

PHONOLOGY AND MORPHOLOGY
OF HOPI-TEWA

by
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PREFACE

In this work a dialect of the Tewa language is under description. The dialect is that spoken by a group of Indians known variously as Hano, Hopi-Tewa, and Arizona Tewa.

Hano, or Tewa Village, is one of the villages located on First Mesa on the Hopi Indian Reservation in northeastern Arizona. Ancestors of the present-day Hopi-Tewa migrated from New Mexico shortly before the end of the 17th century and settled among the Hopi (Dozier 1954: p. 276). All other dialects of Tewa and all other Tanoan languages are spoken in New Mexico (Hoijer 1946: pp. 22-23).

The materials forming the basis for this thesis were collected in the course of five months of field work in Arizona in the summers of 1955 and 1956. Two native speakers of Hopi-Tewa served as informants. Both informants--one a man, the other a woman--were approximately thirty years old. Both spoke Hopi as well as Tewa. Both spoke English with ease but with much evidence of the influence of Tewa and/or Hopi. Both said that they had learned to speak Hopi much later in life than Tewa and that they did not consider themselves really fluent in Hopi. Both were married to Hopi. Both had had high school education, and both had spent a considerable amount of time away from the Hopi Reservation.

None of the Tewa dialects have been extensively

described. There is most information concerning the Santa Clara dialect. Two papers concerned with Santa Clara have appeared in recent years. One, by Dozier and Hoijer, presents the phonemes (1949: pp. 139-144); another, by Dozier (1953: pp. 118-127), gives information concerning certain aspects of the verb structure. Robbins, Harrington, and Freire-Marreco in a work concerned with Tewa ethnobotany (1916: passim) cite an occasional Hopi-Tewa form, but most of their data come from various New Mexico dialects.

Statements by informants indicate that there is a certain degree of mutual intelligibility between Hopi-Tewa and various Tewa dialects spoken in New Mexico. In the absence of comparative work, dialect-distance testing, and other measures of similarity, the amount of intelligibility remains in question.

The field trips during which the materials forming the basis of this dissertation were gathered were made possible through grants received through the Graduate School of Indiana University. To this institution I wish to express my great appreciation.

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CONTENTS

<u>Chapter</u>	<u>Page</u>
I. Phonemes	1
II. Verbs	9
III. Nouns and Directionals	79
IV. Particles	86
V. Morphophonemics	97
VI. Word Classes	104
Bibliography	109

CHAPTER ONE

PHONEMES

1. Phonemes of Tewa are listed below.

1.1. Consonants include stops, nasals, sibilant, lateral, and glides.

Stops are as follows:

(1) voiceless, lenis, unaspirated: p, bilabial; t, apico-alveolar; c, apico-palatal with sibilant release; k, dorso-velar; ʔ, glottal; (2) voiced, lenis, unaspirated: b = [b] [ɸ], bilabial stop varying with bilabial or labio-dental fricative; d, apico-alveolar; g, dorso-velar.

Nasal frictionless continuants, all voiced: m, bi-labial; n = [n] [ɲ], apico-alveolar varying with dorso-velar.

Sibilant, grooved, voiceless: s.

Lateral frictionless continuant, voiced: l.

Glides: w, toward or from high, back, rounded--voiced; y, toward or from high, front, unrounded--voiced; h, voicelessness plus quality of preceding or following vowel.

1.2. Vowels are as follows (all front and central are non-rounded; all back are rounded):

(1) non-nasalized, with high tone: í, high, front; é, higher mid, front; É, lower mid, front; á, low, central; ó, mid, back; ú, high, back; (2) nasalized, with high tone: í̃, é̃, É̃, á̃, ú̃; (3) non-nasalized, with low tone: i, e, E, a, o, u; (4) nasalized, with low tone: ĩ, ẽ, É̃, ã, õ, ũ.

All high front vowels are relatively close. All mid back vowels are relatively open, approaching [ɔ́], [ɔ], [ɔ̃] etc. Nasalized high back and nasalized higher and lower mid front vowels are relatively more open than their non-nasalized counterparts (qualities shown immediately following for low-tone vowels apply also for their respective high tone counterparts): /u/ = [ũ] ; /e/ varies freely between [e] (the closer quality that is associated with the non-nasalized higher mid front vowels) and [ɛ̃] /E/ = [æ̃] .

There is no contrast between nasalized and non-nasalized vowels in the position immediately preceding a syllable final (1.4.) nasal continuant. Vowels in these environments, although they tend to be nasalized, are considered members of the several non-nasalized phonemes. Vowels in these positions are produced at approximately the same tongue height as--sometimes somewhat higher than--corresponding non-nasalized allophones.

1.3. Our 'macrosegment' is the contour, a sequence of phonemes bounded by silence and marked terminally by attenuation of voice and fall of pitch over the last vowel or two to a register lower than is attained in positions that are not pre-pausal. These terminal features are subsumed under a contour-ending juncture symbolized by a period followed by space / . / . A short pause, contour medial, is referred to as a contour-interrupting juncture and is symbolized / , / .

1.4. Every contour begins with a consonant; each consonant, except /l/ occurs in contour-initial position. The final segmental phoneme of any contour is one of the following: n, ' , y, w, or a vowel.

Consonant clusters occurring in final position are:

y' and w'.

Consonant clusters occurring in initial position are:

hw, hy, ph, th, kh, p', t', c', k', kw, ky, khw, khy, k'w, k'y.

Consonant clusters which occur in medial position fall into several categories: (1) some are identical with those which occur in initial position; (2) some are identical with those which occur in final position; (3) some can be analyzed as sequences of elsewhere final C or CC plus elsewhere initial C, CC, or CCC; (4) some do not fall into any of the above categories.

There is no overlapping between (1) and (3); that is, no medial cluster identical with initial cluster consists at the same time of a sequence of final consonant(s) plus initial consonant(s). There is, however, overlapping between (2) and (3)--the two clusters subsumed under (2) appearing also under (3). Clusters included under (4) consist of d, g, h, or m plus single consonants or consonant clusters which elsewhere occur in initial position.

In any sequence of vowel plus consonant cluster plus vowel, syllable boundary is placed immediately preceding that consonant which stands first in the longest sequence (of one or more consonants) which--included in and terminating the cluster in question--can also occur in initial position.

In any sequence of vowel plus consonant cluster plus vowel, syllable boundary is placed immediately preceding the consonant.

All consonants may appear as syllable initials, contour-medially. All but one appear as syllable initials in contour-initial position, as well. Examples follow of syllable-initial consonants followed by vowel (hyphen indicates syllable boundary).

p pín-khu. chest; na-bí-pín. my heart.

t to-wán-he'-na-mu. who is that? wí-tay-naa-di. I know you.

c ce-'e-na-to-'on. the dog is inside; na-p'o-cii-mu. it's wet.

k kán-he'-naá-tay. remember, you know him; naa-dii-hwii-kan-t'ó. I'm going to eat.

' 'i-hwii-'o. he's eating.

b bí-maa-k'a-'o. you're learning; di-bi-hwii-'o. are you eating? 'im-bí-kwi-yóo. their wives; /b/ = [v] everywhere except after m, in which position it varies between [b] and [v].

d dii-hwii-'o. I'm eating; naa-dii-hwii-kan-t'ó. I'm going to eat.

g ga-maa-k'an. we two know how; yo-gi-'a-t'aa-mE-mi. let's go out for a walk.

m ma-bée-tay. you know them; dii-maa-k'a-'o. I'm learning.

n nan-'an-hwii-'o. we two are eating; wí-tay-naa-di. I know you; /n/ = [n] in syllable-initial position.

s soo-nu. four; dóo-khúu-lú-saa. they have growing corn.

y yo-gi-'a-t'áá-mE-mi. let's go out for a walk;
na-bi-'ee-yEE. my children.

w wóo-tay-he'-di. he knows you; he'-di-wóo-tay. he knows you.

h ho-dii-hwii-'an. I ate already; di-ho-vi-hwii-'an.
have you eaten?

The phoneme l occurs only in contour-medial position and only in syllable-initial position:

l dóo-khúu-lú-saa. they have growing corn.

Syllable-initial consonant clusters--these occur both in contour-initial and contour-medial position--are as follows:

(C₁ = p, t, k, c, h; C_{1a} = p, t, k; C_{1b} = k; C_{1c} = c; C₂ = ', h, w, y; C_{2a} = ', h; C_{2b} = ', C_{2c} = w, y; C₃ = w, y):

C_{1a} + C_{2a}

p' p'o-cii. wet; na-p'o-cii-mu. it's wet.

t' t'ó-ló-'i. worker; yo-gi-'a-t'áá-mE-mi. let's go out for a walk.

k' k'e-ge-dó-mun. I see the house; dii-maa-k'a-'o.
I'm learning.

ph pha-ge-di-'óo-dó-k'wii. I put it away from the fire;
na-pha-paa. the fire went out.

th than-'án-khwim-mEE-yu. we looked at the sun; dó-thaan.

I'm breaking it.

kh khuu-pí. don't take it! he'-dó-khá'-t'ó. I'm going to eat that.

C_{1b} + C_{2a}

c' c'ee. face; sen-'íí-be'-khyá-ne-na-c'ún. the man went far inside.

C_{1a} + C_{2b}

kw kwi-yó-dó-mun. I see the woman; na-bí-kwi-yó. my wife.

ky kyu-'i. corpse; hE-E-mo-'o-kya'-me. just stay there.

C_{1c} + C_{2b}

hw hwii-kan-'i. table; dii-hwii-'o. I'm eating.

hy hyan. nest;

C_{1a} + C_{2a} + C₃

k'w k'wii. lie (citation form); dii-k'wii. I lay down.

k'y k'yaa. throw away (citation form); dó-k'yaa-mí. I'll throw it away.

khw khwen. rain; naa-la-di-dí-khwim-mEE-yu. the snakes are looking at us.

khy khyay. sediment; nE-'E-hE-lE-wii-dó-khyaw. I found something here.

Some consonants may appear syllable-final position preceded by vowel both contour-medially and contour-finally. The

consonants in question are as follows:

n ga-maa-k'an. We two know how; pín-khu. chest;
 soo-nu-'in-ge. four o'clock; he-'in-di-'un-wo-vée-tay.
they know you all; dEn-ye. they met each other; kán-he'-
 náá-tay. remember, you know him; than-'án-khwim-mEE-yu.
we two looked at the sun; 'an-tay. we two know each other;
 'un-di-naa-dí-tay. you know me; mán-c'a-la. he cut it;
 náá-tay. remember, you know him; dín-sa-gi. I'm having
fun; /n/ in syllable-final position = [ŋ] when contour-final
 and when contour-medial before k, g, w, y, h, ' ; /n/ in
 syllable-final position = [n] when contour-medial before
 t, d, c, n, s.

w dii-khyaw. I got up; dii-khyaw-mí. I'll get up.
 y he'-di-wóo-tay. he knows you; wí-tay-naa-di. I
know you.

' dó-ha'. I ate it; he'-kán-náá-tay. remember, you
know him.

Some consonants may appear in syllable-final position
 preceded by vowel only contour-medially. These are as
 follows:

d háa-dii-mo-wa-kid-han-we-di-bi-'o-dE-di. they made
that, but they don't do it.

g 'i-p'o-k-u-wag-mEE-yu. it's floating.

m than-'án-khwim-mEE-yu. we two looked at the sun.

h ho-bi-p'o-k'wóh-mo-wa. quit swimming.

There are two syllable-terminating consonant clusters;

these occur both in contour-medial and contour-final position:

w' khaw'. song; dii-khaw'-mo-wa-di they finished singing.

y' 'i-cE-woy'. dirty; 'o-kay'-po. I asked for it;
do'-kay'-'an. I prayed for it (cf. do'-kay'-'an. I hid it).

1.5. Vowels occur only in positions other than contour-initial. Examples of the various vowels follow.

i nan-'i-bi-hwii-'o. we're eating; dii-maa-k'a-'o.
I'm learning; dii-maa-k'a-'o. they're teaching him.

e sen-'ii-be-khy-ne-na-c'un. the man went far inside;
na-bi-'ee-yEE. my children; nan-di-wo-bee-tay. we know you.

E kwEn. tail

a he'-kan-naa-tay. remember, you know him; ha-ya-
'o-pii-ma. shall I go out?

o na-bi-to. my stick; he'-di-woo-tay. he knows you

u haa-gu-dii-t'olo-'am-mi. let me work; do'-c'uude.

I took it in.

i 'i-hwii-'o. he's eating; 'o-pii. he came out.

e di-tay-he'-di. he know me; 'o-hee. he's sick.

E hE-di-han-di-tu-'an. then he said to me; do'-'o-dE.

I always do it.

a 'an-tay. we two know each other; na-mu. it is.

o na-bi-to. my shirt; 'o-hee. I'm sick.

u 'um-bi-kwi-yoo. your wives; di-tu-'an. he told me.

i cili'. cricket.

e haa-dii-we-pi-'o. I was just doing that; 'imo'-

hē'i. tall.

Ē k'e-ge-p'Ēnū. front of the house.

a mán-cúu-de-má'a. he brought it in. dó-pha-páa.

I let the fire go out.

ŷ nū-'a. skirt; khūū. leg.

ī cīlī'. cricket.

e na-khe-k'ó. it's buried; dó-see-len. I'm boiling

it.

Ē 'i-Ē-lŷ. he ran. na-bi-'ēē-yĒĒ. my children

a di-ha'-seh-po. they got hungry; na-khwāa-be-mĒ-n.

he's going down.

o na-hwīī-jō. feed it!

ŷ 'ŷ-bī-kwi-yó. your wife; 'o-pūū-t'ó. I'm going

to go.

CHAPTER TWO

VERBS

2. The minimum word involving a Verb stem (for the definition of which, see 2.1. below) consists of a Verb stem plus an affix. This model can be expanded to include as many as a dozen morphemes in sequence. The Verb word by virtue of the diversity of morpheme classes which can be represented within it and by virtue of the length to which it may attain is a much more complex unit than words involving stems of other classes. (Word classes are presented below, in Chapter Six.)

As an example of a minimum Verb word we cite the following: dí-tay. you know me. This sequence consists of the prefix dí- non-1st person acts upon 1st person plus the Verb stem tay know. (dí- belongs to a group of prefixes and prefix sequences referred to as X; these mark person and related categories.) As an example of a Verb word which includes a relatively large number of morphemes we cite the following: wé-dii-hwii-kan-t'ó-di. I'm not going to eat. wé- is a prefix marking negation; dii-, a member of X, consists of two prefixes which together mark 1st person actor (or agent, the term used herein); hwii and kan are Verb stems which taken together can be translated eat; -t'ó is a prefix marking future intention; -dí is a suffix marking negation.

Values of symbols used in the discussion of the verb word are given in the remainder of this section.

pN = Pronoun, a subclass of N(oun). Among the members of this subclass which are relevant to the following discussion are naa~naa'i 1st person, 'u 2d person, he'~he'i he 3d person.

non sg is a label for a morpheme having various phonemic shapes. An occurrence of this morpheme is always immediately preceded by an occurrence of a Noun base. All pN and certain other N combine with non sg. These can be--but are not always--followed by non sg.

non sg and its absence contrast in meaning as non-singular (i.e., indifferently dual or plural) and singular number of referent of associated N. Thus (see the three pN listed above): naa-n or naa'in 1st person non-singular; 'u-n 2d non-singular; he'i-n or he-n 3d non-singular. (Allomorphs and distribution of non sg are treated under 3.2.)

Agent = one who performs a specified action;
recipient = one who undergoes a specified action or is in a specified state.

pl V = a subclass of Verb themes which occur in combination with members of X in which the number of the recipient is not marked or is marked as plural; non pl V = a subclass of Verb themes which occur in combination with members of X in which the number of the recipient is not marked or is marked as non-plural. (These themes are treated

in detail under 2.1.)

indep V = independent Verb, a subclass of Verb stems which may occur in base final position; dep V = dependent Verb, a subclass of V stems which may not occur in base-final position.

st V = stative Verb; ac V = active Verb.

f = any affix

2.1. The examples which follow illustrate a frame which is diagnostic for Verb stems.

mele na-k'ó-'i. the pot which is lying flat; mele (N) pot; na- (X) it; k'ó (V) be in a lying position; -'i (f) that which.

'áyyá-'i sen. good man; 'áyyá (V; this is said by informants to be a form used only by women; men are said to use the form 'óyó); -'i (f) the one who; sen (N) man.

hwii'-kan-'i dín-k'ó. I have a table; hwii'-kan (V-V) eat; -'i (f) the place where; dín-k'ó (X-V) I am the possessor of something which lies.

'Elu-'i. runner; 'Elu-'i-n. Runners; 'Elu (V) run; -'i(-) the one who, etc.; -n (f) non sg.

dii-'áyyá-'ám-mí-'i. the place where they fix things (e.g., an auto repair shop); dii-(X) they; 'áyyá-'ám (V-V) repair, improve; -mí (f) will; -'i (f) the place where.

c'ewa-'i na-mu. he is intoxicated; c'ewa (V) be intoxicated, crazy; -'i (f) the one who; na- (X) he; mu (V) be.

gerund labels a morpheme represented by morph -'i; the meaning is that which or the one who or the place where.

Certain morphemes can be immediately succeeded by gerund. Of these, those which are defined as stems (6.7.) constitute class V(erb). Those which are defined as affixes constitute a group of Verb suffixes.

The sequence V + gerund is a subclass of Noun base (6.6.).

Some V in combination with preceding X may appear in word final position or in the position immediately preceding Verb suffixes. These constitute subclass indep(endent) V. Some V in combination with preceding X never occur in word final position or in the position immediately preceding Verb suffixes. These constitute subclass dep(endent) V. In a sequence of two V, the prior one may be either indep or dep V.

A sequence of (one or more) V stems, the last one of which is in word-final position or is immediately followed by Verb suffixes is termed the Verb base.

indep V which, in base-final position, combine only with X1 and X2 constitute sub-class st(ative) V; those which, in base-final position, combine only with X3, X4, and X5 constitute sub-class ac(tive) V; those which in base-final position, combine with members of X1 through X5 constitute sub-class st ac V. (X1-X5 are listed under 2.4. - 2.8.)

Some V may appear in combination with a morpheme marking the recipient as plural in number. Thus:

dó-k'wóodi. I put several things down, as opposed to do-k'wii. I put it or those two down.

dín-saa. I have several things, growing, as opposed to dín-kyan. I have it or those two, growing.

The combination V + pl is referred to as pl V (theme). Any V which can combine with pl is termed, when not in combination with pl, non pl V (theme).

pl st (and st ac) V combine with all X1 and with those X2 which display morpheme pl; pl ac (and st ac) V combine with all X4 and X5 and with those X3 which display morpheme pl. non pl st (and st ac) V combine with all X1 and with those members of X2 which do not display morpheme pl; non pl ac (and st ac) V combine with all X4 and X5 and with those members of X3 which do not display morpheme pl.

A given pl V is always matched by a corresponding non pl V. In combination with V, the plural-marking morpheme is in no instance represented by an unambiguously isolable morph. It is identified with the plural-marking morpheme which combines with members of set q, a morpheme which in certain contexts is clearly represented by an isolable morph. (q is a set of morphemes which are present in some members of X.)

2.2. This section and the ones which follow treat prefixes which precede the Verb base.

neg(ative prefix) labels a morpheme represented by morphs $wé-$, $wó-$, $wú-$. This morpheme is always in word-initial position and is always followed by one or another of the members of the set of prefix sequences labelled X (2.3.). Distribution of allomorphs is as follows: $wó-$ precedes members of X in which the first (or the only) vowel is o (that is to say, one of the mid back rounded vowels); $wú-$ precedes members of X in which the vowel is u or uu; $wé-$ can precede any member of X. (An ethnolinguistic aside: both informants volunteered that forms with $wú-$ and $wó-$ were 'incorrect' and in giving citation forms of utterances recorded on tape requested that $wú-$ and $wó-$ be changed to $wé-$ in the written record. Both of them used the assimilated as well as the unassimilated variants in unguarded speech.)

negative prefix is always accompanied by one or the other of two suffix morphemes following the Verb base. These are $-dí$ negative suffix and $-dá$ obligation (2.23.). negative suffix is always accompanied by negative prefix; obligation need not be accompanied by negative prefix.

Examples follow:

$wé-na-hiiyE-dí$. (neg-X (= q3-k.X2)-V-neg) he didn't want to; he wasn't satisfied.

ho $wé-'o-pii-mi-pi-di$ (P neg-X (= q1-k.X2)-V-opt-dub-neg) if I hadn't gone in.

$wó-'o-pii-mi-da$. (neg-X (= q1-k.X2)-V-opt-obl) I'd better not go out.

