

Verbal Morphology of the Southern Unami Dialect of Lenape¹

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Abstract

Because of a complex system of participant-verb agreement, the Lenape verb has a fascinating role in the structure of a sentence. Not only does the verb contain enough information about the nominal elements in the sentence to make a separate pronoun for the subject and object unnecessary, but it identifies what grammatical role each nominal element will play. It goes about this in a somewhat round-about way, assigning each participant to a morphological category, which itself does not indicate the grammatical role, but is assigned the grammatical role by a separate morpheme called a theme sign. In this thesis, I undertake to make the fascinating basics of Lenape verbal morphology, primarily as described by Goddard in his dissertation *Delaware Verbal Morphology: A Descriptive and Comparative Study*, more readily accessible.

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1. Intro

1.1 Purpose

After a few semesters of studying the Lenape language, I realized that I did not have a very good understanding of the structure of the Lenape verb. In my search for more information on Lenape verbs, I came across Ives Goddard's dissertation from 1969 titled *Delaware Verbal Morphology: A Descriptive and Comparative Study*. This was a thorough description of Lenape verbs, but was so densely packed with information that it was by no means an easily accessible document. In this thesis, therefore, I undertake to make the basics of Lenape verbal morphology, primarily as described by Goddard, more readily accessible.

1.2 Who are the Lenape?

The Lenape, also known as Delaware, are a Native American tribe from the region between the Delaware Bay and the Catskill Mountains (New Jersey, Southern New York, Eastern Pennsylvania, and Northern Delaware), a region which they refer to as *Lenapehoking*, 'land of the Lenape' (Lenape Talking Dictionary). Now there are Lenape reservations in Oklahoma, Wisconsin, and Canada, as well as Lenape remaining in *Lenapehoking*. Lenape is part of the Eastern Algonquin subgroup (Goddard 1979) and is often thought of as a grouping of two closely related languages: Munsee and Unami. Unami is further broken down into two dialects: Northern Unami and Southern Unami. Munsee was spoken in the northernmost part of *Lenapehoking* including the area surrounding the Hudson River; Northern Unami was spoken in the area surrounding, and to the southeast of, the Lehigh River; and Southern Unami was spoken in the area surrounding the Schuylkill River (Lenape Talking Dictionary). While Munsee still has a

few native speakers in Canada (Ethnologue), the last native Unami speaker, Edward Thompson, died in 2002 (Chambers 2002). Both languages are currently undergoing revitalization efforts. In this thesis I focus exclusively on the Southern Unami dialect where ever it differs from Munsee.

1.3 Sources

In this thesis, I work mostly from Ives Goddard's dissertation, *Delaware Verbal Morphology: A Descriptive and Comparative Study*, originally published in 1969. This includes a detailed description of Lenape verbal morphology, phonology, and morphophonology. It also includes a comparative discussion of Munsee, Unami, and Proto-Algonquian, occasionally mentioning similarities with other Algonquian languages.

I also draw from my own background in Lenape, which consists of Lenape language lessons with Shelley DePaul, in which I used her course materials *Conversations in the Lenape Language, Advanced Supplements to Accompany Conversations in the Lenape Language*, and *Advanced Lenape Language Study*. I have also found *Dictionary of Verb Conjugations* by the Lenape Nation of PA Language Project, with which she is affiliated, helpful for studying verb paradigms.

Other sources of Southern Unami verbs include the *Lenape Talking Dictionary*, *Oklahoma Delaware Ceremonies, Feasts and Dances* by Frank Speck, and *Delaware Texts* by C. F. Voegelin. The latter two texts include Lenape narratives with English translations and were two of the sources used by Goddard for his research. The *Lenape Talking Dictionary* (hereafter, LTD) is a Lenape-English online bilingual dictionary that includes some morphological analysis along with recordings of native speakers.

1.4 Notes on examples, and morphophonology

The Lenape examples in this paper are presented in four lines as in (i) below. The first line (italicized) is the Lenape as it would appear in modern Southern Unami orthography², the second line is the morphemic breakdown, the third line is the gloss of the morphemes, and the fourth line is the English translation.

- (i) *Nachiha.*
n-nachih- a -w
1-bother-THEME1-SG
'I bother him.'

The first and second lines often differ considerably due to morphophonological change. I occasionally mention these changes in the discussion of the example in order to give an idea of the changes that may occur, but an in depth discussion of this is beyond the scope of this thesis. However, I give here a summary of some of the changes one may expect to commonly affect Lenape verbs.

Common morphophonological changes in Lenape verbs include the insertion of a vowel between some consonant combinations, the insertion of a glide between some vowel combinations, and the insertion of *t* between a prefix and a verb stem beginning in a vowel. Some verb stems are reshaped (*nehl* 'kill' is reshaped as *nihel* in conjugated forms). The glide *w* often coalesces with an adjacent vowel to create another vowel. The last letter in a word-final morpheme, or even an entire word-final morpheme, is often dropped or reshaped.

1.5 Structure of this paper

The remaining sections of this paper fall into two categories. Sections 2 and 3 describe *what* features may be indicated in the morphology of a Lenape verb. Section 4 describes *how* features are indicated. Section 2 examines the participants. In section 2.1, I discuss the nominal properties of the participants that may be indicated on the verb. In

² In this paper, I write any Lenape word or morpheme as it would be in the modern Southern Unami orthography. The exception is the appendix where I use the phonetic orthography used by Goddard.

section 2.2, I discuss the categorization of the participants as well as which participants may accompany which types of verbs. Section 3 examines the verbal categories that may be indicated. Section 4 focuses on the actual morphemes that indicate the features described in sections 2 and 3.

2. Noun verb interaction

2.1 Nominal properties marked on verbs

The Lenape verb may agree with one or more of its participating nouns on a number of categories, often making a separate noun or pronoun indicating the subject or object unnecessary. These categories are gender (animate/inanimate), obviation (proximate/obviative), number and person, and presence (nonabsentive/absentive). The verb can also mark its participants as pejorative or diminutive.

2.1.1 Gender

Lenape divides all nouns into animate (ANIM) and inanimate (INAN). For many nouns, the assignment to one of these categories is somewhat logical. Nouns that denote living, or once living, things are usually classified as animate. This includes people, spirits, animals, meat, trees and many other plants. Other nouns, including those denoting body parts and manmade objects, are inanimate. There are, however, nouns that are not classified as one would expect. For example, *hus* ‘bucket’ is classified as animate despite being a manmade object, while *xaskwim* ‘corn’ is classified as inanimate despite being a plant. The animate/inanimate classification is indicated morphologically in the plural form of the noun (DePaul 2009a). Animate plural nouns end in *-ak*, while inanimate plural nouns end in *-a*. Thus the plural of the animate noun *chahkol* ‘frog’ is

chahkolak ‘frogs’, while the plural of the inanimate noun *ahkwiyan* ‘blanket’ is *ahkwiyana* ‘blankets’. There is no morpheme designated solely to indicating the gender of participants on the verb. Instead, there are verbal suffixes in which gender, person, and number may be indicated in a single morpheme (see sections 4.4.2 and 4.4.3 on suffix positions 5 and 7³). The gender of the participants also affects the choice of verb stem; each verb stem requires participants of particular genders. For example, the Lenape words *peshi* and *petu* are both transitive words meaning ‘bring’; however *peshi* requires an animate object, while *petu* requires an inanimate object.

2.1.2 Number and person

An animate participant of a Lenape verb may be first, second, or third-person, and may be singular or plural in number. Additionally, a participant may be ‘first plural inclusive’ which includes individuals of both the first and second-persons. This gives a total of seven combinations of person and number. The Lenape verb marks the person and/or number of one or both of its participants depending on the verb form. Which participants are indicated, as well as how they are indicated, is discussed in more detail in section 4.

- (1) *Nachihawenanak*.
 n -nachih- a -wenan- ak
 1- bother-THEME1- 1.PL -PL.ANIM
 ‘We bother them’

In sentence (1), the verb indicates the person and number of both participants. Here, the suffix *-a* indicates that the object is third-person⁴, that the prefix *-n* and the

³ Position 7 also conflates presence into this morpheme.

