)ʔiwtšɵ ʔo nɵš·napɛ (26)nwɵč (27)ʔɛ-mišk wɵsɵt
Indian(3) So the(3) Indian(3) better he(3) was able

(28)ʔɛ-mk·ɵtakmɵkɛt. (g)(29)ʔi (30)šɵ na (31)pɵnɛ
he(3) collected furs that(0) so always

(32)ka-šɵčkɛwat. (h)ʔiwtšɵ (33)nkotɵk ʔɛs·pɵn (34)ʔɛ-ki-mk·ɵwat
how they(35) did so once raccoon he(3) found them(3')

(35)nɵ·wɛ ʔɛs·pɵnɵn, (36)nkot (37)ʔɛ-ki-nis·wɛpnat,
three raccoons(3') the first he(3) threw him(3') down

(38)mine nkot, (39)ʔahaw tšə ni ns·wɛ (40)ʔɛ-ki-kč·ə-
and one by golly! but the(3') third they(35) fought

-mikatwat. (i)ʔiwtšə (41)škəč (42)nɛʔiš
strenuously together So after while both

(43)ʔɛ-ki-nis·awat, (44)ʔɛ-kč·ə-mikatwat.
they(35) fell down they(35) fought strenuously together

(j)ʔiwtšə ʔo nəš·napɛ (45)ʔɛ-ki-pwa-kk·ɛnmat niw
So the(3) Indian(3) he(3) didn't recognize him(3') the(3')

(46)təʔɛs·pənmən, ms·kwɛkas· ʔiw (47)ʔɛ-ki-pk·əškannək.
his(3) raccoon(3') the red rag(0) it(0) it(0') had fallen off

(k)(48)ki tšə (49)ʔjajkɛnwik tšə kiw,
they(35) so they(35) were the same size so they(35)

(50)čo tšə (51)mamta (52)ʔɛ-wi-wɛp·otwat, (53)ʔɛ-pwa-kk·ɛnmat
not so impossible he should hit him(3) he(3) didn't

niw təʔɛs·pənmən. (l)pənɛ tšə
recognize him(3') the(3') his(3) raccoon(3') always so

niw təʔɛs·pənmən (54)namjəkwan (55)ki-wčəš·non. (m)ʔiwtšə
the(3') his(3) coon(3') underneath he(3') lay So

ʔo ʔɛs·pən (56)ʔɛ-ki-kk·ɛnmat niw (57)wik·anən
the(3) raccoon(3) he(3) saw him(3') the(3') his(3) friend(3')

(58)ʔɛ-pwa-kk·ɛnməkot. (n)(59)kkan (60)ʔɛ-napmat
he(3') did not recognize him(3) closely he(3) glanced at him(3')

(61)škiškonək. (o)ʔitšə ni wtəʔɛs·pənmən (62)ʔipə
in his(3) eye So the(3') his(3) coon(3') there

(63)ʔɛ-nə-k·wɛs·at niw nkot, minə (64)ʔɛ-čipnikwɛs·at,
he(3) tossed his head the(3') one and he(3) winked

ʔiwtšə ʔo nəš·napɛ (65)ʔɛ-ki-wɛp·otwat niw nkot,
so the(3) Indian(3) he(3) hit him(3') the other(3') one

(66)ʔɛ-ki-ns·at.
he(3) killed him(3').

(a) Once upon a time a certain Indian had a pet coon. (b)When the Indian went trapping he(the coon) was along. (c)So when the coon grew up

he helped him hunt. (d)So he marked him, put a red rag around his neck. (e)So the raccoon would customarily climb a tree, would find his fellow coons, would threw them down to the Indian; customarily the Indian would kill them. (f)So the Indian was able to collect furs better. (g)That is how they always did. (h)So once the raccoon found three other raccoons; he threw the first down, and the second, but by golly! he and the third one fought strenuously together. (i)So after while they both fell down(out of the tree), and fought hard together. (j)So the Indian didn't recognize (which one was) his own coon, since the red rag had been torn off. (k)They were just the same size, these two, you see; so it was impossible for him to hit him, he couldn't tell which was his own. (l)His coon was always underneath. (m)So the raccoon saw that his friend couldn't recognize him. (n)He glanced at him closely with his eye. (o)So his coon there tossed his head at the other, and winked, so the Indian hit the other one, and killed him.

(a)The five words are; particle(connective), pronoun, noun(these two in a junction), verb, noun; the junction is subject of the verb, the last noun object.

(b) The last word is the finite verb and the predicator; it has an implicit subject which apparently means "the raccoon;" since the verb is in indicative mode the sentence is a parenthetical comment. The other words constitute an adverbial phrase, consisting of a

participial construction(ʔo wɛniʔkɛt), a noun in extraposition with ʔo (nəšnapɛ), and the second-position connective tše.

(c) See §11.12 for analysis.

(d) This sentence contains two clauses; for the analysis of the second see §11.8. The first clause is connective plus predicator.

(e) See §11.13.

(f) Connective(ʔiwtše), subject consisting of a junction of ʔo and nəšnapɛ, adverb nwəč, predicator ʔɛ-mišk^wəsət; and a second clause with subject implicit but obviously the same as that of the first -- ʔɛ-mkətaknəkɛt. The meaning of the two verbs, "he was able," and "he collected furs," suggests a subordination of the second to the first; this is only semantically so, not formally.

(g) Equational predication with predicator omitted. First term ʔi, connective še na (or possibly še is "the way," "how") adverb pənɛ, second term the participial ka-šəčkɛwat how they did. Possibly this last word should here be written ka-šə-čkɛwat, with an incorporated še how.

(h) For analysis see §11.2 ff.

(i) Two clauses; first is connective, adverb, numeral subject, predicator; second verb only, references implicit.

(j) Two clauses; for the analysis of the second see §11.13, the last example, to which this is analogous; msəkwɛkas in extraposition with the subject ʔiw, predicator last, with form for 0' subject, indicating subordinate idea. First clause; connective, subject(pronoun-noun),

predicator, object(pronoun-noun).

(k) The indicative mode verb in the first clause of this sentence marks that clause as a parenthesis; presumably the other two are not. First clause subject, connective, predicator, particle(connective repeated), and subject repeated; the free translation attempts to bring out the effect of this word order and repetition. In the second clause čo not and mamta impossible reinforce each other, rather than cancel each other out; adverb, connective, adverb, predicator. Third clause is predicator with implicit subject, and object(pronoun-noun).

(l) This is another parenthesis, to explain the trouble. Adverb, connective, subject(pronoun-noun), adverb, predicator.