One class of minimum Verb word consists of a (2.3) sequence of X plus indep V. Such a sequence can occur in isolation. An occurrence of an X is always followed in the same word by an occurrence of an indep V in base-final position, but not vice versa.

A sequence of one or more morphemes may intervene between X and base-final indep V. One or more of these intervening morphemes may also be members of class indep V. When, in the sections following, it is said that X 'combines with' V, the intended reference is always to indep V in base-final position, and to no other.

Members of X mark (among other things) various combinations among categories of person and number. Some members mark person of agent, some mark person of recipient, and some mark person of possessor. (These referents, and others, are treated in sections following.)

imp X = imperative X, a subclass whose members are mutually incompatible with all suffixes which follow the Verb base except the morpheme continuative (see 2.23.); non imp X = non-imperative X, a subclass whose members combine with restriction with Verb suffixes.

non imp X and imp X are treated separately in the following sections. In sections 2.3. - 2.13. statements concerning X are intended to apply only to non-imp X, and in 2.14. - 2.20. only to imp X.

Some X combine only with st V; the remainder combine only with ac V.

Of those X which combine with st V, some combine both with non pl V and pl V (these are listed as set X1 under 2.4.); of the remainder, some combine only with non pl V and the rest with pl V (these two groups--listed under 2.5.1. and 2.5.2 respectively--are referred to together as set X2).

Of those X which combine with ac V, some combine both with non pl V and pl V (these are listed as sets X4 and X5 under 2.7. and 2.8. respectively); of the remainder some combine only with non pl V and the remainder with pl V (these two groups--listed under 2.6.1. and 2.6.2. respectively--are referred to together as set X3)

(Further criteria for the establishment of these sets are given under 2.9.)

All X can occur without any accompanying pN. All X can occur preceded by a single pN. The members of some subsets--namely X2 and X3--can be preceded by no more than one pN. Members of the remaining subsets--X1, X4, X5--can occur preceded by a sequence of two pN. (X5 is distributionally distinct from the other four sets and is treated separately below.) The remarks of the immediately following paragraphs apply only to X1 through X4.

Each member of set X4 may occur preceded by a sequence

of two pronoun words. Combinations are as follows (as to relative order, see below):

naa he' and naa he'i-n co-occur with do'- 1st person singular agent acting upon 3d person recipient; 'y he', 'y he'i-n naá'- 2d sg on 3d; he' he', he' he'i-n mán'- 3d sg on (non-identical) 3d; naa'i-n he', naa'i-n he'i-n 'án'- 1st dual on 3d and 'ii- 1st plural on 3d; 'u-n he', 'u-n he', 'u-n he'i-n dÉn- non-1st du on 3d and 'óbiin- 2d pl on 3d; he'i-n he', he'i-n he'i-n den- non-1st du on 3d and dii- 3d pl on 3d

The pronoun associations of X4 form a kind of double paradigm in which there are two sets of independently varying variants. One of these sets consists of he' 3d sg and he'i-n 3d non-sg, either of which can occur with any member of X4. The other set consists of naa, 'y, he', naa-i-n 'u-n, he'i-n; each member of this latter set occurs only with certain specified members of X4: naa with do-, 'y with naa-, etc. the latter set is referred to as pNi and the former as pNii.

In a given utterance both a representative of i and of ii may be present, one or the other may be present, or neither may be present.

In the listing of pN combinations given above, the pNi is in every case placed preceding the pNii. This is not intended as a statement of relative order. As can be seen in the illustrations below the relative position of

of the two pN is not fixed. Thus, naa'in he' 'án-tay.
and he' naa'in 'án-tay. we do know him. In some cases
 pNii follows rather than precedes the Verb word. Thus,
 dó-tay he'. I know him.

Members of set X1, like members of X4, can occur
 preceded by a sequence of two pN representing two inde-
 pendently varying sets of variants. One of these sets is
 identical with pNi associated with X4. The other--called
 pNiii--shares a feature with pNii associated with X4, namely,
 that it consists of a set of pN which in association with
 any X1 can occur either with or without the morpheme non-sg.
 (Examples are given under 2.4.)

In a given utterance both a representative of i and
 of iii may be present, one or the other may be present,
 or neither may be present.

Each member of set X2 and each member of set X3 can
 occur preceded by a single pN. The set of pN which combine
 with members of X2 and with members of X3 is the same as
 pNi associated with X1 and X4.

In each of the three sets, X2, X3, X4, each member
 has in the other two sets a counterpart which combines with
 the same pNi. And each of the X2-X3-X-4 triplets except
 one has in X1 a corresponding member which combines with
 the same pNi. The exception is the (non-1st du) triplet
 X2 da, X3, dēn, X4 dēn, each of which combines with 'un and
 he'in. X1 dēn-(2d-du) combines with 'un, and X1 dēn (3d du)

combines with he'in.

Combinations involving members of X1 through X4 and pN_i are as follows: X which combine with naa or naa'i-n are those which are labelled 1st person in the listing under .4-.7. below; X which combine with 'u or only with 'u-n are those which are labelled 2d; X which combine with he' or only with he'i-n are those which are labelled 3d; X which combine now with 'u-n, now with he'i-n are those which are labelled non-1st. X which combine with a pN_i which is not in combination with morpheme non-sg are those which are labelled sg; X which combine with a pN_i which is in combination with morpheme non-sg are those which are labelled du(al) and those which are labelled pl(ural).

pN_i in association with X4 mark person and number of agent not identical with recipient; with X3, person and number of agent identical with recipient or alternatively of agent without recipient; with X2, person and number of recipient; with X1, person and number of possessor (with some verbs) or of agent (with other verbs).

pN_i_i (always in association with X4) mark person and number of recipient.

pN_i_{ii} (always in association with X1) mark person and number of recipient.

Each member of X5 can occur preceded by a sequence of two pN, representing two variant sets. The relative order of the two sets is fixed. The prior-occurring set is

referred to as pN_{iV} and the set that follows is referred to as pN_V . pN_{iV} are always immediately followed by a morpheme of phonemic shape -di whose 'meaning' is: preceding noun marks person and number of agent. (pN_V mark person and number of recipient.)

Combinations involving members of X5 and pN_{iV} are as follows: X5 which combines with naa and naa'in is labelled 1st person agent acts on... under 2.8. ; those which combine with he' and he'in alone are labelled 3d on...; that which combines with he' and he'in, 'u and 'un is labelled non-1st on....

Combinations involving members of X5 and pN_V are as follows: X5 which combine with 'u and 'un are labelled ...on 2d person recipient ; that which combines with he' and he'in is labelled ...on 3d; that which combines with naa and naa'in is labelled ...on 1st.

pN_{iV} + -di can occur after the verb word rather than preceding it.

In a given utterance both a representative of iv and v may be present, one or the other may be present, or neither may be present.

(In sections following this one, where members of X are listed, a paragraph of numbered examples is succeeded by a paragraph of morphemic break-downs--giving either specific morpheme labels or class labels--numbered to correspond to the examples in the preceding paragraph.)

2.4. X1

sg

dín-1st: (1) din-han. I have something broken, it broke on me; din-hwi. I have it trapped, I caught it in a trap; dín-'E'E. I have it coming, it's on its way to me; dim-po'a. it came to me (I have it having come); (2) hwíi-kan-'i dín-k'ó. I have a table; (3) kee dín-k'wón. I have several bears; (4) dín-suwa-mu. I have it warm; (5) naa dín-kwiyó-'En. I have a wife; (6) naa dín-hangim-po he'. I heard him; (7) he'i-n dín-hangim-po. I heard them; 'u dín-hangim-po. I heard you sg; 'u-n dín-hangim-po. I heard you non sg; (8) dín-kyaa-tíi. I have something spilled.

(1) st V; (2) non pl st ac V; (3) pl st ac V; (4) dep V + indep st V; (5) pN_i N + V; (6) pN_i stV + st V pN_{iii}; (7) pN_{iii} stV + st V; (8) ac V + st V.

'úh- 2d: (1) 'úh-kú-mí. keep it! (2) 'u 'úh-kyaa-tíi. you sg have it spilled; (3) naa 'úh-hangim-po. you sg heard me; na'i-n 'úh-hangim-po. you sg heard us; he' 'úh-hangim-po. you sg heard him; he'i-n 'úh-hangim-po. you sg heard them; (4) 'úh-k'ege-ná. you sg have a house.

(1) non pl st ac V + opt; (2) pN_i ac V + st V; (3) pN_{iii} st V + st V; (4) N + st V.

'úy- 3d: (1) 'óyó 'úy-po. he's had the opportunity; (2) heyan 'eeyEE 'úy-k'wón. how many children has he? (3) 'u-n 'úy-de'-hangim-po. he heard you non sg; (4) he' naa 'úy-hangim-po. he heard me; he'ne-n 'úy-hangim-po. he heard

us; he' 'y 'yy-hangim-po. he heard you sg; he' he' 'yy-hangim-po. he heard him; (5) mele 'i-bi'-p'ó-de 'uu-k'ó di'. she has the pot on her head.

(1) P st V; (2) P N + non sg pl st ac V; (3) pN_{iii} f-st V + st V; (4) pN_i pN_{iii} st V + st V; (5) N pN-'s-N-f non pl st ac V.

du

gáh-1st: (1) gáh-hangim-po. we du heard him; (2) na'i-n gáh-k'ege-ná. we du have a house; (3) 'y gáh-hangim-po. we du heard you sg; he' gáh-hangim-po. we du heard him.

(1) st V + st V; (2) pN_i N + st V; (3) pN_{iii} st V + st V.

déh- 2d: (1) déh-k'ege-ná. you du have a house; (2) 'u-n déh-k'ege-ná. you du have a house.

(1) N + st V; (2) pN_i N + st V.

dén- 3d: (1) dén-k'ege-ná. they du have a house; (2) p'anu dén-'éey_{EE}-k'wón di'. they have five children; (3) kee dén-'En. they du have a bear; (4) he'i-n na'i-n dén-hangim-po. they du heard us; he'i-n he'i-n dén-hangim-po. they du heard them.

(1) N + st V; (2) P N + non sg + pl st ac V P; (3) N non pl st ac V; (4) pN_i pN_{iii} st V + st V.

pl

gih- 1st: (1) gih-k'ege-ná. we pl have a house; (2) na'i-n gih-k'ege-ná. we pl have a house; (3) he' gih-hangim-po. we pl heard him.

- 'oh- 2d: (1) 'oh-k'ege-na. you pl have a house;
 (2) di 'u-n 'oh-khu^uly^u-saa. do you pl have corn growing?
 (3) di na'i-n 'oh-hangim-po. did you pl hear us?

(1) N + st V; (2) P pN_i N + st V; (3) P pN_{ii} st V
 + st V.

- doo- 3d: (1) doo-khu^uly^u-saa. they have corn growing;
 (2) he'i-n doo-khu^uly^u-saa. they have corn growing; (3) he'i-
 n naa doo-hangim-po. they pl heard me; he'i-n 'u-n doo-
 hangim-po. they pl heard you non sg.

(1) N + pl st V; (2) pN_i N + pl st V; (3) pN_i +
 pN_{iii} st V + st V.

2.5. X2

2.5.1. non-pl

sg

- 'o-1st: (1) 'o-khyan. I ran away; 'o-sa'a. I'm
thirsty; 'o-hee. I'm sick; 'o-na'a. I want; (2) 'o-win.
I'm standing; (3) o'k'ó. I'm lying; 'o-En. I'm sitting;
 (4) naa 'o-na'a. I want.

(1) st V; (2) st ac V; (3) non pl st ac V; (4) pN_i
 st V.

- 'u 2d: (1) 'u-na'a. you sg wanted; (2) 'u-win. you
sg were standing; (3) 'u-k'ó. you sg were lying; (4) 'u wen
 'u-k'ó. you sg were lying.

(1) st V; (2) st ac V; (3) non-pl st ac V; (4) pN_i
 P non pl st ac V.

- na- 3d: (1) na-hwi. it is trapped; (2) na-kyan. it's
growing; (3) na-han. it is broken; na-mE-n. he's going;

na-'E'E. he's coming; (4) he' na-k'ó. he is lying; (5)
 he' na-tha-mu. he's broke.

(1) st V; (2) non pl st V; (3) st ac V; (4) pN_i non pl
 st ac V; (5) pN_i ac V + st V.

du

ga- 1st: (1) ga-k'ó. we du were lying; (2) na'i-n
 ga-sa'a. we du are thirsty.

(1) non pl st ac V; (2) pN_i st V.

da non 1st: (1) di da-sa'a. are you du thirsty? (2)
 da-kyan. non we du are growing; (3) da-k'ó. non we du are
 lying; (4) 'u-n da-k'ó. you do were lying; he'i-n da-k'ó.
they du were lying.

(1) P st V; (2) non pl st V; (3) non pl st ac V; (4)
 pN_i non pl st ac V.

2.5.2. pl

gi- 1st: (1) gi'-hee. we pl are sick; (2) gi-k'wón.
we pl were lying; (3) na'i-n gi-mE. we pl went.

(1) st V; (2) pl st ac V; (3) pN_i st ac V.

'i- 2d: 'i-k'wón. you pl were lying; (2) 'u-n 'i-na'a.
you pl want.

(1) pl st ac V; (2) pN_i st V.

di- 3d: (1) di-hee. they pl are sick; (2) di-saa.
they pl are growing; (3) he'i-n di-k'wón. they pl are lying.

(1) st V; (2) pl st V; (3) pN_i pl st ac V.

2.6. X3

2.6.1. non-pl

sg

dii- 1st: (1) dii-mowa. I finished; dii-mun. I saw myself; dii-hwaye. I lowered myself; dii-khyaw. I got up; (2) dii-soge. I sat down; dii-k'wii. I lay down; (3) dii-hwii-'o. I'm eating; (4) naa dii-wo'a. I paid; (5) naa dii-hwii-kan-t'o. I'm going to eat.

(1) ac V; (2) non pl st ac V; (3) ac V + ac V; (4) pN_i ac V; (5) pN_i ac V + ac V.

bi- 2d: (1) di bi-mowa. did you sg finish? (2) di bi-hwii-'o. are you sg eating? (3) 'u bi-maak'a-'o. you sg are learning.

(1) P ac V; (2) P ac V + ac V; (3) pN_i st V + ac V.

'i- 3d: (1) 'i-mun. he saw himself; (2) 'i-wiinu. he stood up; (3) 'i-hwii-'o. he's eating; (4) he' 'i-k'wii. he lay down.

(1) ac V; (2) st ac V; (3) ac V + ac V; (4) pN_i non pl st ac V.

du

'an- 1st: (1) 'an-tay. we du know each other; 'an-khyaw. we du got up; (2) 'an-k'wii. we du lay down; (3) 'an-cika-mEEyyu. we du waited for each other; (4) yo 'an-k'uwa-mi. let's du lie down; (5) na'i-n 'an-hwii-'o. we du are eating.

(1) ac V; (2) non pl st ac V; (3) st V + ac V; (4) P non pl st ac V; (5) pN_i ac V + ac V.

den- non 1st: (1) dem-mun. non we du saw each other; (2) den-k'wii. non we du lay down; (3) den-hwii-'o. non we

du are eating; (4) di 'u-n den-tay. do you du know each other? (5) 'u-n dem-maak'a-'o. you du are learning; he'i-n dem-maak'a-o. they du are learning; (6) he' i-n den-tay. they du know each other.

(1) ac V; (2) non pl st ac V; (3) ac V + ac V; (4) P pN_i ac V; (5) pN_i st V + ac V; (6) pN_i st V.

2.6.2. pl

'ibi- 1st: (1) 'ibi-mowa. we pl finished; 'ibi-khyaw. we pl got up; (2) 'ibi-k'woodi. we pl lay down; (3) na'i-n 'ibi-hwii-'o. we pl are eating.

(1) ac V; (2) pl st ac V; (3) pN_i ac V + ac V.

'obi- 2d: (1) di 'obi-mowa. did you pl finish? (2) di 'obi-k'woodi. did you pl lie down? (3) 'obi-maak'a-'o. you pl are learning; (4) 'u-n wé-'obi-'o-di. you pl are not doing it.

(1) P ac V; (2) P pl st ac V; (3) st V + ac V; (4) pN_i f ac V-f.

dibi- 3d: (1) dibi-mowa. they finished; (2) dibi-k'woodi. they pl lay down; (3) he'i-n dibi-hwii-o. they pl are eating.

(1) ac V; (2) pl st ac V; (3) pN_i ac V + ac V.

2.7. X4

sg

dó- 1st on 3d: (1) dó-mowa. I finished it; dó-thaa. I broke it; dó-mEEge. I gave it away; dó-kwi. I took it away; dó-tELe. I pulled it; do-hwaye. I lowered it; dó-'an.

I did it; do-mEEyu. I'm holding it; do-yon. I commanded him; (2) do-haabe. I broke it; (3) do-k'wii. I put it down; (4) do-k'woodi. I put them down; (5) naa do-mEEge. I gave it; (6) naa do-tay he'. I know him.

(1) ac V; (2) st ac V; (3) non pl st ac V; (4) pl st ac V; (5) pN_i ac V; (6) pN_i ac V pN_{ii}.

naa- 2d on 3d: (1) naa-tay. you know him; (2) naa-kuwa-mi. put it down! (3) naa-k'woo-mi put them down! (4) 'u naa-tay. you know him; (5) kan he' naa-tay. remember, you know him; (6) 'u naa-tay he'. remember, you know him.

(1) ac V; (2) non pl st ac V; (3) pl st ac V; (4) pN_i ac V; (5) P pN_{ii} ac V; (6) pN_i ac V pN_{ii}.

man- 3d on 3d: (1) man-tay. he knows him; (2) man-ka'. he brought it; (3) man-k'wii. he put it down; (4) man-k'woodi. he put them down; (5) he' he' man-tay. he knows him; (6) he' he'i-m man-tay. he knows them.

(1) ac V; (2) st ac V; (3) non pl st ac V; (4) pl st ac V; (5) pN pN ac V; (6) pN_i pN_{ii} ac V.

du.

'an- 1st on 3d: (1) 'an-tay. we du know him; (2) 'an-haabe. we du broke it; (3) 'an-k'wii. we du put it down; (4) 'an-k'woodi. we du put them down; (5) na'i-n 'an-kume'. we du bought it; (6) yo 'an-kume'-mi. let's du buy it; (7) yo he' 'an-kume'-mi. let's du buy it; yo he'i-n 'an-kume'-mi. let's du buy them; (8) na'i-n he' 'an-tay. we du know him; na'i-n he'i-n 'an-tay. we du know them; (9) he' na'i-n 'an-tay. we du know him.

(1) ac V; (2) st ac V; (3) non pl st ac V; (4) pl st ac V; (5) pN_i ac V; (6) P ac V; (7) P pN_{ii} ac V; (8) pN_i pN_{ii} ac V; (9) pN_{ii} pN_i ac V.

dén- non 1st on 3d: (1) dé'n-tay. non we du know him; (2) dé'n-haabe. non we du broke it; (3) 'u-n dé'n-haabe. you du broke it; (4) he'i-n dé'n-k'wii'. they du put it down; (5) he'i-n dé'n-k'woodi. they du put them down; (6) he'i-n dé'n-tay he'. they du know him; he'i-n dé'n-tay he'i-n they du know them; (7) he'i-n he' dé'n-tay. they du know him; 'u-n he' dé'n-tay. you du know him; 'u-n he'i-n dé'n-tay. you du know them.

(1) ac V; (2) st ac V; (3) pN_i st ac V; (4) pN_i non pl st ac V; (5) pN_i pl st ac V; (6) pN_i ac V pN_{ii}; (7) pN_i pN_{ii} ac V.

pl
'ii-ist on 3d: (1) 'ii-tay. we pl know him; 'ii-thaa. we pl broke it; (2) 'ii-haabe. we pl broke it; (3) 'ii-k'wii'. we pl put it down; (4) 'ii-k'woodi. we pl put them down; (5) na'i-n 'ii-tay. we pl know him; (6) na'i-n he' 'ii-tay. we pl know him; na'i-n he'i-n 'ii-tay. we pl know them.

(1) ac V; (2) st ac V; (3) non pl st ac V; (4) pl st ac V; (5) pN_i ac V; (6) pN_i pN_{ii} ac V.

'obiin- 2d on 3d: (1) 'obiin-tay. you pl know him; (2) 'obiin-haabe. you pl broke it; (3) 'obiin-k'wii'. you pl put it down; (4) 'obiin-k'woodi. you pl put them down; (5) he' 'obiin-tay. you pl know him; he'i-n 'obiin-tay. you pl know them; (6) 'u-n he' 'obiin-tay. you pl know him;

(1) ac V; (2) st ac V; (3) non pl st ac V; (4) pl st ac V; (5) pN_{ii} ac V; (6) pN_i pN_{ii} ac V.

dii- 3d on 3d: (1) dii-mEEge. they pl gave it; (2) dii-haabe. they pl broke it; (3) dii-k'wii'. they pl put it down; (4) dii-k'woodi. they pl put them down; (5) dii-tay he'. they pl know him; (6) he'i-n dii-tay he'i-n. they pl know them.

