DELAWARE, AN EASTERN ALGONQUIAN LANGUAGE[1]

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1. SOUNDS AND PHONEMES

§1:1. Phonemes.

Consonants:

Stops:	p	t(T)	č	k	
Ambisyllabic stops:	ᴘ	ᴛ	ᴄ	ᴋ	
Spirants:		s(S)	š		
Fricatives:				x	h
Ambisyllabic fricative:					ʜ
Nasals and Lateral:	m	n	l		
Ambisyllabic nasals and Lateral:	ᴍ	ɴ	ʟ		

Vocalics:

Semivowels:	w	y	
Ambisyllabic semivowel:	w		
Short vowels	i	ə	u
	e	a	o
Long vowels:	i·	(ə·)	u·
	e·	a·	o·

Stress (marked over vowel):

STOPS

§1:2. Points of articulation are identical for p, t, č, k and the corresponding but distributionally restricted ambisyllabic stops (§1:6) and T (§1:10). All stops are voiceless in all positions except one (§1:9). The affricate č (as in English "hatch" rather than "hats") patterns as a stop in Delaware. Velar k appears fairly stable but fronts noticeably after a long high front vowel. The k in ší·ki "good" is somewhat more fronted than the k in kí·spu "he is full of food."

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[1] The dialect represented in this sketch is largely from the speech of one individual, Willie Longbone (74 years old) of Dewey, Oklahoma. The Delaware Indians around Dewey are said to speak Lenape Delaware as opposed to Munsee Delaware. Besides working with a few Lenape informants in Oklahoma, I was fortunate in having Mr. Longbone go with me to Ann Arbor for the Linguistic Institute at the University of Michigan, where he served as informant for a group of students. Reading galley now, several years after our Linguistic Institute discussions, I would offer another solution to the phonemic problem treated then in terms of large cap T and S. I would now write small cap ᴛ and s, and make a new statement of distribution: these ambisyllabic consonants also appear in clusters, and when they do they have the phonetic features formerly attributed to large cap T and S (voiceless in clusters; prior n actualized as consonant).

§1:3. Stops in prevocalic word-initial are unaspirated and quite lenis even when preceding a stressed vowel, as pénkwsu "he is dry," típa·s "chicken."

§1:4. A rather delayed release is audible after stops in word-final, but this release cannot be counted as aspiration. However, w is whispered after k in word-final, and this gives an aspirated effect: máxkw "bear," kúmpakw "leaf," entapá·e·kw "when you fellows came." Likewise, w between voiceless consonants is whispered, giving an aspirated effect: təkwčé·su "he is round," kwsí·yok "they are mowing in a group."

§1:5. As a prior member of a cluster, a stop is weakly aspirated, as k before p and before š, and t before s in kpaxkši·ᴋanə́na "our knives," mi·tsúwak "they are eating." In contrast to ambisyllabic stops which do not occur in clusters, two identical normal stops may be juxtaposed, with the prior stop released and aspirated: amankká·ᴛe· "he has big legs," wsí·ttət "his little foot," nəmattu·nhá·la "I talk mean to him."

§1:6. Stops in intervocalic position may be ambisyllabic (ᴛ), normal (t), or normal juxtaposed (tt). Only normal consonants occur in clusters and at the beginning and end of words. Ambisyllabic stops (§1:7) and ʜ (§1:16) and ᴍ, ɴ, ʟ, ᴡ (§1:19) are restricted to intervocalic position. While stops offer a contrast, as between ᴛ and tt (§1:5; 7), continuants lack this contrast. Voiced consonants in general do not serve as the final members of medial clusters (§1:32). But as an initial cluster, nn and ll are possible: nni·sktəlínko "I have a dirty face," lle·la·ó·kwsi·t "one who is in the middle." Initial nn and ll are produced with two impulses of voicing, sometimes suggesting nən and ləl, while medial ɴ and ʟ are relatively fortis and produced with a single impulse of voicing.

§1:7. Ambisyllabic stops tend to be long and rather fortis after stressed vowels. The second ᴛ is longer than the first ᴛ in nkaᴛá·ᴛamən "I want it," and both are more fortis than the ᴛ in nkaᴛapá "I want to come." However, exceptional instances occur, as in háᴛe· "it is there," when an ambisyllabic stop is neither long nor fortis despite what would usually constitute optimum stressing for ambisyllabic emphasis. The minimum distinction between ambisyllabic stops and normal stops is to be heard in the vocalic on-glide. The vowel before an ambisyllabic stop continues in full force until the stop is reached which appears to close the syllable, and belongs also to the following syllable. The vowel before a normal stop falls slightly in intensity before the stop is reached (§1:29).

In a random word list, well over half the stops in intervocalic position appear to be ambisyllabic. Doublets of the same element may apear with a normal stop in one form, an ambisyllabic stop in another: ntá·ki "my land," háᴋi "land"; ləpwé· "he is smart," kələ́po "you are smart."

But ambisyllabic ᴘ is possible before w: nkaᴛú·ᴘwi "I am hungry." So also is the sequence ᴋw possible: toᴋwí·ma·n "he blamed him for it." If w is granted the status of a vowel in this sequence, ᴘ and ᴋ may still be said to be in intervocalic position (§1:25).

§1:8. Normal stops in intervocalic position are unaspirated without giving the pseudo-voiced effect associated with unaspirated stops in some languages: ne·petané· "I also," íkali "out yonder," me·čitá "through already."

§1:9. Stops are fully voiced only in the sequence homorganic nasal-stop-vocalic (§1:20; 21; 22). Compare maxálankw "evening star," mpənškinkwé·na "I put my finger in his eye," hákink ntəlipánči "I went in the ground." The k of the sequences nkw are fully voiced but the k of the sequence nk in word-final is only partly voiced; p and t are just as fully voiced as č even though mp and nt are in word initial while nč is intervocalic.

When a nonhomorganic nasal precedes a stop, the stop is not voiced: šuwánpi "sea water," naxámtət "my little daughter-in-law," ntaкwí·mkwəm "he blamed me for it." Neither is the stop fully voiced when followed by a voiceless conso-nant in an extended cluster: hémpsa "dresses," ahkontká·тe· "he is long legged," xinkwká·тe· "he has one big leg" (w, being voiceless in the sequence kwk, unvoices the preceding k).

§1:10. Defective T is written for a t which is not voiced in the sequence homorganic nasal-stop-vowel. Besides mahtánTu "devil," other instances found in-volve a by-form of the diminutive suffix (§6:39): ntá·nTət "my little daughter," nəwi·skónTət "my little elbow."

SPIRANTS AND FRICATIVES

§1:11. The spirants s and š and the velar fricative x have much the same dis-tribution as normal stops, but lack a distinctive ambisyllabic-normal contrast in intervocalic position. They are fairly short in word-initial and word-final, but long between vowels, especially long after a stressed vowel: xáxa·kw "sycamore." As prior member of a medial cluster they are long, but short after a prior member in a cluster: ké·šte·k "the heat" but kwənščənámän "he pushed it." The long and short positional variants are always in complementary distribution.

§1:12. Prevocalic spirants are fully voiced after word initial n (§1:21): nša·kwsíhina "we are stingy," nsakhoté·nami "'I am worried."

§1:13. When the sequence ns or nš occurs medially before a vowel or finally, the spirant has a voiced timbre, but is by no means fully voiced; the preceding n is not actualized as a consonant but functions as an anusvara, nasalizing the preced-ing vowel which is always long: alú·ns "arrow," lo·кamhú·nši "elm tree," ši·má·nši "hickory tree" (but sí·mi·n "hickory nut"), naxá·ns "my elder brother," xá·nsa· "oh elder brother," nko·nši·phúwe "I'm hiding," ló·ke·ns "dish."

§1:14. Defective S is written for an s which is not at all voiced in the inter-vocalic sequence nS; it is known for only one word, e·mhó·nSak "spoons." The n before S is actualized as a consonant.

§1:15. Many words begin in a vowel without any suggestion of an h on-glide (§1:34). These are never confused with words beginning in h-vowel; the vowel is short and usually stressed: húpwe·w "he smokes," húko·n "pot hook," háкi

"land," hóĸe·s "bark," hópan "lung," hópəni·s "potato," hápi·s "tump-line,"
híтukw "tree" and hítku·k "trees"; but hupó·ĸan "pipe," hakí·he·w "he is farm-
ing" (§1:33).

In the following, initial x appears where one would expect h in Delaware:
xáni·kw "squirrel." Both x and h appear before w in word-initial: xwi·səmə́sa
"his younger brother," hwíkxkona "his shin." Clusters of x plus stop are found
in word-initial (xkú·k "snake"), but not of h plus stop (§1:18). Velar x occurs freely
in word-final (kí·šu·x "sun"), h in artificially slow speech (wté· beside wté·h
"heart"), and in some exclamations (yúh "all right").

§1:16. Both normal h, which sounds very much like h in an English phrase
("now help me"), and the longer ambisyllabic н occur intervocalically: nkaтahúpo
"I want to smoke," weнuponkwšá·tay "smoking tobacco," eнakí·he·t "farmer."

§1:17. Normal h between vowels is in syllabic-initial except when the vowels
before and after h are short and identical; then h appears to be associated more
closely with the preceding vowel, which may be stressed, than with the following
vowel, which is never stressed. The entire sequence is best regarded as a single
interrupted syllable, having the value of two morae (§1:33). Interrupted syllables
are most often medial, never final, sometimes initial: kənihini·šantpáhamo "you
fellows have two heads each," kopšéhemən "he closed it," kəna·ni·sktəlinkóhomo
"you fellows have dirty faces," úhuma "his grandmother." Except for pohohší·kan
"his dried meat," interrupted syllables have been found only before single conso-
nants, not before consonant clusters.

§1:18. Clusters of h plus stop or spirant are distributionally restricted to
intervocalic position, not unlike an ambisyllabic consonant (§1:6), but are nonethe-
less analyzed as two juxtaposed phonemes (§1:33). These clusters characteristi-
cally follow short vowels, usually unstressed: tahkócu "he is cold," ntákohči "I'm
cold," pehpomoтú·nhe·s "preacher," hwíkahša "his fingernail" (nhíĸaš "my finger-
nail"), pásahpo·n "light, puffed up bread," tahkóx "turtle," but tíhtəs "red ham-
mer wood pecker." The semivowel w occurs after hk, and thereby patterns as a
vowel (§1:25): we·entahkwí·i "both sides, both ends." In rare instances an under-
lying sequence of two short vowels may be actualized as a long vowel before h-
consonant: entá·hpi·t beside entaáhpi·t "one who is born."