⁴ It could also mean that one participant is indefinite, but as there are person/number markers for both participants in this particular verb, this is not the case here.

suffix *-wenan* refer to the subject, and that the suffix *-ak* refers to the object (see section 4.4.1 on theme signs). The prefix *n-* indicates that the subject is first-person (see section 4.3 on prefixes). Because the stem *nachih* ‘bother’ begins with an *n*, the prefix coalesces, but it is still clear that the prefix is *n-* because any other prefix would remain distinct in this environment. The suffix *-wenan* indicates that the subject is plural and first-person (see section 4.4.2). The suffix *-ak* indicates that the object is plural and animate⁵ (see section 4.4.3). We thus know that the subject is first-person plural and the object is third-person plural, thus the sentence does not require additional pronouns.

(2) *Kenachihawenanak.*

k -nachih- a -wenan- ak
 2- bother-THEME1- 1.PL -PL.ANIM
 ‘We (inclusive) bother them’

Sentence (2) differs from sentence (1) only in the prefix. The prefix *k-* indicates the presence of a second-person participant (see section 4.3 on prefixes) and is followed by an epenthetic vowel to break up the *k-n* cluster. The suffix *-wenan* still indicates that the subject is plural and includes first-person, but together with the second-person prefix it specifies that the subject is first-person plural inclusive, i.e., that includes both the speaker and the addressee.

(3) *Nachiha.*

n -nachih- a -w -∅
 1- bother-THEME1- SG -SG
 ‘I bother him’

In sentence (3) many of the affixes are not visible, but the meaning is still apparent. The suffix *-a* is the only affix that is overtly present. It indicates that the prefix

⁵ In this case, the information that the object is animate is redundant and is merely a matter of agreement.

refers to the subject and that the object is third-person. The absence of an overt prefix in this case means that the prefix must be *n-* (and therefore first-person) as this is the only one that would coalesce with the *n* at the beginning of the verb stem. The *-w* and null suffix indicate that the subject and object respectively, are singular. The *-w* is elided at the end of a word after a vowel, therefore neither of these suffixes are visible. However, if either the subject or object were plural, the verb would require the suffixes *-wenan* and *-ak* respectively, as seen above in sentences (1) and (2). Therefore, although not all the affixes are overt, it is still clear that sentence (3) has a first-person singular subject and a third-person singular object.

- (4) *Maxkw nachiha.*
 maxkw n-nachih- a -w - \emptyset
 bear 1-bother-THEME1-SG-SG
 ‘I bother the bear’

Unlike sentences (1)-(3), sentence (4) includes a noun. The verb in sentence (4) is the same as that in sentence (3) and thus has a first-person singular subject and a third-person singular object, as discussed above. The noun *maxkw* ‘bear’ is further specifying the third-person singular participant and is therefore the object.

2.1.3 Obviation

Obviative (OBV) is used to mark a third-person participant as non-proximate; that is, it is not the most important third-person being discussed. With any set of third-person animate participants, one will be proximate (most important) and the others will be obviative. For example, if ‘a man’ and ‘his father’ are under discussion, it is obvious that the man is proximate and his father is obviative because the father is described in terms of his relationship with the man and therefore is not as important in the narration as the

man. If the father were proximate the participants would be ‘a man’ and ‘his son’. Much of the time, which participant is proximate and which is obviative depends on the context of the narrative. For example, if there was a story about a boy, the boy would be proximate and any other third-person character would be obviative. So if a sentence in this story had the boy and a frog as participants, the boy would be proximate and the frog would be obviative. However, if the story were about the frog, then the frog would be proximate and the boy would be obviative.

This distinction is especially helpful when both the subject and object of the verb are equally plausible as the semantic subject of the verb. In Lenape, word order is flexible and cannot be relied upon to indicate the grammatical role of the nouns. Instead, by marking one participant as obviative both in the verb and on the noun, it becomes clear which noun fills which role in the sentence.

(5) *Pilaechech naolao chahkola.*

pliaechech ⁶naol - a -w- a chahkol-a
 boy follow-THEME1-SG-OBV.ANIM frog -OBV
 ‘The boy follows the frog.’

(6) *Chahkola naolao pilaechech.*

chahkol- a naol - a -w - a pliaechech
 frog -OBV follow-THEME1-SG-OBV.ANIM boy
 ‘The boy follows the frog.’

Sentences (5) and (6) both mean that the boy is following the frog, regardless of the fact that they have different word orders. In both cases, the first verbal suffix *-a* indicates that the suffix *-w* refers to the subject and that the following suffix *-a* refers to

⁶ The third-person prefix is implied.

the object. The suffix *-w* means that the subject is singular. The final suffix, *-a*⁷, means that the object is obviative and animate (the suffixes *-w* and *-a* fuse and are realized as *-o*). The noun *chahkol* ‘frog’ also has the obviative suffix *-a*. Therefore, as the verb indicated that the object is obviative, the frog must be the object, leaving the boy to be the subject.

(7) *Chahkola naoluku pilaechech.*

chahkol- a naol - ekw -w - a pilaechech
 frog -OBV follow- THEME2-SG-OBV.ANIM boy
 ‘The frog follows the boy.’

In sentence (7) the subject is obviative. Here, the verbal suffix *-ekw* means that the suffix *-w* refers to the object while the suffix *-a* refers to the subject. The suffix *-w* indicates that the object is singular and the suffix *-a* indicates that the subject is obviative and animate. Therefore, as the noun *chahkol* ‘frog’ is followed by the obviative suffix *-a*, it must be the subject of the sentence. The way in which obviation is indicated is discussed in more detail in sections 4.4.3 and 4.4.4.

2.1.4 Presence

An absentive (ABS) marker may be used to emphasize the non-presence (physically or spiritually) of a third-person participant. This is rarely used except in the case of a deceased individual that is known to the speaker, under which circumstances it is rarely omitted (Goddard 1979:33).

⁷ In other dialects *-al* but Unami drops the final *l* (Goddard 1979:154). Thus the peripheral obviative is now indistinguishable from the singular animate absentive peripheral ending.

- (8) *Nkiikamukunana.* (LTD)
 n-kiikam- ekw -wenan- a
 1- visit- THEME2- 1.PL -ABS.ANIM.SG
 ‘He, now deceased, visited us.’

The verb in sentence (8) marks the third-person subject as absent. The suffix *-ekw* indicates that the prefix and suffix *-wenan* refer to the object and that the suffix *-a* refers to the subject. The suffix *-wenan* indicates that the object is first-person plural and the prefix *-n* agrees with this. The suffix *-a* indicates that the subject is absentive, animate, and singular⁸. It also must be third-person, as first and second-persons cannot be absent.

- (9) *Yu tali yushe xuwi Lenapeyunkahke wihikihtit.* (LTD)
 yu tali yushe xuwi lenapew-enkahke wiki -hti- t
 this place here old Lenape -deceased dwell-PL-3.CONJ
 ‘This place where the old Lenape had lived.’

Presence may be indicated on a noun as well as on a verb. When a noun has an absentive marker, the absentive suffix on the verb is optional. In sentence (9) the noun *Lenapeyunkahke* ‘deceased Lenape’ includes an absentive suffix *-enkahke*, while the verb *wihikihtit* ‘they dwell (CONJ)’ does not. Details on how an absentive participant is indicated on a verb are discussed in section 4.4.3.

2.1.5 Diminutive and Pejorative

A participant may also be diminutive (DIM) or pejorative (PEJOR). Something marked as diminutive is smaller in some way⁹. For example the diminutive of *mwekane* ‘dog’ is *mwekanetet* ‘little dog, puppy’. Marking something as pejorative makes it derogatory. For example the pejorative of *lenu* ‘man’ is *lenushesh* ‘no-good man’ (LTD).

⁸ In Unami, this is the same as the obviative suffix and therefore could alternatively be interpreted as such.

⁹ A diminutive form may also indicate endearment (LTD).

The words *mwekanetet* and *lenushesh* are nouns with diminutive and pejorative suffixes respectively, but it is also possible to indicate that something is diminutive or pejorative on the verb. This is especially useful when the sentence does not contain a separate noun, as in sentences (10) and (11).

(10) *Wetenatuwak.* (LTD)
 w- weten - a - ti -w - ak
 3- pick.up-THEME1-DIM-SG-PL.ANIM
 ‘He picked up the little ones.’

(11) *Neyoshu.* (LTD)
 n-new- a - shi -w -∅
 1- see-THEME1-PEJOR-SG-SG
 ‘I see the undesirable one.’