(1) ac V; (2) st ac V; (3) non pl st ac V; (4) pl st ac V; (5) ac V pN_{ii}; (6) pN_i ac V pN_{ii}.

2.8. X5

wi- 1st (agent) on 2d (recipient): (1) wi-tay. I or we know you; (2) naa-di wi-tay. I know you; (3) naa-di 'u wi-tay. I know you sg; (4) na'i-n-di wi-tay. we know you; (5) na'i-n-di 'u wi-tay. we know you sg.

(1) ac V; (2) pN_{iV-ag} ac V; (3) pN_{iV-ag} pN_V ac V; (4) pN_{iV-non sg-ag} ac V; (5) pN_{iV-non sg-ag} pN_V ac V.

woo- 3d on 2d: (1) woo-tay. he or they know you; (2) he'-di woo-tay. he knows you; (3) woo-tay he'-di. he knows you; (4) he'-di 'u woo-tay. he knows you sg; (5) he'i-n-di woo-tay. they know you; (6) he'i-n-di 'u woo-tay. they know you sg.

(1) ac V; (2) pN_{iV-ag} ac V; (3) ac V pN_{iV-ag}; (4) pN_{iV-ag} pN_V ac V; (5) pN_{iV-non sg-ag} ac V; (6) pN_{iV-non sg-ag} pN_V ac V.

'oo- 3d on 3d: (1) 'oo-tay. he or they know him or them; (2) he'-di 'oo-tay. he knows him or them; (3) he'-

di he' 'oo-tay. he knows him; (4) he'i-n-di 'oo-tay. they know him or them; (5) he'i-n-di he' 'oo-tay. they know him.

(1) ac V; (2) pN_{iV}-ag ac V; (3) pN_{iV}-ag pN_V ac V;
(4) pN_{iV}-non sg-ag ac V; (5) pN_{iV}-non sg-ag pN_V ac V.

di- non 1st on 1st: (1) 'u-di di-tay. you sg know me or us; (2) 'u-di naa di-tay. you sg know me; (3) 'u-di na'i-n di-tay. you sg know us; (4) 'u-n-di naa di-tay. you non sg know me; (5) he'-di na'i-n di-tay. he knows us; (6) he'i-n-di na'i-n di-tay. they know us.

(1) pN_{iV}-ag ac V; (2) pN_{iV}-ag pN_V ac V; (3) pN_{iV}-ag pN_V-non sg; (4) pN_{iV}-non sg-ag pN_V ac V; (5) pN_{iV}-ag pN_V-non sg ac V; (6) pN_{iV}-non sg-ag pN_V-non sg ac V.

An additional member of X5 occurs only in combination with y2 and y3 (2.13.)

2.9. Segmentation of the members of X yields a number of morphs which appear in contexts paralleling those in which appear sequences of morphs. Such refractory morphs are said to be simultaneous representations of more than one morpheme; in the list that follows such morphs are marked pt. (= port-manteau).

Morphs listed under 2.9.1. are grouped together as morpheme quantified 1st person; 2.9.2. quantified 2nd person; 2.9.3. quantified 3d person; 2.9.4. quantified non-1st person. These morphemes are said to constitute set quantified person (abbreviated q).

Morphs listed under 2.9.5. are grouped together as Morpheme dual (du); 2.9.6. plural (pl). These morphemes are said to constitute set number (n).

Morphs listed under 2.9.7. are grouped together as Morpheme k1 (= constant member of X1); 2.9.8. k2; 2.9.9. k3; 2.9.10. k4. These morphemes are said to constitute set constant (k).

Each member of each of the three sets defined above is mutually incompatible with the other members of its class.

Each of the members of X1, X2, X3, and X4 consists of a sequence--in the order mentioned--of either (a) one member each of set q, set n, set k, or (b) one member each of set q, set k. (The constituents of X5 are another, entirely different group of morphemes.) The bi-morphemic members of X1 through X4 are those listed in the several places above under the heading sg. The category of sg is defined as contrastive absence of any member of set n (that is, there are pairs of X which differ in morphemic constituency only in the presence and absence of some member of n).

(In segmenting members of X we extract components of tone from units which are considered single phonemes. Elsewhere in this description a vowel symbol with an acute accent indicates a vowel phoneme with high tone and a vowel symbol without accent indicates a vowel phoneme with low tone. In the listing of segments below, high tone is marked by acute accent; low tone is marked by grave accent; a vowel symbol

without accent indicates a vowel phoneme from which the tone component is considered extracted.)

2.9.1. 1st sg: d-X1, X3, X4; 'o- X2. (dín-, díi-,
dó-dò-; 'ò-)

1st du: g- X1, X2; '-X3, X4. (gáh-, gá-; 'àn-, -'án-)

1st pl: idem (gih-, gi-; 'ibi- 'ii-)

2.9.2. 2d sg: 'u- X1, X2; b- X3; náá- má- mà-
(pt. k4) X4. ('úh-, 'ù-; bí-; náá- má- mà-)

2d du: de-(pt. du) X1. (déh-)

2d pl: '-X2; 'ób- X4; 'o-(pt. pl) X1, X3. ('i-;
'obiin-; 'oh-, 'obi-)

2.9.3. 3d sg: na- X2; '-X3; 'úú- (pt. k1) X1; mán- (pt.
k4) X4. (ná-; 'i-; 'úú-; mán-)

3d du: d- X1. (dén-)

3d pl: d-X1, X2, X3, X4. (doo-, di-, dibí-, dii-)

2.9.4. non 1st du: d-X2, X3, X4. (dà-, dèn-, dén-)

2.9.5. 1st du: -a- X1, X2, X3, X4. (gáh-, gá-, 'án-,
'an-)

2d du: de- (pt. 2d) X1. (déh)

3d du: -e- X1. (dén)

non 1st du: -a- X2; -e- X3, X4. (gá-; dèn-, dén-)

2.9.6. 1st pl: -i- X1, X2, X3, X4. (gih-, gi-,
'ibi-, 'ii-)

2d pl: -i- X2, X4; 'o- (pt. 2d) X1, X3. ('i- 'obiin-;
'oh-, 'obi-)

3d pl: -i- X2, X3, X4; -oo- (pt. k1) X1. (di-, dibi-,
dii-; doo-)

2.9.7. k1: -in-1st sg; ...h-2d sg, 1st du, 2d du
1st pl, 2d pl; ...n- 3d du; -oo- (pt. pl) 3d pl; 'uu- (pt. 3d)
3d sg. (din-; 'uh-, gah-, gih-, 'oh-; deh-, den-; doo-; 'uu-)

2.9.8. k2: ... 1st sg, 2d sg, 3d sg, 1st du, non 1st du,
1st pl, 2d pl, 3d pl. ('o-, 'u-, na-, ga-, da-, gi-, 'i-,
di-)

2.9.9. k3: -ii- 1st sg; -i- 2d sg, 3d sg; ...n- 1st du,
non 1st du; ...bi- 1st pl, 2d pl, 3d pl. (dii-; bi-, 'i-;
'an-, den-; 'ibi-, 'obi-, dibi-)

2.0.10. k4: -o- ~ -o- 1st sg; naa- ~ ma- ~ ma- (pt. 2d)
2d sg; man- (pt. 3d) 3d sg; ...n- 1st du, non 1st du;
...i- 1st pl; ...i- 3d pl; ...-in- 2d pl. (do- ~ do-; naa- ~ ma- ~
ma-; man-; 'an-, den-; 'ii-; dii-; 'obiin-)

2.10. Morphemes of which members of X5 are composed are
as follows (ag = agent; recip = recipient).

2.10.1. 1st (person)ag: -i- in 2d recip + ___ + y1.
(w-i-, w-i-n-)

2.10.2. 3d ag: -oo-in 2d recip + ___, 3d recip + ___;
-o- in 2d recip + ___ + y1, 3d recip + ___ + y1; -o- in
3d recip + ___ + (y2, y3). (w-oo-, 'oo-; w-o-n-, 'o-n-; 'o-ben-,
'o-bee-)

2.10.3. non 2d ag: -o- in 2d recip + ___ + (y2, y3).
(w-ò-bén-, w-ò-bée-)

2.10.4. 3d recip: ' - in ___ + 3d ag + (y1, y2, y3).
('-òò-, '-ò-n, '-ò-bén, '-ò-bée)

2.10.5. 2d recip: w-in ___ + 1st ag + y1, ___ + 3d ag
+ y1, ___ - non 2d ag + (y2, y3). (w-i-, w-i-n-, w-ò-, w-ò-n-,
w-ò-bén-, w-ò-bée-)

2.10.6. 1st recip: di- in ___ + y1. (di-, di-n-)

2.11. The meaning of the construction X + ac V (i.e., Verb base consisting of or terminating in ac V or st ac V) is (with qualifications to be noted): recipient is undergoing a specified action performed by agent. The presence of k⁴ signals that the associated member of q marks person of agent and that recipient, non-identical with agent, is 3d in person. Thus: d-ò-k'wii'. (q1-k⁴-st ac V) I put it down. The presence of k³, with some Verb bases, signals that agent and recipient are identical, the person being marked by the associated member of q. Thus: dii-k'wii'. (q1-k³-st ac V) I lay down (cf. d-ò-k'wii'. I put it down). With other Verb bases, the presence of k³ signals that associated member of q marks person of agent, recipient being left unmentioned. Thus: dii-wo'a'. (q1-k³-ac V) I paid; cf. d-ò-wo'a'. (q1-k⁴-ac V) I paid him.

The meaning of the construction X² + st V is: recipient

is in a specified state. The presence of k2 signals that the associated member of q marks person of recipient. Thus: 'ò-k'ó. (q1-k2-st ac V) I'm lying (k'ó lie being the stative counterpart of k'wii--cited above--place in a lying position).

The meaning of the construction X1 + st V is: recipient, in a specified state, is possessed. The presence of K1 signals that the associated member of q marks person of possessor. Thus: dín-k'ó. (q1-k1-st ac V) I have something, lying. (Person of recipient may be marked by associated pN_{iii}; when there is no pN_{iii}, the Verb word is often translated as if the recipient were marked as 3d in person.)

2.12. y labels a set of prefixes whose members--mutually incompatible with one another--occur in the position immediately following X; an occurrence of any y is always accompanied by an occurrence of one or another of the members of a certain subset of X. Members of y are as follows (assignment of meanings to these morphemes is deferred to the discussion below):

-n- (y1): d'ò-n-k'umè-n. (q1-k4-...-ac V-prog) I'm buying it for him.

-bén- (y2): d'ò-bén-k'umè-n. I'm buying it for them du.

-bee- (y3): d'ò-bee-k'umè-n. I'm buying it for them pl.

When in combination with a Verb base consisting of or terminating in one or another of the members of a certain

subclass of V, a member of y signals that the recipient marked by the associated member of X stands in a relationship of indirect recipient to the agent marked by that member of X (and that there is a 3d-person direct recipient). When standing in combinations of this sort y1, y2, and y3 mark the number--sg, du, and pl, respectively--of this indirect recipient--except in cases in which X5 dí- (1st person recipient) is involved; dí- is one of those members of X5 which combine only with y1 (see list given below); when in combination with dí-, y1 merely signals that the recipient marked by dí- is indirect. (In the listing of examples below, Verb k'wii (non pl) and k'woódi (pl) place in lying position, give exemplify the subclass of V referred to above.)

In other combinations involving V (in base-final position) of another, different subclass the members of y mark the number of the recipient whose person is marked by the preceding member of X. Here, however, only y2 and y3 are involved. Instead of triplets of the sort cited above (dónkumèn, dòbénkumèn, dòbèekumèn I'm buying it for him, them du, them pl, respectively) there are triplets in which Verb words including y2 and y3 are matched against words in which no member of y is present; thus: dó-tày. I know him, dò-bén-tày. I know them du, dò-bèe-tày. I know them pl. (In the listing of examples below, Verb tay know serves to exemplify this second subclass of V.)

2.13. Members of X which combine with members of y are as

follows.

X4

dó- (+ y1) ~ dò- (+ y2, y3) 1st sg on 3d (q1-k4):

(1) dó-n-k'wii. I gave it to him; (2) naa-di he'i-n do-bén-k'wii. I gave it to them du; (3) naa-di do-bée-k'woódi. I gave it to them pl; (4) he'i-n do-bén-tay. I know them du; he'i-n do-bée-tay. I know them pl (cf. he' dó-tay. I know him).

(1) -y1-non pl st ac V; (2) pN_i-ag pN_{ii}-non sg -y2-non pl st ac V; (3) pN_i-ag -y3-pl st ac V; (4) pN_{ii}-non sg -y2, -y3-ac V (cf. pN_{ii} ac V).

má- (+ y1) ~ ma- (+ y2, y3) 2d sg on 3d (q2-k4):

(1) má-n-k'wii. you sg gave it to him; (2) 'y he'i-m ma-bén-k'wii. you sg gave it to them du; (3) 'y ma-bée-k'woódi. you sg gave it to them pl; (4) he'i-m ma-bén-tay. you sg know them du; he'i-m ma-bée-tay. you sg know them pl (cf. he' naá-tay. you sg know him).

(1) -y1-non pl st ac V; (2) pN_i pN_{ii}-non sg -y2-non pl st ac V; (3) pN_i -y3-pl st ac V; (4) pN_{ii}-non sg -y2, -y3-ac V (cf. pN_{ii} ac V).

X5

'ó- (+ y1) ~ 'o- (+ y2, y3) 3d on 3d (3d recip-3d ag):

(1) he'-di 'ó-n-k'wii. he gave it to him; (2) he'i-n-di 'ó-n-k'wii. they gave it to him; (3) he'-di 'o-bén-k'wii. he gave it to them du; (4) he'-di 'o-bée-k'woódi. he gave it to them pl; (5) 'o-bén-tay. he or they know them du;

'o-bée-tay. he or they know them pl (cf. 'oo-tay. he or they know him or them). (1) pN_{iV}-ag -yl-non pl st ac V; (2) pN_{iV}-non sg-ag -yl-non pl st ac V; (3) pN_{iV}-ag -y2-non pl st ac V; (4) pN_{iV}-ag - y3-pl st ac V; (5) -y2, -y3-ac V (cf. ac V).

The three members of X5 listed next combine only with yl.

dí- non lst on lst: (1) he'-di dí-n-k'wii'. he gave it to me; 'u-di dí-n-k'wii'. you gave it to me; (2) he'-di na'i-n dí-n-k'wii'. he gave it to us du; (3) 'u-di na'i-n dí-n-k'woodi. you gave it to us all; (4) he'i-n-di naa dí-n-k'wii'. they gave it to me. (cf. he'-di na'i-n dí-tay. he knows us).

(1) pN_{iV}-ag -yl-non pl st ac V; (2) pN_{iV}-ag pN_v-non sg - yl-non pl st ac V; (3) pN_{iV}-ag pN_v-non sg - yl-pl st ac V; (4) pN_{iV}-non sg-ag pN_v - yl-non pl st ac V (cf. pN_{iV}-ag pN_v- non sg ac V).

wí- lst on 2d (2d recip-1st ag): (1) naa-di wí-n-k'wii'. I gave it to you; (2) na'i-n-di wí-n-k'wii'. we gave it to you.

(1) pN_{iV}-ag - yl-non pl st ac V; (2) pN_{iV}-non sg-ag - yl-non pl st ac V.

wó- 3d on 2d (2d recip-3d ag): (1) he'-di wó-n-k'wii'. he gave it to you; (2) he'i-n-di wó-n-k'wii'. they gave it to you.

(1) pN_{iV}-ag - yl-non pl st ac V; (2) pN_{iV}-non sg-ag -yl-non pl st ac V.

The member of X5 listed next below is in all of its occurrences in combination either with y2 or y3.

wo- non 2d on 2d (2d recip-non 2d ag): (1) naa-di-wo-ben-k'wii. I gave it to you du' he'-di wo-ben-k'wii. he gave it to you du; (2) naa-di wo-bee-k'woodi. I gave it to you pl; he'-di wo-bee-k'woodi. he gave it to you pl; (3) na i-n-di wo-ben-k'wii. we gave it to you do; (4) he'i-n-di wo-bee-k'woodi. they gave it to you pl.

(1) pN_{iV}-ag -y2-non pl st ac V; (2) pN_{iV}-ag -y3-pl st ac V; (3) pN_{iV}-non sg-ag -y2-non pl st ac V; (4) pN_{iV}-non sg-ag -y3-pl st ac V.

Imperative X are as follows.

2.14. X2

'o- sg: 'o-p'uu. go away! 'o-k'E'E. come!

ba- du: ba-p'uu. go away, you do! ba-k'E'E. come, you do!

bi- pl: bi-p'uu. go away, you pl! by-k'E'E. come, you pl!

2.15. X3

'o- ~ 'o- sg: 'o-sooge. sit down! 'o-hwii-'a. eat!

ba- ~ ba- du: ba-sooge. sit down, you du!
ba-hwii-'a. eat, you do!

bi- ~ bi- pl: bi-sooge! sit down, you pl!
bi-hwii-'a. eat, you pl!

2.16 X4

na- ~ na- sg on 3d: 'ii na-to. put him in! na-haa-

'a. do that! na-mapi-'a. keep him quiet!

bín- ~ bin- non sg on 3d: bìn-háá-'a. do that, you
non sg; bín-k'wó. put them pl down, you non sg!

2.17. X5

dí- (unspecified number) on 1st: dí-tu-'a hĕlĕ náá-
 tay'i. tell me what you know!

2.18. X4 + y

má- ~ ma-sg on 3d: má-n+'a. give it to him! ma-bén-
 'áyyá-'a. fix them du! ma-bée-'áyyá. fix them pl!

2.19. X5 + y

dí- (unspecified number) on 1st: pháá dí-n-'a. give
it to me!

2.20. Morphemes of which members of imp X are composed are listed below. Morphs listed under 2.20.1. are grouped together as Morpheme imp(erative).

2.20.1. imp sg: 'o- k2,k3; ná- ~ ná- ~ má- ~ má-
 (pt. k4) k4. ('ó-, 'ó- ~ 'o-; ná- ~ ná- ~ má- ~ má-)

imp du: b-k2, k3. (bá-, bá- ~ bà-)

imp pl: idem. (bí-, bí- ~ bi-)

imp non sg: b- k4. (bín- ~ bìn-)

2.20.2. du: -a- k2, k3 (bá-, bá- ~ bà-); (= Morpheme listed under 2.9.5.)

2.20.3. pl: -i- k2, k3 (bí-, bí- ~ bi-); (= 2.9.6.)

2.20.4. non sg: -i- k4. (bín- ~ bìn-)

2.20.5. k2: ... sg, du, pl. ('ò-, bà-, bi-) (= 2.9.8.)

2.20.6. k3: ... sg, du, pl; ... sg, du, pl. ('ò-, bá-, bi-; 'ó-, bá-, bí-) (= 2.9.9.).

2.20.7. k4: ná- ~ ná- ~ má- ~ má- (pt. imp) sg;
 1.1.1. n- ... n- non sg. (ná- ná- má- má-; bín- bín-)
 (= 2.9.10.)

2.20.8. (unspecified number) on 1st: dí-X5. (di-)

2.21. Certain morphemes are always found to occur between X and the Verb base. These prefixes fall into two sets, the members of one (z) always preceding the members of the other (1). Members of z and of i, unlike members of y, are distributionally independent of Pronouns associated with the Verb word.

2.21.1 Members of z are listed below:

c'an just now, just then: dii-c'an-hwii-'an. (q1-k3-...-ac V-ac V) I just ate; dó-c'an-da-ha'. (q1-k4-...-P-ac V) I just ate it; née dó-c'an-da-kwii-t'ó. (P q1-k4-...-P-int) I was just now going to take it away from him.

-de'- all, completely: do-de'-sili'. (q1-k4-...-ac V) I tore it all up.

pí by oneself, requiring no help: ho mam-pí-ka'. (P q3-k4-...-st ac V) he brought it himself; dó-pí-c'ala. (q1-k4-ac V) I cut it myself.

t'e' right away: dii-t'e'-mowa-ndE. (q3-pl-k4-ac V-hab) they always finish it right away; han dii-t'e'-'o-dE. (N q3-pl-k4-ac V-hab) they always do it right away; 'ii do-t'e'-huwa-mí. (D q1-k4-st ac V-opt) I'll take it over right now.

wépi just, only, no more than: han dii-wépi-'o. (N q1-k3-...-ac V-prog) I was just doing that, just pretending; na-wépi-hee-po. (q3-k2-st V-st V) he just got sick; na-wépi-suwa. (q3-k2-st V) it's just warm; 'i-wépi-soge-mEfyu. (q3-k3-...st ac V-ac V) he's just sitting around.