NASALS AND LATERAL

§1:19. In intervocalic position ambisyllabic м, n, ʟ, w are distinguished from
m, n, l, w in being distinctly long, with one impulse of voicing (§1:6): aʟəní·xsu
"he talks Delaware," kəмankka·тáhana "we have big legs," ikaktaнáwo "you fel-
lows sieze him." In contrast to stops (§1:7), ambisyllabic continuants are rare in-
deed; only w appears after a long vowel: po·tama·wó·o "they pray to him."

§1:20. Of the nasals, m is always bilabial. The n phoneme has two posi-
tional variants, alveolar and velar.

Velar n occurs only before k (§1:9). It is this allophone of the n phoneme which is homorganic to k.

Alveolar n occurs in all positions except before k. With some slight assimila tion, alveolar n is homorganic to t, č, s, š in the clusters nt, nč (§1:9) and ns, nš (§1:12; 13), and to n in nn (§1:6).

§1:21. In word-initial clusters of nasal plus homorganic consonant, the nasal is extremely short and even somewhat unvoiced if the consonant is voiceless (§1:9; 12), but merely short before n (§1:6).

§1:22. Nasal syllables, that is, syllables closed by prevocalic or word-final mp, nt, nč, nk have the value of two morae (§1:33). The preceding vowel is short but the nasal is very long, longer than an ambisyllabic nasal (§1:19). The two morae length of a nasal syllable is distributed between the fixed short vowel and the fol lowing nasal which is long only if the homorganic stop is voiced (§1:9; 10). Com pare nasal syllable in hémpəs "dress," and syllables with length determined by vowel in hémpsa "dresses," maxke·mpsé·yok "they have red dresses."

§1:23. Clusters of ns and nš after a vowel (§1:13) yield two morae nasalized syllables (§1:33) in which the n serves to nasalize the preceding long vowel: čú·lə·ns "bird." If the spirant is replaced by an homorganic stop, the n is actualized as a consonant in a nasal syllable (§1:22) rather than a nasalized syllable: ču·lə́ntət "little bird" (§6:39). Nor does a nasalized syllable result when n precedes defective S (§1:14) or when the sequence ns is followed by other consonants in an extended cluster: mpənstu·né·na "I put my finger in his mouth."

§1:24. Fully voiced l (like the first rather than the second l in English "lit tle") occurs in word-initial and intervocalically. In word-final and in clusters be fore voiceless consonants, l is slightly fronted and, like w in the same positions, begins with a voiced on-glide but ends in a voiceless off-glide; in contrast, n and m in these positions are not at all unvoiced: nu·ltu·nhéhena "we talk well," pá·lsu "he is sick," ntahitkáwsi "I am very gentle," ksaка·péhu·l "I am leading you," i·lá·wke·w "he is dancing the war dance," ntəma·kwe·wxé·semak "my beaver hides."

SEMIVOWELS

§1:25. When the cluster w plus consonant is in word-initial, w is completely unvoiced. Compare eheliwsí·ka·k "to the west" and wsí·ka "sun-down." When the sequence kw is in word-final or precedes a voiceless consonant, w is com pletely voiceless (§1:4; 9). Postvocalic w is partly voiceless in word-final and as a prior member of a cluster (§1:24). In clusters, w patterns as a consonant when voiceless, as a vowel when voiced (§1:7; 18; 28). When not in word-final, and not preceding a voiceless consonant, w as well as y is voiced (§1:26; 27; 28). There seems to be no voiceless allophone for y. In one example noted of y before consonant, y is voiced: ntu·lháytət "my little breast." Likewise, y is voiced in

word-final: kwšá·tay "tobacco." No examples of y following a consonant have been found.

§1:26. In word-initial, y occurs before u and u· while w occurs before i, i·, e·, o·, ə: yúkwe "now," yú·k "those," wí·xa "his hair," we·yó·psi·t "one who is white," wələTú·nhe· "he talks well," wo·kahté·səma "his paunch." One example gives y before a· and only a few instances show w before a: ya·ká·un "shade house," waní·Ti·s "that one, my friend."

§1:27. Likewise in intervocalic position there is a tendency toward comple-mentary distribution in vowel sequences which permit the intrusion of one semi-vowel to the exclusion of the other. Only y appears between two vowels if the first vowel is e· or if the second is u· or u: me·xke·yohkə́si·t "one who has red flesh, an Indian," wiyú·s "meat." Only w appears if the first vowel is ə: kahé·səwa "the mother of all of you." However, both y and w may appear between two vowels if the first vowel is not e·, and not ə, and the second vowel is not u· or u. Thus, both oyə and owə are possible: toyəmə́na "he bought them," powənəməné·yo "they sieved it."

§1.28. The semivowel w has been found to occur after prior member p, P, κ (§1:7; 18) and k (but not after t or č); after h and x (but not after s or š); after m (but not after n or l): šinka·lkwə́su "he is hateful," wí·shwi "his gall," mú·xwe·s "worm," tataentaša·wəla·mwíhti·t "until they starve to death." Syllabic bounda-ries remain undetermined here; the prior consonant was heard indifferently as in syllabic initial (with w) and in syllabic final. While t, č, s, š never precede w, w pre-cedes these and other consonants but has not been noted before p, m, n, l (§1:24).

CLUSTERS

§1:29. All consonants except members of restricted series (§1:6; 10; 14) ap-pear in word-initial, in word-final, and in clusters. One gains a general impression (but see §1:6; 7; 17; 28) that prevocalic consonants syllabify with the following vowel, while one or more prior members of a cluster syllabify with a preceding vowel; clusters at the beginning or end of a word are, respectively, in syllabic-initial and syllabic-final.

§1:30. Only x, s, and n have been noted as prior members before k, kw and s in word-final (§1:9; 11; 13): ó·paskw "cornshuck."

§1:31. Word-initial clusters show n, k, w as prior members before t, č, s, š; m instead of n, and k but not w before p; n but not k or w before k; n and k but not w before h; k but not n or w before x (§2:21 ff.). There are besides kwč, kwš, xkw, khw, nhw, kw, hw, xw, mw, mh, nh, th, ph, ll, tk, čk, sk, xk, and doubt-less other clusters in word-initial.

§1:32. Medial clusters are less restricted than clusters in word-final or word-initial. All consonants except p and l appear prior to p; all consonants, including t, appear prior to t; t, č, s, x, m and l have not been noted before č; all consonants.

including k but not p, appear prior to k; all consonants except s, š, č appear prior to s; t, č, s, š, m and l have not been noted before š; all consonants except č, x, h appear prior to h; č, s, x, h, m, n have not been noted before x. A voiced consonant may serve as prior member but not as the final member of a medial cluster; however, the semivowel w (not y) appears freely both as prior and final member (§1:28). Medial clusters of more than two consonants include at least xkp, ntp; skt, xpt, xkt, nst, nkwt, mskt, mxkwt; kwč, nšč; ntk, nkk, nkwk, psk, ksk, msk, nšk, pxk, kxk, nxk; sks, skws, xkws, nkws, nks, mps; xkš, kwš; nkh, pskh; stx, xtx, ntx, nkx, nktx, xktx.

VOWELS

§1:33. Interrupted syllables (§1:17), nasal syllables (§1:22), and nasalized syllables (§1:23) have a fixed length of two morae. Sequences of h plus stop or spirant appear to follow short vowels (§1:18); compare éhsak "mussels" and é·həs "mussel." So also, word-initial h appears before short vowels (§1:15); compare hatá·ᴘi "bow" and nta·ta·ᴘí·wəna "our bow."

§1:34. Other syllables show a contrast between short and long, depending on whether the vowel of the syllable is short or long. Thus, when a word begins in a vowel, the vowel may be short a (as in English "father") or long a·, amánki "it is big," á·me· "he is fishing" (compare namé·s "fish"); short e (as in English "met") or long e· (as in English "mad"), eᴌí·i "both," e·ᴋó·ᴋoles "raspberry"; short i (more like English "feet" than "fit") or long i·, íka "there," í·la "brave man"; short o (as in English "thought") or long o·, ókahte·s "paunch," o·pe·ksí·ᴘu "White River"; short u (as in English "fool") or long u·, ú·ce "fly," úpxkon "his back." Short u occurs with less frequency than other vowels; its favorite positions are before w, and in word-final: wewtənúwe·s "mermaid," kéku "something," təkwčé·su "he is round." In general, short vowels occur more freely in word-final than long vowels; in other positions both lengths occur freely.

§1:35. Short ə (as in English "butter") does not occur in word-initial nor in word-final, and is also avoided in interrupted syllables (§1:17) and in syllables having a fixed length of one mora (§1:33). In other syllables, ə is a favorite vowel.

§1:36. Only long vowels are nasalized; the phonetic long ə· is found only in a nazalized syllable (§1:23).

§1:37. Front vowels (long and short i, e, a) are freely juxtaposed without the intrusion of a semivowel, and thereby form two syllables, the second syllable beginning in a vowel. Of back vowels, only o or o· appears as the first member of a juxtaposed pair. Back vowels occasionally appear after front vowels, but more often a semivowel intrudes in such a sequence (§1:27 and 2:2). If the pair of juxtaposed vowels is of the same quality, one is usually long; if of different qualities, both vowels may be short or both may be long. Compare entatəntewhé·enk "when he and I made a fire," entapá·ᴛia "when I came," entapali·a·ᴛíhti·t "when they went away" but ikapa·á·ne "when you get there."

§1:38. In rare instances three vowels are juxtaposed, and thereby form three syllables: nəmaipənaó·ok "I go to see them."

§1:39. A few words are distinguished only by a difference in stress. Compare the independent mode káwi "you are sleeping" (§2:23), and the imperative kawí "sleep!" (§2:8 and 6:3).

Each word receives one stress. A particle may be stressed in a certain collocation, and thereby count as a separate word, but in another collocation may precede or follow a stressed word as an unstressed procliic or enclitic (§4:1 and 5:3; 8).

The favorite position for stress is on the third mora from the end of the word (§1:22). Accordingly, a two morae penult is stressed (§6:2); but the antepenult would be stressed when the penult and the ultima each have the value of one mora (§6:4).

A less favored position for stress is on the second mora from the end of the word. Accordingly, a two morae ultima is stressed; but the penult would be stressed before a one mora ultima (§6:3).

A small class of words shows stress arbitrarily on the theme-final vowel, even when this vowel is the word-end mora (§6:5).