(m) This sentence consists of two clauses connected by a pivot. ʔiwtǎə is connective, ʔo ʔɛs·pən subject of the first clause, ʔɛ-ki-kk·ɛnmat predicator in the first clause, niw wik·anən object of first verb, subject of second. The object of the second verb is the subject of the first, but it is implicit in the second clause.

(n) Adverb, predicator, adverb(locative noun).

(o) Four clauses; first is connective, subject(pronoun-noun), adverb, predicator, adverb(pronoun-noun, perhaps pseudo-object, since the verb is ai); second is connective, predicator; third is connective, subject (pronoun-noun), predicator, object(pronoun-noun); fourth predicator with referencee implicit.

(l) ʔimǝs·ə once upon a time, connective particle, see §10.

(2) ʔo 3 demonstrative; see §9.

(3) nəš·napɛ; formula √ɑnəš·ɑnapɛ(#j).

(4) ʔɛ-ki-pmənat; stem √pɑmɑn ta take care of as one cares for a domestic animal; paradigmatic suffix √a-t 3-3' conjunct, §7.3; preverbs √ʔɛ narrative, √ki past tense.

(5) ʔɛs·pənən; stem √ʔɛs·ɑpɑn, obviative ending √n.

(6) tše mild connective, comparable to the Biblical "and;" takes second position in the clause; see §10.

(7) wɛni?kɛt; stem √Oni?ɑkɛ^aj go trapping; paradigmatic suffix √t 3 conjunct, §7.4; initial change giving participial.

(8) ki-jawə; stem √jaw ai be; paradigmatic suffix √# 3 indicative; preverb √ki past tense.

(9) ʔiwtše mild connective, like (6) above; the ʔɪw simply affords the second position tše something to hang on.

(10) ʔɛ-nə-mkəknot; stem √mɑkɑkɑn ai; ending √t; preverbs √ʔɛ and √ɑnɑ.

(11) ʔɛs·pən; cf (5) above; this has the singular ending zero.

(12) ʔɛ-ki-nišok·məwat; stem √nišok·ɑmɑw.

(13) ʔɛ-kiws·ɛnət; stem √kiwɑs·ɛ ai; paradigmatic suffix √nɑt, §7.4.

(14) ʔɛ-ki-k·ɛnwač?at; stem √kɑk·ɛnɑwačo? ta.

(15) ms·kwɛkas·; stem √mɑs·kwɛkas·.

(16) ʔɛ-ki-napk·otnat; stem √napɑk·otɑn ta.

(17) ʔɛ-ktəkosit; stem √kɑtɑkosi ai.

(18) nək·o particle.

(19) mt·əkwɛn; stem √mɑt·ɑkwE, √mɑt·ɑkO; see §§6.6-6.9.

(20) wiǰ?ɛs·pənən; for √iǰ see §6.3.

(21) ?ɛ-mk·əwat; stem √mɑk·ɑw.

(22) ?ɛ-nis·wɛpnəmwat; stem √nis·ɑwɛpɑnɑmɑw.

(23) niw; demonstrative 3'; also ni, without the w; see §9.

(24) nəš·napɛn; (3) and the obviative suffix √n.

(25) ?ɛ-ns·at; stem √nɑS·.

(26) nwəǰ particle.

(27) ?ɛ-miškwəsət; stem √miškɑwɑs.

(28) ?ɛ-mk·ətaknəkɛt; stem √mɑk·ɑtakɑnɑkɛ ai.

(29) ?i; also ?iw; demonstrative O, §9.

(30) šə na; šə is probably "how"; na is postpositive for emphasis, though its precise shade of meaning is difficult to determine; §10.

(31) pənɛ particle.

(32) ka-šəǰkɛwat or ka-šə-ǰkɛwat; in the first case the stem is √ɑšɑǰɑkɛ ai; in the second √ǰɑkɛ ai, and šə ("√ɑšɑ") is inserted.

(33) nkotək; stem √nɑkOt plus adverbial ending √k; see §8.

(34) ?ɛ-ki-mk·əwat; (21) and preverb √ki.

(35) ns·wɛ; see §8.

(36) nkot; see §8.

(37) ?ɛ-ki-nis·wɛpnat; stem √nis·ɑwɛpɑN.

(38) mine connective particle.

(39) ?ahaw interjection; see §1.11.

(40) ʔɛ-ki-kč·ə-mikatwat; stem √mikat. It is not certain whether the intensive element √kač·a is to be regarded as an inserted particle or as a preverb.

(41) škəč particle.

(42) nɛʔiš substitution; §9.

(43) ʔɛ-ki-nis·awat; stem √nis·a/ɛ.

(44) ʔɛ-kč·ə-mikatwat; (40) without the √ki.

(45) ʔɛ-ki-pwa-kk·ɛnmat; stem √kak·ɛnam ta; √pwa is the negative prefix, see §7.1.

(46) təʔɛs·pənmən for wtəʔɛs·pənmən; stem √ʔɛs·apan; derived possessed theme with 3 possessor, with personal prefix √wat and possessive derivative suffix √m; obviative paradigmatic suffix √n.

(47) ʔɛ-ki-pk·əškannək; stem √pak·aška/ɛ ii.

(48) ki; demonstrative 35.

(49) ʔjajkɛnwik; stem √ʔjajakɛnO ai.

(50) čo negative particle, see §10.

(51) mamta particle; §10.

(52) ʔɛ-wi-wɛp·otwat; stem √wɛp·otam ta; preverb √wi future ; see §7.1.

(53) ʔɛ-pwa-kk·ɛnmat; (45) without the √ki.

(54) namjəkwan particle; see §6.8.

(55) ki-wčəš·non; stem √Očaš·anɸ ai.

(56) ʔɛ-ki-kk·ɛnmat; cf (53) and (45).

(57) wik·anən; stem √ik·an.

(58) ʔɛ-pwa-kk·ɛnməkot; cf (56) etc.

(59) kkan particle.

(60) ʔɛ-napmat; stem √napɑm.

(61) škiškonək for wškiškonək; stem √škiš[illegible]O; derived possessed theme with 3 possessor, prefix √w; [illegible] obviative suffix √n and locative suffix √k.

(62) ʔipe particle.

(63) ʔɛ-ne-k·wɛs·at; stem √k·wɛs·a/ɛ; preverb √ɑnɑ.

(64) ʔɛ-čipnikwɛs·at; stem √čipɑnikwɛs·a/ɛ.

(65) ʔɛ-ki-wɛp·otwat; cf (52).

(66) ʔɛ-ki-ns·at; cf (25).