In sentence (10) the diminutive suffix *-ti* indicates that something is small. In this case it refers to the third-person plural object. In sentence (11) the pejorative suffix *-shi* indicates that something is derogatory, in this case, the third-person singular object. See section 4.4.4 for more information on the scope of the diminutive and pejorative.

(12) *Na mwekanetet pe.* (LTD)
 na mwekane-tet pa -w
 that dog -DIM come-SG
 ‘That little dog came.’

When a noun with a diminutive or pejorative suffix is present, the verb does not require a diminutive or pejorative suffix as well. In sentence (12), the noun *mwekane* ‘dog’ has the diminutive suffix *-tet*. The verb *pa* ‘come’ however only has the suffix *-w*, which indicates that the subject is singular. This fuses with the *a* in the stem, resulting in the verb *pe* ‘he comes’. The third-person prefix is implied (see section 4.3). Notice that there is no diminutive suffix on this verb.

2.2 Participants

2.2.1 Types of verbs

All Lenape verbs belong to one of the following four types: intransitive inanimate, intransitive animate, transitive inanimate, and transitive animate. Intransitive inanimate verbs are a class of verbs that takes an inanimate subject and no object. These verbs usually describe their subject (e.g. *ahowtu* ‘it is expensive’). Intransitive animate verbs take an animate subject and no object. They either describe their subject (e.g. *xuwsu* ‘he is old’) or are an action done by the subject (e.g. *kshihele* ‘he is running’). Transitive inanimate verbs have an animate subject and an inanimate object (e.g. *liksemen* ‘he paints it’). Transitive animate verbs have both an animate subject and an animate object (e.g. *weneyoo* ‘he sees him’)¹⁰.

Because the Lenape verb includes so much participant agreement, the participants are important for categorizing the verbs. Different sets of suffixes are required depending the combination of participants present (see sections 4.4.2 and 4.4.3). Different types of verbs also require different verb stems. For example, *nem* ‘see’ is a transitive inanimate verb stem requiring an inanimate object, while *new* ‘see’ is a transitive animate verb stem requiring an animate object. The verb *kshete* ‘be hot’ is intransitive inanimate and requires an inanimate subject, while the verb *kesi* ‘be hot’ is intransitive animate and requires an animate subject. The verbs *akenut* ‘talk about (something)’ and *akenim* ‘talk about (someone)’ are transitive inanimate and transitive animate respectively. These sometimes follow patterns, but the patterns are by no means universal. For more discussion of verbs stems, see section 4.2.

¹⁰ It is possible for an transitive animate to have an inanimate subject. See section 4.4.1 for details.

2.2.2 Basic participants for different types of verbs

Each verbal event takes nominal participants. Goddard labels these participants in terms of their semantic importance as well as their morphological category (see Figure 1).

Semantic Relevance	Primary		Secondary
Grammatical Role	Subject or Direct object	Subject or Direct object	Other objects
Morphological Category	Central (Endings of Position 5)	Peripheral (Endings of Position 7)	

Figure 1: Participants (adapted from Goddard, 1979)

The primary participants are those that are semantically closely linked to the verb (i.e. the subject or direct object), while the secondary participants are those that are less semantically relevant to the verb (other objects). The central participant is the participant that is morphologically indexed by the central ending, called such because its position relative to the other possible suffixes is central (i.e., it is in position 5 out of eight). See section 4.4.2 for full set of central endings. The peripheral participants are morphologically indexed by the peripheral ending (suffix position 7). See section 4.4.3 for full set of peripheral endings.

An intransitive verb takes a single primary participant which acts as its subject. In the Lenape word *nkawi* ‘I sleep’, for example, the verb *kawi* ‘sleep’ is intransitive and takes one participant as its subject; in this case, the first-person ‘I’. A transitive verb takes two primary participants, which act as its subject and object. An example of this would be the word *newichema* ‘I help him’; a form of the verb *wichem* ‘help (someone)’ which takes a subject and object, in this case first and third-persons respectively. In

verbs which take one and only one animate participant (i.e. intransitive animate and transitive inanimate verbs), this participant is the central participant. In such cases, this participant also acts as the subject.

- (13) *Mpemskahena.*
n-pemeska-hmenan
1- walk - 1PL
'We walk.'

- (14) *Kelusemeneyo.*
k-lus - em - newaw-∅
2-burn.it- CLASS1b- 2PL -SG
'You (pl) burn it.'

The verb in sentence (13) is an intransitive animate verb which thus takes an animate subject. The subject is indexed by the first-person plural central ending *-hmenan*. The verb in sentence (14) is transitive inanimate. It takes an animate subject but an inanimate object. Thus the subject, as the only animate participant, is indexed with the central ending. The central ending *-newaw* indicates that the subject is second-person plural. In the word-final position it is simplified to *-neyo*. The prefix *k-* also refers to the animate participant, indicating that it is second-person. The empty peripheral ending indicates that peripheral participant, here the inanimate object, is singular. The suffix *-em* simply indicates a phonological class and does not have any semantic value (see section 4.4.1).

Verbs with two animate participants (i.e. transitive animate verbs) follow one of two patterns. In one pattern, one participant is the central participant and the other is a peripheral participant. In this case, however the central participant may be either the subject or the object depending on the verb form (see section 4.4.1).

(15) *Mpakamaok.*
n-pakam- a -w-ak
1- hit -THEME1-SG-PL
'I hit them.'

(16) *Mpakamkuk.*
n-pakam- ekw -w-ak
1- hit -THEME2-SG-PL
'They hit me.'

Sentences (15) and (16) show two forms of the same verb. Because the verb is transitive animate, it takes both an animate subject and object. The form in (15) indexes the subject as first-person singular with the prefix *n-* and central ending *-w* and the object with the peripheral ending *-ak*, while the form in (16) does the reverse, indexing the object with the prefix and central ending and the subject with the peripheral ending. This difference is due to the first suffix, called the theme sign, which is responsible for indicating whether the central or peripheral participant is the subject. In sentence (15), the theme sign *-a* indicates that the central participant is the subject and thus the peripheral participant is the object. In sentence (16), the theme sign *-ekw* indicates that the peripheral participant is the subject while the central participant is the object. See section 4.4.1 (themes 1 and 2) for more information on this pattern.

The other pattern followed by verbs with two animate participants applies to forms in which one participant is first-person and the other is second-person. These may be referred to as 'you-and-me forms'. In such forms, only one participant is explicitly indexed (as the central participant); the other remains unindexed, thus the verb does not index a primary peripheral participant.

- (17) *Kpakamaihena.*
 k-pakam- i - hmenan
 2- hit -THEME3- 1PL
 ‘you hit us.’

Sentence (17) has a second-person subject and a first-person object. Here, the suffix *-i* indicates that this is a you-and-me form with a first-person object. The central ending *-hmenan* indexes a first-person plural participant which must be the object. The prefix *k-* indicates that one of the participants is second-person, as would be the case with any you-and-me form (see section 4.3). See section 4.4.1 (themes 3 and 4) for more information on this pattern.

2.2.3 Other patterns of participants

A third-person secondary participant may sometimes be added as an extra object. This occurs in transitivized intransitive animate verbs and double-object transitive animate verbs. In the former, an intransitive animate verb (which is normally intransitive) takes an object. Goddard gives the example *ntelakin* ‘I paint myself with it’ from the verb *ntelaki* ‘I paint myself’. In the latter, a transitive animate verb takes a second object. An example of this would be *nemilan* ‘I gave it to him’ (Goddard 1979:37).

Besides being able to add an extra object, a usually transitive verb may have an indefinite peripheral participant, indicated by the lack of a peripheral ending (Goddard 1979:40). Reflexive, collective plural, and the reciprocal forms are indicated using derived verb stems and syntactic constructions (Goddard 1979:43).

3. Verbal categories

3.1 Order

Lenape modes are sorted into three groups called orders: the independent order, conjunct order, and imperative order. Independent order is used for predications (*welusemen* ‘he burned it’), conjunct order is used for subordinate clauses (*enta lusinke* ‘when he burned it’), and imperative order is used for commands (*lusi* ‘burn it!’).

3.2 Mode

3.2.1 Modes of the independent order

The independent order has two modes: indicative and subordinative.

(18) *Ahchinkxe.*
ahchinka-w
stubborn-SG
‘He is stubborn.’

(19) *Ahchinkxe hech?*
ahchinkxa- w hech
stubborn - SG Q
‘Is he stubborn?’