2. PHONOLOGY

MORPHEME ALTERNANTS: IN SUFFIXATION

§2:1. Person pluralizing suffix -na[·n]- appears as -na·n- before another suffix, as -na in word-final. Thus, nkahé·sana "our mother"; but before suffixes -ak, -a, and -inka, nkahe·saná·nak "our mothers," nkahe·saná·na "our mother, now deceased," nkahe·sana·nínka "our mothers, now deceased."

Intrusive ə appears between a theme ending in certain consonants and -na[·n]- (see above). But if the theme ends in a vowel, the vowel is expanded to a two morae interrupted syllable (§1:17) before -na[·n]-: nəmasiliáhana "we are moving about"; and before person pluralizer -mɔ (§3:8).

Some elements ending in -m or underlying -w are followed by intrusive -hu- and -hum- before -mo and -na[·n]- respectively. The negative suffix -i[·w]- provides an example of underlying -w (§5:4): ku·takaʀakwtəki·húmo "no, you fellows don't want to go back," ku·taki·lú·na kaʀakwtəki·húmana "not us, we don't want to go back." Compare theme-final in -m (§6:10): nkaʀunko·mhúmana "we are sleepy."

§2:2. Third person suffix -w is usually not heard in word final, but appears as such between theme-final -u and a following suffix: péhewe·w beside péhewe· "he is waiting," kánthu "he is flying" but kanthúwak "they are flying."

Between theme-final -e· or -i· and suffix in -a, third person -w- contracts with the following -a to -o, and an intrusive y appears between the theme-final -e· or -i· and -o (§1:37): pehewé·yok "they are waiting." Likewise, inanimate suffix -w contracts with thing pluralizer -a after -e·-, but remains as -w- after -n- (§4:3).

§2:3. After a theme in -m, third person -w is dropped in word-final, but with

suffix ⸱ak contracts to u·: kahtúnko·m "he is sleepy," kahtunkó·mu·k "they are sleepy."

Inverse marker ⸱əkw (§3:14) plus ⸱ak, ⸱ə·na[·n]⸱, ⸱a, and ⸱wa[·w]⸱ contracts, respectively, to ⸱ku·k, ⸱ku·na[·n]⸱, ⸱ku, and ⸱kuwa (when ⸱wa[·w]⸱ is in word-final, otherwise ⸱kəwo·o·). But subordinate mode suffixes in ⸱e follow ⸱əkw without contraction, while those in ⸱a contract with ⸱əkw to ⸱əko (§2:9 and 4:4): entawəlál-kwenk "when we are kept by him or them" (with suffix ⸱enk), entawəlálkon "when you are kept by him or them" (with suffix ⸱an).

Animate noun final ⸱kw plus pluralizer ⸱ak contracts to ⸱ku·k, but plus obviative ⸱a contracts to ⸱ko (§3:12).

§2:4. Person pluralizing suffix ⸱wa[·w]⸱ appears as ⸱wa in word-final, but contracts with following suffix vowel ⸱a⸱ to ⸱wo·o·: kahé·səwa "the mother of all of you," but kahe·səwó·ok "the mothers of all of you" (with following suffix ⸱ak) and kohe·səwó·o "their mother" (with following suffix ⸱a). It contracts with following suffix vowel ⸱i⸱ to ⸱wo·u·: kahe·səwo·únka "the mothers, now deceased, of all of you."

Preceding suffix ⸱a[·w]⸱ (§2:5) plus pluralizing suffix ⸱wa[·w] contracts to ⸱awo: kwi·cəmáwo "you fellows are helping him." But ⸱a[·w]⸱ plus ⸱wa[·w]⸱ followed by a suffix in ⸱a contracts to ⸱awo·o·: ku·lhalawó·ok "you fellows keep them" (§2:3 and 3:14). Theme-final in ⸱aw⸱ plus ⸱a[·w]⸱ plus ⸱wa[·w]⸱ plus suffix in ⸱a contracts to ⸱a·wo·o·: wši·kwi·ta·wó·o "they robbed him."

§2:5. The direct marker, ⸱a[·w]⸱ (§3:14), appears as ⸱a in word-final, as ⸱a·w⸱ before intrusive ⸱ə⸱, as ⸱a·⸱ before suffix beginning in a consonant, as ⸱a⸱ before a preaspirated consonant (§4:7), as ⸱a·o in contraction with following ⸱a (§2:4).

Theme-finals in ⸱e·w and ⸱aw contract with ⸱a[·w]⸱ as ⸱e·yo and ⸱ao respectively. Compare kwihilú·ʈaw "run after him!", né·w "see him!" (with zero suffix); and nné·yo "I see him," nkwihilú·ʈao "I ran after him" (with direct marker ⸱a[·w]).

§2:6. Speaker-addressee suffix ⸱i appears as ⸱i in word-final (§3:15) and before another suffix beginning in a vowel (§4:4), but is extended to two morae before a consonant (§2:10).

§2:7. Speaker-addressee suffix ⸱əl[u]⸱ appears without vowel in word-final (§3:15) and before a suffix beginning in a vowel (§4:4), but with vowel extended to two morae before consonant (3:15). In contraction with the negative suffix ⸱i[·w], ⸱əlu·wi results (§2:12 and 5:4): ku·kəne·wəlú·wi "no, I do not see you."

§2:8. Imperative singular ⸱l appears after transitive animate themes in ⸱i⸱ (§4:2). It is dropped after animate intransitive themes in i, sometimes leaving a shift in stress as a reflex (§6:3). It appears after other theme-final vowels (§6:1). Compare la·ləmátahpi "sit down!" and lapipá·l "come back again!"

The m of imperative suffix ⸱ʈam is replaced by n before element in k (§5:8).

§2:9. When third person subordinate ⸱k follows a theme in ⸱m, ⸱m is replaced by n, and a preceding long vowel is replaced by a short vowel, but a short vowel remains (§4:8). Compare independent kahtúnko·m "he is sleepy," and subordinate

entakahtúnkonk "when he is sleepy"; independent wi·cə́ntamu·k "they are help-
ing," wəlú·səmən "he burned it"; and subordinate entawi·cə́ntank "when he
helps," entalú·sənk "when he burned it."

But third person -k and preceding -əkw combine as kuk: entawelálkuk "when
he is kept by him or them" (§2:3 and 4:8).

An intrusive -ə- follows theme in -l before third person -k: entame·čimaxakí·lək
"when she got big."

§2:10. When a theme in -m or -l precedes intrusive -i- and -hti·t (§4:8), the h
before t is transposed to precede the intrusive -i-: entakahtunko·mhíti·t "when they
are sleepy," entawi·cəntamhíti·t "when they helped it," entame·čimaxaki·lhíti·t
"when they got big."

Theme-final vowels which are long before other subordinate suffixes are short
before -hti·t (§6:2 ff.): entako·nši·phuwéhti·t "when they are hiding."

Suffixes ending in -t replace t by c before i or i· (§4:9 ff.): e·lanku·máci·k "the
ones to whom you are related."

§2:11. First person singular -a[·n]- appears as -a in word-final (§4:4), as -a·n-
before -e (§5:2). Compare entalú·sia "when I burned" and xulu·siá·ne "if I should
burn."

§2:12. The negative suffix -i[·w] appears as -i in word-final: ku·taní·
nkaтakwtəкí·i "not me, I don't want to go back." It contracts with preceding
theme final in -i and following suffix in -a as -i·yo (with intrusive y). Compare
entakwtə́kia "when I went back" and entamatakwtəкí·yo "when I did not go
back." But after underlying third person suffix -w (§3:5), -i·í·yo- results:
ku·takahtakwtəki·í·yok "they didn't go back." Before preconsonantal intrusive -ə-,
-i·w- results: ni·ntəlimatakwtəкí·wən "I, indeed I did not go back," ku·kəne·hku·
wí·wəna "we are not seen by him." In the last example, the theme -ne·w- plus in-
verse marker -əkw- before the negative suffix yields -ne·hku·wi·w- (§2:1 and 5:4).

§2:13. Preterite -əp[an] appears as -əp in word-final, as -pan- before a vowel
(§5:5; 6). Syncope of syllable-final -ə- in medial position is regular.

§2:14. Intrusive -y occurs between theme-final -e·- and suffixes in a (§6:2):
entatəmi·кé·yankw "when we went in the house" (§2:2). Intrusive y is also found
within the theme (§6:7): ohtawé·yu "he is talking Ottawa."

§2:15. The independent person particle -i·[lu·]- appears as -i· in word-final,
as -i·lu-- before person pluralizers (§5:10): ní· "I," ni·lú·na "we," ki·lú·wa "you
fellows."

§2:16. After theme-final -o·-, the vowel -a is replaced by -o, but -e remains
(§6:9): entaahke·pinkó·o "when I was blind" (§4:4).

§2:17. Syllables with long vowels may be replaced by two morae interrupted
syllables (§1:17). Thus, the stem pe·w- appears as pehew- before intransitive
formative, as pe·- before transitive formatives (§6:15), with -w lost before the con-
sonants of the latter.

§2:18. The transitivizer -aw- plus -əkw contracts to -a·kw (§6:18):

nəmáxka·kw "he found me." In another formation with theme in ‑am, ‑am appears as ‑un before ‑t: entamáxkunt "when he has found his way." Themes in ‑aw plus ‑i appear as ‑ai, but contract with ‑əl as ‑u·l (§3:15): kša·khwíkai "you kicked me," kša·khwíku·l "I kicked you."

§2:19. Themes in ‑uw, as those formed with the transitivizer ‑šuw (§6:16; and occasionally other themes in spirants which add ‑uw as a by-form), contract with ‑əkw or ‑əl to ‑u·kw or ‑u·l (§3:14; 15). Compare kpé·šuwi "you brought me" with mpé·šu·kw "he brought me," kpé·šu·l "I brought you"; nəmóhu·kw "he ate me," kəmóhu·l "I ate you," mhú·we "Cannibal" (proper name).

MORPHEME ALTERNANTS: IN PREFIXATION

§2:20. The person prefixes, nə‑, kə‑, wə‑ (§3:1 ff.), remain as such before stems beginning in certain consonants but undergo change of form or position before stems beginning in other consonants and before stems beginning in vowels (§2:21 ff.). While wə‑ is frequently subject to metathesis, nə‑ and kə‑ are never transposed.