LEXICON

The following list includes all the lexemes which appear in the grammar or the text. Non-lexemic morphemes are excluded -- namely, paradigmatic suffixes, personal prefixes and suffixes, and the possessive derivative suffix. Stems are given as such except in those cases in which they were analyzed in the grammar; in those cases the smaller units also are listed. All entries are in morphophonemic symbols and the root sign has been omitted. All numerical references are to sections of the grammar and the paragraph sign has also been omitted. References are not given for each occurrence, but only to those occurrences where some information is given about the form.

ɑ, N, ta say to 7.3
a, ta final = w; 4.3
aǰɑwɑn -stream in particles upstream etc 6.8
aj ai passive final 4.6
akɑn noun-forming final 4.2
ak·w medial, wood 4.1
apa liquid(?) 4.2
apo final; liquid 4.2
asO ai passive final 4.6
as· dim of final n 4.2
at medial, exist, be 4.1
a/ɛ ai final 4.3
ɑǰɑkasO ai passive final 4.6
ɑǰɑkatɛ ii passive final 4.6
ǰakɛ ai do something
Oǰak·ɛ#j stump 4.2 6.6
ǰak·osij ai be short 7.4
ǰak·wajɵ ii be short
ǰɑn ai final; 4.3
Oǰaǰ·ɑn ai be underneath 4.3
ɑǰɑtɑmo#j, chipmunk 6.6
ǰaǰ·amɑsɑkɑn, sneezing medicine 6.6
ǰaǰ·amO ai sneeze
ǰakɑm ta eat up, consume 4.7
ǰakɑnɛ ai be bereaved
ǰakɑt ti eat up, consume 4.7
ǰaǰE nose 6.2
ǰɛ medial; round object 4.1
Oǰɛpɑk·(w)E root 6.6 6.8
(O)ǰɛt·E sinew 6.6
ǰik locative prefix; next to, by 6.8
ǰikɑkatɛnO ai lie with one leg in the air
ǰikwɑn knee 6.2
ǰikwɛ thunder 4.1 6.1 6.6
ǰikwɛmjɛwE rainbow 4.1 6.6
ǰiman canoe 5
ǰipɑ?ɑkɛsO ai be hit, punched 4.6
ǰipɑ?w ta hit, punch, strike
ǰipɑnikwɛs·a/ɛ ai wink
ǰipɑtɑp ai sit down
ǰis·ɑpɑn ta pinch

kašas ti warm up food 4.1
kašasO ai be hot 4.1
košat•ɛ ii be hot(not weather)4.1
kašapakas ti heat 4.7
kašapakasakasO ai be heated 4.6
kašapakasw ta heat 4.7
kašapakaswatasO ai heat oneself 4.5
kašapakaswat(ij) ai heat each other 4.4
kašapos• ti heat a liquid 4.1 4.2
košatas ai be glad 4.1
kašat•ɛ ii be hot weather 4.1
kašɛ?w ta hit lightly
kašɛk•a/ɛ ai be a fast runner 4.3
kašipək•ənɛn ta scratch the back of
košipək•ənɛnat ai scratch each other's back 4.4
katakan field 4.2 6.6
katakɛ ai prepare a garden 4.2
katakosi ai climb up
katakɛ#j otter 6.6
kâtawan log 6.1
kawan; see kon 8
kə assentive preverb 7.1
kač•ij be small 7.4
kakakaš•i#j crow 6.6
akakO porcupine
akasO ai passive final 4.6
kas• dim of noun-forming final kan 6.5
kas•akamo ai start running
kas•kanasO ai whisper
kas•kanapakwɛ ai be thirsty 4.2
kata/ɛ final; leg 4.1
kɛ ai final; 4.3
ki preverb; past tense; 7.1
kikapɛ(ij) boy 6.6
kikiš preverb; after 7.1
kikos• fish 6.6
kikos•ak•ɛ ai catch fish 4.3
kis•as•O sun, month 6.1 6.6
kišakwE day, sky 6.6
kišaški#j flat cedar tree 6.1
kišakatɛ ii be dry 4.3
kiškO? ti cut 4.7
kiškO?w ta cut 4.7
kiwanɛ ai wallow around
kiwas•ɛ ai go hunting
kiwat•a around(and around) 6.8
kiwat•a?omako ai ride around horseback
kiwat•apat•o ai run around 4.3
kiwɛ ai go home
kiwɛpat•o ai run back 4.3
kjɛ#j mother 6.2
akOčɛs• bean 6.1 6.6
kočan ai hang, be suspended 4.3
kokapanakan basket 6.6
koki ai dive into water 4.1
kon, kawan so many years; 8
konakat, kawanakat so many years 8
konjɛ snow 6.1 6.6
kotakok•wan chain over fire from which to hang pots 6.6
kwočakasO ai be feared 4.6
kwas• son 6.2 6.7
kwas• ta fear
kwas•atasO/O ai fear himself 4.5
kwas•at(ij) ai fear each other 4.4
kwatamočakan fishhook 4.2 6.6
kwatamočakɛ ai go fishing
kwat•ač ai be frightened
kwakanas•an ii be mouldy 4.3
kwak•watɛ#j grasshopper 6.6
kwam(O) ai final; sleep 4.3
kwapat•o ai run out of the water 4.3
kwas•kasa?O ai jump
kwawakan forked stick by the fire which supports a rod over the fire 6.6
kwɛpanapat•o ai run past, run by; 4.3
kwičan ai lie in water 4.3
kwito ti leave in water
ak• ti final 4.7
ak•a land, earth, dirt 6.4 6.6 6.7
ak•ačakak•wɛ?akan parasol, porch 6.6
ak•ak•ašɛ#j coal charcoal 6.3
ak•ak•ašɛwapatɛ#j burnt stump 6.6
ak•ak•O bucket 5 6.1 6.6
ak•amak ground, in locative particles 6.8
ak•amas•akan axe 6.6
k•an noun final 4.2 6.5 6.6
k•anatapE skull 6.2
k•anE bone 6.2
ak•ašajɛpawis•an breakfast 6.1 6.6
k•at vagina, vulva (form?) 6.1 6.2
Ok•atan vagina, vulva(form?) 6.1 6.2
ak•atO ai say
ak•aw ta final, 4.7