The independent indicative is used for both simple statements and questions.

Sentence (18) is a statement formed with an independent indicative verb. The suffix *-w* is the central ending which here indicates that the subject is singular and coalesces with the stem-final *a* and becomes *e*. The third-person prefix is understood (see section 4.3). In sentence (19), the same verb is used along with the question marker *hech* to form a question.

The independent subordinative mode has a number of uses: as a complement to another verb (20); as a complement to certain particles (21); with stems containing certain roots, called relative roots, after a deictic element (22); with certain verbs of

motion or locomotion after a deictic element (23); and in a construction that topicalizes participants (24). (Goddard 1979:48-9)

- (20) *Nemannihokw nteli-shenkixinen*¹¹. (Goddard 1979:48)
 n- manih - ekw - w- ø n- eli -shenkixi -ne
 1-make.do.something-THEME2-SG-SG 1-because¹²-lie.down-SG
 ‘He made me lie down.’

When it acts as the complement to another verb, the independent subordinative often occurs with the preverb *eli*. In sentence (20) the subordinative verb *shenkixinen* is a complement to the verb *nemannihokw* ‘he makes me do something’ and is preceded by the preverb *eli*. Here, the first-person prefix *n-* attaches to the preverb *eli* rather than to the verb itself (see section 4.2). The singular central ending is *-ne*, not *-w* as we saw in the independent indicative forms. This is because there are different sets of central endings that are used in different situations. The central ending *-w* is part of a group of central endings called the *w*-endings which are used in indicative verbs, while *-ne* is from a group called the *n*-endings which are used in subordinative verbs (see section 4.4.2 for more discussion of central endings).

- (21) *Na mpan.* (LTD)
 na n- pa -ne
 then 1-come-SG
 ‘Then I came.’

In sentence (21) the subordinative verb *mpan* forms a complement to the particle *na* ‘then’. The prefix *n-* indicates that the subject is first-person (the nasal undergoes place assimilation to the following *p*) and the central ending *-ne* indicates that it is

¹¹ I have no idea what the final *-n* is doing here.

¹² The preverb *eli* often has the meaning ‘because’, thus I gloss it as such. However, in some of these examples it does not seem to carry quite that semantic value.

singular (the final *e* is elided in the word-final position). Notice once again the use of an *n*-ending rather than a *w*-ending.

- (22) *Nani ktenta-pehelen.* (Goddard 1979:48)
 nani k- enta - peh - el -ne
 that 2-where-wait-THEME4-SG
 ‘I waited for you there.’

After the deictic element *nani* in sentence (22), the verb *ktenta-pehelen*, which contains a relative root in the preverb *enta* ‘where’, is in the subordinative mode. Once again, the prefix *k-* is attached to the preverb rather than the verb stem (see section 4.2). The suffix *-el* indicates that this is a you-and-me form and that the object is second-person. The central ending *-ne* indicates that the participants are singular.

- (23) *She yu pwemskan.* (Goddard 1979:49)
 she yu w-pemeska-ne
 here this 3- walk -SG
 ‘He walked right by here.’

After the deictic element *she yu* in sentence (23), the verb *pwemskan*, a verb of locomotion (walking), is in the subordinative mode. The *w-* prefix and *-ne* suffix indicate that the participant is third-person and singular respectively.

- (24) *Maxko ta teli-nhilan.* (Goddard 1979:49)
 maxkw- a ta teli-nehl- a -ne
 bear -OBV EMPH that-kill -THEME1-SG
 ‘It was a bear that he killed.’

In sentence (24), the preverb *teli* along with the subordinative verb topicalize the noun *maxko* ‘bear (OBV)’. The verbal suffix *-a* indicates that the central ending refers to the subject and that the object is third-person (see section 4.4.1). The implied third-person prefix indicates that both participants are third-person (if a first or second-person participant were present it would require an overt prefix) and the suffix *-ne* indicates that the subject is singular. Notice that there is no peripheral ending indexing the object. This

is because, along with using *n*-endings instead of *w*-endings, subordinative verbs do not index their peripheral participant. As both participants are third-person, one must be obviative. There is no indication that the central participant (in this case the subject) is obviative, therefore the object must be obviative. The noun that is being topicalized, *maxko* ‘bear (OBV)’, includes the obviative suffix *-a* (here fused with *w* and realized as *o*) and must therefore be the object of the sentence.

3.2.2 Modes of the conjunct order

In the conjunct order we see five modes: indicative, changed, changed subjunctive, subjunctive, and participle. Together, the five conjunct modes along with the subordinative mode of the independent order are known as the subordinate¹³ modes as they can all be used to form subordinate clauses.

- (25) *Koch hech nekaliyan?* (Goddard 1979:50)
 koch hech nekal- i - an
 why Q leave-THEME3- SG
 ‘Why did you abandon me?’

The conjunct indicative mode forms complements to certain particles. In sentence (25), the conjunct indicative verb *nekaliyan* forms a complement to the particle *koch* ‘why’. The suffix *-i* indicates that this is a you-and-me form and that the object is first-person (see section 4.4.1). The central ending *-an* indicates that the participants are singular. This is part of yet another set of central endings that are used for modes in the conjunct order. See section 4.4.2 for the complete set of conjunct central endings.

¹³ Not to be confused with subordinative.

- (26) *enta-mitsiyan*¹⁴ (Goddard 1979:50)
 enta -mitsi-an
 when- eat -SG
 ‘when you (SG) are eating’

The changed mode is only used with certain verbs and preverbs. It is not clear what the significance of changed mode is, unless it is to emphasize the actuality of the event.

Example (26) shows a changed conjunct verb *mitsiyan* following the preverb *enta* ‘when’.

Note once again that the verb employs a conjunct central ending (*-an* ‘singular’) to index its participant.

- (27) *mechi elemskahtite* (Goddard 1979:51)
 mechi alemska-hti-t- e
 already leave -PL -3-SUBJ
 ‘after they left’

The changed subjunctive mode is used, as Goddard puts it, for an “actual past event subordinate to some succeeding past event”. Example (27) shows a changed subjunctive conjunct verb. If the first vowel in the verb stem is a short *a* or a schwa, it is changed to a long *e* (Goddard 1979:80) as seen in *elemskahtite*. This change is called initial change¹⁵ and occurs in the changed mode, the changed subjunctive mode, and the participle mode. The suffix *-hti* indicates that the participant is plural and is needed because the third-person conjunct central ending *-t* does not distinguish between singular and plural. The suffix *-e* is used in the subjunctive and changed subjunctive modes in order to distinguish them from the conjunct indicative mode and changed mode. The subjunctive and changed subjunctive modes also do not allow a peripheral ending.

¹⁴ In this example in Goddard, the suffix employs a short *a* as opposed to a long *a*, a distinction that is not preserved in the modern Unami orthography, but one that, in this case, determines the difference between a first-person singular ending and a second-person singular ending.

¹⁵ The changed mode and changed subjunctive mode are called such because they employ the initial change.

- (28) *enta-mitsiyan* Changed mode (w/ *enta*)
 enta -mitsi-an (Goddard 1979:50)
 when- eat -SG
 ‘when you are eating’
- (29) *enta-pahtite* Changed subjunctive mode (w/ *enta*)
 enta - pa -hti-t- e (Goddard 1979:51)
 when-come-PL -3-SUBJ
 ‘when they came’

Both the changed mode and the changed subjunctive mode may occur with the preverb *enta*. Goddard proposes that the changed conjunct is used with *enta* to indicate simultaneity (28) while changed subjunctive conjunct is used with *enta* to indicate temporal precedence (29) (Goddard 1979:51).

- (30) *pate*
 pa -t- e
 come-3-SUBJ
 ‘if he comes’

The subjunctive mode is used for unfulfilled events and hypothetical conditions as illustrated by (30). The verb in (30) takes a conjunct central ending, in this case the third-person ending *-t* (the lack of a plural marker indicates that the participant is singular). A subjunctive verb also requires the subjunctive suffix *-e* and does not allow a peripheral ending.