-wii- back, again: na-wii-po'a. (q3-k2-...-st ac V)
he came back; ho do-wii-kee. (P q1-k4-...-ac V) I got it
back; mele man-wii-khwaabe-ma'a. (N q3-k4-...-st ac V-st ac
 V) she's bringing the pot back down; dii-wii-wo'a. (q1-k3-
 ac V) I paid back.

2.21.2. Members of i are listed below. Some members
 of this set bear phonemic-and-semantic resemblance to stems;
 thus: ma'n hand and ma-, a prefix designating actions in which
 the hand may be involved. However, a Noun such as ma'n may
 occur incorporated as part of the Verb word and as such may
 also stand immediately prior to the Verb base. Thus:
 do-ma'n-c'ala. (q1-k4-...-ac V) I cut my hand; cf. do-ma-p'ege.
I pushed it. The same situation holds for the pair 'an foot
 and -'a'- with the foot.

-ni- fasten, attach, make secure (or the opposite there-
of)

+ st V:

na-ni-kyan. (q1-k2) it's sticking up out of the ground;
 cf. na-kyan it's growing, it (non-human) is standing up, as
 illustrated, for example, by mele na-kyan-'i (N q3-k2-stand-
gerund) the pot which is standing up as opposed to mele na-
 k'o-', the pot which lies flat.

+ ac V:

ma'n-ni-mEEyu. (q3-k4) he's holding on to something
which is fastened to something else (as a stick with a flag
 attached to it); cf. ma'm-mEEyu. he's holding it (in the hand).

man-wii-ni-tE1E-n. (q3-k4-z, prog) he's pulling it out (as a nail) again; cf. mán-tE1E-n. he's pulling it.

+ st ac V:

na-ni-k'ó. (q1-k2) he's hanging on, sitting tight (as a man on horseback); cf. na-k'ó. he is lying.

dó-ni-k'wii'. (q1-kr) I inserted it slightly (as a needle in a pin cushion); cf. dó-k'wii'. I put it down (k'wii' = active counterpart of stative k'ó, above).

dó-c'an-ni-toge. (q1-k4-z) I just now inserted it; cf. dó-toge. I put it in (as bread in oven, children in school).

na-ni-c'un. (q3-k2) it went in, it punctured (as a tack).

dó-ni-yún. (q1-k4) I punctured it; cf. 'o-bée-yún. (3d recip-3d ag-y3) they're giving them injections (yún = active counterpart of stative c'un, above).

na-ni-'En. (q3-k2) it's fastend on, he's hanging on; cf. na-'En. he's sitting.

dó-ni-soge. (q1-k4) I fastened it on (as a scarecrow on a stick); cf. dó-soge. I left it; (soge - active counterpart of stative 'En, above).

-ma- with the hand

+ ac V:

dó-pí-ma-p'ege. (q1-k4-z) I pushed it by myself; the meaning of -ma- as with the hand is not exact, as shown, for example, by: 'i-bi-'an-di mām-ma-p'ege. (pN-'s-N-D q3-k4)

he pushed it with his foot; however, the items in which -ma- appears refer to actions which may involve the hand); cf. do-p'ēge. I threw it away.

+ st ac V

na-ma-huwe. (imp-k4) scratch it! cf. 'o-huwa. I'm itching.

In several instances, segmentation into ma- + V is in doubt because the provisional segment following ma- is not found in the corpus without ma-. Examples:

do-ma(-)c'ē. (q1-k4) I scratched it.

do-ma(-)c'un. I squeezed it (c'un could possibly be proposed as belonging with c'un, c'uude enter, take in; however c'un enter is an allomorph which appears in stative contexts.

do-ma(-)pilE. I twisted it, wound it.

do-ma(-)sun. I massaged it.

do-ma(-)yek'ibe. I pinched it.

'a'- with the foot

+ ac V:

'i-'a'-tuwe. (q3-k3) he walked; cf. do-tuwe-má.

(q1-k4, opt) I'll lift it up

'i k'é'é díbí-de'-'a'-khiidi (pN D q3-pl-k3-z) they all stepped on it; cf. di-khiidi. I danced.

mán-'a'(-)c'ade. (q3-k4) I kicked it (there is no example of a Verb c'ade).

yoh- sleep

+ st V:

'o-wépi-yoh-na'a. (q1-k2-z) I'm just sleepy;

cf. 'o-na'a. I want.

+ st ac V:

na-yoh-'En. (q3-k2 he's sitting up sleeping; cf. 'o-En.
he's sitting.

na-yoh-win. (q3-k2) he's standing up sleeping (said
of an important person, the 'head of things'); cf. na-win.
he's standing.

'o-yoh-ku-mí. (q1-k2, opt) I'll be asleep; cf. 'o-ku-mí.
I'll be lying down.

'i-t'e'-yoh-k'uwa-mí. (q3-k3-z, opt) he'll go to
sleep right away.

2.22. Some Noun stems in some of their occurrences stand between X and the Verb base; that is, they are incorporated as part of the Verb word. Nouns so incorporated refer to the recipient. There are pairs of utterances which differ only as to the position of the Noun stem, the Noun being incorporated within the Verb word in one member of the pair and standing prior to X in the other. The Noun in the latter sort of sequence may, however, refer either to the agent or to the recipient. A pair of sequences of which one is N X + V and the other X + N + V are homonymous when the N in the first sort of sequence refers to recipient. A statistical study of selection among sequences of word length and longer with a large body of running texts serving as the data possibly would show a difference in the probabilities of

selection of the two sorts of sequences in various contexts.

Pronouns are not incorporated within the Verb word. We have drawn no boundaries between units of greater length than the word (the contour is phonologically defined); hence we must speak somewhat vaguely of Nouns occurring in positions prior to X. We have reference however mainly to the positions immediately prior to X or to the prefix neg (whose occurrence marks the outer boundary of the Verb word "on the left"), or to positions separated from the first morpheme of the Verb word by a Particle or two.

Examples of N in incorporated position are given immediately below.

k'ege house: dó-k'ege-paa. (q1-k4-...-ac V) I built a house; cf. k'ege dó-paa. I built a house; yo 'ii-k'ege-'ám-me-mi. (P q1-pl-k4-...-ac V-cont-opt) let's make a house, let's play house; wi'dín-k'ege-ná. (P q1-kl-...-st V) I have one house.

mele spherical thing, pot, container: na-mele-mu. (q3-k2-...-st V) it's spherical; mām-mele-piye-má'á. (q3-k4-...-st ac V-st ac V-prog) she's bringing the pot down.

son wood: dó-som-pabe. (q1-k4-...-ac V) I chopped wood.

pha fire: na-pha-páá. (q3-k2-...-st ac V) the fire went out.

2.23. Items which follow the Verb base are now considered.

There follows a list of suffix morphemes which occur in positions following the Verb base.

prog(ressive). It is necessary in every case to specify the allomorph of this morpheme with which a given V combines. Allomorphs are as follows:

-'^o(-), as in do'-su-'. I'm drinking it, I was drinking it.

-n(-), as in 'o-mE-n. I'm going, I was going.

In certain cases a single morph simultaneously represents a Verb stem and morpheme prg; as 'o in do'-'o. I'm doing it.

A given V + prg and the same V when in word final position contrast in meaning as progressive and completed action.

Thus: do'-sun. I drank it; 'o-mE. I went.

Some V do not combine with prg. The reference held in common by such V appears to be to a type of action whose performance involves some extension through time or to the maintenance of a certain state. Thus: do'-mEEyu. I'm holding it, I was holding it; 'o-win. I'm standing, I was standing.

int(entional). -t'^o(-), as in do'-kan-t'^o. I am going to do it.

cond(itional). -ma, as in wen gi -m'yu-ma. where shall we go?

hab(itual). Allomorphs are as follows:

-ndE(-), as in 'o-da-má-y-po-ndE. I always get tired.

-dE(-), as in na-cala-n-dE. it is always held.

Verb-representing morphs ending in /n/ combine with -nE(-); some Verb-representing morphs ending in a vowel combine with -ndE(-); some combine with -dE(-).

cont(inuative). -me(-), as in 'oo-kya'-me. keep on sitting!

opt(ative). -mí(-), as in man-'am-mí. let him do it.

dub(itative). -pí(-), as in kam-pí. don't do it!

obl(igation). -dá, as in hōgu do-hāadi-mí-dá. I should have moved it.

neg(ative). -di, as in we-do-'an-di. I didn't do it.

The examples given above illustrate that each of these morphemes can occur as the final morpheme of the verb word and also that each can occur immediately following the verb stem, with the exception of obl, which is always preceded (though not always immediately so) by opt. In addition to combinations involving ohl other combinations among these morphemes are possible. Only certain ones have been found in the present corpus. These are given without the implication that there might not be others.

prog + neg. we'-na-mE-n-di. he isn't going.

int + neg. h watii we'-dii-hwii-kan-t'o-di. I'm not going to eat right away.

hab + neg. we'-'omEnE-ndE-di. I never go.

opt + neg. na-bí-pade wé-'u-wii'-mi-di. don't stand
in front of me!

dub + neg. wé-dó-ha'-pi-di. if I hadn't eaten it.

opt + dub + neg. ho wé-'o-c'ú-mi-pi-di. if I hadn't
gone in.

cont + opt. dó-'am-me-mi. I'll keep on doing it.

cont + opt + dub + neg. ho we-dó-hanE-me-mi-pi-di.
if I hadn't eaten it.

hab + dub + neg. hiye wé-'an-kée-kumE-ndE-pi-di.
we always buy a lot of clothes.

hab + opt + dub + neg. ho wé-na-cala-ndE-mi-pi-di.
if it weren't cut.

opt + obl. hogú dó-haadi-mi-dá. I should have
moved it.

opt + dub + obl. hogú wé-'o-c'ú-mi-pi-dá. I shouldn't
have gone in.

The distributions of these morphemes are summarized as follows. (A set of morpheme labels separated by commas and enclosed within parenthesis indicates that in a given utterance only one of the morphemes shown is present.)

prog: V + ___ + neg

int: V + ___ + neg

cond: V + ___

hab: V + ___ + neg; V + ___ + opt + dub + neg

cont: V + ___; cont appears in the preceding context

only in combination with one or another of the members of a certain subclass of V (some st) when the V in question is in combination with imperative X2 (2.14); otherwise, cont is always followed by opt; the remaining contexts are:
 V + ___ + opt + (dub + neg)

opt: V + ___ + neg; V + ___ + dub + (neg, obl);

V + cont + ___ + (dub + neg); V + hab + ___ + dub + neg

dub: V + ___; V + ___ + neg; V + opt + ___ + (neg, obl); V + hab + ___ + neg; V + (hab, cont) + opt + ___ + neg

obl: V + opt + dub + ___

neg: V + (prog, int, hab, opt, dub) + ___;

V + opt + dub + ___; V + hab + opt + dub + ___; V + con + opt + dub + ___

2.24. This completes the discussion of affixes which are included within the Verb word. The remainder of this chapter is devoted to the various classes of Verb stems and the various combinations among classes of Verb stems which constitute the Verb base. All Verb stems except dependent Verb stems may stand in base-final position. In Verb bases consisting of sequences of Verb stems, relatively few stems stand in base-final position; a relatively large number of stems occur in pre-final position. Hence, combinations are presented in terms of those stems which occur in base-final position.

Verb base = ac V + ac V.

Second member = 'an do, cause; first member =

ha' eat: ho dii-hwii-'an. (P X3-...) I ate already;
 dii-hwii-'o. (X3-...-prog) I'm eating; naa dii-hwii-kan-t'ó.
 (pN X3-...-int) I'm going to eat; maadi 'i-huii-'o-dE.
 (P X3-...-hab) he's always eating; ho vi-hwii-'ám-mí
 (P X3-...-opt) go ahead and eat! hagu' 'o-hwii-'á (P imp X3-...)
try to eat!

sun drink: yan do'-suwe-'an. (N X4-...) I watered
the fruit tree (cf do-sun I drank it and do'-suwe-yon--X4-drink-
 V(= command)-- I watered it, I gave it water; yan do'-suwe-'o.
 (N X4-...-prog) I'm watering the fruit tree; do'-suwe-kan-t'ó.
 (X4-...-int) I'm going to water it; 'óó-suwe-'ám-mí.
 (X5-...-opt) let him water it vín-suwe-'á. (imp X4-...)
you non-sg water it!

Second member = ka' move hither (with); first member =

kEnu jump: 'i-kEnu-má'á. (X3-...-prg) he's jumping
hither (cf. 'i-kEnu-n--X3-jump-prog--he's jumping);
 'i-kEnu-Pá'á-t'ó. (X3-...-int) he's going to jump hither;
 'i-kEnu-má'á-mí. (X3-...-opt) let him jump hither;
 vi-kEnu-má'á. (imp X3-...) you pl, jump hither!

haadi move: 'i-khaadi-má'á (X3-...-prog) he's moving
hither (cf do-haadi--X3-move--I moved it); 'i-khaadi-má'á-mí.
 (X3-...-opt) let him move hither.

'eele bounce: 'ale-ge-pe'e 'i-'eele-má'á. (N-D-D X3-
 ...-prog) it's bouncing down the slope hither

(cf. 'i-'eele-n.--X3-bounce-prog--it's bouncing; dívi-'eele-máwe-ndE. (X3-...-hab) they pl always bounce hither.)

'Elu run: 'i-'Elu-má'á. (X3-...-prog) he's running hither (cf. 'i-'Elu-n.--X3-run-prog--he's running);
 mán-;Elu-má'á (X4-...-prog) running, he's bringing it hither;
 'i-'Elu-máwe-ndE. (X3-...-hab) he always runs hither;
 'i-'Elu-pá'á-t'ó. (X3-...-int) he's going to run hither
 (cf. 'áthu dó-'Elu-t'ó.--N X4-run-int--I'm going to drive
 the car); mán-'Elu-pá'á-t'ó. (X4-...-int) running, he'll bring
 it hither; vi-'Elu-má'á-mí. (X3-...-opt) you sg will run
 hither; vi-'Elu-má'á-(imp X3-...) you pl, run hither!

Second member = ho move thither (with); first member =
 c'ala cut: dó-cala-ho-n. (X4-...-prg) moving along
 thither, I was cutting it (cf. dó-c'ala.--X4-cut-- I cut it and
 do-c'ala-n--X4-cut-prog--I'm cutting it).

há' eat: dó-khá-ho-n (X4-...-prg) I was eating it on
 the way over there (cf. dó-háne-n.--X4-eat-prog--I was eating it).

háadi move: díi-kháadi-hó-n. (X3-...-prog) I was
 moving thither (cf. dó-háadi. I moved it).

kEnu jump: 'i-kEnu-hó-n (X3-...-prg) it's jumping
 thither (cf. 'i-kEnu-n. it's jumping); 'í-kEnu-khuwa-t'ó.
 (X3-...-int) it's going to jump thither; 'i-kEnu-húu-mí.
 (X3-...-opt) it'll jump thither.

khyaw stand up from a lying position; find: ho díi-da-
 khyaw-hó-n dí (P X3-P-...-prog) I was just about to stand up
 (cf. díi-khyaw.--X3-stand up--I stood up and díi-khya'--X3-...

stand up-prog--I was in the act of standing up or was about to stand up); d'ó-khyaw-h'ó-n (X4-...-prog) I was about to find it, I was about to get him up.

tege lift, carry: d'ó-tege-h'ó (X4-...) I carried it over there (cf d'ó-tege. I lifted it up); 'án-tege-h'ó-n. (X4-...-prog) we du were carrying it over there; d'ó-tege-huu-mi'. (X4-...-opt) let me carry it over there; náá-tege-huu (imp X4-...) you sg, carry it over there.

'eele bounce: 'i-'eele-h'ón. (X3-...-prog) it's bouncing thither (cf. 'i-'eele-n. it's bouncing.

kw'ooli fly: ci',e'e k'ege k'wayge 'i-kw'ooli-h'ó-n. (N N D X3-...-prg) the bird is flying thither over the house (cf. ci',e'e k'ege 'iive-'inge 'i-kw'ooli.--N N D-D X3-fly--the bird flew through the house).

ha' eat: dii-hwii-h'ó. (X3-...) I went to somebody else's place to eat; dii-hwii-h'ó-n. I'm going to somebody else's place to eat (cf. dii-hwii-'an.--X3-eat-do--I ate, and do'-ha'--X4-eat.--I ate it).

t'an win: d'ó-t'an-h'ó-n. (X4-...-prog) I'm winning, I'm about to win (cf d'ó-t'an I won).

Second member = mEEyu hold, keep; first member =

c'ala cut: d'ó-cala-mEEyu. (X4-...) I'm cutting them (cf. do-c'ala.--X4-cut--I cut it).

k'enu jump: 'i-k'enu-mEEyu. (X3-...) it's jumping around (cf. 'i-k'enu-n.--X3-jump-prog--it's jumping).

yon request, command, cause: maadi d'ó-com-mEEyu-ndE

(P X4-...-hab) I'm always asking him to do things (cf. dó-yon. I commanded him).

'eele bounce: 'i-'eele-mEEyu. (X3-...) it's bouncing around (cf. 'i-eele-n. it's bouncing).

'Elu run: 'i-Elu-mEEyu. (X3-...) he's running around (cf. 'i-Elu-n.--X3-run-prog--he's running).

kwóolí fly: ci'ee 'i-kwóolí-mEEyu 'iivé. (N X3-... D) the bird is flying around inside (cf. ci'ee k'ege 'iivé-'inge 'i-kwóolí.--N N D-D X3-fly--the bird flew through the house).

haadi move: 'i-khaadi-mEEyu. (X3-...) it's moving around; dó-khaadi-mEEyu. (X4-...) I'm moving it around; (cf. do-haadi. I moved it).

ku' buy: dó-ku-me'-mEEyu. (X4-...) I'm buying around (cf. do-ku'--X4-buy--I bought it).

Second member = yon; first member =

sun drink: dó-sunwe-yon (X4-...) I gave him some water, I watered it (cf. dó-sun. I drank it; dó-yom mán-'ám-mi''i--X4-command X4-do-opt pN--I commanded him to do it); yan dó-suwe-yome-n (N X4-...-prog) I'm watering the fruit tree (cf. yan dó-suwe-'o.--N X4-drink-do-prog--I'm watering the fruit tree).

ha' eat: dó-hwii-yon (X4-...) I feed it (cf. dii-hwii-'an.--X3-eat-do--I ate); do-hwii-con-t'o. (X4-...-int) I'm going to feed it; naa-hwii-yo. (imp X4-...) you sg, feed it!

Second member = mowa finish; first member =

ku' buy: ho dii-ku'-mowa. (P X3-...) I'm through buying things (cf. do-ku'--X4-buy--I bought it)

paa make, build: d^o-k'ege-paa-mowa. (X4-N-...)

I finished building the house (cf. d^o-paa. I built it).

Verb base = st V + (st) ac V

Second member = 'an do, cause; first member =

hee be sick: m^an-hee-'an. (X4-...) he made him sick
(cf. na-hee--X2-be sick--he's sick).

tun say, make a sound: he' sen d^o-tu-'an na-khya-mi.

(pN N X4-... X2-V-opt) I told that man to go away (cf. da
h^aguto na m^y gi do' na-tun.--P P X2-V P P X2-say--he says
he's undecided).

t'a dry: d^o-t'a-'an. (X4-...) I dried it (cf. na-t'a.
it dried out); m^an-t'a-kan-t'^o. (X4-...-int) he's going to
dry it.

'^ooyo freeze: p'o do-'^ooyu-'an. (N X4-...) I froze
water (cf. p'o na-'^ooyu.--N X2-freeze--the water froze, is
frozen.)

Second member = m^{EE}yu, hold, keep; first member =

cika wait: d^o-cika-m^{EE}yu. (X4-...) I'm waiting for
him (cf. 'o-cika.--X2-wait--I'm waiting); 'an-cika-m^{EE}yu.
(X3-...) we waited for each other.

tun say, make a sound: naa d^o-tu-m^{EE}yu. (pN X4-...)
I'm telling him.

Verb base = ac V + st (ac) V

Second member = po become; first member =

mo'a reject: 'o-da-mo'a-po. (X2-P-...) I got sort
of lonely (cf. di-mo'a.--X5-reject--they don't want me)

hə' eat: na-khə'-po. (X2-...) it got eaten
 (= tuberculosis) cf dó-hə'---X4-eat--I ate it)

Second member = 'En sit, be: first member =

mo'a reject: 'o-mo'a-'En (X2-...) I'm worried;
 di-mo'a-k'wón (X2-...) they pl are worried (cf do-mo'a---X4-reject--I don't want him).