(O)k•ak•ɑ#wE chest, breast 6.2
k•an noun-forming final; instrument, means; 4.2
k•as• dim of k•ɑn; 6.5
k•atɛ leg 4.1 6.2
ak•atɛnakɑn a braid of hair 4.2 6.6
ak•atɛnakɛ ai braid hair
ak•ati#j kettle 6.1 6.6
ak•a/ɛ ai final; motion 4.3
k•ɛ ai final; verb of producing 4.3
ak•jɛnɑn ta hold, retain
ak•jɛnɑnɑmɑw ta hold for, retain for 4.7
(O)k•onE liver 6.2
ak•wačɑtajɛpɑwɑn chair 6.6
k•wɑT, k•wač on top of 6.8
ak•wɛtak•ɑ#wE hill 6.6
k•wɛ woman 4.1 6.6
k•wɛkɑn neck 6.2 6.8
ak•wɛm sister 6.2 6.9
k•wɛs•a/ɛ ai nod one's head
m ta final 4.4 4.5 4.7
ɑm ta final 4.4 4.5 4.7
mačɑkak•owɑs• first-born man 4.1
mačɑkak•wɛwɑš• first-born woman 4.1
mačɑmos•a/ɛ ai be fastened
mačɑmoš•ɑn ai be stuck 4.3
mačɑnɑw ta compete with
mačɑnakɛ ai compete with someone 4.3
mačɑnat ai compete with each other 4.4
mačɑtɑs•E socks, leggings 6.6
ɑmačɑtotat ai abuse each other 4.4
ma?wɛ(#j) wolf 6.6
makakano ai grow up
makat ii final 4.3 7.6
mak• root; find 4.6
mak• ti find
mak•akasO ai be found 4.6
mak•ɑmɑw ta find something for 4.7
mak•ɑsɑn shoe
mak•atakɑn fur 6.1 6.6
mak•atakɑnakɛ ai collect furs
mak•atɛ ii be black 4.1
mak•atɛmɑn blackberry 4.1 4.2 6.1 6.6
[illegible] forest 6.6 6.7
mak•ɑw ta find
mak•ɑwatatɑso ai find oneself 4.5
ɑmak•O beaver
mak•otat(ij) ai find each other 4.4
mak•o bear
[illegible]
mak•omɛ 6.1 6.6
mak•otatɑso ai find oneself 4.5
mak•o#w be a bear 4.3
mɑmačɑkɔn ta hold
mɑmakɑt•awɑka/ɛ ai be big-eared 4.1
mɑmɛnwa ii be roomy
mɑn final; berry 4.1 4.2 6.2
mɑnaš•ɛ(#j) island 6.6
mɑnato(#j) snake, spirit
mɑnačɑkatɛ ii be smelled 4.6
OmɑnašKɑno ai eat a feast
Omɑnaškɑnowɑn meat at a feast 4.2
mɑnat ti smell
mɑnokiškɑt ii be a nice day
mɑnok•ɑmɑwikɑwamE summer house 6.6
mɑnowatak•a/ɛ ai have a war dance 4.3
mɑnowitok•Otat(ij) ai be good to each other 4.4
mɑ̨ɑs•ɛ lake 6.6
mɑsɑsek horsefly
mas•ɑtE stomach 6.2 6.8
mɑsat•ɑkwE ear of corn 6.1 6.6
mas•ɛ#j older sister 6.2
mas•kɔmɑn red raspberry 4.2 6.1
mas•kopwakɑn red clay pipe; peace pipe 6.1 6.6
mas•kwa ii be red
mas•kwapɑko(#j) penny 6.1 6.6
mas•kwatiŞj anus 6.1 6.2 6.6
mas•kwɛ blood 6.4 6.6
mas•kwɛkas• red rag 6.6
maškak•ɑ#wE medicine 6.6
maš•a ii be big
maš•imɑn apple 6.1
maš•omɑs• grandfather 6.2 6.9
maš•omɛ#j stepfather; FP paternal uncle 6.2
mɑtɑmosɛ#j old woman 6.4 6.6
mɑtakwaj ai have a good time 7.4
mɑtemɑn corn 4.2 6.1 6.6
mɑtamɑnapo hominy, corn scup 4.2 6.6
mɑtatɑs• ten 8
mɑtoto? ta give a sweatbath to
mɑtotowɑn steam, vapor 4.2
mat•ɑkaškOtɛk•an fire drill 6.6
mat•ɑkos• twig 6.5
mak•ɑtɛpiwapɑkwE black iron(?) 6.6
mat•ɑkwakɔk•ɑ#wE timber, woods, forest 6.6 6.7
mat•ɑkwap bow 6.1 6.6
mat•ɑkwE, mat•ɑkO tree, stick, log 6.1 6.6

mat·akwɛjapjE bowstring 6.6
amaw ta final, double-object verb 4.7
mači ai come 4.3
načiN ta take 4.7
načitaw ta take something for 4.7
načitakɛ ai take something 4.3
načito ti take 4.3 4.7
mič ti(vowel stem) eat 4.1
mikačɛwit·aw ta work for
mikačɛwit·akɛ ai work for someone 4.3
mikat ai fight with each other 4.4
mikwan feather 6.1
mik·wɛnatam ai remember
miN ta give something to
minakasO ai have something given to one 4.6
minak·an seed 4.1 4.2
minɛ berry 4.1 6.6
mišaško#wE grass, weed 6.6
mišakan leather; set of harness6.6
mišakanakwE#j 6.6
miškawas ai be able
miš·ačɛpok·ama(#j) peach 4.1 6.1 6.6
mišanikwakan eyebrow, eyelash 6.6
miš·atamak·anakan small beard in center of chin 6.6
mjanas ai be ugly 4.3
mjanaškaw ta hurt, kick, injure; hurt from the inside, like medicine or poison 4.7
mjanaškakO ti be sick from
mjanat ii be bad 4.3
mjɛwE road 4.1 6.6 6.8
mok·it· ti start out after 4.7
mok·it·aw ta start out after 4.7
moškanaN ta fill up
moškananatasO ai fill oneself up 4 4.5
moš·ačakasO ai be felt 4.6
moš·aš ta feel
moš·a?atasO ai feel oneself 4.5
moš·a?at(ij) ai feel each other4.4
motəj bottle 6.6
mowačE faeces(?) 6.6
N ta final 4.7
N, a ta say to 7.3
n ai final; 4.3
n ta final 4.7
n ti final 4.7
n root ?
n noun-forming final 4.2
an ii final 4.3
ana preverb; when, then, until the time that 7.1
načE hand 6.2
anač·iman pea 4.2
nakačakasO ai be lost 4.6
naka? ta lose 4.7
naka?ataso/O ai lose oneself 4.5
naka?at(ij) ai lose each other 4.4
nakamO ai sing
nakamOwan song 4.2 6.6
nakapjɛš·an ai melt away 4.3
nakataN ta beat in a race
nakatašawɛ ai win a race
nakat·o ti lose 4.7
nakapawɛ ai dissolve 4.2
nakaška/ɛ ai stop 4.3
nakaš·an ai stop 4.3
Onakɛk·O, Onakɛk·wE tree bark 6.1 6.6
nakOt one 8
nakOtaw ai live alone
nakOtwatas· six 8
anako(#j) star 6.1 6.6
nako? ti bury 4.7
nako?w tabury, cover up 4.1 4.7
nako?wataO ai bury oneself 4.5
nako?wat(ij) ai bury each other 4.4
nako?waj ai be buried 4.6
nako?wasO ai be buried 4.6
nakwapačakan snare, net, trap 6.6
nakwikan wing 6.1 6.2 6.8
nak·ɛ arm 6.2
nak·wɛsaka?am ai be excused 4.7
nak·wɛškaw to meet 4.7
nak·wɛškOtat(ij) ai meet each other 4.4
nak·wɛt· ti answer 4.7
nak·wɛt·aw ta answer 4.7
namajə ai get a short way 7.4
anamakan shoulder 6.2
anamoš· dog
anana#w man 4.1 4.2 6.6
nanat·aw ta ask
nanat·akɛ ai ask someone; ask for someone 4.3
napiš· water 6.8
napo ai die
napomakat ii die 4.3
napwak·a ai be smart
napwak·awan education, intelligence, scheme 4.2
naS· ta kill
nas· three 8
nas·ačakasO ai be killed4.6