- (31) *miliyanpanik* (Goddard 1979:52)
 mil - i -an- pan - ik
 give-THEME3-SG-PRET-ANIM.PL
 ‘those you had given me’

The participle mode is used to create noun-like constructions as in (31). Initial change (change of the first vowel in the stem) occurs in the participle mode, but as initial change does not affect the vowel *i*, this is not seen in (31). The suffix *-i* indicates that the primary participants of the verb are first and second-persons and that the object is first-

person. The conjunct central suffix *-an* indicates that the primary participants are singular. The suffix *-pan* indicates the preterite aspect, meaning that the action took place in the past (see section 3.3 for more on aspects). The participle mode indicates the nominal head of the construction (always third-person) with the peripheral ending. The peripheral ending *-ik* in (31) indicates that the head is animate and plural, the secondary participant ‘those’.

3.2.3 Modes of the imperative order

The imperative order has three modes: ordinary, prohibitive, and future.

- (32) *Wetenemokw.* (Goddard 1979:57)
 weten - em -okw
 pick.up-CLASS1b-2.PL
 ‘(you pl.) pick it/them up.’

The ordinary imperative is used to command or entreat the addressee to act. In (32), the suffix *-em*, a class sign (see section 4.4.1), identifies the verb as transitive inanimate as this is the only type of verb that is divided into classes (the transitive animate stem for ‘pick up’ happens to also be *weten*). Thus the object will be inanimate. The imperative order does not allow peripheral endings, so the object cannot be indexed on the verb. The ending *-okw* is the second-person plural ordinary imperative central ending which indexes the subject. See section 4.4.2 for the complete list of imperative central endings.

- (33) *Kachi nhiliyekach.* (Goddard 1979:57)
 kachi nehl- \emptyset - eyek - at - \emptyset
 don’t kill -THEME1-PROH-2.SG-PROH
 ‘Don’t kill him/them.’

The prohibitive mode commands or entreats against an act, as in (33). This uses a special negative particle: *kachi* ‘don’t’. Transitive animate verbs, such as that in (33),

follow the pattern of theme 1 (i.e. the central ending indexes the subject, see section 4.4.1 on theme signs) despite having an empty theme sign suffix. A prohibitive verb then has a prohibitive suffix, which in (33) takes the form of *-eyek* (see section 4.4.4 for other variations of this suffix). This is followed by a conjunct central ending which indicates the subject (in this case, the ending *-at* indicates that the subject is second-person singular). Lastly, a morphophonological change, which Goddard explains by hypothesizing the presence of an empty prohibitive suffix, changes a preceding *t* to *ch*.

- (34) *Ika ame.* (Goddard 1979:58)
 ika a - m - \emptyset - e
 there go-FUT-2.SG-FUT
 ‘Go there (you sg).’

The future imperative commands or entreats an act at some future time. Thus sentence (34) must mean ‘go there (at some future time)’ as opposed to ‘go there (right now)’. The future imperative verb form uses a future imperative suffix *-m*, a future imperative central ending to indicate the subject (here the empty central ending indicates second-person singular), and a final future imperative suffix *-e*. This form seems to have died out, for although Goddard found plenty of examples in a text from 1906, he did not find any Southern Unami examples in his most recent texts or his own fieldwork.

3.3 Aspect and negation

All modes of the independent and conjunct orders have the same three aspects (unspecified, preterite, and present) as well as a negative form. The unspecified aspect (so-called because the event is temporally and morphologically unspecified, as demonstrated in (35-37)) is the most common aspect, as the other two had mostly died out by Goddard’s time.

- (35) *Nemitsi.*
 n-mitsi-hm¹⁶
 1- eat -SG
 ‘I am eating / I ate.’
- (36) *Pexu kenihelokw.* (Goddard 1979:53)
 pexu k-nehl- ekw -w
 soon 2- kill -THEME2-SG
 ‘He will kill you.’
- (37) *Ika mah mpa.* (Goddard 1979:53)
 ika mah n- pa -hm
 there PAST 1-come-SG
 ‘I have been there / I had been there’

Because the unspecified aspect does not indicate a particular timeframe, this may be gathered from the context or extra-lexical words or particles. Sentence (35) has no such indicators, so we assume it is referring to present time. The word *pexu* ‘soon’ in sentence (36) indicates a future time. The particle *mah* in sentence (37) indicates a past time.

- (38) *apopanik*
 api -w- pan - ik
 exist-3-PRET-ANIM.PL
 ‘they used to be’

When the preterite aspect is used, it marks a past event with an effect or relevance in the past and not the present. It may be thought of as marking distant past. In example (38), the verb has the preterite suffix *-pan*. The central and peripheral endings together indicate that this intransitive verb has a third-person plural animate subject (see sections 4.4.2 and 4.4.3 on central and peripheral endings).

¹⁶ the suffix *-hm* deletes in word-final position.

- (39) *ki alemoxolats 'hane yu wenchi*¹⁷
 ki alemoxol- \emptyset - at -s'han- e yu wenchi
 you take.away-THEME1-2SG-PRES -SUNJ this from
 'if you have taken him away from here'

In contrast to the preterite aspect, the present aspect deals with past events that have an effect or relevance in the present. Sentence (39) includes a verb in a subjunctive mode and present aspect. The morpheme relevant to the present aspect is the present suffix *-s'han*. This aspect was no longer in use in Unami in Goddard's time.

The negative employs different negative particles to indicate different types of negation (Goddard 1979:56). In the case of the independent order, the negation is also reflected in the morphology of the verb. In the conjunct order however, the special negative forms are not usually used. Instead the regular form is used along with the negative particle.

- (40) *ku nemilkuu*
 ku n- mil- ekw - wi -w- \emptyset
 not 1-give-THEME2-NEG- SG-SG
 'he did not give me'

In the independent verb in (40), the suffix *-ekw* indicates that the central participant is the object and the peripheral participant is the subject and is third-person. The central and peripheral endings, *-w* and the empty ending respectively, indicate that both participants are singular, while the prefix *n-* indicates that the object is first-person. The verb also includes the negative suffix *-wi*.

¹⁷ This was the only Unami example of present aspect that Goddard was able to find.

- (41) *eli-mata-welamhitank*
 eli -mata-welamhit- am -k- ø
 because- not -believe.it-CLASS1a-3-SG
 ‘because he did not believe it’

In the conjunct verb in (41), the conjunct central ending *-k* indicates that the subject is third-person, the lack of a plural suffix indicates that the subject is singular, and the empty peripheral ending indicates that the object is singular. The negative particle *mata* is also present, but a negative suffix is not necessary in a conjunct verb.

4. Morphology of a verb

4.1 Overview

Lenape verbs consist of a stem with a prefix and one or more suffixes. Every suffix belongs to a specific relative position, conventionally numbered 1-8, after the verb stem. A verb may mark the nominal properties of its participants as well as its order, mode, aspect and negation. A general map of the verbal affixes is given in Figure 2.

Prefix	person (subject or object)
Stem	
Position 1	Theme sign
Position 2	Diminutive and pejorative
Position 3	Obviative and plural
Position 4	Negation, independent and conjunct modes
Position 5	Central ending
Position 6	Aspect
Position 7	Peripheral ending
Position 8	Mode

Figure 2. Verbal affixes

4.2 Verb stems

A basic stem is made up of a root and a ‘final’. The final is the element that makes the stem verbal and indicates its type. Intransitive inanimate stems may end in *a*, *i*, *t*, or *n*. Intransitive animate stems may end in *a*, *i*, *nep*, *t*, *k*, *kw*, *m*, *xin*, or *l*. Transitive inanimate stems may end in *n*, *s*, *sh*, *t*, *m*, or *i*. Transitive animate stems may end in *m*, *n*, *l*, *x*, *h*, or *w*. Semantically related stems can vary quite a lot. For example, the verbs for eating fall into three of the four verb types: *mitsi* or *michi* ‘eat’ is intransitive animate, *michi* ‘eat something’ is transitive inanimate, and *mehw* ‘eat someone (meat)’ is transitive animate.

A preverb may attach to the basic stem to form a complex verb. A few examples of preverbs are *kata* ‘want’, *weli* ‘well’, *eli* ‘because’, and *hapi* ‘with, also’. The preverb and basic stem function as a unit morphologically but as separate words phonologically. That is, any prefix or initial change takes place on the preverb instead of the basic stem, but no phonological changes take place at the boundary between the preverb and basic stem. In sentence (20), repeated below as (42), the prefix *n-* is attached to the preverb *eli* (the *t* is inserted between the prefix and a word that starts with a vowel) instead of the verb stem *shenkixi*.