Second member = mu be: first member =

c'ala cut: na-cala-mu. (X2-...) it is cut.

haadi move: na-khaadi-mu. (X2-...) it's been moved
 (cf dó-haadi---X4-move--I moved it).

hə' eat: na-khə-mu it's been eaten, it's partly eaten.

tha break: 'áthu na-tha-mu. (N X2-...) the car is broken (cf. do-tha I broke it); 'o-tha-mu. (X2-...) I'm broke (i.e., without money)

Second member = ná there exists; first member =

c'ala cut: na-cala-ná. (X2-...) it is cut
 (cf. dó-c'ala. I cut it); 'o-mán-cala-ná. (X2-N-...) my hand is cut.

haadi move: na-khaadi-ná. (X2-...) it's been moved.

hulu open, uncover: ná-khulu-ná (X2-...) it is uncovered, open (as a door) (cf. dó-hulu---X4-open--I opened it).

Second member = tii have been; first member =

c'ala cut: na-cala-tii (X2-...) it's been cut.

hə' eat: na-khə'-tii. (X2-...) it got eaten;
 na-khə'-tíime-n (X2-...-prog) it's being eaten up (as by an animal);
 'úu-khə'-tii. (X1-...) he swallowed it.

hulu open, uncover: na-khulu-tii. (X2-...) it got opened; na-khulu-tiime-n (X2-...-prog) it's almost open, it's about to be opened.

haadi move: na-khaadi-tii. (X2-...) it's been moved.

kya spill: na-kya-tii. (x2-...) it got spilled;
'yu-kya-tii. (X1-...) he accidentally spilled it. (cf do-
kya. I spilled it).

paa make, build: na-paa-tii (X2-...) it got made;
na-paa-tii-t'ó (X2-...-int) it's going to be made.

tha break: 'áthu di-tha-tii. (N X2-...) the cars have broken down; 'o-tha-tii. (X2-...) I went broke.

Second member = na'a want; first member =

'an do, cause: 'o-kan-na'a (X2-...) I want to do it
(cf. dó-kan-t'ó.--X4-do-int--I'm going to do it).

ha' eat: 'o-kha'-na'a. (X2-...) I want to eat it
(cf. dó-kha'-t'ó.--X4-eat-int--I'm going to eat it).

Verb base = st V + st(ac) V

Second member = po become; first member =

cén be careful, numb, shocked: 'o-cém-po. (X2-...)
I got shocked over something (cf 'o-cém-mí.--X2-be careful-opt-I'll be careful)

hee be sick: na-hee-po. (X2-...) he got sick
(cf na-hee. he's sick)

kyan taste, feel, be bothered by: 'o-kyam-po.
(X2-...) I felt it, I tasted it (cf. háá na-kyan.--P X2-
taste--it tastes funny); háá 'i'i-di 'o-kyam-po-ndE

(P D-D X2-...-hab) something bothers me;

máy tired, lazy, restless: 'o-máy-po. (X2-...)

I got restless (cf. 'o-máy. I'm lazy); 'o-da-máy-po-ndE
(X2-...-hab) I always get tired.

t'a dry: tú na-t'a-puwame-n (N X2-...-prg) beans are drying (cf. na-t'a. it dried out; tú t'a-'i.--N V-gerund--
dried beans).

Second member = mu be; first member =

cén be careful, numb, shocked: 'o-cém-mu. (X2-...)

I'm numb

hee be sick: na-hee-mu. (X2-...) he's sick.

sa'a be thirsty: na-sa'a-mu. he's thirsty.

k'ahagi sweet: na-k'ahagi-mu. it's sweet.

Second member = 'En sit, be; first member =

cika wait: 'o-cika-'En. (X2-...) I've been waiting.

Second member = tun say, make a sound; first member =

hee be sick: na-hee-tun. (X2-...) he groaned, moaned.

Verb base = st ac V +(st) ac V.

Second member = 'an do, cause; first member =

kanu roll, tip: dó-kanu-'an. (X4-...) I tipped it over;
dó-kanu-kan-t'ó. (X4-...-int) I'm going to tip it over.

Second member = ka' move hither (with); first member =

c'úude enter (with): mán-cúude-má'á. (X4-...-prog)
he's bringing it in (cf. mán-c'úude-n.--X4-enter with-prog--
he's bringing it in or he's taking it in and mán-cúude-hó'n.--

X4- enter with- take-prog--he's taking it in); do'-cuude-má'we-ndE. (X4-...-hab) I always bring it in; mán-cuude-pá'á-t'ó (X4-...-int) he's going to bring it in; do'-cuude-má'á-mí. (X4-...-opt) I'll bring it in; náa'-cuude-má'á (imp X-...) bring it in!

pii emerge-ascent (with): 'ám-piye-má'á- (X4-...-prog) we two brought it out or up (cf. do'-piye-n--X4-emerge with-prog--I brought or took it out or up and di náa'-piye-hó-n--P X4-emerge with-prog--are you sg taking it up or out?); do'-piye-má'we-ndE. (X4-...-hab) I always bring it out; mán-piye-pá'á-t'ó. (X4-...-int) he's going to bring it out; do'-piye-má'á-mí. (X4-...-opt) I'm going to bring it up; bim-piye-má'á. (imp X4-...) bring it out!

hwaabe descend(with): mán-khwaabe-má'á. (X4-...-prog) he's bringing it down (cf. dEn-hwaabe-n--X4-descend with-prog--they du are bringing or taking it down and 'ii-khwaabe-hó-n--X4-descend with-take-prog--we pl are taking it down); mán-khwaabe-má'we-ndE. (X4-...-hab) he always brings it down; mán-khwaabe-pá'á-t'ó. (X4-...-int) he's going to bring it down; hágu mán-khwaabe-má'á-mí. (P X4-...-opt) let him bring it down; náa-khwaabe-má'á. (imp X4-...) bring it down! 'o-khwaaye-má'á (imp X3-...) just come on down!

kanu tip, roll: mán-kanu-má'á. (X4-...-prog) he's rolling it hither.

soge sit: 'i'i-di dii-soge-má'á. (D-D X3-...-prog) from there I kept sitting down on the way over here (cf. dii-soge. I sat down)

Second member = ho move thither (with); first member =
 c'uude enter (with): mán-cúude-ho'-n. (X4-...-prog)
he's taking it in; dó-cúude-huwa-ndE (X4-...-hab) I always
take it in; mán-cúude-khuwa-t'ó. (X4-...-int) he's going to
take it in; dó-cúude-húu-mí. (X4-...-opt) let me take it in;
 náa-cúude-húu. (imp X4-...) you sg, take it in.

hwaabe descend (with): mán-khwaabe-ho'-n. (X4-...-
 prog) he's taking it down; mán-khwaabe-huwa-ndE. (X4-...-hab)
he always takes it down; mán-khwaabe-khuwa-t'ó. (X4-...-int)
he's going to take it down; mán-khwaabe-húu-mí. (X4-...-opt)
let him take it down; náa-khwaabe-húu. (imp X4-...) you sg,
take it down! 'o-khwaabe-húu. (imp X3-...) you sg, go on
down!

kanu roll, tip: mán-kanu-ho'-n. (X4-...-prog) he's
rolling it thither.

k'wii lie: dii-c'an-kuwa-ho'-n di. (X3-P-...-prog P)
I was just getting ready to lie down; 'ibi-kwoh-húu-mí.
 (X3-...-opt) we're going to bed elsewhere.

piye emerge-ascend with: dó-piye-ho'-n. (X4-...-prog)
I was taking it out; dó-piye-huwa-ndE. (X4-...-hab) I always
take it out; mán-piye-khuwa-t'ó. (X4-...-int) he's going
to take it out; dó-piye-húu-mí. (X4-...-opt) let him take
it out; náa-piye-húu. (imp X4-...) you sg, take it out!

soge sit: dii-soge-húu-mí. (X3-...-opt) I'll keep
sitting down on the way over there.

sowe grow: 'i-sowe-ho'-n (X3-...-prog) it's growing,

he's growing up (cf. do'-sowe-n.--X4-grow-prog--I'm growing it).

wiinu stand up (from a sitting position): dii-c'an-
kwiinu-ho-n di. (X3-P-...-prog P) I was just about to
stand up

Second member = mEEyu hold, keep; first member =

k'wii lie: 'ibi-kwoh-mEEyu. (X3-...) we lay down
all around; do'-kwoh-mEEyu. (X4-...) I'm putting them around.

wiinu stand up (from a sitting position): 'i-kwiinu-
mEEyu. (X3-...) he stands around.

Second member = hwaabe descend (with); first member =

suyu slide: dii-suyu-hwaabe. (X3-...) I slid down;
do'-suyu-hwaabe. (X4-...) I slid it down.

Second member = mowa finish: first member =

soge sit: ho dii-soge-mowa. (P X3-...) I'm through
sitting.

Verb base = st ac Vt st (ac) V.

Second member = po'a move hither; first member =

c'un enter: 'o-cuude-'E'E. (X2-...-prog) I'm coming
in (cf. do'-cuude-ma'a.--X4-enter (with)- move hither (with)-
prog--I'm bringing it in); 'o-cuude-'Ene-ndE. (X2-...-hab)
I always come in; 'o-cuude-kE'E-t'o. (X2-...-int) I'm going
to come in; 'o-cuude-'E'E-mi. (X2-...-opt) I'll come in;
'o-cuude-kE'E. (imp X2-...) you sg, come in!

hwaan descend: na-khwaabe-'E-E. (X2-...-prog) he's
coming down; na-khwaabe-'Ene-ndE. (X2-...-hab) he always

comes down; na-khwaabe-kE'E-t'ó (X2-...-int) he's going to come down; na-khwaabe-'E'E-me. (X2-...-opt) let him come down; bí-khwaabe-kE'E. (imp X2-...) you pl, come down!

kanu roll: k'ege 'i'i-pe'e na-kanu-E'E (N D-D X2-...-prog) it's rolling coming toward the house.

píi ascend-emerge: 'o-píi-'E'E. (X2-...-prog) I'm coming up; 'o-píi-'Ene-ndE. (X2-...-hab) I always come up; 'o-píi-kE'E-t'ó. (X2-...-int) I'm going to come up; na-píi-'E'E-mi. (X2-...-opt) let him come up; 'o-píi-'E'E, (imp X2-...) you sg, come up!

Second member = mE move thither; first member =

c'un enter: 'o-cúude-mE-n. (X2-...-prog) I was going in; 'o-cúude-mEne-ndE. (X2-...-hab) I always go in; 'o-cúude-púu-t'ó (X2-...-int) I'm going to go in; 'o-cúude-múu-mi (X2-...-opt) I'll go in; 'o-cúude-púu. (imp X2-...) you sg, go in!

hwaán descend: na-khwaabe-mE-n. (X2-...-prog) he's going down; na-khwaabe-mEne-ndE. (X2-...-hab) he always goes down; na-khwaabe-púu-t'ó. (X2-...-int) he's going to go down; na-khwaabe-múu-mi. (X2-...-opt) let him go down; bí-khwaabe-púu. (imp X2-...) you pl, go down!

kanu roll, tip: k'ege 'i'i-pe'e na-kanu-mE-n. (D-D X2-...-prog) it's rolling going toward the house.

píi ascend-emerge: 'o-píi-mE-n. (X2-...-prog) I'm going up; 'o-píi-mEne-ndE. (X2-...-hab) I always go up; 'o-píi-púu-t'ó. (X2-...-int) I'm going to go up; 'o-píi-múu-mi. (X2-...-opt) I'll go up; 'o-píi-púu (imp X2-...)

you sg, go up!

Second member = na there exists; first member =
han be broken: na-khave-na. (X2-...) it's all
cracked (cf na-han.--X2-be broken--it's broken; do'-have.
I broke it).

Second member = tii have been; first member =
k'ó lie: di-kwoh-tii. (X2-...) they've been put
down.

Verb base = dep V + (st) ac V.

Second member = 'an do, cause; first member =
c'ewa be crazy, drunk: do'-c'ewa-'an. (X4-...) I
made him drunk; do'-c'ewa-kan-t'ó (X4-...-int) I'm going to
make him drunk.

hulu rub: do'-hulu-'an (X4-...) I rubbed it; do'-hulu-'o.
(X4-...-prog) I'm rubbing it; 'i-hulu-'o. (X3-...-prog) he's
rubbing it against something.

suwa be warm: do'-suwa-'an. (X4-...) I warmed it;
do-suwa-'o. (X4-...-prog) I'm warming it.

Second member = mEEyu hold, keep: first member =
cala hold: do'-cala-mEEyu. (X4-...) I'm holding it.
suwa be warm: do'-suwa-mEEyu (X4-...) I'm keeping it
warm.

Second member = ka' move hither (with): first member =
cala hold: do'-cala-má'a (X4-...-prog) I was holding
it, moving it hither.

Second member = hó move thither (with): first member =

cala hold: d^o-ca^la-ho^o-n. (X4-...-prog) I was hold-
ing it, moving it thither.

Verb base = dep V + st (ac) V.

Second member = mu be; first member =

cala hold: na-ca^la-mu. (X2-...) it is held.

c'ewa be crazy, drunk: na-c'ewa-mu. (X2-...) he's
crazy; maadi na-c'ewa-mu-ndE (P X2-...-hab) he is always
drunk.

hulu rub: na-hulu-mu. (X2-...) it's been rubbed

suwa be warm: diⁿ-suwa-mu. (X1-...) I've got it
warm.

Second member = po become; first member =

c'ewa be crazy, drunk: na-c'ewa-po. (X2-...) he got
drunk; maadi na-c'ewa-po-ndE. (P X2-...-hab) he's always
getting drunk.

hulu rub: na-hulu-po. (X2-...) it got rubbed

suwa be warm: 'imo' na-suwa-po (P X2-...) it got
over-heated.

Second member = na there exists: first member =

cala hold: na-ca^la-na^o. (X2-...) it is held together.

hulu rub: na-hulu-na^o. (X2-...) it's been rubbed.

Second member = tii have been; first member =

cala hold: na-ca^la-tii. (X2-...) it was held together.

hulu rub: na-hulu-tii. (X2-...) it was rubbed.

Verb base = ac V.

c'aia cut: do^o-c'ala. (q1-k4-...) I cut it; do^o-c'ala-n.

(prog) I'm cutting it; do'-c'ala-ndE. (hab) I always cut things; do'-c'ala-mi'. (opt) I'll cut it; do'-cala-t'ó. (int) I'm going to cut it; naa'-c'ala (imp-k4) cut it'.

c'ElE pound, hammer: do'-c'ElE. (ql-k4-...) I pounded it; do'-c'ElE-n. (prog) I'm pounding it; naa'-c'ElE (imp-k4) pound it!

haadi move: nE'E do'-de'-haadi (D ql-k4-all-...) I moved everything over here; do'-khaadi-t'ó (int) I'm going to move it.

ha'eat: do'-ha'. (ql-k4-...) I ate it (cf. dii-hwii-'an. --ql-k3-eat-do--I ate); do'-haane-n (prg) I'm eating it; maadi do'-haane-ndE (P ql-k4-...-hab) I always eat it; do'-ha'-mi'. (opt) I'll eat it; haya do'-ha'-ma. (P ql-k4-...-cond) may I eat it? do'-kha'-t'ó. (int) I'm going to eat it; naa'-ha' (imp-k4) eat it!

hooge (pl V; see kee) get, acquire: do'-hooge (ql-k4...) I got them; do'-khon-t'ó. (int) I'm going to get them.

kee (non pl V; see hooge): do-wii-kee. (ql-k4-back-...) I got it back he' do-wii-keen. (pN ql-k4-back-...-prog) I'm getting it back; hagu do-wii-kee-mi' (P ql-k4-...-opt) let me get it back; do'-kee'-t'ó. (int) I'm going to get it.

hulu open: do'-hulu. (ql-k4-...) I opened it; do'-hulu-n. (prog) I'm opening it; naa'-hulu (imp-k4) open it!

koo plant: do'-koo. (ql-k4-...) I planted it; do-ko. (prg) I'm planting it; do'-ko-dE. (hab) I always plant it. hogu do'-ko-mi' (P ql-k4-...-opt) let me plant it; do'-ko-t'ó.

(int) I'm gonna plant it; naa-ko. (imp-k4) plant it!

ku' buy: do'-ku'. (ql-k4-...) I bought it; 'imo' 'an-kee-kume-ndE. (P ql-du-k4-N-...-hab) we buy a lot of clothes; 'an-'an-kume'-mi. or 'an 'an-kume'-mi. (ql-du-k4-N-...-opt or N ql-du-k4-...-opt) we'll buy shoes.

kEnu throw: do'-kEnu. (ql-k4-...) I threw it;
i-vi-'i'i naa-kEnu. (pN-'s-D imp-k4-...) throw it at him.

kEnu jump: 'i-kEnu. (q3-k3-...) it jumped; 'i-kEnu-n.
(prog) it's jumping.

khiidi dance: dii-khiidi. (ql-k3-...) I danced; dii-khiwa-n. (prog) I'm dancing; maadi dii-khiwa-ndE.

(P ql-k3-...-hab) I always dance; maadi we-dii-khiwa-ndE-di.

(P neg-ql-k3-...-hab-nag) I don't always dance; naa dii-khi-t'o.

(pN ql-k3-...-int) I'm going to dance; 'o-khi. (imp-k3-...) dance!

khili' scream: 'i-khili! (q3-k3-...) he screamed.

khweEEdi hit, strike a blow: do'-khweEEdi. (ql-k4-...)
I hit it; do'-khweEEdi-t'o (int) I'm going to hit it; I'm going to whip him.

khyaw find, get up from a lying position: dii-khyaw.
(ql-k3-...) I got up; do'-khyaw. (ql-k4-...) I got him up, I found it; dii-khya' (prg) I'm about to get up; do'-khya'
(prg) I'm trying to find it, I'm trying to get him up;
dii-khya'-dE. (hab) I always get up-, do'-khya'-dE. (hab)
I always find it, I always get him up; dii-khyaw-t'o. (int)

I'm going to get up; do'-khyaw-t'ó. (int) I'm going to get him up; dii'-khyaw-mí. (opt) let me get up; wé'-do'-khyaw-pí-dí (neg-ql-k4-...-dub-neg) if I don't find it; 'o-khyaw.

(imp-k3) get up! vin'-khyaw. (imp-non-sg-k4) find it!

kwoóli fly: ci'ee k'eege k'way-ge 'i-kwoóli. (N N D-D q3-k3-...) the bird flew across the house.

k'yaa throw away: do'-k'yaa. (ql-k4-...) I threw it away; 'ibi-k'yaa. (ql-pl-k3-...) we threw ourselves away; do'-k'yaa-n. (ql-k4-...-prog) I'm throwing it away; do'-k'yaa-mí. (opt) I'll throw it away; do'-kyaa-t'ó (int) I'm going to throw it away; naa'-k'yaa. (imp-k4) throw it away!

mEEge give away: do'-mEEge. (ql-k4-...) I gave it away; do'-mewa-n (prog) I'm giving it away; do'-mEE-mí. (opt) I'll give it away; do'-pEE-t'ó. (int) I'll give it away.

mEEyu hold, keep: do'-mEEyu (ql-k4-...) I'm holding it; do'-mEEyu-ndE. I always hold it; do'-mEEyu-mí. (opt) I'll hold it; do'-pEEyu-t'ó. (int) I'm going to hold it.

mile turn around, make an about-face: 'i-mile. (q3-k3-...) he turned around.

mowa finish, quit, fix: do'-mowa. (ql-k4-...) I finished it, I fixed it; dii'-mowa. (ql-k3-...) I quit; do'-mowa-n. (prog) I'm fixing it; dii'-mowa-ndE. (q3-pl-k4-...-hab) they always fix it; do'-mowa-t'ó. (int) I'm going to fix it.

mo'a reject, not to want: do'-mo'a. (ql-k4-...) I don't want him; di-mo'a. (Ist re-...) they don't want me.

mulu' circle: 'i-mulu' (q3-k3-...) he went around;
 mán-mulu' (q3-k4-...) he circled it; mām-mulu-n (prog) he
was circling it.

mun see: do-mun. (q1-k4-...) I saw him.

nE taste: do-nE (q1-k4-...) I tasted it; do-nE-n
 (prog) I'm tasting it; do'-nE-t'ó. (int) I'm going to taste
it.

nūwe look for: mán-nūwe. (q3-k4-...) he looked for
it.

paa make, build: 'ám-paa. (q1-du-k4-...) we du made
it. do'-k'ege-pa. (q1-k4-N-...-prog) I'm building a house;
 náá-paa. (imp-k4-...) make it!

pave chop: do-som-pave. (q1-k4-N-...) I chopped
wood; do'-som-pave-n. (prog) I'm chopping wood.

phiwe smoke: dii'-phiwe-n. (q1-k3-... prog) I'm smoking;
 naa dii'-phiwe-ndE (pN q1-k3-...-hab) I always smoke;
 naa we-dii'-phiwe-ndE-di. (pN neg-q1-k3-...-hab-neg) I never smoke.

p'ege throw away, discard: do'-p'ege. (q1-k4-...) I
threw it away; mām-p'ewa-n. (q3-k4-...-prog) he's throwing
it away; mām-p'ewa-ndE. (hab) he always throws things away;
 do'-pe-t'ó. (int) I'm going to throw it away; náá-p'e
 (imp-k4-...) throw it away!

sE1E boil: hodo'-sE1E. (P q1-k4-...) I boiled it;
 do'-sE1E-n. (prog) I'm boiling it; ho hágu do'-sE1E-me-mí.
 (P P q1-k4-...-cont-opt) let me be boiling it; maadi do'-sE1E-ndE.