nas·atasO/O ai kill oneself 4.5
nas·at(ij) ai kill each other 4.4
nas·awa?ak·ɛ ai put feathers on arrows 4.3
naškatɛj bird's tail 6.1 6.2
naš·awɛj scrotum, testes 6.1 6.2
naš·Onačatakaw ta destroy things for 4.7
naš·Onačatakɛ ai destroy something 4.3
naš·Onačato ti destroy
nato? preverb; try 7.1
nat·amaw ta kill someone for 4.7
nat·o ti kill
anawɛmakan relative 6.2
anawɛwɛkas ai make a noise 4.1 4.3
anawɛwɛkat ii make anoise 4.1 4.3
anəš·anapɛ Indian
načakatɛ ii be fetched 4.6
Onaxxxdish 6.5
nak·an mat 6.5 6.6
nak·anaškwE reed
nam under 6.8
naN ta go get, fetch 4.7
nanawanačakan middle finger 6.6
nanipaw ai stand up 7.2
nanoš·ɛpas·awan earring 6.6
nap ai look, glance
napak·otan ta put something around the neck of
napak·owakan string of beads, neck-tie, handkerchief around the neck 6.1 6.6
napam ta look so to, have look so to one 4.7
napanan ta do something to, with
napɛm husband 6.2
napo drink 4.2 6.6 6.8
nat ti go fetch 4.7 7.4
natwɛ snake
nɛkatoš·a#j horse 4.1 6.6
nɛkatoš·aja#w ai be a horse 4.3
nɛkatoš·awakamakwE barn 4.1 6.6
nɛkok·a#wE trash, dirt 6.6
nɛnatam ai remember, think 4.1
Onɛnatam ai forget 4.1
nɛnɛjam mother 6.2 6.9
nɛs·ɛkwapatɛ?awan pin 6.6
niČanas· child 6.2
OniČanas· ai have children 4.3
Oni?akɛ ai go trapping
nikani ai be leader, head man 6.8
nima?atij ai dance together 4.4
nima?atijawan dance 4.2
nipaw ai be standing
nis·awɛpaN ta throw down
nis·awɛpanakasO ai be thrown down 4.6
nis·awɛpanamaw ta throw something down to 4.7
nis·a/ɛ ai fall down 4.3
nis·kik·aw ta bother disturb
nis·kikOtat(ij) ai bother each other 4.4
niš two 8
nišok·amačakasO ai be helped 4.6
nišok·amaw ta help
nišotɛ(#j) twin 6.6
nita? ta send for something by
nita?awɛ ai send for something 4.3
njanan five 8
njɛw four 8
no?ak seven 8
no?akananačE first finger 6.6
nokan hip 6.2
nok·aN ta hire
nok·ašawɛ ai hire something done 4.3
nomakat ii 4.3
nos·kwam ta lick
nos·kwamatasO ai lick oneself 4.5
noš·ɛ#j stepmother; FP maternal aunt 6.2
not ti hear
notan ii be windy 4.3
notaw ta hear
notakačakamusical instrument(not a drum) 666
notatasO ai hear oneself 4.5
anwɛ bullet 6.4 6.6
O prefix in secondary derivation; 4.3
o in numerals 6, 8, and 10; 8
ok·Omas· grandmother 6.2 6.9
omatanana# cardinal tens; 8
os· father 5 6.2 6.9
os·ak cardinal thousands 8
os·as· grandchild 6.7
oškan so-many bagsful 8
otapa?akan see tapa?akan 8
pačakwan penis 6.2 6.6
pa? ta escape from 4.3
apa?awɛ ai run towards a goal 4.3
pakakanakan ankle 6.2
pakamas·akan axe 6.6
pak·aška/ɛ ai come off, be torn off
apakawajan cloth 6.6
pakanE walnut 6.6 6.8
pakanes· hazel hut 6.5 6.6