§2:21. Stem-initials in m‑ prefix nə‑ and kə‑ with prefix vowel preserved: kəmathaká·la héč "did you fight him?," kəma·kháko "your bottles," nəməκəná·‑ kwələnč "my little finger," kəmihilú·səm "your husband," kəmí·ci·n "you ate it," nəmé·κən "I gave it away," kəmú·kum "your blood," nəmo·kələ́ma "my mauls."

§2:22. Stem-initials in p‑ prefix nə‑ and kə‑ with prefix vowel lost (and n‑ is replaced by m‑ before p‑): kpé·tu·n héč "are you waiting for it?" mpi·κənə́mən "I crumbled it," kpaxkši·kanə́na "our knife," mpa·lsuwa·kanə́na "our sickness," mpó·ma "my thighs," kpu·kí·xtu·n "you broke it," mpəmú·τamən "I shot him."

§2:23. Stem-initials in k‑ prefix nə‑ and kə‑ with prefix vowel lost (and k‑ contracts with k‑ to a single k‑): nkí·tələnč "my thumb," kišipənae·lə́ntamən héč "have you finished thinking about it?" nke·nahkíha "I take care of him," kə́τukw "your knee," nkanthála "I hid him," ka·xksə́mən "you dried it," kəpšéhemən "you closed it," nkwə́ntamən "I swallowed it," ki·kwə́ntamən beside kwə́ntamən "you swallowed it," kohó·κanəm beside ki·kohó·κanəm "your mortar" (§2:26).

§2:24. When stem-initials in m‑, p‑, k‑ are followed by the vowels i, i·, e·, the prefix wə‑, with loss of prefix vowel, is transposed after the stem-initial consonant. Compare §2:21 and mwihilú·səma "her husband," mwí·ci·n "he ate it," mwé·κəna "he gave it away." Compare §2:22 and pwé·tu·n "he waited for it," pwi·kanə́mən "he crumbled it." Compare §2:23 and kwi·tələ́nča "his thumb," kwišipənae·lə́ntamən "he has finished thinking about it," kwe·nahkihá·o "he takes care of him," kwə́tko "his knee."

§2:25. But when m‑, p‑, k‑ are followed by a, a·, the prefix wə‑ is not only transposed after the stem-initial consonant but also contracts with the following vowel as o, without influencing the length of this vowel. Compare 2:22 and poxkší·kan "his knife," po·lsuwá·κan "his sickness." Compare §2:21 and mothaka·‑ lá·o "he was fighting him," mo·kháko "his bottles," moκəna·kwələ́nča "his fingers."

Compare §2:23 and konthalá·o "he hid him," ko·xksə́mən "he dried it," kopšéhemən "he closed it."

§2:26. When the vowel following the stem-initial consonant is u·, o, o·, or when the initial sequence is kw- or pə- (followed by a nasal), an underlying meta- thesis of wə- may be assumed, with the resulting contraction leaving the stem- initial sequence in its original form. Compare §2:21 and mú·kum "his blood," mo·kələ́ma "his mauls." Compare §2:22 and pó·ma "her thighs," pu·kí·xtu·n "he broke it," pəmú·tamən "he shot it." Compare §2:23 and kwə́ntamən "he swal- lowed it," kohó·kanəm "his mortar."

§2:27. Stem-initials in t-, č-, š-, s- and h- (followed by i or wi) prefix nə- and kə- with loss of prefix vowel: ktá·n "your daughter," ntú·n "my mouth," ktehená·· nak "our hearts," ktə́ki "your shoulder," ntə́la "I told him," kčí·kəni·n "you took it away from me," nšinká·la "I hate him," nša·khwíka·kw "he kicked me," ksí·səna héč "did you pinch him?" ksu·kháməne·n "we poured it," nsí·ta "my feet," nsəpú·ti "my anus," nsaka·pého "I am leading him," nsa·ki·má·yum "my chief," nhikí·yon "my nose," khika·təná·na "our legs," nhwícu "my calf."

§2:28. So also, wə- appears as w- before stem-initials in tu-, te-, tə-, či-, ši-, si-, su-, sə-: wtú·n "his mouth," wté·ha "his heart," wtə́ki "his shoulder" (but təlá·o "he told him," with stem-initial unchanged after prefixation of wə-), wčí·kəna·n "he took it away from him," wšinka·lá·o "he hates him," wsí·ta "his feet," wsi·səná·o "he pinched him," wsu·khámən "he poured it," wsəpú·ti "his anus."

§2:29. Stem-initials t-, š-, s- followed by a, a· permit the usual metathesis of wə- with contraction to o, o· (§2:25): tó·na "his daughter," šo·khwika·wó·o "they kicked them," soka·pehó·o "he is leading him," so·ki·má·yuma "his chief."

§2:30. The prefix wə- never occurs in metathesis without contraction after stem-initials in t-, č-, š-, s- (§2:24); but note such metathesis after stem-initial hi·: hwikí·yon "his nose," hwíka·t "his leg." Stem-initial hw- remains unchanged after wə- (§2:26): hwíčuwa "his calf of leg." The prefix vowel is preserved before stem- initial cluster šk-: nə́škinkw "my eye," kə́škinkw "your eye," wə́škinkw "his eye."

§2:31. Both kə- and wə- precede stem-initials in l- and n-, with prefix vowel preserved. Metathesis of wə- occurs only with contraction of following a, a· to o, o· (§2:25): wəle·la·o·kwələ́nča "his middle finger," kəla·ptu·né·na "you put your finger in his mouth," lo·ptu·ne·ná·o "he put his finger in her mouth," kənaxkú·məl "I answered you," noxku·má·o "he answered him," no·wəlá·o "he followed her," kənúhula héč "are you nursing him?" wənu·ná·kan "her nipple."

§2:32. But nə- suffers loss of prefix vowel before l- and n- (and n- is replaced by l- before l-): lle·la·ó·kwələnč "my middle finger," lla·ptu·né·na "I put my finger in his mouth," nnaxkú·ma "I answered him," nná·wəla "I followed her," nnúhula "I nursed him."

§2:33. Before stem-initials in we- and wi-, nə- preserves prefix vowel, kə- suffers loss of prefix vowel, and wə- disappears in contraction: nəwe·tanə́mən "I

took it," kwe·ʀanə́mən "you took it," we·ʀanə́mən "he took it"; nəwí·si "I am fat."

§2:34. Stem-initials in wə- contract with the prefixes to nu·-, ku·-, and u·-: wəli·ʀé·he·w "he is good hearted" (§3:5 and 6:5), nu·li·ʀe·háhana "we are good hearted." A pleonastic wə- is prefixed to the absolute form of some words with the usual contraction when person prefixes precede: wiyú·s "meat," u·yú·səm "his meat," ku·yú·səm "your meat."

§2:35. Stems in x- appear as such in absolute forms, and also, in one class of stems, after kə- with loss of prefix vowel: kxí·səməs "your younger brother" (in this class, nə- contracts with a stem-extending vowel, and wə- is transposed: naxí·səməs "my younger brother," xwi·səmə́sa "his younger brother"). Usually a- or wə- precede stems in x- before the person prefixes: xáskwi·m "corn," ntaxaskwi·məmə́na "our corn"; xkwə́n "liver," ú·xkwənəm "his liver" (§2:34; 39).

§2:36. Many possessed nouns without absolute forms (§3:6), show prefix vowel and stem-initial vowel contracting as i·-: wí·l "his head," ni·ʀí·ʀa "my teeth," kí·ʀi·s "your friend." But compare í·la· "brave man" and kti·la·íhina "we are brave" (§6:36).

§2:37. Stem-initials in hu- contract with the prefixes to nu·-, ku·-, and u·- (§2:34): húko·n "pot hook," u·ʀó·nəma "his pot hook"; hupwé·yok "they are smoking," ku·póhona "we smoke" (§6:9).

§2:38. The prefix vowel contracts to o· with stem-initials in ho-, o-, o·-: hópəni·s "potato," no·pəní·səmak "my potatoes"; hópan "lung," wo·panə́ma "his lung"; ókahte·s "paunch," wo·kahté·səma "his paunch"; o·ʀínkw "opossum," ko·ʀínkum "your opossum."

§2:39. Other vowels are preceded by intrusive -t- before person prefixes: éhsak "mussels, clams," ntéhsəmak "my clams"; ntəla·šî·mwi "I am dreaming" but la·ši·muwá·kan "dream" (with ə- not appearing in word-initial); a·lu·kwé·ʀi "hat," kta·lu·kwe·ʀí·si "you are wearing a hat"; ayəmú·k "they are buying," toyəmə́na "he is buying things."

§2:40. A few instances show h- before -a- replaced by intrusive -t- with vowel lengthened before person prefixes: hatá·ʀi "bow," nta·tá·ʀi "my bow," to·tá·ʀia "his bow"; haki·hé·yok "they are farming," nta·ki·héhena "we are farming."

3. PREFIX PARADIGMS

§3:1. Prefix paradigms are sets of elements (used in the inflection of certain word classes, in part or exclusively) which mark at least the first person (speaker) and second person (addressee) by prefixes while number and other categories are marked by suffixes. Word classes (parts of speech) include nouns, verbs, and particles. Nouns are inflected only by prefix paradigms. The independent mode of verbs is inflected chiefly by prefix paradigms, while the independent with inanimate actor as well as all other modes is inflected by suffix paradigms (a correlative paradigm type which marks all categories, including person, by suffixes to the ex-

clusion of prefixes). Particles are generally uninflected,—at most, partially inflected (§5:10).

§3:2. Prefix paradigms are used in the inflection of inanimate, animate, and preterite animate nouns; and independent mode verbs which are intransitive with animate actor, or transitive with animate goal, or transitive with inanimate goal. These six paradigms all employ the person prefixes nə- and kə-.

§3:3. As a result, a given form used in the expression of person serves to marks the possessor in the case of nouns, the actor in the case of verbs. Thus, the prefix nə-, without person pluralizing suffix, expresses "my" or "I": nšé·ʈu·n "my lip" (inanimate noun), nkáhe·s "my mother" (animate noun), nkahé·sa "my mother, now deceased" (preterite noun), nčí·ʈuwe "I am whistling" (animate intransitive), nu·lhála "I keep him" (transitive animate), nu·lhátu·n "I keep it" (transitive inanimate). If kə- instead of nə- were prefixed to the preceding examples, the translations would be "your" in place of "my," and "you" in place of "I" (§2:20 ff.)