- (42) *Nemannihokw ntelishenkixinen.* (Goddard 1979:48)
n- manih - ekw - w- ø n- eli -shenkixi -ne
1-make.do.something-THEME2-SG-SG 1-because-lie.down-SG
‘He made me lie down.’

Despite this connection, other independent words may also be inserted between the verb and the preverb, as in (43). Notice that here the prefix attaches to the preverb, thus the preverb and the verb are acting as a morphological unit even though they are separated by the word *keku*.

- (43) *Nkata- keku -luwe.*
 n-kata - keku -luwe
 1-want- something- say
 ‘I want to say something.’

4.3 Prefixes

Lenape verbs have a single set of prefixes which mark the person of one of the participants and are used only in the independent order. Which participant is marked is decided by a rule of precedence that is common among Algonquian languages. It places second-person in highest priority followed by first-person, and lastly third-person. This means that if there is a second-person primary participant present, regardless of whether it is the subject or object, the verb receives the second-person prefix *k-*, as in (44). If there is no second-person participant but there is a first-person participant, then the verb receives the first-person prefix *n-*, as in (45). Only in the case where there are only third-person participants is the third-person prefix (*w-*) used, as in (46).

- (44) *Kenuskenepalel*¹⁸.
 k- nuskenepal - el -w
 2-throw.water.on.someone-THEME4-SG
 ‘I throw water on you.’

¹⁸ As many peripheral and central endings for singular participants delete in final position, the prefix is often left as the only thing marking person.

(45) *Nuskenepala.*
 n- nuskenepal - a -w - ø
 1-throw.water.on.someone-THEME1-SG-SG
 ‘I throw water on him.’

(46) *Wenuskenepala.*
 w- nuskenepal - a -w - ø
 3-throw.water.on.someone-THEME1-SG-SG
 ‘He throws water on him.’

In (44) the suffix *-el* indicates that this is a you-and-me form and that the object is second-person. The second-person prefix, therefore refers to the object. In (45) and (46), the suffix *-a* indicates that the object is third-person, leaving the prefix to indicate the person of the subject, i.e., first-person in (45) and third person in (46).

It is sometimes permissible to have an understood (not overt) third-person prefix as in (18), repeated below as (47). This is not permissible for the first or second-person prefixes, therefore if there is not a prefix where one would expect one (i.e. on all verbs of the independent order) than it must be an understood third-person. However, a first or second-person prefix may coalesce with a stem beginning with an *n* or *k* and thus become obscured. Note also that the first-person plural inclusive includes a second person as well as a first person. This means that a verb with a first-person plural inclusive participant will have a *k-* ‘second-person’ prefix as this ranks higher than a first-person prefix as seen in (2), repeated below as (48).

(47) *Ahchinkxe.*
 ahchinka- w
 stubborn-SG
 ‘He is stubborn.’

(48) *Kenachihawenanak.*
 k -nachih- a -wenan-ak
 2- bother-THEME1- 1.PL -PL.ANIM
 ‘We (inclusive) bother them’

4.4 Suffixes

As mentioned in section 4.1, the suffixes are divided into classes determined by which of the eight suffix positions they fill. Position 1 is occupied by theme signs which assign the grammatical roles to the participants. Position 5 is occupied by the central endings which mark the person and number of the central participant. Position 7 is occupied by the peripheral endings which may mark a peripheral participant for gender (animacy), obviation, number, and presence. The other positions are occupied by markers for nominal features of the central ending as well as order, mode, aspect, and negation. See appendix for a chart of the suffixes of all eight positions. I discuss positions 1, 5, and 7 in their own sections, as they are both the most fundamental and the most complicated.

4.4.1 Position 1: Theme signs

Transitive Animate Theme Signs

Transitive animate theme signs indicate which participant is the subject and which is the object. Transitive animate verbs take one of four theme signs: Direct forms, (theme 1); inverse forms (theme 2); forms with a first-person object (theme 3); and forms with a second-person object (theme 4). In a direct form, the central participant is the subject and the peripheral participant is the object. In inverse forms this is reversed, making the central participant the object and the peripheral participant the subject. Themes 3 and 4 employ only first and second-person participants. Any form requiring other participants uses theme 1 or 2.

As direct and inverse themes never have a first-person participant and a second-person participant together, they usually have a third-person participant and either a first, second, or third-person participant. In these cases, the peripheral participant is always third-person. Thus, direct forms have third-person objects, as in (49), and inverse forms have third-person subjects, as in (50).

(49) *ntelaok*
 n- tel - a -w-ak
 1-tell.someone-THEME1-SG -PL
 ‘I tell them’

(50) *ntelkuk*
 n- tel - ekw -w-ak
 1-tell.someone-THEME2-SG -PL
 ‘they tell me’

The direct and inverse themes each include a form with both participants being third-person. The direct theme form is used when the third-person participant that is more central to the narrative is the subject, as in (51), while the inverse theme is used when the obviative third-person participant is the subject, as in (52).

(51) *telao*
 tel - a -w-∅
 tell.someone-THEME1-3 -SG
 ‘he tells him (obv)’

(52) *telku*
 tel - ekw -w-∅
 tell.someone-THEME2-3 -SG
 ‘he (obv) tells him’

Minor complications arise when the verb takes an indefinite or inanimate subject. The central participant can never be inanimate. Thus it must be the peripheral participant and must use the inverse theme (53). The indefinite participant on the other hand, is only the peripheral participant if the other participant is first or second-person, in which case it, too, would use the inverse theme (54). Otherwise, the indefinite participant is the central participant and the verb uses the direct theme (55).

- (53) *nsekihkwen*
 n-sekih - ekw -ne- \emptyset
 1-annoy-THEME2-SG-SG
 ‘It annoys me.’

The verb in (53) has an inanimate subject. As the central participant can never be inanimate, this must be the peripheral participant. Thus the subject is indexed by the peripheral ending (in this case it is the empty ending indicating that it is singular) and the object is indexed by the central ending (here, *-ne*, indicating that it is singular). This is the pattern used by the inverse theme, thus the verb indicates this by including the inverse theme sign *-ekw*.

- (54) *nemilkehena*
 n- mil - eke -hmenan
 1-give-THEME2- 1.PL
 ‘(indefinite) gives us’ ‘we are given’

In (54) the subject is indefinite. As first and second-person participants have a higher priority for the central ending than an indefinite participant, the first-person object is the participant that gets indexed by the central ending. The indefinite participant is left to the peripheral ending which, however, indicates an indefinite participant by its absence. As the central ending indexes the object, (54) uses the inverse theme. Here, a variant of the inverse theme sign, *-eke*, is used. This variant is only used with indefinite subjects.

- (55) *peshewao*
 peshe- a - w -∅
 bring -THEME1-INDEF-SG
 '(indefinite) brings him' 'he is brought'

The verb in (55) has an indefinite subject and third-person object. As indefinite participants have priority over third-person participants for the central ending, the indefinite subject is indexed by the central ending *-w* and the object is indexed as singular by the empty peripheral ending. As the central ending is the subject, this follows the pattern of the direct theme, which is indicated by the direct theme sign *-a*.

Goddard explains the direct and inverse themes by setting up a parameter of 'distance' (see figure 3). The less distant (lower number on the distance parameter) participant is marked with the central ending (position 5) and the more distant participant is marked in the peripheral ending (position 7). The direct theme is used if the subject is less distant than the object (examples (49) and (51) above), while the inverse is used if the object is less distant than the subject (examples (50) and (52) above). This means that in forms using the direct theme, the central ending will always mark the subject, while in forms using the inverse theme, the central ending will always mark the object.

Direct Theme	Distance Parameter	Inverse Theme
Subject ↓ Object	(1) 1 st , 2 nd person (2) indefinite (subject only) (3) proximate 3 rd person (4) obviative 3 rd person (5) farther obviative 3 rd (6) inanimate (subject only)	Object ↑ Subject

Figure 3. Distance Parameter for Direct and Inverse Themes

Themes 3 and 4 are used for forms that have a first-person and a second-person participant ('you-and-me forms').¹⁹ In theme 3, the first-person participant is the object, and in theme 4 the second-person is the object. In each, one of the participants is indexed with the central ending and the other is left unindexed. In order to know which participant is indexed follow the rules outlined in figure 4. These rules basically have the result that, if the first-person is plural it is indexed in the central ending, otherwise the second person is indexed in the central ending.