pakonajawis·an evening meal 6.1 6.6
pakwɛ dust 6.4 6.6
pakwɛ?as·an chip of wood 6.6
pakwɛškas· cracker 6.6
pak·ačawɛpaN ta let go of
apak·wąčakan roof, top 6.6
apak·wak·watwE ball 6.6
pam root; moving around 4.1
pamaja ai "stick around" 7.4
pamakaš·an ai make a track 4.3
paman ta have as a pet
pamanakan a pet, domesticated animal 4.2
pamapat·o ai run along 4.3
pamas·a/ɛ ai fly 4.1
pamawapan ii be almost morning 4.1
pamakas·o ai lie down
pamaška/ɛ ai fly 4.1 4.3
pamatak·a/ɛ ai swim along 4.1 4.3
pamatas ai live 4.1 4.3
pamos·ɛ ai walk 4.1 4.3
pamača ii be stale
panawakok·a#wE sand 6.6 6.7
apanočɛ(#j) child 6.6
papat·o ai run over somewhere 4.3
papamapat·o ai run around 4.3
apapamatak·a/ɛ ai swim around 4.3
apapamatas ai travel
apapawinapokatakɛ ai go around dirtying water 4.2
paponašiwakan winter-house 6.6
pasatakɛ ai keep one's mind on something
pasošɛ ai be in a dull light
pas·ɛtonO ai have a hair-lip 7.4
pas·wɛtam ai make an echo
paškasakan gun 6.6
pašoškwas·a/ɛ ai have one's feet slip
patakatɛ ii be there, here 4.3
pat·o ai final; run 4.3
*paškas ti shoot 4.7
paškasakasO ai be shot 4.6
paškasw ta shoot 4.7
paš·ak·a#w sow 6.6
pikačas·ako#j stump, old stump, log 4.1 6.6
pikašk ti wear out 4.7
pikaška/ɛ ai be broken, tumble-down 4.3
pikatapɛš·an ai break one's head, break 4.3
pikɛjɛk·was ai be exhausted
pikɛpat·o ai be exhausted from running 4.3
pinanakwas ai be clean 4.3
pinanakwat ii be clean 4.3
pip·is·atɛ?E lung 6.2 6.8
pisakamwakan coat 6.6
piskonajɛ ai dress
pitakɛ ai come in
pitakɛčɛ? ti roll in 4.1
piwapakwE iron 6.6
pja/ɛ ai come 4.1
pjɛčakatɛ ii be brought 4.6
pjɛk water, in locative formations 6.8
pjɛkwaš·an ai come out of the water 4.3
pjɛmakat ii come 4.3
pjɛnomakat ii come to happen 4.3
pjɛto ti bring
pjɛwapan ii be becoming morning 4.1
pjɛwiwaš ai carry a pack
pokapačakatɛ ii be torn up 4.6
pokapato ti tear up
pokašk ti break 4.7
pok·ama#j plum, peach 6.1
pota?ašk wan pestle 6.6
pota?akan mortar 6.1 6.6
potawakan flue, chimney 6.6
potɛwatami(#j, Potawatomi 6.6
pwa negative prefix for conjunct modes
apwakan pipe 6.1 6.6
pwičakatɛ ii be waited for 4.6
pwi? ta wait for 4.7
pwit·o ti wait for 4.7
p·akɛkan rib 6.2 6.8
ap·ašk root; black(?) 6.6
ap·ašk=kano(#j) black eagle 6.3
ap·ašk=ma?wɛ(#j) lion 6.3
ap·akaN ta throw down 4.7
ap·akaš·an ai fall 4.3
ap·akat ti throw down 4.7
ap·akato ti throw down 4.7
ap·ak·je cattail 6.1 6.6
p·ak·wɛs·an ii be loose 4.3
p·ič· prevero; then, while, inasmuch as 7.1 10
p·iT· root; inasmuch as, while 7.1
ap·it·Os·ɛ ai take one's time in walking 4.3
as ai final 4.3
sakwas· maternal aunt 6.2 6.9
sakwas·as· mother-in-law 6.2

sɑnɑkɑt ii be hard
sɑtE foot 6.2
sɑwɑnɑkwE tail 6.2
sɑkɑ?ɑm ai go out 7.4
Osɑmɑkɑtɑs0 ai be too angry
Osɑmɑkwɑm(0) ai oversleep 4.3 7.4
Osɑwɑšonɑja#j gold money or things 6.1 6.6
sɛkɑnɑnɑwɑkɑn tongue 6.2
sɛkɑpɑnɑwɑn braid of hair 6.6
sikɑmɛ?ɑkɑn spear 4.2 6.6
sikɑmɛ?ɑkɛ ai spear something
sipɑ#wE stream 4.2 6.6
sisɑpɑnikwɑkɑn tear(in eye) 6.6
sisɑpɑk·wɑtwE sugar 6.6
siw root; sour 4.2
siwɑn ii be sour 4.2
siwɑno#wE grape 6.6
siwɑt·ɑkɑn salt 6.6
siwɑpo cidar 4.2 6.6
S· prefinal; 4.3
s· noun-forming final; diminutive 6.5
ɑs·ɑj hide, skin 6.1
ɑs·ɑnjE stone, rock 6.6
ɑs·ɑpɑpjE rope, thread 6.6
ɑs·ɑpjE fishnet 6.1
s·ɔsɛ#j older brother 6.2
ɑs·ɑm hide, skin 6.1
Os·ɛ ai final; walk, by foot 4.3
ɑs·ɛmɑ(#j) tobacco 6.1 6.6
ɑs·ɛmɑk·ɛ ai prepare tobacco 4.3
ɑs·kwɛnɑčis· little finger 6.2
ɑs·kwɛsɑtis· little toe 6.2
ɑs·wɛN ti divide up, partition
ɑs·wɛnɑmɑw ta divide up for 4.7
ɑšɑ preverb; thus, so 7.1
šɑč see šɑt
ɑšɑčɑkɛ ai do something thus
šɑkɑš·ɑn ai lie 4.3
šɛkɑkɑ?ɑkɑn button 6.6
šɑkwɑk·wɑminɑk·ɑn pine seed 6.6
šɑkwɑk·wE pine tree 4.1 6.1 6.6 6.8
šɑmɑkɑnɑš· soldier 6.6
šɑš see šɑt
ɑšɑš·ɑn ai lie there, lie thus 4.3
šɑt, šɑč, šɑš numeral connective; 8
ɑšɑtɛ?ɑ/ɛ ai think so, decide 4.3
ɑšɑwɛ ai say so, tell so 4.1 4.3
ɑšɑwɛpɑs ai experience something 4.3
ɑšɑwɛpɑt ii do something 4.3
šɑš šɔš·ɑk·ɑ dirt 6.6
šɑk nine 8
šɑpɑnɑkɑn needle 6.6
šɑš·ɑkwɑm tachew
šɑš·ɑkwɑšk ti mash with the feet 4.7
šɑti#j spearhead, arrowhead 4.2 6.6
šɛj hide, skin, rind 6.1 6.2
šɛnɑwɛkɑn bell, sleighbell 6.6
šij do something in a certain way 7.4
šikɑn hip 6.1 6.2 6.8
šiš·ikɑt·ɑkɑn urine 6.6
šja/ɛ ai go
ɑšk ti final 4.7
ɑškɑmOtE sack, bag 6.6 6.8
Oškɑnɑwɛ#j young man, vassal 6.6
ɑškɑw ta final 4.7
ɑška/ɛ ai final; motion 4.3
(0)škiškɑkO eye 6.1 6.2 6.6
ɑškOtɛ(#j) fire 4.2 6.6
ɑškOtɛk·ɑn flint-and-steel 4.2 6.6
ɑškOtɛs· match 6.5 6.6
ɑškopjE cedar 6.1
ɑškwɑtɛmE door, doorway 6.6 6.8
šomikwɛ smile 6.1 6.6
šonɑja#j money, coin, dollar 6.6
šoškɑs ai be smooth, slick 4.3
šwɑtɑs· eight 8
š· noun-forming final; pejorative 6.5
š·ɑmɑs· niece -- sister's daughter 6.2
š·ɔk·E belly 6.2
ɑš·ɛm ta feed
ɑš·ɑk·i(#j) crawdad
š·imɛ#j younger sibling 6.2 6.9
ɑš·o?ɑkɑn paint, housepaint 6.6
t ti final, 4.4 4.7
ɑt ai reciprocal final 4.4
ɑt ti final 4.4 4.7
ɑt ii final 4.3
tɑkɑšk ti kick 4.7
tɑkɑškɑw ta kick 4.7
Otɑkočɑn ai fall 4.3
tɑkos·ɑn ii be put with something 4.3