§3:4. However, when both prefix nə- and person pluralizer -na[·n]- are employed, first person plural exclusive is expressed: "our" (mine and his) or "we" (he and I); likewise, prefix kə- and pluralizer -na[·n]- yield first person plural inclusive: "our" (your and mine) or "we" (you and I). See §2:1 and §3:15 for examples. All of the prefix paradigms employ -na[·n] except the transitive inanimate, which employs a by-form for this element, namely -e·n: nkwihilu·ʈamə́ne·n "we (he and I) ran after it." Compare imperative -ne·n (§4:2). Supplementary paradigms in -n also employ the by-form -e·n (§5:9 ff.).

§3:5. Of prefix paradigms (§3:2), only animate intransitive verbs employ the third person suffix -w (§2:2; 3), and the obviative suffix, -luwa (in an anecdote about a man and his wife, the "man" as the more prominent actor is third person while "his wife" as the less prominent actor is obviative). In Delaware the obviative is indifferent as to number (§3:13 and 4:6). Compare kə́ntke·w "he is dancing" and kəntké·luwa "she (his wife) is dancing."

§3:6. Other prefix paradigms employ the third person prefix wə-: wšé·ʈu·n "his lip," wənihilá·o "he killed him" (§2:5).

For things not ordinarily spoken of as belonging to anyone there are animate and inanimate nouns which may be said to employ an absolute zero prefix in contrast to forms marked by person prefix. Some names for things which are ordinarily possessed, as body parts, occur only with person prefix, and if the context calls for an absolute meaning, a form with third person prefix is used: wí·xa "his hair" or "a hair."

Other nouns make a formal distinction between possessed and absolute forms; a special suffix, -m- is not necessarily included in the possessed forms but is never used in the absolute forms: u·xkanə́ma "his bones" and xkána "bones," wəlakšía "guts" and u·lahkə́šia "his guts." Different words are used in a few instances: alú·ns "arrow," wí·p "his arrow"; mwe·ʀané·yok "dogs," ntaləmú·sak "my dogs, pets."

The locative suffix -nk generally follows absolute nouns. Any person prefix may precede, but pluralizing suffixes do not follow locative nouns. Compare kwátko "his knee" and kátkunk "on the knee" but ksí·sanal kánanunk "I pinched you on your cheek."

§3:7. Person pluralizer -wa[·w]- is used with ka- prefixed and wa- prefixed nouns and verbs in all paradigms (§3:2) except two (§3:8; 9) in the expression of second and third person plural: kpaxkší·kanawa "your (plural) knife," poxkší·-kanawa "their knife" (§2:4).

§3:8. Person pluralizer -mo is used with ka- prefixed animate intransitive and transitive animate verbs in the expression of second person plural: ktaspeheláhamo héč "do you fellows have smallpox?" ku·lhalíhimo héč "are you fellows keeping me?" (§2:1 and 3:15).

§3:9. Person pluralizer -e·yo is used with ka- and wa- prefixed transitive inanimate verbs in the expression of second and third person plural: ktayamané·yo "you fellows bought it," toyamané·yo "they bought it." It is also used after the directive predicator (§5:9 ff.).

§3:10. Thing pluralizer -a is used in inanimate noun and transitive inanimate verb paradigms: nše·Tú·na "my lips," walu·samána "he burned the things." Person pluralizers -na[·n]- (§3:4) and -wa[·w]- (§3:7) precede thing pluralizer -a: kše·Tu·-naná·na "our lips." But the person pluralizers of transitive inanimate verbs, -e·yo (§3:9) and -e·n (§3:4), are the same whether the goal is singular or plural: walu·samané·yo "they burned the thing or the things." Compare also §4:3.

Some animate intransitive verbs always appear in association with a noun as implied goal. This is somewhat parallel to the loss of the transitive inanimate formative in collocation with a noun which serves as goal. Thus, when the noun is not given, the goal is explicitly marked by the verb: nna·Tamána "I went after it (plural)." But when the noun is given in the sentence, the same verb appears in animate intransitive form: nná·Tam tántay "I'm going after the fire."

§3:11. Preterite noun pluralizer -inka follows animate noun stems or person pluralizers (§3:4; 7), and has been occasionally noted with verbs where the actors are no longer existing, as ankalúnka "they are dead" (§5:6). The preterite noun paradigm is unique in having an explicit singular suffix -a, as well as the plural suffix -inka, for na- and ka- prefixed nouns (§2:1); however, in third person -inka serves indifferently for singular or plural (compare §3:13 and 5:6).

§3:12. The pluralizer for animate nouns and for third person of verbs is -ak in all prefix paradigms except those employing thing pluralizer -a (§3:10) or preterite pluralizer -inka (§3:11).

With animate nouns, -ak follows the noun stem or the person pluralizer (§3:4; 7) and marks the plurality of the noun rather than the person or the possessor in the case of na- and ka- prefixed forms: ni·mahtásak "my brothers," ku·xwi·saná·nak "our grandchildren." Zero and wa- prefixed nouns use -ak only

when the noun is not followed by an obviative suffix (§3:6; 13): alú·nsak "arrows," kwə́tku·k "the knees" but kwə́tko "his knee or knees."

In contrast, -ak after verbs serves to mark third person plural. With animate intransitives, -ak follows -w (§2:2; 3 and 3:5). With transitive animates, -ak appears after the direct or inverse goal markers (§2:3 and 3:14) and after person pluralizers (§3:4; 7), but only when nə- or kə- prefixed forms are involved, not when wə- prefixed forms are used (§3:13).

§3:13. Besides the obviative suffixes -luwa (§3:5) and -li·- (§4:6) there is another obviative suffix, namely -a (not to be confused with the homonymous thing pluralizer, §3:10, or the homonymous preterite singular, §3:11).

Obviative -a may follow absolute animate nouns (§3:6), but necessarily follows wə- prefixed possessed nouns. While the possessor is third person, marked by wə-, the noun itself (as the less prominent of the two) is obviative person and marked by -a: wtəxkwé·yəma "his (third person) sister or sisters (obviative)."

Likewise in transitive animate verbs, obviative -a is necessarily used for wə- prefixed verbs, for the actor is then third person, marked by wə-, while the goal (as the less prominent of the two persons) is obviative and marked by -a: wənihilá·o "he (third person) killed him or them (obviative)." See also §2:5 and §3:14.

§3:14. Transitive animate direct (active) and inverse (passive) third persons are marked, respectively, by suffixes -a[·w]- and -əkw (§2:3; 5). The two voice types are parallel, enjoying much the same possibilities of person and number affixation.

Thus, in the direct (active), the prefixed person is actor while a third person is goal: nu·hála "I keep him," nu·lhalá·ok "I keep them," ku·lhalá·wəna "we keep him," ku·lhala·wəná·nak "we keep them."

But in the inverse (passive), the prefixed person may be regarded as a psychological subject with a third person agentive actor, or more briefly, the prefixed person may be translated as a goal with third person as actor: nu·lhálakw "I am kept by him," or what amounts to the same thing in Delaware, "he keeps me," nu·lhálku·k "they keep me," ku·lhalkú·na "she keeps us," ku·halku·ná·nak "they keep us."

For wə- prefixed verbs (§3:13), compare the direct (active), u·lhalawó·o "they (third person) keep him or them (obviative)"; and the inverse (passive), u·lhalkəwó·o "they (third person) are kept by him or them (obviative)."

§3:15. When transitive animate personal relations do not include third person, all forms are kə- prefixed. Second person actor with first person goal is marked by the addition of suffix -i: ku·lháli "you keep me." First person actor with second person goal is marked by the addition of suffix -əl[u]-: ku·lhálal "I keep you." Whether serving as actor or goal, plurality of second person is marked by -mo, plurality of first person by -na[·n]-: ku·lhalíhimo "you fellows keep me," ku·lhaləlúhumo "I keep you fellows"; ku·lhalíhina "you keep us," ku·lhaləlúhuna "we keep you." See also §2:6; 7 and 4:2; 4; 6.

4. SUFFIX PARADIGMS

§4:1. Suffix paradigms mark all categories by suffixes to the exclusion of prefixes (compare §3:1 ff.). The imperative and the inanimate independent modes are formed without a preceding modal particle or initial syllable change characteristic of the remaining suffix paradigms.

Imperatives occasionally show initial syllable reduplication of a type which is also used to mark aspect (§4:2 and 5:7).

A wide variety of introductory modal particles precede subordinate forms of verbs; these particles vaguely suggest relative time or mode (§4:4 and 5:2 ff.).

In initial syllable change characteristic of the participle mode, the first vowel of a syllable is replaced by -e-- (§4:9 ff.).

§4:2. With animate intransitives, the imperative is marked by -l (§2:8) when one person is addressed, by -kw when plural persons are addressed. Compare imperative la·ləmátahpi·kw "sit down, you fellows!" and independent kələmatahpí-himo héč "did you fellows sit down?"

Singular -l and plural -kw follow transitive animate themes in -i-- (§2:6): mí·li·l či·ranəsəwá·kan "you give me strength!" (a form used in prayer), né·wi·kw "see me, you fellows!" A goal pluralizer --ne·n may replace the imperative suffix, when the goal is first person: ne·wí·ne·n "see us!" mi·lí·ne·n "give us!" (with number of person addressed not specified). The imperative is also marked by a zero suffix when the goal is an indefinite third person: né·w "see him!" mí·l "give him!" But if plural persons are addressed, the imperative is marked by -u·, as né·yu· "see him, you fellows," mí·lu· "give him something, you fellows!" Exhortive suffix -ram (§2:8) follows the transitive animate direct marker -a[·w] (§2:5) as a kind of first person imperative: nhilá·ram "let's kill him," ne·yó·ram "let's see him."

The negative imperative in part shares regular subordinate mode suffixes (§4:4), with a special introductory particle (§5:4).

Transitive inanimate verbs formed by -am- mark singular addressee by -a, plural by -amu·kw, exhortative by -amu·ramu·kw: kwihilú·ra "run after it!" kwihilú·ramu·kw "run after it, you fellows!" kwihilu·ramú·ramu·kw "let's take after it!"

§4:3. When the singular of inanimate intransitive verbs is in -t, the plural is marked by -u·l: wəlát "it is good," əwəltú·l "they are good." More commonly, the singular ends in -w, and the plural is formed by the addition of the regular thing pluralizer -a (§2:2 and 3:10): máxke·w "it is red," ame·xké·yo "they are red"; ní·ske·w "it is dirty," ni·ské·yo "they are dirty," wi·sú·uwa "they are large, fat." There are still other types, including forms ending in -n: wáskən "it is new." Only one participle form, marked by -k, has been noted, serving for both singular and plural: máxke·k "that which is red," wáskink "that which is new."