(P ql-k4-...-hab) I'm always boiling things; naa-sE1E.

(imp-k4-...) boil it!

sEyu hit (with missile): do-sEyu-t'ó. (ql-k4-...-int)
I'll hit him; naa-sEyu. (imp-k4-...) hit him!

siw tear: do-siw. (ql-k4-...) I tore it; naa-siw.
 (imp-k4-...) tear it!

sili' tear up: do-de'-sili' (ql-k4-all-...) I tore it
all up; maadi do-sili'-ndE. (P ql-k4-...-hab) I'm always
tearing things up.

sulu unwrap: do-sulu. (ql-k4-...) I unwrapped it.

sun drink: do-sun. (ql-k4-...) I drank it; do-su-'
 (prog) I'm drinking it; do-sun-t'ó. (int) I'm going to
drink it; do-su-mi'. (opt) let me drink it; naa-su (imp-k4-...)
drink it!

tay know: he' he' man-tay. (pN pN q3-k4-...) he knows
him.

tege lift, carry: do-tege. (ql-k4-...) I lifted it up.

tE1E pull: do-tE1E. (ql-k4-...) I pulled it;
 nu'ú-ge-di man-tE1E-n. (D-D-D q3-k4-...) he's pulling it up
from below; ho man-tE1E-mi'. (P q3-k4-...-opt) let him pull
it; do-tE1E-t'ó. (int) I'm going to pull it; naa-tE1E.
 (imp-k4-...) pull it!

thaa break: do-thaa. (ql-k4-...) I broke it; do-thaa-n.
 (prog) I'm breaking it.

tuwe lift up: do-tuwe. (ql-k4-...) I lifted it up;
 do-tuwe-mi'. (opt) I'll lift it up; do-tuwe-t'ó. (int)

I'm going to lift it up.

t'ale touch: do'-t'ale (q1-k4-...) I touched it.

t'an win, defeat: ho do'-t'an. (P q1-k4-...) I beat him, I won.

wili disturb, ruin: man-de'-wili. (q3-k4-all-...)
he ruined it.

wiyé separate out: do'-wiyé. (q1-k4-...) I separated it from the rest.

wo'a pay(for): do'-wo'a. (q1-k4-...) I paid him;
dii''wo'a. (q1-k3-...) I paid (for it). 'o-wo'a.
(imp-k3-...) pay for it!

yan pull out (something fastened or rooted): do'-yan
(q1-k4-...) I pulled it out.

yala fight: do'-yala. (q1-k4-...) I fought him.

ye meet, encounter: dEn-ye (q non 1 - du-k3-...)
they met each other.

yon request, command: do'-yon. (q1-k4-...) I commanded him;
do'-yome-n. (prog) I'm commanding him; do'-con-t'ó (int)
I'm going to command him.

yuunu shrink: do'-yuunu. (q1-k4-...) I shrunk it.

'an do, cause: do'-'an. (q1-k4-...) I did it. do'-'o.
I'm doing it; do'-'o-dE. (hab) I always do it; do''am-mí.
(opt) let me do it; do'-kan-t'ó. (int) I'm going to do it;
haa''kam-pí (P ...-dub) don't do it!. Naá''a. (imp-k4-...)
do it!

'eele bounce: 'i-eele-n. (q3-k3-...-prog) it's bouncing.

'Elu run, race: he'i-n-án dibi-Elu. (pN-non sg-rel q3-pl-k3-...) they're the ones who ran. 'i-Elu-n. (prog) he's racing; 'athu do-'Elu-t'o. (N q1-k4-...-int) I'm going to drive the car.

Verb base = şt V.

cén be careful: na-cén. (q3-k2-...) he's careful.

cika wait: 'o-cika. (q1-k2-...) I'm waiting (cf. do-cika-mEEyu--q1-k4-wait-hold--I'm waiting for him).

hee be sick: wé-na-hee-dí. (neg-q2-k3-...-neg) he's not sick (cf. na-hee-po.--q3-k2-be sick-become-he became sick).

hiyE approve: 'o-hiyE. (q1-k2-...) I approve.

kyan taste, feel: háá na-kyan. (P q3-k2-...) it tastes funny; he'-di háá 'o-kyan. (pN-D P q1-k2-...) I felt funny over that.

kyan stand up, grow (non pl V; see saa): hE'E na-kyan (D q3-k2-...) it's growing there; mele na-kyan-'i do-kye-n. (N q3-k2-...-gerund q1-k4-V-prog) I'm reaching for the pot that is standing.

k'ahagi be good, be sweet: na-k'ahagi. (q3-k2-...) it's good (cf. k'ahagi-'i na-mu.--...-gerund q3-k2-V--it's a sweet thing).

máy be tired, restless, lazy: 'o-máy. (q1-k2-...) I'm lazy.

mu be: he' sen da 'ayya-'i na-mu. (pN N P dep V-gerund q3-k2-...) that man is really good; han na-mu-mí. (P q3-k2-

...-opt) let it be like that.

na' exist: din-k'ege-na. (q1-k1-N-...) I have a house.

na'a want: da-na'a di. (q non 1-du-k2... P) they want;

maadi hEIE 'imo' na-na'a-dE. (P P P q3-k2-...-hab) he always want a lot (cf. na-Ely-na'a.--q3-k2-run-want--he wants to run).

naayu be caved in: na-naayu. (q3-k2-...) it's caved

in.

po happen, become: haa' 'o-po. (P q1-k2-...) something

happened to me; haa' da-po. (P q non 1-du-k2-...) something

happened to you du or they du; han na-puwa-t'o. (P q3-k2-...-int)

what's going to happen? naa han wo-'o-po-pi-di. (pN N neg-q1-k4-...dub-neg) I didn't do anything (cf. 'o-kyam-po--q1-k2-st V-...--I felt it, I tasted it).

p'aw make a popping sound: na-p'aw. (q3-k2-...) it

popped.

saa stand up, grow (p1 V; see kyan): di-saa. (q3-p1-k2-

...) they're growing; di-saa-ndE. (hab) they're always grow-

ing; doo-saa-t'o. (q3-p1-k1-...-int) they're going to have some things that are planted.

sagi be nice, pretty: din-sagi. (q1-k1-...) I'm having

fun; di na-sagi. (P q3-k2-...) it is nice?

tun say, make a sound: da ha'guto na-mu gi do' na-tun.

(P PV q3-k2-V P P q3-k2-...) he says he's undecided (cf. na-hee-tun.--q3-k2-be sick (st V)-...--he groaned).

yi be around, walk around: ga-yi-mi. (q1-du-k2-...-opt)

we'll walk around; maadi 'o-yi-ndE. (P q1-k2-...-hab) I'm

always around (cf. na-'Ely-yi-ndE--q3-k2-run (ac V)-...-hab--
he's always running around).

'et'an fall from above, from high place: hyan te 'i'i-
di na-'et'an. (N N D-D q3-k2-...) the nest fell out of the
tree.

'ooyu be frozen: p'o na-'ooyu. (N q3-k2-...) the water
is frozen.

Verb base = st ac V. Stems are cited in their unsuf-
fixed form when in combination with non-imperative X, first
stative, then active (if these forms differ from one another).

cin, cive affix: we'-na-cin-di'. (neg-q3-k2-...-neg) it
didn't stick; do'-cive. (q1-k4-...) I fastened it on.

c'an, yanu fall over: na'-c'an. (q3-k2-...) it fell
over; do'-yanu. (q1-k4-...) I tipped it over.

c'un, c'uude enter (with): 'o-c'un. (q1-k2-...) I
entered; 'o-c'u-ndE. (hab) I always enter; 'o-cude-t'ó.
(int) I'm going to enter; 'o-c'u-mi'. (opt) I'll enter;
'ó-cuwave. (imp-k2-...) enter!. (cf. 'o-cude-mE-n.--q1-k2-
...-go (with) (st ac V)-prog--I'm going in; 'o-cude-'E'E. I'm
coming in; the stem c'un et al, when in combination with X1
or X2, does not combine with immediately following suffix
prog; it may, however, combine with immediately following
stems which in turn combine with immediately following suffix
prog, namely, mE go (with) and po'a' come (with); these stems
may, when in combination with c'un, also be followed by
suffixes other than prog; thus, 'o-cuude-k'E'E-t'ó.--q1-k2-...

come (with)-int--I'm going to come in; the foregoing remarks apply also to hwan descend and pii exit-ascend); do-c'uude. (q1-k4-...) I entered with it; do-c'uude-n. (prog) I'm entering with it; do-c'uude-ndE. (hab) I always enter with it; do-cuude-t'o. (int) I'm going to enter with it; do-c'uude-mi. (opt) I'll enter with it; naa-c'uude. (imp-k4-...) enter with it'. (c'uude et al can occur in combination with immediately following stems ho go with--member of the same morpheme as mE, cited above--and ka' come with--member of the same morpheme as 'E'E, cited above; thus, man-cuude-ho-n.--q3-k4-...-go with-prog--he's taking it in and man-cuude-ma'a. he's bringing it in).

han, haabe break: na-han. (q3-k2-...) it broke; din-han (q1-k1-...) I have something broken; do-haabe. (q1-k4-...) I broke it.

hwan, hwaabe ascend (with): na-hwan. (q3-k2-...) he descended; na-hwa-ndE. (hab) he always descends; na-khwaabe-t'o. (int) he's going to descend; na-hwa-mi. (opt) he'll descend (cf. na-khwaabe-mE-n.--q3-k2-...-go-prog--he's going down and na-khwaabe-'E'E. he's coming down); man-hwaabe. (q3-k4-...) he descended with it; man-hwaabe-n. (prog) he's descending with it; man-hwaabe-ndE. (hab) he always descends with it; man-khwaabe-t'o. (int) he's going to descend with it; man-hwaabe-mi. (opt) he'll descend with it; naa-hwaabe. (imp-k4-...) descend with it! (cf. man-khwaabe-ho-n.--q3-k4-lll-go with-prog--he's taking it down and man-khwaabe-ma'a).

he's bringing it down).

kanu roll, tip over: na-kanu. (k3-k2-...) it fell over; do'-kanu. (q1-k4-...) I tipped it over (cf. na-kanu-mE-n.--q3-k2-...-go-prog--it's rolling thither; na-kanu-'E'E.--q3-k2-...-come-prog--it's rolling hither).

koye burn, ignite: na-koye. (q3-k2-...) it burned; do'-koye. (q1-k4-...) I started a fire.

k'o, k'wii be in or assume a lying position (non pl V; see k'won): 'o-k'o. (q1-k2-...) I'm lying; 'o-ku'-ndE. (hab) I always lie; 'o-ku'-t'o. (int) I'm going to be lying; 'o'ku'-mi. (opt) I'll be lying; 'o-ku'-me (imp-k2-...-cont) keep lying; wi' di'-t-t'un-k'o. (P q1-k1-N-...) I have one basketry plaque; wiye di'-t'un-k'o. I have two plaques (cf. poye di'-t'un-k'won--wherein appears the plural counterpart of k'o--I have three plaques); gih-t'un-k'o. (q1-pl-k1-N-...) we pl have a plaque; dii-k'wii. (q1-k3-...) I lay down; dii-k'uuwa-n. (prog) I am in the act of or about to be in the act of lying down; dii-k'uuwa-ndE. (hab) I always lie down; dii-kuwa-t'o. (int) I'm going to lie down; dii-k'uuwa-mi. (opt) I'll lie down; 'o-k'u. (imp-k3-...) lie down! do'-k'wii. (q1-k4-...) I put it down; do'-k'uuwa-n. (prog) I'm about to put it down; do'-k'uuwa-ndE. (hab) I always put it down; do'-kuwa-t'o. (int) I'm going to put it down; do'-kuwa-mi. (opt) I'll put it down; naa'k'u. (imp-k4-...) put it down!

k'won, k'woodi be in or assume a non-standing position

(pl V; see k'ó lie, 'En sit): poyé gih-t'un-k'wón.
 (P ql-kl-N-...) I have three plaques; poyé gih-t'un-k'wón.
 (p ql-pl-kl-N-...) we pl have three plaques (cf. wi' dín-t'un-k'ó.--P ql-kl-N-lie--I have one plaque and wiyé dín-t'un-k'ó. I have two plaques); poyé dín-'éeyEE-k'wón.
 (P ql-kl-N-non sg-...) I have three children (cf. wi' dín-'éé-'En.--P ql-kl-N-sit--I have one child and wiyé dín-'éé-'En. I have two children); gi-k'wón. (ql-pl-k2-...) we pl were sitting or lying; gi-kwo-ndE. (hab) we always sit or lie; gi-kwo'-t'ó. (int) we pl are going to be sitting or lying; gi-kwo'-mi. (opt) we pl will be sitting or lying; vi-kwo'-me. (imp-pl-k2-cont) keep sitting or lying! 'ibi-k'woodi.
 (ql-pl-k3-...) we pl sat or lay down; 'ibi-k'wowa-n. (prog) we pl are about to sit or lie down; 'ibi-k'wowa-ndE. (hab) we pl always sit or lie down; 'ibi-kwo'-t'ó. (int) we pl are going to sit or lie down; 'ibi-kwo'-mi. (opt) we pl will sit or lie down; vi-k'wo'. (imp-pl-k3-...) sit or lie down! dó-k'woodi. (ql-k4-...) I put them pl down or left them pl there (cf. dii-k'wii.--ql-k4-lie--I put it or them du down and do-soge.--ql-k4-...sit--I left it or them du there); 'ii-k'woodi. (ql-pl-k4-...) we pl put them pl down or left them pl there.

mE, hó go (with): 'o-mE. (ql-k2-...) I went; 'o-mE-n. (prog) I'm going; 'o-mEne-ndE. (hab) I always go; 'o-pEE-t'ó. (int) I'm going to go; 'o-mEE-mi. (opt) I'll go; do-hó.

(q1-k4-...) I took it; do-hó-n. (prog) I'm taking it;
dó-huwu-ndE. (hab) I always take it; náá-huu. (imp-k4-...) take it!

niw, niwe fasten by puncturing: na-niw. (q3-k2-...) it punctures and sticks on; do-niwe. (q1-k4-...) I nailed it.

pii, piye exit or ascend (with): 'o-pii. (q1-k2-...) I ascended; 'o-pii-ndE. (hab) I always ascend; 'o-pii-t'ó. (int) I'm going to ascend; 'o-pii-mí. (opt) I'll ascend; 'o-píbe. (imp-k2-...) ascend! do-piye. (q1-k4-...) I ascended with it; do-piye-n. (prog) I'm ascending with it; do-piye-ndE. (hab) I always ascend with it; do-piye-t'ó. (int) I'm going to ascend with it; do-piye-mí. (opt) I'll ascend with it; náá-piye. (imp-k4-...) ascend with it! (cf. 'o-pii-mE-n--q1-k2-...-go-prog--I'm going up, 'o-pii-'E'E. I'm coming up, do-piye-ho-n---q1-k4-...go with-prog--I'm taking it up, do-piye-má'á. I'm bringing it up).

po'a, ka' come (with): 'o-po'a. (q1-k2-...) I came; 'o-E'E. (prog) I'm coming; 'o-Ene-ndE (hab) I always come; 'o-kE'E-t'ó. (int) I'm going to come 'o-kE'E. (imp-k2-...) come! dín-'E'E. (q1-k1-...-prog) it's on its way to me! do-ka'. (q1-k4-...) I brought it; do-má'á. (prog) I'm bringing it; (int) I'm going to bring it; do-pá'á-t'ó. do-má'á-mí. (opt) I'll bring it; náá-má'á. (imp-k4-...) bring it!

sow, sowe grow up: na-sow. (q3-k2-...) it is grown up; dó-sowe. (q1-k4-...) I grew it.

suyu slide: na-suyu. (q3-k2-...) it slid; 'i-suyu.
 q3-k3-...) it slid; do'-suyu. (q1-k4-...) I slid it.

win, wiinu be in or assume a standing position: 'o-win.
 (q1-k2-...) I'm standing; 'o-wi-ndE. (hab) I always stand;
 'o-kwi'-t'ó. (int) I'm going to be standing; 'o-wii-mi'.
 (opt) I'll be standing; 'o-kwi'-me. (imp-k2-...-cont) keep
standing; dii-wiinu. (q1-k3-...) I stood up; dii-wiinu-n.
 (prog) I'm about to stand up; dii-wiinu-ndE. (hab) I always
stand up; dii-kwiinu-t'ó. (int) I'm going to stand up; dii-
 wiinu-mi'. (opt) I'll stand up; 'o-wiinu. (imp-k3-...)
stand up!

yawe peel off: na-yawe. (q3-k2-...) it peeled off;
 do'-yawe. (q1-k4-...) I peeled it off.

'En, soge be in or assume a sitting position (non pl V;
 see k'wón): 'o-'En. (q1-k2-...) I'm sitting; 'o-kya-
 ndE. (hab) I always sit; 'o-kya'-t'ó. (int) I'm going to
be sitting; 'o-kya-mi'. (opt) I'll be sitting; 'o-kya'-me.
 (imp-k2-...-cont) keep sitting! wi' din-'ée-'En. (P
 q1-k1-N-...) I have one child; dii-soge. (q1-k3-...) I sat
down; dii-soge-n. (prog) I'm about to sit down; dii-soge-ndE.
 (hab) I always sit down; dii-soge-t'ó. (int) I'm going to
sit down; dii-soge-mi'. (opt) I'll sit down; 'o'-soge.
 (imp-k3-...) sit down! do'-soge. (q1-k4-...) I left it
there; do'-soge-t'ó. (int) I'm going to leave it there.

CHAPTER THREE

NOUNS AND DIRECTIONALS

3. In this chapter, two classes of distributionally similar stems are treated. These classes are designated N(oun) and D(irectional).

3.1. rel(ative) labels a morpheme which is represented by morphs -án (which occurs when the preceding phoneme is a consonant or low central vowel), -yán (which occurs when the preceding phoneme is a front vowel), -wán (which occurs when the preceding phoneme is a back vowel); the meaning is it is that one which, it is that one who.

Certain morphemes can be immediately succeeded by rel. Of these, those which are defined as stems (6.7.) constitute class N(oun).

Some N combine with morpheme non sg (2.3.). This morpheme has a variety of phonemic shapes; it is necessary to specify the allomorph with which a given N combines. The position of non sg is immediately following the N stem. N stems which occur in combination with immediately following non sg are referred to as animate N; all others are referred to as inan N.

's labels a morpheme which is represented by morph -bí-; 's marks the referent of a preceding N as being the

possessor of the referent of a following N. The position of -bi- is between two N, one of which immediately follows and one of which may immediately precede or (if it is an anim N) may be separated from -bi- by the presence of non sg.

All anim N and some inan N may combine with immediately following -bi-. All inan N and some anim N may combine with immediately preceding -bi-; those an N which precede but do not follow -bi- are the ones referred to as Pronouns (pN).

3.2. Examples follow of N in combination with morphemes referred to in the preceding section.

N + rel: he' p'o-wan' na-mu. (pN N-rel q3-k2-st V) that's water; pE-yan' na-mu. (N-rel q2-k3-st V) that's a deer; naa-an' do-'an. (pN-rel q1-k4-ac V) I did it.

N + non sg: phuyu-n. flies; 'u-n. (pN-non sg) you non sg; in some instances the allomorph of non sg equals low-tone vowel of same quality as immediately preceding stem-final high-tone vowel, as, for example, in kwiyo'-o. women and eey'E-E. children.

N + 's + N: kwiyo'-bi'-mele. (anim N-'s-inan N); na-bi'-to. (pN-'s-inan N) my shirt; athu-bi'-k'ege. (inan N-'s-inan N) car's house, garage.

N + non sg + 's + N (+ non sg): kwiyo'-o-bi'-k'ege. (anim N-non sg-'s-inan N) women's house; 'u-m-bi'-nile-n. (pN-non sg-'s-anin N-non sg) your chickens.