tɑk·ɑnakɑn cradle 6.6
tɑk·ɑpwE well 6.6 6.8
tɑk·apoja ii be cbbd(of a liquid only) 4.2
tɑk·Opɑčɑkɑn ai anything to tie things with; e. g., hair-ribbon 4.2 6.6
tɑk·Opɑčɑkɛ ai tie things
tɑk·Opɑn ta tie, fasten 4.7
tɑk·Opɑtɛ ii be tied up 4.3
tɑk·Opɑto ti tie, fasten 4.7
tɑk·wɑn limb of a tree 6.2
tɑm ai final; 4.3 4.7
tɑnɑ?ɑš·ɑm ta bury
ɑtɑnɑs ai be here
tɑpɑ?ɑkɑn, otɑpɑ?ɑkɑn miles, yards 8
tɑpɑ?ɑkɑs·, otɑpɑ?ɑkɑs· o'clock 8
tɑpɑk·ɑkis·ɑs·O moon 6.1
tɑpɑwɛ ai hold council
tɑpɑk·ɑnɑkɛ ai hold council 4.1
tɑpɑk·ɑnɑkɛwɑnɑnɑ#w lawyer 4.1
tɑpE head 6.2
tɑpom ta hold council about
ɑtɑsO ai reflexive final 4.5
ɑtɑso ai reflexive final 4.5
tɑs· see 8
tɑšɑ preverb, where, while, how 7.1
ɑtɑšik· ti play with, fool around with 4.7
ɑtɑšik·ɑw ta play with, fool around with 4.7
tɑt·ɑkɑkwɑn backbone 6.2 6.8
Otɑt·ɑn ti get, acquire 4.7
tɑ ti final = to; 4.3
tɑm ta sell to 4.3 4.7
tɑmɑk·ɑn chin, jaw 6.2 6.8
Otɑnɑkwɛ ai have a town
tɑnɑs· daughter 6.2
Otɑpɑjɑn wagon, cart 6.1
tɑt(ij) ai reciprocal final 4.4
tɑwɛ ai trade 4.3
ɑtɑ/ɛ ai live, dwell 4.1
tɛ ii final 4.3
tɛ? root; heart 4.2
tɛ?ɑmɑn strawberry 4.2 6.6
tɛ?ɑ/ɛ ai think
tɛ?E heart 4.2 6.2
tɛp preverb; succeed
tɛpɑm ta have enough of, say the truth about 4.7
tɛpɑpɑ? ta escape from 4.3
tɛpɑt ta have enough of; say the truth about 4.7
tɛpwɛt· ti believe 4.7
tɛpwɛt·ɑw ta believe 4.7
tɛtɛ#j father, "dad" 6.2
tɛwɛ?ɑkɑn drum 6.1
tɛwɛ?ɑkɑnɑnimɑ?ɑtɑwɑn drum dance 6.6
ti?ɑkwąm pet horse, pony 6.2
ɑtij ai reciprocal final 4.4
to ti final; 4.3 4.7
tok·ɑn ta awaken
tok·i ai wake up 4.3
tonɑk·os·ɑwɛj kidney 6.1
tonE mouth, lips 6.2
ɑtop·ɑwɑn table 4.2 6.6
ɑtop·ɑwɛkɑn tablecloth 6.6
tos·kwɑn elbow 6.2 6.8
Otɑtɑn ai have a village 4.3
t· ti final 4.7
ɑt·ɑkɑmɑn acorn 4.2 6.6
ɑt·ɑkɑmɑšE oak-tree 4.2 6.1 6.6
ɑt·ɑkɑpɑkwE leaf 4.2 6.6
t·ɑm ai final; 4.3 4.7
t·ɑs·E navel 6.2
t·ɑw ta final 4.7
t·ɑwɑkɑ/ɛ final; ear 4.1
t·ɑwɑkE medial and sbem, ear; 4.1 6.2 6.8
ɑt·ɛpɑčɛwɛpɑn ta,ti roll along 4.1 4.7
t·ɛt·ɛ ii be ripe
t·o ti final 4.7
ɑw ta final 4.4 4.5
#w ai final; verb of being 4.3
#w noun-forming final 4.2
ɑwɑ preverb; on the way to 7.1
wɑčɑ preverb; why or towards 7.1
ɑwɑjɑs·E meat 6.6 6.8
wɑn noun-forming final 4.2 6.6
wɑkɑmɑkwE final; house 4.1
wɑk cardinal hundreds; 8
wɑk·ɑ?ɑkɑn fence 4.2 6.6
wɑk·ɑjɑpɑtɛ#j circle of teeth, jawful of teeth 6.1 6.6
wɑnɑkwE hole 6.6
wɑnɑk·ɛ ai dig a hole 4.3
wɑnɑk·wɑk·ɑ#wE ditch 6.6
wɑp [illegible] white
wɑpɑčɑkɑsO ai be seen 4.6
wɑpɑčɑkɑtɛ ii be seen 4.6
wɑpɑkɑn clay 6.1 6.6 6.8
wɑpɑkonoškwɛ#j rat 6.3
wɑpɑkonoškwɛs· mouse 6.3
wɑpɑm ta see 4.7 5