§4:4. In subordinate mode verbs involving speaker or addressee, one suffix is employed for both person and number as follows: -an and -e·kw for second person

singular and plural; ˑa[ˑn]ˑ, ˑenk, ˑankw for first person singular, exclusive, and in-
clusive, respectively.

Thus, with animate intransitives: eˑlipiˑlsían "while you are clean,"
entapáˑpieˑkw "when you fellows play," neˑlikawíenk "while we were sleep-
ing (stems preceded by modal particles eˑliˑ, entaˑ, neˑliˑ). See also §2:11 and 5:2.

The suffixes listed above may follow the inverse marker of transitive animate
verbs (§2:3 and 3:4); ˑan, ˑenk, ˑeˑkw may follow transitive animate suffixes ˑi and
ˑəl[u]ˑ (§3:15): entawəlahalíeˑkw "when you fellows kept me," entawəlahalóleˑkw
"when I kept you fellows."

Transitive inanimate verbs employ all the suffixes used by animate intransi-
tives (those above, and §4:7; 8), and in the subordinate do not distinguish between
a singular and plural goal. Compare independent mode kəlúˑsi "you are burning,"
kəluˑsəmən "you burned it," kəluˑsəmána "you burned many things" (§3:2; 10);
and subordinate mode entalúˑsian "when you are burning," entalúˑsəman "when
you burned one or many things."

§4:5. Certain suffixes do not follow the direct marker (§3:14) but are ap-
pended directly to the transitive animate theme. These include all but two of the
suffixes given (§4:4): entawəláhalankw "when we (you and I) kept him." The
singular of first and second person is marked by ˑak and ˑat in place of ˑa[ˑn]ˑ and
ˑan, respectively: entawəláhalat "when you kept him or them," entawəláhalak
"when I kept him or them."

§4:6. In contrast to the last example, compare entawəlálko "when I am kept
by him or them (obviative?)," and entawəláhaliˑt "when he kept me" beside
entawəlahalíhtiˑt "when they kept me." Suffixation in the first example includes
the inverse marker ˑəkw (§3:14), plus first person singular ˑa[ˑn]ˑ (§4:4), possibly
appearing as though in word-final but actually before obviative ˑa (§3:13), with
the usual contraction (§2:3). If correct, this instance of obviative with first person
is unique; other instances combine only third person with obviative (§3:5; 13).

With animate intransitive verbs, the form of the obviative suffix both after
vowel and after consonant plus intrusive ˑə is ˑliˑˑ: entameˑčimaxakíˑləliˑt "when
obviate person ('his wife') got big."

§4:7. Third person subordinates, singular ˑt, and plural ˑhtiˑˑ plus ˑt, may
follow animate intransitive themes ending in a vowel (§4:8), and transitive ani-
mate verbs with preceding goal suffix ˑiˑ (§4:6) or direct marker ˑa[ˑw]ˑ (§2:5 and
3:14). Compare entapánčiˑt "when he went in," entakoˑnšiˑpuwéhtiˑt "when they
are hiding," entapaliˑáˑt "when he went away," entahupóhtiˑt "when they were
smoking"; and entawəláhalaˑt "when she keeps him or them," entawəlahaláhtiˑt
"when they keep him or them."

§4:8. The by-form ˑk is used in place of ˑt (§4:7) after themes ending in a
consonant and after the inverse marker ˑəkw (§2:9). However, the regular subordi-
nate plural, ˑhtiˑˑt, follows these consonant ending forms after an intrusive ˑiˑ
(§2:10): entawəlalkwíhtiˑt "when they are kept by him or them."

§4:9. For third person singular, participles employ the subordinate suffix (-t after vowel and -k after consonant) but are also marked by a distinctive initial syllable change. Compare the subordinate entawəle·lə́ntank "when he is glad" and the participle we·le·lə́ntank "one who is glad." Initial change is omitted in some participle forms: mi·kəmó·si·t alúmske· "the worker went away." In addition to subordinate suffixes serving in participle formation, an agentive suffix -s is used where the actor is characteristically occupied in a certain way. Compare participle pe·pomoτú·nhe·t "one who is preaching (at the moment)" and pehpomoτú·-nhe·s "preacher."

Some participle forms add -i to the subordinate suffix (§2:10 and 4:11): e·lanku·má·ci "the one or ones to whom he is related."

§4:10. A participle pluralizer -i·k follows suffixes -k and -t (§2:10): we·le·lə̀ntánki·k alumské·yok "the ones who were glad went away," mi·kəmo·sí·ci·k "workers." The plural of agentive forms in -s is marked by the regular animate pluralizer -ak (§3:12): pehpomoτu·nhé·sak "preachers."

When third person participle is in -i (§4:9), plural is formed by the subordinate pluralizer -hti·· (§4:7): e·lanku·mahtí·ci "the one or ones to whom they are related" (§4:11).

§4:11. Productive participle formation is limited to third person forms (§4:9; 10). However, certain transitive verbs undergo initial syllable change (§4:1) and form plurals in -i·k (§4:10) with speaker and addresssee suffixes (§4:4; 5). These are formally participles but are usually translated as possessed nouns. Compare the independent verb ntəlankú·ma "I am related to him," and the following participles: e·lankú·mak "my relative" (the one to whom I am related), e·lankú·mat "'your relative," e·lanku·mé·kwi·k "the ones to whom you fellows are related," e·lankú·mankw "our relative" (the one to whom you and I are related).

5. SUPPLEMENTARY PARADIGMS

§5:1. Both prefix paradigms (§3:1 ff.) and suffix paradigms (§4:1 ff.) may be elaborated by the addition of certain elements. In expression of categories as in formation, supplementary paradigms are characterized by some addition to paradigms already described.

§5:2. Thus, the subordinate mode suffixes (§4:4 ff.) followed by -e express subordinate mode of improbable event (generally translated as an "if" clause). Compare entalú·sian "when you burn" and xulu·siáne "if you should burn"; entalú·si·t "when he burns" and xulu·sí·τe "if he should burn" (both enta- and xu- are modal particles; the latter is used for future event. See §4:1; 4).

§5:3. The modal element -á· is always stressed. Base forms of verbs without suffixes (§6:1) are not stressed before -á· while other forms retain their normal stress (§5:8). Compare nkwə́tki "I went back" and nkwətkiá· "I ought to go back," but kwətəkí·w "he went back" and kwətəkí·w á· "he ought to go back." Examples

show ·á· after the improbable subordinate in ·e (§5:2) without an introductory modal particle (§4:1): kwətəkiá·ne á· "I should go back." Apparently ·á· is the only stressed member in a group of particles before the following negative verb: nahali·á·mata nkwətkí·i "I shouldn't go back."

§5:4. The negative particle ·mata is used only after another introductory particle. Beside this noninitial negative, ku·, ku·ta, and the imperative negative kači occur initially, often as unstressed proclitics, before a negative verb which is formed by suffixing ·i[·w]· in word-final or before a person pluralizer (§2:1; 7; 12). Compare kəne·yó·wəna "we saw him" and ku·kəne·yo·wí·wəna "we did not see him."

The negative of independent and subordinate verbs is formed by the addition of ·i[·w]·; the negatives of imperative verbs are formed partly by supplementary suffixes, partly by suffixes which supplant the affirmative imperative (§4:2): kačine·wié·kač "don't see him!" kačine·wé·ke·k "don't see him, you fellows!" The imperative negative particle, kači, before a subordinate negative verb, appears to count as an imperative: kačine·í·enk "don't see us!"

§5:5. The preterite in ·əp[an]· (§2:13), as a final suffix in subordinate verb usually suggests a past momentaneous (§5:6). Compare entané·yok "when I see him" and entane·yókəp "since I had seen him"; entane·yóhti·t "when they saw him" and entane·hohtí·rəp "since they had seen him."

§5:6. Noun preterite singular ·a and plural ·inka (§3:11) follow participle verb suffixes in supplementary paradigm: e·lanku·máка "the one, now deceased, to whom I was related" (compare §4:11). More commonly, ·a and ·inka follow participles already marked for momentaneous preterite (§2:13 and 5:5): e·lanku·makpána "the one, suddenly deceased, to whom I had been related," e·lanku·makpanínka "the deceased ones to whom I had been related," e·lanku·ma·tpanínka "the deceased one or ones to whom he had been related," e·lanku·mahti·tpanínka "the deceased one or ones to whom they had been related."

§5:7. The past habituative element ma follows independent verbs without causing a forward shift in stress (compare §5:5). The preceding verb may show initial syllable reduplication (§4:1). Compare nne·yó·ok "I see them" and nnihine·yó·okma "I used to see them."

§5:8. The reflexive is formed by a transitive animate verb preceding a possessed noun, ·haкay "self," as goal. Compare nníhila "I killed him" and nníhila nháкay "I killed myself," kənihilá·wəna khaкayə́na "we killed ourselves." In subordinate and imperative forms, the collocation of verb and noun receives only one stress (§4:3): entanhilaкenhákay "if I would kill myself," nhila·rankhaкayə́na "let's kill ourselves!" (§2:8 and 4:2).

§5:9. The directive predicator ·n, suffixed to independent mode verbs, directs attention to a collocated noun or particle as the focus of attention; the predication assumes significance, as it were, by virtue of the noun or particle to which the verb in ·n points.

Attention may be directed to a place rather than a person: nanətə́nta aləmí·ki·n "right there, there indeed she began to grow."

Usually attention is directed to a person: naniskí·xkwe moipahkí·la·n "that young woman, she indeed went and threw her away." Here the verb, with direc-tive predicator ‑n, points to the actor (that young woman) for special attention as the instigator of the event (throwing her away) while the goal (her) is relatively unimportant and is known only from context to be a certain child mentioned in a preceding sentence. By way of contrast note kwəriskíNu təlá·o wi·Tí·sa "one young man told his friend," where the verb without ‑n (təlá·o "he told him") simply states the relationship of telling between the young man as actor and his friend as goal, with attention equally divided between actor, event, and goal.

§5:10. The independent person particle ‑i·[lu·]‑ (§2:15), with first and second person and number affixes, often appears unstressed before verbs with directive predicator ‑n. These verbs usually include ‑əli‑ "thus, indeed" after the person prefix of the verb proper with the result that person is pleonastically expressed. Compare kəlú·si "you are burning" and ki·ktəlilú·si·n "you, you indeed are burn-ing"; kəlu·síhimo "you fellows are burning" and ki·lu·waktəlilu·si·né·yo "you fel-lows, you fellows indeed are burning."