3.3. This section deals with Noun suffixes not treated above.

Suffixes which occur in the position immediately following N stem are as follows.

to, toward -pe'e, as in k'ege-pe'e na-píi. (N-... X2-V)
he went up home.

in, into, at -ge, as in p'olo-ge do'toge. (N-... X4-V)
I put it in the hole.

from, with, by means of -di, as in 'i-bí-'an-di má-má-
map'ege. (pN-'s-N-... X4-V) he pushed it with his foot;
k'ege-di na-kanu-po. (N-... X2-V-V) it rolled away from the
house.

through, along the side of -inge, as in k'ege-'inge
na-píi-mE-n. (N-... X2-V-V-prog) it's going up the side of
the house.

D labels a class of stems which share certain features of distribution with N. These are: possibility of occurrence in the position immediately following morpheme 's (above) and possibility of combination with the suffixes listed above. In addition, certain members of D combine with suffixes not found following N. These are as follows.

at that place -de, as in k'ege nú'ú-de na-to'on. (N
D-... X2-V) it's under the house.

at that very spot -mo, as in 'i'í-mo 'o-kyá'-t'ó.
(D-... X2-V-int) I'm going to stay right there.

Certain combinations among the suffixes listed in the paragraphs above are possible. These are as follows.

-ge+ -pe'e, as in nū'ú-ge-pe'e na-kanu-po. (D-...X2-V) it rolled down.

-ge+ -di, as in pha-ge-di 'o'ó do-k-wii. (N-... D X4-V) I put it away from the fire.

-pe'e+ -di, as in k'ege p'Énú-pe'e-di na-po'á. (N D-... X2-V) he came from in front of the house.

-de+ -pe'e, as in k'É'É-de-pe'e mām-piye. (D-... X4-V) she took it up.

Members of D are listed below with examples; combinations with N and with various of the above listed suffixes (represented in the parenthetic formulae by the cover symbol D) are shown.

p'Énú in front (of); outside: p'Énú 'o-kya-ndÉ.

(D X2-V-hab) I always stay outside; p'Énú-pe'e 'o-pii.

(D-D X2-V) I went outside; hogú p'Énú-mo 'o-kya-mí-dá.

(P D-D X2-V-opt-obl) I should have stayed outside;

k'ege p'Énú na-po'á. (N D X2-V) he came in front of the house;

k'ege p'Énú-pe'c na-po'á. he came in front of the house;

k'ege p'Énú-pe'e-di na-po'á. (N D-D-D X2-V) he came from in

front of the house; sen k'ege p'Énú na-win. (N N D X2-V) the man is standing in front of the house.

nū'ú under: nū'ú-di na-kyan. (D-D X2-V) it is growing up from under; k'ege nū'ú-di na-pii. he came out from under

the house; ce'ee k'ege nū'ú na-En. (N N D X2-V) the dog is

under the house; k'ege nū'ú na-c'un. (N D X2-V) we went under

the house; k'ege nu'u-pe'e na-c'un. he went under the house;
 k'ege nu'u-pe'e na-cude-mE-n. (N D-D X2-V-V prog) he's going
in under the house; nu'u-ge na-win. (D-D X2-V) he's standing
down there; nu'u-ge-pe'e na-hwan. (D-D-D X2-V) he went down;
 nu'u-ge-pe'e man-khwaabe-ho-n. (D-D-D X4-V-V-prog) he's tak-
ing it down; nu'u-ge-di man-tE-n. (D-D-D X4-V-prog) he's
pulling it up from below; k'ege nu'u-de na-to'on. (N D-D X2-V)
it's under the house; na-bi-nu'u-'inge (pN-'s-D-D) under me.

'iive in: 'iive 'o-c'un. (D X2-V) I went in; 'iive
 'o-to'on-dE. (D X2-V-hab) I always stay inside; 'iive
 'o-cuwave (D imp X2-V) go on in! 'iive man-mun. (D X4-V)
he looked in at it; ci'ee k'ege 'iive 'i-kwoli-mEEyu (N N D
 X3-V-V) the bird is flying around inside the house; ci'ee
 'i-kwoli-mEEyu 'iive. (N X3-V-V D) the bird is flying around
inside; k'ege 'iive na-c'un. he went into the house
 (cf. k'ege na-c'un. he went into the house); ci'ee k'ege
 'iive-'inge 'i-kwoli. (N N D-D X3-V) the bird flew through
the house; k'ege 'iive-di napii. (N D-D X2-V) he came from
inside the house; 'iive-pe'e man-khwim-mEEyu. (D-D X4-V-V)
he's looking in.

k'ee up, upon: k'ege k'ee maadi na-kya-ndE.
 (N D P X2-V-hab) it sits on the house all time; ci'ee k'ege k'ee
 na-'En. the bird was sitting on the house; ci'ee k'ege k'ee
 'i-soge. the bird landed on the house; ci'ee k'ege k'ee
 'i-kwoli-mEEya. the bird is flying around above the house;
 k'ee-de na-win. (D-D X2-V) he's standing up there;

k'e'e-pe'e mam-map'ege. (D-D X4-V); he pushed it up;
 k'e'e-pe'e do-mun. I looked up; k'e'e-de-pe'e mam-map'ege.
 (D-D-D X4-V) he pushed it up; k'e'e-de-pe'e do-mun. I looked
up; sen k'e'e-de-pe'e na-pii. (N D-D-D X2-V) the man reached
the top; na-bi-waayu k'e'e-di 'o-'etan. (pN-'s-N D-D X2-V)
I fell off my horse.

puu down: puu-ge nawin. (D-D X2-V) he's standing
down there; puu-ge-pe'e man-tElE. (D-D-D X4-V) he pulled
it down; puu-ge-pe'e do-mun. I looked down.

'o'o away, over there: 'o'o man-kanu-'an. (D X-V-V)
he rolled it away; 'o'o-pe'e do-tege-ho. (D-D X4-V-V) I
carried it over there; 'o'o-ge-pe'e na-kanu-mE-n. (D-D-D
 X2-V-V-prog) it's rolling away sen 'o'o-de na-win.
 (N D-D X2-V) the man is standing there.

'i'i there, to there: 'i'i 'o-c'un. I went in there;
 k'ege 'i'i do-toge (N D X4-V) I put it in the house;
 'i'i 'o-mE. I went there; 'i'i do-mun. I saw him there;
 'i'i 'o-En. I've been sitting there; 'i'i-di dii-soge-ma'a.
 (D-D X3-V-V-prog) from there I kept sitting; 'i'i-mo 'o-kyat't'o.
 (D-D X2-V-int) I'm going to stay there; 'i'i-mo do-soge-t'o.
I'll leave it there; k'uu k'ege 'i'i-pe'e na-kanu-po.
 (N N D-D X2-V-V) the stone rolled up to the house; t'un
 'i'i-ge-pe'e do-mun. I looked into the basket; na-bi-'i'i-ge-pe'e
 'i-cihwaye. (pN-'s-D-D-D X3-V) he looked down at me.

hange beside: sen k'ege hange na-mE-n. (N N D X2-V-prog)
the man is walking beside the house; k'u k'ege hange-pe'e

na-kanu-po. (N N D-D X2-V-V) the stone rolled toward the house; k'ege hánge-pe'e-di na-kanu-mE-n (N D-D-D X2-V-V-prog) it's rolling thither, away from beside the house; na-bi-hánge-'inge (pN-'s-D-D) near me; he' sem-bi-hánge na-win. (N N-'s-D X2-V) he's standing beside that man; k'ege hánge-'inge na-'E'E. (N D-D X2-V-prog) he's coming alongside the house; k'ege hánge-'inge-pe'e-di na-'E'E. (N D-D-D-D X2-V) he's coming from alongside the house.

hE'E there (as opposed to here): hE'E k'ege na-ná. (D N X2-V) there's a house over there; hE'E-pe'e we-náa-huu-mi-di. (D-D neg-imp X4-V-opt-neg) don't take it in that direction! hE'E-mo 'o-kya'-me. (D-D imp X2-V-cont) just stay there!

nE'E here: 'o-kya'-t'ó nE'E. (X2-V-int D) I'm going to stay here; nE'E-di na-pii. (D-D X2-V) he went out from here.

CHAPTER FOUR

PARTICLES

4. P(articles) are defined as stems which in at least some of their occurrences appear in positions preceding the initial morpheme or following the final morpheme of the Verb word and which in their distributions do not conform to the criteria by which are defined classes N and D. Some stems which are thus classifiable as P also occur immediately preceding Morpheme gerund; such stems are classified as PV. (e.g., 'áyyá 'u-n we¹'obi-o'di.--PV pN_i neg-q2-p1-k3- ac V-prog-neg--you are not doing right; cf. 'áyyá-'i na-mu.--PV-gerund q3-k2-st V--it's good).

(In the treatment of Particles, certain polysyllabic sequences are taken to be monomorphemic even though there are resemblances in phonemic shape as between these longer sequences and monosyllabic Particles; this is because no regularity of meaning correspondence can be established between a given CV Particle and the same sequence of phonemes standing as part of the longer sequences in question.)

The assignment of Particles to subclasses can undoubtedly be refined beyond that which is attempted here. The present description is limited in scope for the most part to

word morphology. Further investigation is necessary with respect to privileges of co-occurrence among members of class P and also as between members of class P and members of other morpheme classes.

4.1. Particles are first subdivided into those which in some of their occurrences stand between X and the Verb base (i.e., incorporated as part of the Verb word) and those which invariably stand outside the Verb word. Members of the former subclass are listed immediately below.

da emphatic: ho do-da-khuu-t'ó. (P q1-kr-...-st ac V-int) I'm just about to take it, I'll just have to take it, I'm really going to take it; ho d'ó-da-háá-'ám-mí. (P q1-k4-...-P-ac V-opt) I just have to do it; na-da-k'ahagi. (q3-k2-...-st V) it really tastes good; he'-d-án da 'imo' 'o'-n-kÉ'-'an. (pN_i-ag-rel ... P 3d recip-3d ag-yl-dep V-ac V) he's the one who charged a high price for it; cf. he'-d-án 'imo' 'ón-da-kÉ;- 'an. he's the one who charged a high price for it; ho 'i-da-wíinu-ho'-n. (P q3-k3-...-st ac V-st ac V-prog) he's just about to stop; da hágúto 'i-'o. (... V q3-k3-ac V-prog) he is undecided, he gets into trouble; he' da hÉ1E na-mu. (pN_i ... P q3-k2-st V) he's respected, he's really someone; he' sen da 'áyyá-'i na-mu. (pN N ... PV-gerund q3-k2-st V) that man is really good; wati da hágúto 'ii ga-'En. (P ... P D q1-du-k2-st ac V) we're still undecided about staying there.

háa that, something: 'u ke háa bi-'an. (pN_i P ... q2-k3-

ac V) you must have done something; háá na-kyan. (... q3-k2-st V) it tastes funny; háá kam-pí. (... ac V-dub) don't do that! ho man-háá-'ám-mí. (P q3-k4-...-ac V-opt) let him do that! háá ba díbí-'an. (...P q3-pl-k3-ac V) I hear they did something.

mapi still, quiet: ho bi-mapi-'a. (P imp-pl-k3-...-ac V) keep still! cf. ho mapi bi-'a. keep still! hE'E mapi 'o-kyá'-me. (D ... imp-k2-st ac V-cont) sit still there!

4.2. Particles which invariably stand outside the Verb word fall into several subclasses.

Each of the Particles included in the set listed immediately below stands in each of its occurrences preceding a Verb word among whose constituents is the suffix morpheme -mi(-) optative.

gúba it is to be hoped: gúba na-powa-mí. (... q3-k2-st ac V-opt) I hope he comes.

gúho should: gúho wo-dó-kwii-mí-da. (... P neg-ql-k4-ac V-opt-obl) I should not have taken it away from him.

háadan it is possible, I think, perhaps: ho háadan 'áyyá na-puwa-mí. (P ... PV q3-k2-st V-opt) I think it will get well; ho héye háadan díń-'ode-mí. (P P ... ql-kl-st V-opt) I'll forget it some day; háadan dó-hwaye-mí. (... ql-k4-ac V-opt) I can lower it; cf. háadan wo-dó-hwaye-mí-dí (same as preceding except for presence of neg-...-neg) I can lower it (whatever difference in meaning there may be between these two

sequences, it is certainly not one of positive vs. negative; haadan, as far as we know, is unique in this respect.)

háaki may it be that: háaki do'-hwaye-mí. (... ql-k4-ac V-opt) let me lower it; háaki do'-da-kwii-mí. (... ql-k4-P-ac V-opt) I'd better take it away from him; háaki naa-an do'-kwii-mí. (... pN₁-rel ql-k4-ac V-opt) let me take it away from him.

hánto will not, would not, cannot: hánto do-'ayya-'ám-mí. (... ql-k4-PV-ac V-opt) I won't fix it; hánto dii-da-'ám-mí. (... ql-k3-P-ac V-opt) I don't know what to do with myself; hánto ke do'-khyaw-mí. (... P ql-k4-ac V-opt) I am afraid I won't be able to find it; ho we-'o-pii-pí-di hánto háá 'oo-'ám-mí. (P neg-ql-k2-st ac V-dub-neg ... P 3d recip-3d ag-ac V-opt) if I hadn't gone out, he wouldn't have done anything to her.

hogú should: hogú we-'o-c'u-mi-pi-da. (... neg-ql-k2-st ac V-opt-dub-obl) I should not have gone in; hogú 'i-i-mo 'o-kya-mí-dá. (... D-D ql-k2-st ac V-opt-obl) I should have stayed right there.

yo hortative: yo 'án-kumé'-mí. (... ql-du-k4-ac V-opt) let's du buy it; yo he'i-n 'án-kumé'-mí. (... pN₁₁-non sg ql-du-ac V-opt) let's buy them; yo 'ii-kumé'-mí. (... ql-pl-k4-ac V-opt) let's pl buy them.

The Particle listed immediately below stands in each of its occurrences preceding a Verb word among whose constituents is either (a) a member of set imperative X or (b) the

suffix morpheme -mi(-) optative.

hágu may it be that: hágu do-'ám-me-mi. (... q1-k4-ac V-cont-opt) let me be doing it; hágu 'o-hwii-a. (... imp-ac V-ac V) try to eat! ho hágu do-sE1E-mi. (P ... q1-k4-ac V-opt) let me boil it; hágu ho dó-hoo-mi. (... P q1-k4-ac V-opt) let me start taking them.

Each of the Particles included in the set listed immediately below co-occurs with the Particle a ~ ya ~ wa (often translated as the mark of a non-yes-no question; this Particle in some of its occurrences stands immediately following the Verb word but may also occur elsewhere and may even be repeated within the same utterance (see example under heyu below).

háada why: háada 'u-mE-n a. (111 q2-k2-st ac V-prog P)
why are you leaving?

háadida how: háadida 'u-mE-n a. (... q2-k2-st ac V-prog P) how are you going? háadida 'u-púu-t'ó wa. (... q2-k3-st ac V P) how are you going to go?

háya probably: háya na- 'Eñ a. (... q3-k2-st ac V P) probably he's there; háya na-hee ya. (... q3-k2-st VP) probably he's sick.

héedan how soon: héedan 'u-mE-n a. (... q2-k2-st ac V-prog P) how soon are you leaving?

heyu how many: heyu thaw-án nE'E ya 'u-kya'-tió wa (... N-rel D P q2-k2-st ac V-int P) how many days are you going to stay here?

Particles which do not fall into any of the subclasses given in the above sections are listed below.

ba I hear, it is said that: haa' ba dibi-'an. (P ... q3-pl-k3-ac V) I hear they did something; he'i-n-d-ám ba 'o-bée-t'olo-'an. (pN_i-non sg-ag-rel ... 3d recip-3d ag-y3-dep V-ac V) I hear it was they who told them.

di yes-no question: di 'i-Ely. (... q3-k3-ac V) did he run? di han naa-'an. (... N q2-k4-ac V) did you do it?

dí and, when: do-caḷa-mEEyu dí wé-na-müü-mi-dí. (q1-k4-dep V-ac V ... neg-q3-k2-st ac V-opt-neg) I'm holding on to him so he w n't go away.

do' only, just, very: da haḡuto na-mü gi do'na-tun. (P P q3-k2-st VP ... q3-k2-st V) he says he's undecided; moyi' do' na-mü. (P P q3-k2-st V) he's very critical; wi' do' kwiyo'. (P ... N) just one woman.

ga it is not known: ga haa' he dan ke 'ayya wen do-bée-mowa dí, (... P P PV P q1-k4-ac V P) I don't know whether I improved them; ga haa' bi-'an dí woo-khwim-mEEyu. (... q2-k3-ac VP 2d recip-3d ag-dep V-ac V) I don't know what you did, but they're looking at you; ho 'o-müü-mi ga haya 'o-kya-mi ga 'y-na'a. (P q1-k2-st ac V-opt) ... P q1-k2-st ac V-opt ... q2-k2-st V) I'll go unless you want me to stay; ga wée na-mE. (... D q3-k2-st ac V) I don't know where he went.

gi Particle of discourse: gi do-tu-'an. (... q1-k4-st V-ac V) that's what I told him; da haḡuto na-mü gi do'na-tun. (P P q3-k2-st V ... P q3-k2-st V) he says he's undecided.

gú already, certainly: gú he' na-sow. (... pN₁ q3-k2-st ac V) he is grown up. gú do-da-kwii-mi-da. (... q1-k4-P-ac V-opt-obl) I should have taken it away from him; gú wo-dó-ha'-mi-pí-dá. (... neg-q1-k4-ac V-opt-dub-obl) I should not have eaten it.

haawen at least: ho haawen wiye k'e'e-de-pe'e da-p'olo-ná. (P ... P D-D-D q non l-du-k2-N-st V) there are at least two trails going up.

háguto rough, crooked, undecided, miserable: da háguto 'i-'o. (P ... q3-k3-ac V-prog) he is undecided; he gets into trouble; hE'E k'e-de-de háguto na-p'olo-ná. (D D-D ... q3-k2-N-st V) up there, there is a rough road; háguto na-mu. (... q3-k2-st V) it is all crooked, rough; háguto 'o-mu. (... q1-k2-st V) I'm miserable, undecided; háguto ga-'En. (P ... q1-du-k2-st ac V) we are living in an irresponsible manner; wati da háguto 'i'i ga-'En. (P P ... D q1-du-k2-st ac V) we are still undecided about staying there.

handi in that case: ho wati handi wo-'o-pii-mi-dá. (P P ... neg-q1-k2-st ac V-opt-obl) in that case, I'd better not go out yet.

heye sometime, ever: ho heye háadan dín-'ode-mí. (P ... P q1-kl-st V-opt) I'll forget it someday maybe; hanto heye dín-'ode-mí. (P ... q1-kl-st V-opt) I'll never forget; heye wé-'i-t'olo-mEyu-di. (... neg-q3-k3-dep V-ac V-neg) he never works.

hEdi then: hEdi han di-tu-'an. (... N 1st recip-st V-ac V) then he told me something.

hE1E thing: 'imo' ne' hE1E d^o-pa. (P pN ... q1-k4-ac V-prog) I make a lot of these things; maadi hE1E wi t'ehki d^o-tu-mEEy^y. (P ... P P q1-k4-st V-ac V) I always tell him every thing; hE1E wi w^{ee} d^o-da-huwa-ndE. (... P D q1-k4-st ac V-hab) I'm always losing something.

hiye few: hiye we-'an-k^{ee}-k^ume-ndE-pi-di. (... neg-q1-du-k4-N-ac V-hab-dub-neg) we always buy a lot of clothes.

ho already, certainly: ho dii-hwii-'an. (... q1-k3-ac V-ac V) I ate already; di ho bi-hwii-'an. (P ... q2-k3-ac V-ac V) did you eat already? na-n ho 'an-hwii-'an. pN₁-non sg ... q1-du-k3-ac V-ac V) we du ate already; na-na'a di ho man-'am-mi d^o-tu-'an. (q3-k2-st V P ... q3-k4-ac V-opt q1-k4-st V-ac V) if he wants to, go ahead and do it, I told him; naa-di ho d^o-kwii'. (pN₁-ag ... q1-k4-ac V) I've already taken it away from him.

huwa again: huwa d^o-suwa-'an. (... q1-k4-st V-ac V) I warmed it again.

ke in all probability: ho mam-piye ke. (P q3-k4-st ac V ...) he must have brought it out already; ho ke mam-piye. he must have brought it out already; 'y ke haa bi-'an. (pN₁ ... P q2-k3-ac V) you must have done something; hanto ke d^o-khyaw-mi'. (P ... q1-k4-ac V-opt) I'm afraid I won't be able to find it.

kidi and, then: na-'En kidi 'i-kwooli'. (q3-k2-st ac V ... q3-k3-ac V) it was sitting and then it flew away.