If...	Choose...
both singular	less marked
one plural	plural participant
both plural	more marked

Figure 4: Rules for Choosing Indexed Participant in Themes 3 and 4

Note: indefinite is considered singular.

(56) *Kpakamaihena.*
 k-pakam- i - hmenan
 2-hit -THEME3-1PL
 'you hit us.'

(57) *Nani ktenta-pehelen.* (Goddard 1979:48)
 nani k- enta - peh - el -ne
 that 2-where-wait-THEME4-SG
 'I waited for you there.'

Sentences (56) and (57) demonstrate themes 3 and 4 respectively. The verb in (56) is a you-and-me verb with a first-person object, thus it uses theme 3, as can be seen by the theme sign *-i*. The first-person participant is plural, so this is indexed by the central

¹⁹ There is an exception in that in theme 3 in the conjunct order, the subject may be other than second-person, requiring only that the object be first-person singular.

ending (*-hmenan*). There is no peripheral ending. The verb in (57) is also a you-and-me verb but with a second-person object. It therefore follows the theme four pattern and uses the sign *-el*. The first-person participant is not plural, therefore the central ending indexes the second-person participant, indicating that it is singular with the suffix *-ne*. Notice that the verbs in both (56) and (57) have the second-person prefix *k-*. This is the case with all theme 3 and 4 verbs as second-person has priority for the prefix and there is always a second-person participant present in you-and-me forms.

Transitive Inanimate Theme Signs (Classes)

The transitive inanimate theme signs are as simple as the transitive animate theme signs are complicated. As a matter of fact, they are not even truly theme signs; they are classes. The class of a transitive inanimate verb simply depends on the phonological structure of the verb, specifically, the final. It is not clear what finals are followed by the class 1a suffix *-am*, however, stems ending in *-en*, *-es*, or *-esh*, are followed by the class 1b suffix *-em*. Stems ending in *-t* are followed by the class 2 suffix *-o* or *-aw*. Class 3 verbs are rare, end in *-nt*, *-am*, *-em*, or *-i*, and don't have a class suffix.

4.4.2 Position 5: Central endings

The central endings index the number and sometimes person of the central participant and occurs in suffix position 5. Each order has its own set (or sets) of central endings.

Independent Order Central Endings

The independent order in Lenape has three sets of central endings called the *w*-endings, the *n*-endings and the *m*-endings. Each is made up of a formative element (considered position 5a) and a number marker (position 5b). The *w*-endings along with their derivations are given in figure 5 as an example. For the derivations of all three sets of endings, see the appendix.

w-endings		
sg	-w	$_{5a}/-w/ + _{5b}/-\emptyset/$
1pl	-wenan	$_{5a}/-w/ + _{5b}/-nan/$
2pl, 3pl	-wewaw	$_{5a}/-w/ + _{5b}/-waw/$
indef	-w	$_{5a}/-w/$

Figure 5. Derivations of *w*-endings

The *w*-endings are as follows: *-w* indicates a singular or indefinite participant, *-wenan* indicates a first-person plural participant (this includes first-person plural inclusive), and *-wewaw* indicates a second or third-person plural. The *w*-endings are used with transitive animate themes 1 and 2 for forms that index a primary peripheral participant in position 7. The verb in (58) on the next page follows the transitive animate theme 1 (direct, indicated by the suffix *-a*) and includes a peripheral ending (*-ak*). It therefore uses a *w*-ending, in this case *-wenan*.

- (58) *Kenachihawenanak.*
 k -nachih- a -wenan-ak
 2- bother-THEME1- 1.PL -PL.ANIM
 ‘We (inclusive) bother them’

The *n*-endings are as follows: *-ne* indicates a singular or indefinite participant, *-nenan* indicates a first-person plural participant (this includes first-person plural inclusive), and *-newaw* indicates a second or third-person plural. The *n*-endings are used

in transitive inanimate forms, transitive animate forms with an inanimate subject, forms with an objective second peripheral participant, and forms in the subordinative mode (except for intransitive inanimate verbs). The verb in (59) is transitive inanimate and therefore uses an *n*-ending (-*newaw*).

- (59) *Kelusemeneyo.*
 k-lus - em - newaw- \emptyset
 2-burn.it- CLASS1b- 2PL -SG
 ‘You (pl) burn it.’

The *m*-endings are as follows: -*hm* indicates a first or second-person singular participant, -*hmenan* indicates a first-person plural participant (this includes first-person plural inclusive), -*hmewaw* indicates a second-person plural participant, and -*w* indicates a third-person participant. The *m*-endings are used in forms that do not indicate a peripheral participant. There is no *m*-ending for forms with indefinite subjects. In this case, an *n*-ending is used. The verb in (60) does not indicate a peripheral participant (there is no peripheral ending) and therefore uses an *m*-ending (-*hmenan*)

- (60) *Kpakamaihena.*
 k-pakam- i - hmenan
 2-hit -THEME3-1PL
 ‘you hit us.’

Conjunct order central endings

The conjunct order has two sets of central endings, which partly overlap. These are the *at*-endings and the *an*-endings (see figure 6 on next page). The *at*-endings are used with theme 1 when it ends in a consonant. Otherwise, the *an*-endings are used. The conjunct order central endings are also used with the prohibitive mode with a similar distribution.

	at-endings	an-endings
1sg	-ak	-an
2sg	-at	-an
indef	-ent	-nk
inan	-	-k
3	-t ~ -k	
1pl	-enk	
1pl.incl	-ankw	
2pl	-ekw	

Figure 6: Conjunct Central Endings (adapted from Goddard, 1979)

Imperative Order Central Endings

Each mode of the imperative order employs a different set of central endings, which have many irregularities. For the ordinary imperative mode, verbs that have a second-person subject and third-person object use an empty suffix to indicate that the second-person is singular and the suffix *-oh* to indicate that it is plural. All other verbs in the ordinary imperative mode assign central endings as summarized in figure 7.

Subject	Central ending
you (sg)	-l
you (pl)	-okw
you (sg) and I	-(o)tam
you (pl) and I	-(o)tamokw
we (exclusive)	-nen

Figure 7. Ordinary Imperative Central Endings

The other two modes are simpler. The prohibitive mode uses the conjunct central endings. The future imperative mode uses an empty central ending to indicate that the subject is second-person singular and the suffix *-waw* to indicate that it is plural.

4.4.3 Position 7: Peripheral endings

While the central position has many sets of endings that only indicate the participant's person and number, there is only one set of peripheral endings, but this indicates a combination of gender, number, obviation, and presence. The peripheral ending occurs in suffix position 7. The set of peripheral endings is shown in figure 8. The vowel (V) in the nonabsentive endings is *i* in conjunct forms or after endings of position 6 and *a* elsewhere.

Nonabsentive			Absentive		
	Animate	Inanimate		Animate	Inanimate
Singular	-∅	-∅	Singular	-a	-e
Plural	-Vk	-V	Plural	-enka(ke)	-enka(ke)
Obviative	-V		Obviative	-enka(ke)	

Figure 8. Peripheral Endings Note: V= i or a

Peripheral endings are used mainly to index the peripheral participant. However, they may also be used to indicate the nominal properties of the central participant when this is third-person and uses the central *m*-ending, *-w*, as well as to index the head of a participle.

4.4.4 Other endings

The diminutive and pejorative suffixes, *-ti* and *-shi* respectively, occur in suffix position 2. When there is no animate object, these markers refer to the subject. When there is an animate object, these markers refer to the object or peripheral participant. In some cases it may even refer to the verbal element and not a participant at all (Goddard

1979:88). Whether the diminutive or pejorative is referring to a participant or the verbal element is not indicated but must be gleaned from the context.

The obviative suffix of position 3, *-li*, is used to mark a third-person central participant as obviative. Also of position 3 is the plural suffix, *h(e)ti*, which is used to indicate that a third-person central participant of the conjunct order or prohibitive mode is plural. This would otherwise be unindicated because the conjunct central endings do not distinguish between singular and plural third-person.

Suffix position 4 includes suffixes that indicate a negative form or imperative mode. In a negative form, the suffix *-(o)w(i)* is used. The use of the vowels depends on the phonological environment. The suffixes that indicate the prohibitive mode take the form of one of four variants. After transitive animate theme 1, the variant *-eyek* is used. Elsewhere, after a vowel *-h* is used, after a nasal *-hek* is used, and after a consonant other than a nasal *-eh* is used.