§5:11. Transitive inanimate verbs with theme-final in ‑ən do not apparently add another ‑n for directive predicator. Compare kəlú·səmən héč "did you burn it?" and ni·ntəlilú·səmən "I, indeed I burned it." When an inanimate person is to be indicated in the inverse (§3:14), ‑ən follows ‑əkw: nu·lhálkwən "I am kept by it" (compare §5:12: directive predicator after ‑əkw).

§5:12. Animate intransitive verbs add the directive predicator ‑n to the verb stem (§5:10), but in the case of transitive animate verbs ‑n follows ‑a[·w]‑ or ‑əkw (§3:14), or ‑i or ‑əl[u]‑ (§3:15). In all cases person pluralizers ‑e·n or ‑e·yo (§3:4; 9) follow after ‑n: šé·nan ntəliwəlálkwən "that one, he indeed kept me," ni·lu·nan-təliwəlahalá·ne·n "we, we indeed kept him or them," ki·lu·waktəliwəlahali·né·yo "you fellows, you fellows indeed kept me," ni·ktəliwəlahalələné·yo "I, I indeed kept you fellows."

6. THEMES

§6:1. Animate intransitive themes appear in two characteristic forms, base form and word-initial form. The word-initial form is used before the suffix ‑w or ‑luwa (§3:5). The base form is used with all other affixes, as after the prefixes nə‑ or kə‑ (§3:3 ff.), before one of the subordinate or participle mode suffixes (§4:4 ff.), before the directive predicator (§5:9 ff.).

Themes of all classes except one end in a vowel (§6:2 ff.). The theme-final vowel is short in word-final and before ‑hti·t (§2:10); it has the value of two morae when followed by a suffix beginning in a single consonant. Theme-final vowel be-fore a suffix beginning in a vowel (§4:4) is long when the base form ends in a, e, or o, but short when the base ends in i.

In general, any theme is taken to be a form ready for inflection; analysis of this form may reveal a stem, or stems in composition, with or without derivative or formative suffixes.

§6:2. For many verbs, theme-final vowel remains a or e in both word-initial and base forms (§2:14): entapopsi·ká·an "when you had feathers on your head," entapa·tamá·e·kw "when you fellows were praying," entatəntewhé·enk "when we made a fire," nkəsínkwe "I am washing," pahóke·w "he is friendly."

§6:3. In a less extensive group of verbs, theme-final vowel remains i in both word-initial and base forms. The vowel is stressed before suffixes: né·li kawía "while I was sleeping," né·li kawíenk "while we were sleeping," entakawí·t "when he was sleeping," kawí·w "he was sleeping," but nkáwi "I am sleeping." In all cases stress falls on the second mora, counting from the end of the word (§1:39). An apparent exception is kawí "sleep," where the imperative suffix, ·l, of the underlying form, *kawí·l, is dropped (§2:8).

§6:4. A few verbs differ from the preceding class only in conforming to the favorite third mora stress pattern (§1:39): hákink lipə́nči·w "he went in the ground," entapə́nčia "when I went in," entapə́nči·t "when he went in."

§6:5. In this class, theme-final vowels are of different qualities for the two forms: a for base form, e for word-initial form. The theme-final vowel is stressed without respect to mora count (§1:39): kahtapé·w "he wants to come," nəwinkia·pá "I like to come," me·čimpá "I have come," entapá·enk "when we came." While vowels preceding the theme-final are never stressed, vowels following the theme-final in extended suffixation may be stressed: entapa·ríhti·t "when the little ones came."

§6:6. Some verbs differ from the preceding only in conforming to the usual stress patterns (§1:39): ká́ntke·w "he is dancing," nkántka "I am dancing."

§6:7. Many verbs appear with theme-final i in base form, u in word-initial form: nohtawé·i "I am talking Ottawa," pi·lsúwak "they are clean."

Some of these show stress on the second, others on the third mora from the end of the word (§1:39). Compare né·li pi·lsía "while I am clean" and entatahkócia "when I am cold."

§6:8. Other verbs appear with word-initial form in ·u, and differ from the preceding only in that the base form is in postconsonantic ·wi: nkánthwi "I am flying," kənthúwak "they are flying." Compare second mora stress in entaki·spwía "when I am full of food" and third mora stress in entakahtú·pwia "when I am hungry" (§1:39).

§6:9. A somewhat similar class appears with ·o in base form but with postconsonantic ·we in word-initial form: ahke·pínkwe·w "he is blind," entaahke··pinkó·enk "when we were blind" (§2:16).

§6:10. Theme-final in consonant remains the same for word-initial and for base forms (§2:1; 9 and 4:8 ff.). Relatively few animate intransitive themes end in a consonant.

§6:11. Inanimate intransitives (§4:3) are not as extensively used as animate intransitives. Certain parallel themes can be analyzed as stem, or stems in composition, plus animate formative in one case, plus inanimate formative in the other. A highly productive example is a noninitial (-s-, -t-) which appears in animate forms as -si or -su but before inanimate suffixes as -te-·. This noninitial follows such stems as pi·l- "clean" (§6:7), and ka·xk- "dry." Compare the animate nká·xksi "I am dry," ká·xksu "he is dry" and the inanimate ká·xkte·w "it is dry," ka·xkté·yo "the things are dry."

§6:12. Theoretically, each transitive theme calls for a transitivizing suffix. Where such a formative does not actually appear, a zero formative is postulated. Thus, mi·l- plus zero transitivizer before direct marker -a[-w]- (§3:14) in nəmí·la "I gave him something."

§6:13. Stems characteristically precede one or the other of a pair of transitivizers to form correlative transitive animate and transitive inanimate themes (§6:14 ff.). In many cases a given stem may be followed by intransitive as well as by transitive formatives. Rarely, the contrast in goal gender is marked by correlative stems rather than by correlative formatives: nəmóho "I ate him" but nəmi·cí·na "I ate the things"; compare nəmí·tsi "I am eating."

§6:14. Certain stems precede the transitivizers -l, -tu·n. Here, as in the following types, the stem syllable preceding may be slightly altered in accommodation: nníhila "I killed him," nní·tu·n "I killed it" (with long vowel before -tu·n, but two morae interrupted syllable [§1:17] before -l).

§6:15. Certain stems precede transitivizers -h, -tu·n. Before these, the form of the stem is often extended by the addition of -i·: mpi·lí·ha "I cleaned him," mpi·lí·tu·n "I cleaned it." The stem extensor -i·- is not used before other elements, as intransitive -si, -su, -te· (§6:7; 11). Compare mpé·ha "I wait for him," mpé·tu·n "I wait for it," and mpéhewe "'I am waiting" (§2:17 and 6:2). Also without stem extensor: nu·wá·ha "I know him," nu·wá·tu·n "I know it."

§6:16. Certain stems precede the transitivizers -šuw, -тu·n. Compare mpé·šuwa "I brought him," mpé·тu·n "I brought it," and pé·yok "they came" (§6:5).

§6:17. Note the transitivizers -l, -тamən in mpaó·la "I have power from him," mpaó·тamən "I have power from it."

§6:18. Compare with the preceding the transitivizers -aw, -amən in máxkaw "find him!" (with zero imperative suffix), nəmáxkamən "I found it."

The -ən of transitivizers after -am, -тam (§6:17), and other preceding elements in -m is dropped in one type of intransitive derivation (§3:10). The remaining element in -m is followed by -aw in the formation of a theme having two goals (direct and indirect object, one of which is necessarily animate): nəmaxkamáo "I found it for him."

A mediopassive derivation involves in part the animate formative -aw (as -a·- before consonant); -кe is added and the resulting theme is inflected in part as

an intransitive: kəmaxka·ké́hena "we have found our way," entamaxka·ké·enk "when we have found our way." But the subordinate third person ·t and first person ·ak (appearing as ·k) follows ·am (·an before ·k): entamáxkank "when I have found my way" (§2:18).

§6:19. Themes marked for two goals (direct and indirect object, inflected as a transitive animate; compare §6:18) may be formed by the suffix ·lx· after animate intransitive themes (§6:2): wi·nəwé·w "he is begging," nəwi·nəwé·lxa "I beg it for her."

Intransitive ·e· appears to be replaced by transitivizers ·am, ·antamən: nəwi·nəwáma "I begged him," nəwi·nəwántamən "I begged it." But on the analogy of somewhat clearer examples (§6:27), ·a· can be isolated as an instrumental, "by mouth, by talking," followed by the transitivizer ·m for animate goal, ·ntamən for inanimate goal. Compare nəwí·cəma "I helped him," nəwí·cə́ntamən "I helped it," where ·m, ·ntamən follow the stem without preceding instrumental.

§6:20. Intransitive ·i is replaced by transitivizers ·m, ·tu·n: nšenkí·xi "I'm lying down," nšenkí·xəma "I laid him down," nšenkí·xtu·n "I laid it down."

Some transitivizers suggest a causative function; however, maNi·· plus transitivizer ·h (§6:15) is used as a verb of causation before a directive predicator verb (§5:9 ff.): nəmaNí·ha təlišenkí·xi·n "I made him lie down."

§6:21. While there are some dozen different formatives for marking each of the gender goals, the different stem classes call for scores of transitive pair types when the permutations are counted of ·tu·n and ·l as one pair type (§6:14), of ·tu·n and ·h as another pair type (§6:15), ·tu·n and ·m as another (§6:20), and so on.

The lexical form which is restricted to one pair of transitivizers may be a free stem (§6:14 ff.) or a noninitial, as an instrumental. But free stems may precede a wide variety of noninitials, especially those of the instrumental type (§6:22 ff.). some free stems never appear directly before a transitivizer, but always precede an instrumental.

§6:22. The instrumental ·ən "by hand" precedes transitivizers zero for animate goal, ·əmən for inanimate goal: mpí·ləna "I cleaned him by hand," mpi·lənə́mən "I cleaned it by hand" (compare §6:15).

§6:23. The instrumental ·hik "by feet" precedes transitivizers ·aw, ·amən: mpi·lhíkao "I cleaned him with my feet," mpi·lhíkamən "I cleaned it with my feet." Compare intransitive mpénkwsi "I am dry" and mpenkhwíkamən "I dried it with my feet" (with h transposed before the ·w of penkw).

§6:24. The instrumental ·a·khw beside ·ha·khw "by tool," precedes transitivizers zero, ·amən: mpi·la·khómən "I cleaned it with an instrument," mpenkhó··kho "I wiped him dry" (dried him with towel as a tool).

