ONONDAGA PRONOMINAL PREFIXES

By

Percy W. Abrams January 13, 2006 (edited 2/24/06 P.A)

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Percy Abrams

Dedicated to my wife, Kim, to my kids, Corinne, Pierce and Clark, and Mom and Dad

My deepest appreciation to my advisory committee, Matthew Dryer Wolfgang Wölck

But, especially to Karin Michelson for all of the help.

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TABLE OF CONTENTS

Dedic	cations a	and Acknowledgements	iii
Table	of Con	tents	iv
List c	of Tables	3	vii
Abstr	act		viii
Abou	t Me		1
Chap	oter 1:]	Introduction to Onondaga pronominal prefixes	2
1.0	Backg	ground	2
1.1	What	is a language, word and pronominal prefix?	7
1.2	Struct	rure of the Onondaga word	9
1.3	Struct	rure of the Iroquois verb	12
1.4	Prono	minal prefixes	13
1.5	Louns	sbury's representation of the pronominal prefixes	14
1.6	Organ	nization of Chapters 2 and 3	20
Chap	oter 2: 1	Forms of the Onondaga pronominal prefixes	23
2.0	Overv	view	23
2.1	Colun	nn 3: pronominal prefix	36
	2.1.1	Primary or right-side variations	38
	2.1.2	Secondary or left-side variations	38
	2.1.3	Representing primary and secondary variation in column 3	38
2.2	Colun	nn 4: verb stem class	41
	2.2.1	Horizontal and vertical readings of column 4	42

2.3	Colum	nn 2: preceding environs	47
	2.3.1	Y-drop pronominal prefixes	48
	2.3.2	Y/A-drop pronominal prefixes	50
	2.3.3	W-drop and fusion	51
	2.3.4	H-drop and HS-metathesis	53
2.4	Colum	nn 1: prefix numbers	55
2.5	Colum	nn 5: variation/distribution	55
	2.5.1	Variation/distribution Pattern A	56
	2.5.2	Variation/distribution Pattern B	57
	2.5.3	Variation/distribution Pattern C	58
	2.5.4	Variation/distribution Pattern D	58
	2.5.5	Variation/distribution Pattern E	59
	2.5.6	Variation/distribution Pattern F	60
	2.5.7	Variation/distribution Pattern G	60
	2.5.8	Variation/distribution Pattern H	61
	2.5.9	Variation/distribution Pattern I	62
2.6	Uniqu	e pronominal prefixes	62
2.7	Homo	morphs	64
2.8	Multip	ble choices	67
Chap	ter 3: N	Aeanings of the pronominal prefixes	69
3.0	Overv	iew	69
3.1	Basic	concepts	69
3.2	Meani	ngs and their distribution	73

3.3	Comp	aring the use of English pronouns and Onondaga pronominals	80
3.4	More	about semantic distinctions	82
	3.4.1	Semantic distinctions of English pronouns	83
	3.4.2	Semantic distinctions of Onondaga pronominal prefixes	85
3.5	Using	the pronominal prefixes in Conversational Pairs	88
	3.5.1	The positive-iterative response model	90
Chapt	ter 4: (Conclusion	95
Refere	ences		98
Appen	ıdix		101

LIST OF TABLES

Onondaga Pronominal Prefixes: Onondaga Nation (Woodbury 2003)	15
Table 1. Forms of the Onondaga pronominal prefixes	26
Table 2. A vertical reading for A stem verbs	46
Table 3. Homomorphs in the Onondaga pronominal prefix system	67
Table 4. Modified English Pronouns for Onondaga prefixes #1 - #24	71
Table 5. Meanings of the Onondaga pronominal prefixes	75
Table 6. Person, number and gender in English	83
Table 7. English nominative and accusative pronouns	84
Table 8. Onondaga agent prefixes	87
Table 9. Onondaga patient prefixes	87
Table 10. Onondaga Conversational Pairs	89
Table 11. Onondaga question and answer sentence pairs	91
Table 12. Disorganization of Onondaga pronominal prefixes	96

ABSTRACT

This dissertation is an investigation into the pronominal prefix system of Onondaga, a Northern Iroquoian language currently spoken in central New York and southern Ontario. The Iroquois pronominal prefix system was described by Floyd Lounsbury in his seminal work on Iroquoian languages, *Oneida Verb Morphology*, first published in 1953. In that work Lounsbury presented a single comprehensive table that captured many of the unique properties of the Iroquoian pronominal prefix system. The organization of that table has been applied to the Onondaga pronominal prefix system in *Onondaga - English / English - Onondaga Dictionary* (Woodbury 2003). I have used this table extensively while teaching Onondaga language and grammar at the Onondaga Nation Territory during the past 6 years. During that time I have made a number of valuable discoveries and observations concerning the pronominal prefix system and the organization of Lounsbury's (1953) table.