wapɑmaj ai be seen 4.6
wapɑn ii be morning, tomorrow 4.1
wapɑškɑkɑno(#j) white eagle 6.6
wapɑškok•ɑ#wE swamp 6.6
wapɑt ti see 4.7
wapɑtɑsO ai see oneself 4.5
wapɑtɑ? ta show something to
wapɑt(ij) ai see each other 4.4
wapɑto#j mushroom, toadstool 6.1 6.3 6.6
wapɑtok•ɛ#j mushroom, roadstool 6.1 6.6
wapɑt•ɑk cardinal tens 8
wapɑwɑjan blanket 6.6
wapjɛk so-many pieces; 8
wap=kɑno(#j) white eagle 6.3
waposo rabbit
was•ɑkonɛto#j flower 6.6
was•ɑs•o ai shine
was•ɛčɑkɑn window 4.2 6.6
wawɑjɛja ii be round
wawɑnɑs•ɑn ii be not fixed right4.3
ɑwawE egg 6.6 6.8
#wE noun-forming final 4.2
wɛ́ai final, verb of action on indefinite object 4.3
wɛmɑt•ɑkoši#j Frenchman 6.6
wɛnɑp•ɑnɑs ai be easy 4.3
wɛnɑp•ɑnɑt ii be easy 4.3
wɛp preverb; inceptive 7.1
wɛp ai do something
wɛpɑ?ɑwɑn paddle, oar 4.2
wɛpɑn ta leave
wɛpak•wi ai throw something; swing an axe
wɛpi? ta run away from
wɛpi?ɑwɛ ai run away 4.3
wɛp•očɑkatɛ ii be hit 4.6
wɛp•ot ti hit
wɛp•otɑw ta hit
wɛt•ɛk•ɛk•O brass kettle 6.1
wɛwɛk medial; sound 4.1
wi preverb; future 7.1
wiča?ɛ#j spouse 6.2 6.9
wikɑča? ta try, test 4.7
wikɑčɑt•o ti try, test 4.7
wikɑpiš• bark 6.6 6.8
wikɑpiš•ɑk•ɛ ai collect bark 4.3
wikɑwamE house 4.1 6.6 6.8
winɑnO fat, grease 6.1 6.6
winɑs•ɑs•E hair 6.2
winɛtɑpE brain 6.2
wip•ɛm ta sleep with
wis•ɑn ai eat 4.1
wis•ɑnɑwɑn food 4.2
wišɑkɑs ai be strong 4.3
wišɑkja ii be hard 4.3
wištɑja#j blacksmith 6.6
witɛk•ɑw ta play with, have a liaison with
wiwɑšɑwɑn pack, bundle 4.2 6.6
wiwɑšɑwɑnɑk•ɛ ai make up a pack 4.3
wiwɑtij ai have intercourse 4.4
wiwin horn

It is necessary to list separately the words which are not reduced to formulae in the grammar. In the following section of the lexicon the reader is not to interpolate the root sign before the entries; they are given as words in phonemes.

čajɛk all(inanimate) 9
čak kɛko everything 9
čak wəjɛ everybody 9
čo not, no 10
čokɛko nothing9
čonkoči nowhere 9
čonkotɛ?nɛ neither one 9
čowəjɛ nobody 9
čẃwik•a never 9
hə̂w hellow! goodby! 1 .11
hɛ̌• Hm! So! 1.11
?ahaw well well! Aha! 1.11
?a?itəw on both sides of something 6.8
?ajač more and more 10
?ajap•ən in the same place
?ako that over there 9
?anət some, a few 9
?apto-jəkwan halfway 6.8
?ašwɛ-jəkwan beyond 6.8
?imət•ə once upon a time 10
?ipə over there 6.8
?ipə-jəkwan over there 6.8
?i šə na so, thus 10
?i(w) that θ; 9
?iwt•ə completely 10
?i(w)tšə and so, then, next 10
?o that 3; 9
?otə that 3; 9
?otə that O; 9
jɛ predicator 10
jɛtək doubt 10
kət•ə(n) sure enough 10
kanɛjək beyond a body of water 6.8
kɛko don't! 10
kɛko something 9
kɛna would that . . . 10
kin thou 9
kinan we inclusive 9
kinwa you 9
kiš•pən if 10
ki(w) those 35; 9
kkan closely, carefully
knəpəč maybe 10
kotə those35; 9
kpəč on the edge of a body of water
kwɛp•mə beyond something
k•wət-pək on the roof 6.8
mamta can't 10
mamwɛč of necessity 10
mčɛš a great many 9
mč•i-jəkwan down below 6.8
mč•ik down below 6.8
mɛkwa still
minə and, with 10
močkɛ nevertheless
močma please! 10
nə interrogative particle 2.1 10
nək•mək everywhere 6.8
nək•o customarily
nəš• very much 10
nəš• nə kɛ for a reason

nəš· šə na for no particular reason
nakač soon 10
nakɛna would that . . . 10
nanaw-jəkwan in the middle 6.8
nawɛš in the middle 6.8
naw-jəkwan in the middle 6.8
nɛ?iš both 9
nɛjap back
nɛt·əm the first
nikan ahead 6.8
nimətšə what? why? 9
nin I 9
ninan we exclusive 9
nip·itšə where? 9
nis·ačwən downstream 6.8
nitšəši how? in what way? 9
nitšəwi why? 9
ni(w) that 3'; 9
ni(w) those 05; 9
nkoči somewhere 9
nkom today 10
notə those 05; 9
notə that 3'; 9
ns·wɛ three 8
nwəč more, better
pənɛ always 9
pəp·ič once in a while 10
pamɛ-jəkwan on one side of something 6.8
pɛš·oč close, nearby
pk·an differently 10
pošo hello!
p·i now 10
p·iš· when 10
sakčə-jəkwan outside, outdoors 6.8
sakəč outside
s·ə predicator 10
s·əwi predicator 10
šə how, so, thus 10
šə nə s·ə šə more or less 10
šə nəš· p·i in precisely this manner 10
šə na emphasis 10
ši(w) there 9
škəč after while
škwɛ-jəkwan on the edge 6.8
škwɛjak behind, afterwards 6.8
šotɛ there 9
špəmək on high, above 6.8
tənip·itšə where? 9
tənitšə what? who? 9
tšə mild disjunctive 10
wənats·ək several times 10
wəjɛ someone 9
wá´ what? what did you say? 1.11
wá·t·ójâ· surprise 1.11
wawik·a now and then 10
wči-jəkwan towards something 6.8
wɛkni what? for what reason? 9
wɛknitšə what? 9
wɛkwɛntək somebody, something 9
wɛni(tšə) who? 9
wik·a sometimes(?) late 9 10
wik·ap·i finally 10
win he 9
winwa they 9
wk·ɛw particle; easily, easy 10
wnako yesterday
wškə first
wškəča the first
wtop·i right now 10

SUMMARY

Potawatomi is a typical Algonkian language. The one really unique feature, for Algonkian, is the system of alternation of form of morphemes which is dealt with in §2; though since work with Potawatomi was begun it has developed that Mohican, possibly some of the other eastern Algonkian dialects, and the southern dialects of Ojibwa, have a similar, though not identical, system.

In dealing with that system of phonological alternation the present thesis makes a methodological contribution, which is of significance not only for the other Algonkian tongues mentioned above, but for Tonkawa, some other Indian languages, and, it may be, ultimately for Indo-European — since it has been suggested that alternate forms in the various extant Indo-European languages derive from a functional alternation based on vocalic syncope in the parent tongue.

The factual contribution of this present work is that it fills a gap in our descriptive knowledge of Algonkian. The historical implications of Potawatomi were not discussed in the present thesis; but it may be indicated here that Potawatomi helps to resolve a number of problems of Proto-Algonkian phonology; it also raises a number, however, for the solution of which we must await satisfactory descriptive data on Algonkian dialects which are as yet untouched by the modern linguist.