§6:25. The instrumental ·s "by heat" precedes transitivizers zero, ·mən: mpénkwsa "I dried him by heat," mpenkwsə́mən "I dried it by heat."

§6:26. The instrumental ·əl "by shooting" precedes transitivizers ·aw, ·amən: mpo·kəláo "I broke him by shooting," mpo·kəlámən "I broke it by shooting."

§6:27. The instrumental -a- (§6:19) "by mouth, by talking" precedes transiʹtivizers -m-, -ntamən: mpóˑkama "I chewed him up," mpoˑkántamən "I broke it with my mouth."

§6:28. The instrumental -hitehe "by fist, by hitting" precedes transitivizers -w, -mən: mpoˑkhitého "I broke him to pieces by hitting him" (-ew plus -a[ˑw]- contracts to -o), mpoˑkhitéhemən eнeˑšánteˑk "I broke the window by hitting it." Only one free stem has been noted before -w, -mən: nnéˑyo "I see him," nnéˑmən "I see it."

§6:29. The instrumental -h "by intricate movement of fingers" precedes transitivizers -w, -amən: nkápho "I locked him up," nkəphámən skonteˑaméˑnak "I locked the gate shut."

A pleonastic instrumental is formed by combining -ələnč "finger," and the instrumental -h. Thus, nniˑskələnchámən "I dirtied it with my fingers," nniˑʹskəlánčho "I dirtied him with my fingers." This is contrary to the usual semantic relationship of lexical elements (§6:40; one would here expect the actor, by means of his fingers, to dirty the fingers of the goal).

§6:30. The instrumental -əsk "by legs, by walking" precedes transitivizers -aw, -amən: nkwətkáskao "I sent him back." Compare the intransitive nkwətkíhina "we went back."

Some instrumentals, notably -əsk, indicate the central event of a predication (rather than the usual contributory elaboration stating how that event is impleʹmented) when the directive predicator (§5:9 ff.) is added to a transitive theme, or when intransitive formatives (§6:6) follow the instrumental: mpámskaˑn "I walked past him," kaтaˑləmskáhamo héč "do you fellows want to get going?" alámskeˑw "he began to go."

§6:31. The instrumental -səт beside -t "by ear, by hearing" precedes transiʹtivizers -aw, -amən: nkiˑmsáтao "I eavesdropped on him," nkiˑmsáтamən "I got the secret of it by hearing," nkəlsáтao "I listen to him," kəlástaw "listen to him!" (with -səт transposed to -əst). Compare mpántao "I hear him, understand him" and mpənáo "I look at him, perceive him" (with transitive theme in -aw, but lacking the preceding instrumental -t).

§6:32. The instrumental -š "by cutting" precedes transitivizers zero, -mən: nkíˑškša "I took off a piece of him by cutting," nkiˑskšámən "I cut off a piece of it."

Compare the inanimate noun kšíˑkan "knife" which may be a secondary derivative in -кan from the stem kiˑšk- with the sibilant transposed in the sense of "knife, a thing which takes off pieces." Derivative suffixes (§6:33 ff.) are oriented in respect to preceding transitivizers (§6:18), indifferent to preceding instrumenʹtals.

§6:33. Secondary derivatives in -кan may be formed on the basis of a free stem, as in the preceding instance, or on the basis of a theme including an instruʹmental. Note the free stem kəʳ- "to close, shut in" with the instrumental -aˑkhw (§6:24) in nkəʳaˑkhómən "I locked it," and the inanimate noun with initial syllable

reduplication and vowel change of the aspectual type (§4:1): ke·kpa·khwí·ᴋan "lock, thing which shuts in by tool." Often ⸴ᴋan replaces the transitivizer without other change: nta·thilu·há·la "I told him a myth," a·thilu·há·ᴋan "myth."

§6:34. But the reciprocal ⸴əᴛi beside ⸴ti, forming an intransitive verb (§6:7), calls for a preceding animate goal transitivizer. Compare ntalíhilala "I grabbed him," ntalihilaləᴛíhina "we grabbed each other"; nkəcu·ltíhina "we came out together in a group" (with underlying transitive theme); nəwi·pé·ma "I sleep with him," wi·péntuwak "they are sleeping together" (with ⸴e·m replaced by ⸴en before ⸴t).

§6:35. Secondarily derived intransitive verbs are formed by ⸴he· (§6:1) after a noun. Compare mpahahší·ᴋana "my dried meats," mpahahši·ᴋanahéhena "we dried the meat"; čú·lə·ns "bird," ču·lə́·nshe·w "he is hunting birds," ču·lə́·nshe·s "bird hunter" (§4:9); wiyú·s "meat," wiyú·she·w "he has meat."

§6:36. The derivative with base form ⸴i (§6:7) likewise calls for a preceding noun which in some instances follows wə⸴. Compare i·lá·ok "brave men," i·lá·yuwak "they are brave men"; nəmí·s "my older sister," nu·mí·si "I have an older sister" (nə⸴ contracts with wə⸴ as nu··); təpčéhele·w "it rolls," ntəpčehelá··səm "my wagon," nu·təpčehelá·səmi "I have a wagon."

§6:37. In contrast to derivative suffixes (§6:33 ff.), the diminutive is added to transitive animate verbs without changing the paradigm type; ⸴ᴛu follows the direct and inverse markers (§3:14) in the independent mode, ⸴ᴛi follows the same markers in the subordinate mode and also follows the speakeraddressee suffixes (§3:15), while other inflective suffixes follow the diminutive forms: nu·lhalá·ᴛu "I kept the little one," nu·lhalkwə́ᴛu "he kept little me," ku·lhalí·ᴛi "you are keeping little me," entawəlahalá·ᴛian "when you kept the little one." This is really a supplementary paradigm (§5:1 ff.); however, the intransitive and noun diminutives (§6:38; 39) merely form extended themes which call for simple paradigms (§3:1 and 4:1).

§6:38. The diminutive follows the base forms of animate intransitive themes (§6:1), ⸴ᴛi forming a new diminutive base form, ⸴ᴛu a new wordinitial form (§6:7): kpa·tama·ᴛíhimo hếč "are you little fellows praying?" (compare §6:2), kawí·ᴛu "the little one is sleeping" (§6:3; 5), entakəntká·ᴛie·kw "when you little fellows were dancing" (6:6), nohtawe·í·ᴛi "little I am talking Ottawa" (§6:7), ki·spwí·ᴛuwak "the little ones are full" (§6:8).

§6:39. Diminutive ⸴ᴛət (⸴tət, ⸴ᴛət) is added to a preceding noun which remains a noun and true to its gender class.

Except for derived nouns and for the small class of nouns which have two forms (wordfinal ⸴ay, and ⸴e· before suffixes: tə́ntay "fire," tənté·yo "fires"), noun stems are identical with noun themes. Accordingly, suffixes are simply added to the single noun form which in most instances ends in a consonant; the gender of the noun is morphologically apparent only from the inflection (syntactic concordance with verbs also shows gender).

It is possible to speak of an extended noun theme in the relatively rare instances of noun composition and in the frequent cases where the diminutive is added.

Thus, with inanimate nouns: háĸi "the ground," haĸí·ⱦt "the little ground"; kənáxk "your hand," kənáxktət "your little hand"; ktú·n "your mouth," ktú·nⱦət "your little mouth"; alú·ns "the arrow," alúntət "the little arrow" (final ·s is always dropped before the diminutive).

So also, with animate nouns: mú·xwe·s "the insect," mu·xwe·ⱦⱦak "the little insects"; wté·ha "his heart," wte·htǝⱦa "his little heart"; hópan "the lung," hopánⱦət "the little lung"; nú·x "my father" (with vocative núxa· "oh my father"), nú·xtət "my little father, my uncle"; nú·xwi·s "my grandchild" (with vocative nu·xwí·ⱦi "oh my grandchild"), nu·xwí·ⱦət "my little grandchild"; nkáhe·s "my mother" (with vocative ána· "oh mother"), nkahé·ⱦət "my little mother, my aunt."

§6:40. The instrumentals (§6:21 ff.) are characteristically shorter than other types of noninitials (§6:41). Instrumentals generally indicate movement of a body part or activity which requires control by hands or arms. Free stems for body parts are not at all similar in form to these instrumentals, but noninitial by-forms are similar to their correlative free stems.

The noninitial by-forms are followed either by intransitive formatives or by instrumentals which in turn are followed by transitivizers. In the latter case, the noninitial for a body part localizes the portion of the goal toward which the verbal event is directed (§6:29).

§6:41. Most productively, body parts are designated both by free stems and by noninitial by-forms: xkán "bone," nu·xkanǝma "my bones"; compare the noninitial for "bone," ·i·kane, before the instrumental ·h (§6:29): nča·ki·kaného "I tapped him on his bone." But some noninitials do not resemble free stems: nnáxk "my hand"; compare the noninitial for "hand, finger," ·ǝlǝnč before instrumental ·h(§6:29) beside ·i·lǝnče before instrumental ·ǝn (§6:22): nkǝši·lǝnčé·na "I washed his hands with my own hands," or as an intransitive (§6:2): nkǝši·lǝnče "I washed my hands."

§6:42. Most noun themes include no more than one free stem; this is in some instances followed by a noninitial: nki·tǝlǝnčak "my thumbs" (ki·t· "big" before ·ǝlǝnč which may also enter into a verbal theme: §6:41); lǝná·pe "Delaware tribe or individual" (lǝn· meaning uncertain; ·a·pe "human being"), nǝmaⱦa·pe··íhina "we are nasty," wǝla·pé·yu "he is good natured" (maⱦ· "bad," wǝl· "good" before ·a·pe followed by verb deriving suffix: §6:36); tópe·kw "well, spring," manǝpe·kw "lake" (meaning uncertain for to· and manǝ· before noninitial ·pe·kw "body of water").

§6:43. Particles also appear to favor free stems. But compare noninitial ·a·š which counts as "five" when added to certain preceding stems; and enta (§5:4):

kwəтá·š "six" (one and five), ni·šá·š "seven" (two and five); compare kwə́тi "one," ní·ša "two."

§6:44. Perhaps most noninitials in verbal themes other than those indicating body parts (§6:41) lack a correlative free stem: nkaтú·səmwi "I am thirsty," nte·pú·səmwi "I have enough to drink" (with noninitial -u·səmwi: §6:8); nkaтúnko·m "I am sleepy," nəwinkúnko·m "I like to sleep" (with noninitial -unko·m: §6:10). Yet many noninitials (as -a·pa "to come" after wink-i- "to like to") are by-forms of free stems (mpá "I came"; §6:5).