Suffix position 6 is used to indicate aspect. The preterite aspect is indicated by the suffix *-pan*. The present aspect is indicated by the suffix *-sa* when this suffix is word-final, or *-s'han* when it is not word-final. If there is no position 6 suffix then the aspect is unspecified.

Lastly, suffix position 8 includes suffixes for the subjunctive, prohibitive, and future imperative modes. The subjunctive modes and the future imperative mode are indicated by the suffix *-e*. The prohibitive mode is indicated by an empty suffix, which however palatalizes a preceding *t*, making it *ch*.

5. Conclusion

Because of a complex system of participant-verb agreement, the Lenape verb has a fascinating role in the structure of a sentence. Not only does the verb contain enough information about the nominal elements in the sentence to make a separate pronoun for the subject and object unnecessary, but it identifies what grammatical role each nominal element will play. It goes about this in a somewhat round-about way, assigning each participant to a morphological category (central or peripheral), which itself does not indicate the grammatical role, but is assigned the grammatical role by a separate morpheme called a theme sign. Lenape verbal morphology may also indicate nominal properties, including indicating that a participant is absent, diminutive, or pejorative. Verbal categories such as mode, aspect, or negation may also be indicated.

Here follows a summary of the morphology of the Lenape verb. A Lenape verb stem is classified depending on its transitivity and the animacy of its participants. Intransitive inanimate stems and intransitive animate stems have subjects which may be singular or plural and which are indexed by the central ending. Transitive inanimate stems are divided into phonological classes as indicated by suffix of position 1 (immediately following the stem). Their animate subject is indexed by the central ending and their inanimate object is indexed by the peripheral ending (peripheral endings are shown in figure 8 on page 41).

Transitive animate verbs, which have animate subjects and objects, are more complicated. There are four possible patterns which are indicated by theme signs in suffix position 1. When the participants are first and second-persons, the verb uses themes 3 and 4, otherwise it uses themes 1 and 2. Theme 1 indexes its subject with the

central ending and its object with the peripheral ending. Theme 2 indexes its object with the central ending and its subject with the peripheral ending. Theme 3 is used when the object is first-person and theme 4 is used when the object is second-person. These each index one participant with the central ending and leave the other unindexed. If the first-person participant is plural then this is the one that is indexed, otherwise it is the second-person participant that is indexed. A verb may indicate nominal properties of its central participant using suffixes of positions 2 and 3 as discussed in section 4.4.4.

Lenape verbs have three orders: independent, conjunct, and imperative. The independent order uses a prefix to indicate the person of one of its animate participants. If there is a second-person participant, the verb will have the second-person prefix *k-*. If there is no second-person participant but there is a first-person participant, the verb will have the first-person prefix *n-*. Only if there is a third-person participant and neither a first nor second-person participant may the verb use the third-person prefix *w-*. The independent order uses three sets of central endings (see appendix for chart of imperative central endings). The *w*-endings are used with transitive animate themes 1 and 2. The *n*-endings are used in transitive inanimate forms, transitive animate forms with an inanimate subject, forms with an objective second peripheral participant, and forms in the subordinative mode. The *m*-endings are used in forms that do not indicate a peripheral participant.

The conjunct order uses two partially overlapping sets of central endings (shown in figure 6 on page 40). The *at*-endings are used with transitive animate theme 1 when it ends in a consonant. Otherwise the *an*-endings are used. Each mode of the imperative order deals with central endings differently. I thus discuss this below in the summary of modes.

The independent order includes two modes: indicative and subordinative. The subordinative mode uses the *n*-endings to index the central participant where the indicative mode would use the *w*-endings. Subordinative verbs also do not index a peripheral participant.

The conjunct order has five modes: indicative, changed, changed subjunctive, subjunctive, and participle. The changed, changed subjunctive, and participle modes undergo an initial change in their stem. Changed subjunctive and subjunctive include a suffix *-e* in suffix position 8 and do not allow a peripheral ending.

The imperative order has three modes: ordinary, prohibitive, and future, none of which allows a peripheral ending. The ordinary imperative mode uses the imperative central endings discussed in section 4.4.2 shown in figure 7 on page 40. The prohibitive mode is accompanied by the particle *kachi* ‘don’t’ and has prohibitive suffix in position 4 (see section 4.4.4 for the variations of this suffix). It uses the conjunct central endings to index its central participant. It also uses a null suffix in position 8 that causes morphophonological changes to the verb. If the verb is transitive animate it follows theme 1 but has a null theme sign suffix. The future imperative mode uses a future imperative suffix *-m* in position 4 and the suffix *-e* in position 8.

The modes of the independent and conjunct orders share three aspects: unspecified, preterite, and present. The unspecified aspect does not have any special morphology, but the preterite and present aspects are indicated by the suffixes *-pan* and *-s’han* (both of position 6) respectively. Negative verbs are accompanied by negative particles. In the indicative order the verb also includes the negative suffix *-(o)w(i)* in position 4. In the conjunct order this suffix is optional.

This summarizes the basics of the morphology of Lenape verbs. As always, there are exceptions and marginal cases that could be better understood. A study of Lenape's rich phonology and morphophonology would also be required for a more complete understanding of the Lenape verb.

Appendix: Charts

Verb Type	Finals
Intransitive Inanimate	-ā -ī -t -n
Intransitive Animate	-ā -ī -p (only in /nəp-/) -t -k -kw -m -n (only the final /-xīn/) -l
Transitive Inanimate	-ən* -əs* -əš* -t ** -nt*** -ām*** -ēm*** -ī*** * <i>Class 1b stems</i> ** <i>Class 2 stems</i> *** <i>Class 3 stems (rare, archaic)</i>
Transitive Animate	-m -n -l -x -h -pw -mw -hw -sw -šw -aw -əw* -ēw* -āw* * <i>Only 2 stems use this final</i>

Stem Finals

Position 1	Position 2	Position 3	Position 4	Position 5	Position 6	Position 7	Position 8	
Theme Sign	Diminutive & Derivative	Obviative & Plural	Negative; Imperative Mode	Central endings	Aspect	Peripheral endings	Mode	
TA Theme signs Theme 1: Class 1a: /-ā/ ~ /ø/ /-am/ Theme 2: Class 1b: /-əkʷ/, /-əm/ /-əkē/ Theme 3: /-ī/ /aw/ Theme 4: /-əl/ no theme sign	Diminutive: /-tī/ Pejorative: /-šī/	Obviative: /-lī/ Plural: /- h(ə)tī/	Negative: /-(ō)w(ī)/ Prohibitive: /-əyēk/ ~ /-kəh(ī)/ ~ /-(ō)h(ī)/, etc. Future: /-(ō)m/	Independent: w-endings: /-w/ /-(w)ənān/ /-(w)əwāw/ n-endings: /-nē/ /-nēnān/ /-nēwāw/ m-endings: /-hm/ /-hmənān/ /-hmwāw/ /-w/	Conjunct: at-endings an-endings Imperative: /-ø/ /-ōh/ /-l/ /-(ō)kw/ etc.	Preterite: /-pan/ Present: /-sa/ ~ /-shān/	/-ø/ /-Vk/ /-VI/ (V = a, ā, ī) Absentive: /-a/ /-ē/ /-ənka(kē)/	Subjunctive: /-ē/ Prohibitive: /-ø/ Future: /-ē/

Suffixes (adapted from Goddard, 1979)

w-endings		
sg	-w	$5_a/-w/ + 5_b/-\emptyset/$
1pl	-wəṇān	$5_a/-w/ + 5_b/-nān/$
2pl 3pl	-wəwāw	$5_a/-w/ + 5_b/-wāw/$
indef	-w	$5_a/-w/$

n-endings		
sg	-nē	$5_a/-nē/ + 5_b/-\emptyset/$
1pl	-nēnān	$5_a/-nē/ + 5_b/-nān/$
2pl 3pl	-nēwāw	$5_a/-nē/ + 5_b/-wāw/$
indef	-nē	$5_a/-nē/$

m-endings		
1sg 2sg	-hm	$5_a/-hm/ + 5_b/-\emptyset/$
1pl	-hməṇān	$5_a/-hm/ + 5_b/-nān/$
2pl	-hməwāw	$5_a/-hm/ + 5_b/-wāw/$
3sg 3pl	-w	unanalyzed

Independent Central Endings with Derivations

(adapted from Goddard, 1979) The subscripts refer to the suffix position.

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