kwen it's up to the person named, the person named is responsible: 'u-wán kwen náá-paa. (pN-rel ... q2-k4-ac V)
you are the one who made it.

maadi always, habitually: maadi do-p'o-piye-ndE.
(... q1-k4-N-st ac V-hab) I'm always taking the water up;
maadi p'Eny 'o-kya-ndE (... D q1-k2-st ac V-hab) I always stay
outside; hE1E wi maadi man-kage-ndE. (P P ... q3-k4-st ac
V-hab) he always brings something; maadi na-powa-me-mí.
(... q3-k2-st ac V-cont-opt) let him come all the time; naa-
di maadi hE1E wi do-mewa-ndE. (pN_i-ag ... P P q1-k4-ac V-hab)
I'm always giving things to him; maadi hE1E wi wée do-huwa-
ndE. (... P P D q1-k4-st ac V-hab) I'm always taking things
somewhere, I'm always losing things; maadi dii-hwii-'o. (...
q1-k3-ac V-ac V-prog) I'm always eating.

mawon always, continuously: mawom man-ma-p'ewa-ndE.
(... q3-k4-f-ac V-hab) he kept pushing it; mawom man-khw'-
'o-dE. (... q3-k4-dep V-ac V-hab) he is always singing; dii-
khaw'-mowa di mawom man-khaw'-'o. (q3-pl-k4-dep V-ac V P ...
q3-k4-dep V-ac V-prog) they stopped singing, but he kept on
singing.

nee just now, just then, any more: wé-na-hee-di nee.
(neg-q3-k2-st V-neg ...) he's not sick any more; nee 'eeyE
wé-na-mu-di. (... N neg-q3-k2-st V-neg) he's not young any
more; nee ho wo-do-suwa-'o-di. (... P neg-q1-k4-st V-ac V-
prog-neg) I'm not warming it any more; nee do-c'an-da-kwii-
t'ó. (... q1-k4-z-P-ac V-int) I was just now going to take

it away from him.

pí'í' no, none: p'ó pí-i' 'o-po'á. (N ... q1-k2-st ac V) I came to a place with no water.

poyé three: poyé mele mām-piye-ho-n. (... N q3-k4-st ac V-st ac V-prog) she's taking three pots up; poyé dín-t'un-k'won. (... q1-kl-N-st ac V) I have three basketry plaques.

taye' long enough, for a long time: taye' na-hee. (... q3-k2-st V) he's been sick for a long time; ho taye' 'o-cika-En. (P ... q1-k2-st V-st V) I've waited long enough.

t'ehki all, every: maadi hE1E wi t'ehki dó-tu-mEEyyu. (P P P ... q1-k4-st V-ac V) I always tell him everything; t'ehki na-suwa-po. (... q3-k2-st V-st V) it is warmed all the way through.

waagi whatever: naa maadi dó-n-hawe-ndE haa 'i-'ám-mi waagi na-na'a waagi 'i-ám-mi. (pN_i P q1-k4-yl-ac V-hab P q3-k3-ac V-opt ... q3-k2-st V ... qe-k3-ac V-opt) I always let him do whatever he wants to do.

wada' also: naa wada'. (pN ...) me too.

wati still, yet: wati dín-k'ó. (... q1-kl-st ac V) I still have it; wati da háguto-'i'i ga-'En. (... P P D q1-du-k2-st ac V) we're still undecided about staying there; ho wati we-'o-c'ú=mi-dí. (P ... neg-q1-k2-st ac V-opt-neg) I'd better not go in yet; nE'E-mo 'y-kya-mi wati 'o-wii-po'á dí. (D-D q2-k2-st ac V-opt ... q1-k2-z-st ac V P) stay here until I get back!

wemmo but: k'ege p'Ény-pe'e-di 'i-'á-tuwyé wemmo ga
wée na-mÉ. (N D-D-D q3-k3-f-ac V ... P D q3-k2-st ac V) he
walked away from in front of the house, but I don't know where
he went.

wen at some time in the past: wen d'ó-kúme-n. (...
q1-k4-ac V-prog) I was buying it; heye wen na-c'ewa-po-ndÉ.
(P ... q3-k2-dep V-st V-hab) he always used to get drunk.

wiyé two: wiyé dín-k'ége-ná. (... q1-k1-N-st V)
I have two houses. ho haawen wiyé k'e'e-de-pe'e da-p'olo-ná.
(P P ... D-D-D q non l-du-k2-N-st V) there are at least two
trails going up.

wí' one: wí' dín-k'ége-ná. (... q1-k1-N-st V) I
have one house; wí' kwiyo. (... N) one woman.

'ihee that time: 'ihee ho han d'ó-mowa kí'd 'iwÉ-d 'o-
mÉ-n. (... P N q1-k4-ac V P D-D q1-k2-st ac V-prog) that's
the time I finished up on him and went home; d'ó-c'an-da-kwíí
'ihee 'y-c'un. (q1-k4-z-P-ac V ... q2-k2-st ac V) I was
taking it away from him that time when you came in.

'imo' much, too much, very: 'imo' 'o-suwa-po. (...
q1-k2-st V-st V) I got very warm; 'imo' hÉ'É na-ná. (...
D q3-k2-st V) it's quite some distance away; 'imo' d'ó-k'ége-paa.
(... q1-k4-N-ac V) I built a lot of houses.

CHAPTER FIVE

MORPHOPHONEMICS

5. Conditions under which certain alterants of certain morphemes are selected in certain environments can be stated in terms of certain features of the phonemic constituency of these environments.

The respective distributions of certain morphemes whose allomorphs always terminate in a nasal continuant (m, n) are such that these allomorphs appear only in contexts in which the initial phoneme of the immediately following morph is a consonant. The terminal phoneme of such allomorphs is m when the initial phoneme of the immediately following morph is p, b, or m (this set of phonemes being referred to as 'labials'); it is n when the initial phoneme of the immediately following morph is t, c, k, ' , d, g, n, s, w, y, or h (this set of phonemes being referred to as 'non-labials'). Examples follow.

-m- ~ -n- (k⁴): dém-maak'a-o. they du are teaching him; dém-pa. they du built it; dén-tay. they know him; den-c'ala. they cut it; dén'k'wii'. they put it down; dén-'an. they did it; ho dén-da-c'awe-'o. they're letting it get hot; dén-nuwe. they looked for it; dén-soge. they left it; dén-wo'á. they paid him; dén-ya₁la. they fought him; den-hulu. they rubbed it.

$-(\begin{smallmatrix} W \\ y \end{smallmatrix})\acute{a}m \sim -(\begin{smallmatrix} W \\ y \end{smallmatrix})\acute{a}n$ relative: he'i-n-ám ba da-hee.
they're the ones who are said to be sick; na'i-n-án gi-mE.
we're the ones who went; to-bí-níle-yań ke he' na-mu. I
wonder whose chicken that is.

For certain morphemes, the terminal phoneme of the alternant or alternants occurring immediately before morphs with initial vowel is n; for certain others it is m. When (and if) an alternant of a morpheme of either sort occurs immediately preceding a morph whose initial phoneme is one of the labials, the terminal phoneme of the alternant in question is m; when (and if) an alternant of a morpheme of either sort occurs immediately before / . / or immediately before a morph whose initial phoneme is one of the non-labials, the terminal phoneme of the alternant in question is n. Examples follow.

ham \sim han that, something (N): ham-án dó-tu-'an.
that's what I told him; 'u ke ham bi-'an. you must have done
something; han dó-tu-'an. I told him that; han náá-'an.
you did it; han wé-dí-bí-'o-dí. they aren't doing it.

-n \sim -m non-singular: 'u-n-án kwen. it's up to you;
 na'i-n-di wí-tay. we know you; 'i-m-bí-kwiyóo. their wives;
 'u he-i-m ma-bée-tay. you know them.

Alternation among certain morphs which show a high degree of similarity of phonemic shape as well as semantic similarity approaching identity is such that it is not possible to state the conditions of alternation in terms either

of surrounding phonemes or surrounding morphemes. In order to avoid (a) positing free alternation among morpheme alterants and (b) setting up a very large number of phonemically-semantically-distributionally similar morphemes, we introduce two selectors, morphemes \emptyset_1 and \emptyset_2 , in whose presence allomorphs of certain shapes are selected to the exclusion of others. When neither \emptyset_1 nor \emptyset_2 is present, the fullest allomorph (defined as that made up of the greatest number of phonemes in sequence) in a series of morphs representing a given morpheme in a given context (that is, in a given context excluding \emptyset_1 and \emptyset_2 is present).

\emptyset_1 selects morphs terminating in sequences of the shape V_1C which correspond to fullest allomorphs terminating in V_1CV_1 (thus: -pe'e -pe' toward); \emptyset_1 selects morphs including V_1 which correspond to fullest allomorphs including V_1V_1 (thus: mE₃Ey₃ mE₃Yu₃); \emptyset_1 selects morphs of the shape C which correspond to fullest allomorphs of the shape CV (thus: -di -d with). (In process terminology, the only vowel or one of two like vowels is dropped.)

\emptyset_2 selects sequences of the shape $V(-)V$ (the hyphen indicates the possibility of a morpheme boundary) which correspond to fullest $V(-)'V$ (thus: -pe'e -pee toward).

\emptyset_1 and \emptyset_2 may co-occur (thus: -pe'e -pe toward).

It should be said that the status of ' as a phoneme is not in doubt. In other than intervocalic position it is not lost; moreover although one notes at the phonemic stage

of analysis that for every sequence of $V_1 'V_2$ (where V_1 may be or may not be the same as V_2) in a given context it is possible to elicit a sequence of V_1V_2 , one also notes that the reverse procedure is not always possible--that is, in certain contexts $V_1 'V_2$ is not substitutable for V_1V_2 .

The same sort of remarks apply to the contrast between geminate vowel clusters and single vowels. In some texts the contrast between VV and V is almost obliterated. However while V_1 can be substituted for V_1V_1 in many contexts, there are others in which it cannot, and there are many in which V_1V_1 cannot be substituted for V .

A third kind of morphophonemic alternation is that in which alternants of Verb morphemes are selected according to the morphemic constituency of preceding and following affix complexes. In many cases of alternation the specific interchange of phonemes involved is unique to the alternants of one, two, or a few Verb morphemes. In other cases the alternation between specific phonemes or phoneme sequences is amenable to statement as a general rule.

Among $st ac V$, the degree of similarity of phonemic shape between those alternants which in base-final position combine with $X1$ and $X2$ and those which in base final position combine with $X3$, $X4$, $X5$ forms a continuum from identity (e.g., $suy\dot{u}$, slide) to close agreement (win , $w\acute{i}nu$ stand) to absolute non-identity (En , $soge$ sit). The actual interchanges of phonemes involved in the alternations are unique to each

verb or to a small set of verbs (han, habe break; cin, cibe fasten). Alternants of st ac V are listed under (2.24.); no further reduction is here attempted.

The sort of alternation in phonemic shape of base-final Verb morphemes which is associated with the selection of one or another of the suffixes which follow Verb bases is such that interchange of phonemes can be at least partially stated in terms of morphophonemic rules. A stem which in combination with non imp X displays--when immediately followed by one of certain suffixes, viz., prog, hab, opt, cont --as its initial phoneme or phoneme cluster one of those listed under I below displays--when immediately followed by suffix int--as its initial phoneme or phoneme cluster the corresponding one (listed directly opposite) from list II.

I	II
h	kh
w	kw
'	k
c'	c
k'	k
p'	p
m	p

It is possible to predict only from I to II, not from II to I; for example, a stem which displays initial c when the immediately following morpheme is int may or may not

display initial c' in other environments.

Some stems which show the alternation between I and II in the environments listed above display the I consonant(s) initially when there is no suffix or the suffix immediately following is neg (for example: 'o-mE.--unsuffixed--I went; we'-'o-mE-di'.--with neg--I didn't go; 'o-pE-t'o'.--with int--I'm going to go); however, some do not (for example: na-po'a'.--unsuffixed--he came; na-'E'E-mi'.--with opt--let him come; na-kE'E-t'o'.--with int--he's going to come.).

h ~ kh: do'-ha'. (unsuffixed) I ate it; do'-hane-n. (prog) I'm eating it; maadi do'-hane-ndE. (hab) I always eat it; do'-ha'-mi'. (opt) let me eat it; ho we'-do'-hane-me-mi-pi-di (cont-opt-dub-neg) if I hadn't eaten it; we-do'-ha'-pi-di. (dub-neg) if I hadn't eaten it; cf. do'-kha'-t'o'. (int) I'm going to eat it.

w ~ kw: dii-wiinu. (unsuffixed); I stood up; dii-wiinu-n. (prog) I'm about to stand up; dii-wiinu-ndE. (hab) I always stand up; dii-wiinu-mi'. (opt) I'll stand up; dii-wiinu-me-mi'. (cont-opt) I'll keep standing up; cf. dii-kwiinu-t'o'. (int) I'm going to stand up.

' ~ k: do'-'an. (unsuffixed) I did it; do'-'o. (prog) I'm doing it; do'-'o-dE. (hab) I always do it; do'-'am-mi'. (opt) I'll do it; do'-am-me-mi'. (cont-opt) I'll keep on doing it; han we'-dii-'am-pi-di. (dub-neg) if I hadn't done that; cf. do'-kan-t'o'. (int) I'll do it.

c' ~ c: do'-c'uude. (unsuffixed) I took it in; do'-c'uude-n. (prog) I'm taking it in; do'-c'uude-ndE. (hab) I always take it in; do'-c'uude-mi'. (opt) I'll take it in; do'-c'uude-me-mi'. (cont-opt) I'll keep taking it in; cf. do'-cuude-t'ó. (int) I'm going to take it in; also, 'o-c'ú-ndE. (hab) I always go in; 'o-c'ú-mi'. (opt) I'll go in; háya 'o-c'ú-ma. (cond) shall I go in? or maybe I'll go in; cf. 'o-cúde-t'ó. (int) I'm going to go in.

k' ~ k: di-k'wii. (unsuffixed) I lay down; dii-k'úwa-n. (prog) I'm about to lie down; dii-k'úwa-ndE. (hab) I always lie down; dii-k'úwa-mi'. (opt) I'll lie down; dii-k'úwa-me-mi'. (cont-opt) I'll keep lying down; cf. dii-kuwa-t'ó. (int) I'm going to lie down.

p' ~ p: do'-p'ege. (unsuffixed) I threw it away; do'-p'ewa-n. (prog) I'm throwing it away; do'-p'ewa-ndE. (hab) I always throw it away; do'-p'e-mi'. (opt) I'll throw it away; do'-p'e-me-mi'. (cont-opt) I'll keep throwing it away; cf. do'-pe-t'ó. (int) I'm going to throw it away.

m ~ p: 'o-mE. (unsuffixed) I went; 'o-mE-n. (prog) I'm going; 'o-mEne-ndE. (hab) I always go; 'o-wii-mE-mi'. (opt) I'll go back; háya 'o-mE-ma. (cond) shall I go (home)? cf. do'-pEE-t'ó. (int) I'm going to go.

CHAPTER SIX

WORD CLASSES

6. Words are classified according to their morphemic constituency rather than according to their substitutability in various frames.

The values of the symbols used in the following sections are as follows: V^b = Verb base; capital letter with underline (e.g., V) = any affix which combines with members of the stem class designated by that same letter without underline (V- = prefix in combination with V, -V = suffix in combination with V, etc); R = the combined classes of N and D; other symbols are used as in previous chapters.

6.1. V^b in combination with one or more V (in 6.1.1. and 6.1.2. V- must include X; a Noun + non sg, one or more Particles, or one or more prefixes (y or z or i) may intervene between X and V^b ; one morpheme--we (et al) neg--may precede X; in 6.1.3. -V always = -pi(-) dubitative or -i(-) gerund).

6.1.1. V- V^b -V: d'ó-'ám-mí. (q1-k4-ac V-opt) I'll do it.

6.1.2. V- V^b : 'an-tay. (q1-du-k3-ac V) we two know each other.

6.1.3. V^b -V: kam-pí. (ac V-dub) don't do it!

The minimum Verb word is not the shortest sequence elicitable involving a Verb morpheme. The shortest sequence is an alternant of a Verb stem uttered in isolation. All such utterances in our corpus are responses to requests (not frequently made) for translations of English lexical items uttered in isolation on our part. Also, it must be reported that we have several examples of what are herein termed 'prefixes' uttered in isolation. These examples-- which were not translation responses--came about in the following way. Having come across a pair of items which constituted minimal pairs for the contrast between vowel with high tone and vowel of like quality with low tone, we asked the informant if he could think of additional examples. He had no difficulty in grasping the principle of minimal pairs; some of the examples he volunteered, however, were illustrations of contrasts between consonants rather than between vowels of like quality and differing tone. Among the pairs volunteered were dó-. (q1-k4) and tó. stick. The translation given for dó- on this occasion was me (which is not quite complete).

(Both informants appeared to be quite innocent of any knowledge of the structure of Tewa. They occasionally expressed surprise at some structural feature that came to their attention during the course of the eliciting sessions. Neither had previously served as informant, linguistic or ethnographic.)

Our corpus is made up entirely of (a) uninterrupted narrations of personal experiences and (b) short stretches of speech elicited for the purpose of exploring phonology and morphology. The content of the texts included under (a) is informant-selected; the informant spoke in Tewa as long as he desired concerning some incident which he had often just previously alluded to or described in English. Utterances included under (b) constitute (aside from the minimal pairs mentioned above) responses to three types of stimuli: (1) presentation of simple pictures (this accounts for only a small portion of the data); (2) request for translations; (3) request to volunteer utterances related in semantic content to utterances obtained by the procedures of (a) or of (1) or (2) under (b).

In utterances included under (a) there are no examples of verb stem occurring without accompanying affix or of affix occurring without accompanying stem. In utterances included under (b), except for the case of the unaccompanied Verb stem as a translation response to unaccompanied English lexical item, Verb stem is always accompanied by affix, and, except for the case of the unaccompanied affix as the response to the request to supply minimal pairs, affix is always accompanied by stem.

The fact that unaccompanied Verb stems are obtained only under conditions which represent a high degree of

influence of the eliciting technique involved leads to the formulation of the definition of the Verb word as including at least one affix. We do not discount the possibility that widening the corpus to include examples of additional genres might necessitate a reformulation of the definition of Verb word.

6.2. N(-non ag)-'s-R(-R).

6.2.1. N(-non sg)-'s-N(-N): na-bi-to. (pN-'s-inan N)
my shirt.

6.2.2. N(-non sg)-'s-D-D: na-bi-'i'i-di. (pN-'s-D-D)
with me.

6.3. N(-N) when not included in a sequence subsumed under 6.2. or 6.1.): kwiyo do-mun. (N q1-k4-ac V) I saw a woman.

6.4. D(-D) (when not included in a sequence subsumed under 6.2. or 6.1.): 'iibe na-c'un. (D q3-k2-st ac V) he went in.

6.5. P (when not included in a sequence subsumed under 6.1.): ho dii-hwii-'an. (P q1-k3-ac V-ac V) I already ate.

6.6. Were words classified according to their distributions rather than according to their morphemic constituencies, the sequence of V base plus gerund might be considered a kind of Noun base, since such a sequence combines with the suffixes with which Noun stems combine.

6.7. An affix is defined as a morpheme which in all of its occurrences in connected discourse is accompanied by one or another of the members of a specified set of items-- a set of single morpheme or a set of items including both single morphemes and sequences of morphemes--all of whose members stand in some specified position relative to the morpheme in question. All other morphemes are referred to as stems.

Although in connected discourse a given Verb morpheme is always accompanied by one or more additional morphemes, it cannot be called an affix by the above definition since it does not fulfill the requirement of being inevitably accompanied by some morpheme or morpheme sequence one of whose members is always present--and always in the same position relative to the Verb morpheme--when a Verb morpheme is present. In a given occurrence, a Verb stem may be prefixed only, may be suffixed only, may be both prefixes and suffixed.

BIBLIOGRAPHY

1. Dozier, Edward P. 1953 Tewa II: Verb Structure. International Journal of American Linguistics 19: 118-127.
2. Dozier, Edward P. 1954 The Hopi-Tewa of Arizona. University of California Publications in American Archaeology and Ethnology 44: 259-376.
3. Hoijer, Harry 1946 Introduction (9-29), Harry Hoijer and others, Linguistic Structures of Native America. Viking Fund Publications in Anthropology 6. New York.
4. Hoijer, Harry, and Edward P. Dozier 1949 The Phonemes of Tewa, Santa Clara Dialect. International Journal of American Linguistics 15: 139-144.
5. Robbins, Wilfred W., John P. Harrington, and Barbara Freire-Marreco 1916 Ethnobotany of the Tewa Indians. Bureau of American Ethnology Bulletin 55. Washington, D. C.

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