One of the most important observations is that the table, though highly accurate, is too complicated for a beginning student of an Iroquoian language. I was forced to reorganize the information many times, and I found that if I split the table into two parts, a 'reading' of the meanings and a 'listing' of all the variants that occur, the table became more understandable. It was also through the various reorganizations that the enormous scope of the pronominal prefix system became evident. Whereas the system had once seemed vast and random it now appeared finite and orderly. Many patterns and regularities emerged that were not apparent from a single table. The patterns I discovered will hopefully aid the student immensely in understanding the workings of the Onondaga pronominal prefix system.

In this dissertation the Onondaga pronominal prefix system is reorganized as two separate tables representing the two elements of every prefix: form and meaning. Unique observations and discoveries that emerged from this reorganization are discussed. These are derived directly from teaching Onondaga grammar and language classes at the Onondaga Nation Territory. Finally, a summation of each pronominal prefix and its characteristics is provided in an Appendix. Percy Abrams gya·jih / Onuda⁹gehe·nu ni⁹ah tsha⁹ nu tgi⁹dę?sgwa⁹ Naye o⁹ ne⁹ tsha⁹ nu dwagadodih / agya⁹da·⁹ ne⁹ Ganuhsesgeh niyowiho⁹dęh Hodinusyunih hadiyastha⁹ / Naye⁹ hya⁹ gya·jih ne⁹ Haihwa⁹es ugyastha⁹ / Ogu·de·na⁹ niwage⁹se·⁹dęh naye⁹ ohni⁹ ni⁹ah ne⁹ dehodi⁹daägeh gya⁹da·⁹

My name is Percy Abrams, I am member of the Onondaga Nation of Indians, that is where I used to live and that is where I grew up. I belong to the Longhouse religion, my Indian name is Haihwa'es, I belong to the Eel Clan of the Mudhouse people.

Chapter 1: Introduction to Onondaga pronominal prefixes

1.0 Background

This dissertation represents many years of studying the Onondaga language, fruitlessly for the most part, until I discovered that there was order and regularity in the words, in their form and their meanings. I can remember thinking that there must be a systematic approach to this language; however with no training and little experience with other languages, understanding this system was beyond my grasp conceptually.

The approach to learning the Onondaga language at that time was mostly through rote memory of religious texts. I was fairly successful at this, and many elders assumed that since I could "speak" Onondaga I could understand their comments and conversations. In truth I only had an understanding of words in the context of the speeches that I had learned. I really had no clue as to what was being said to me or how to answer if it was outside of the context of the speeches. I was, however, beginning to get a feeling for the language, an implicit understanding that surely would come along naturally given enough exposure to the language. I could not verbalize what made up this "feeling" although, looking back, I can see that I was starting to recognize patterns and tendencies.

It was around this time that I met Nora Carrier, a relative of mine who worked with a linguist, Hanni Woodbury, and she wanted the two of us to meet. Nora was, at that time, the only Onondaga speaker that I knew of who would work with a linguist or any kind of university researcher for that matter. Nora had attended some linguistics courses in Canada a few years before and had really enjoyed them. She suggested that I should take some courses in linguistics if I got the chance.

I was attending junior college at the time, and my English professor, Edmund Thomas, encouraged me to pursue a degree in linguistics at the University at Buffalo. Mr. Thomas was a friend of Dr. Wolfgang Wölck, then Director of Undergraduate Studies in the Linguistics Department at the University at Buffalo. "Wolf" introduced me to Dr. Karin Michelson, who, it turns out, had taught the linguistics course in Canada that Nora had taken few years before. I enrolled in the undergraduate linguistics program at UB that fall.

Linguistics, it turned out, was like learning a new language. I recall going to talks and presentations in the linguistics department, having no clue as to what was being discussed. It was a lot like having a conversation with a speaker of the Onondaga language. In both cases I could catch a stray word or phrase here or there but for the most part I didn't understand the message. This situation changed for the better over the years on both accounts.

I began helping with the Onondaga Nation language program in 1999 in an effort to record the language with the remaining speakers and to revitalize the language through classes and programs. I was given the charge of teaching adult students who wanted to become teachers of the Onondaga language but for the most part were native speakers of English. I would be teaching teachers.

Many students feel that there is a responsibility or obligation to save the Onondaga language as part of our heritage, myself included. It is considered absolute imperative that the religious ceremonies be conducted in the Onondaga language which, I am thankful to say, they still are to this day.

One thing that gives me an advantage as a teacher is that I am also a student, a native speaker of English who is learning to speak the Onondaga language. I have a real understanding of what the students are going through. I can honestly remember thinking that there were no rules to the language. In fact this was the claim of many of the speakers of the language: "There are no rules to Onondaga, you just say it and if you know Onondaga it will come out right." Somehow they failed to see that this was no help to someone who didn't "know Onondaga."

While I can now understand and appreciate the knowledge that some linguists have of the Iroquois languages, I can also understand and appreciate the lack of knowledge of the average student of Onondaga whose first language is English. I have also come to understand and appreciate the world view of the Onondaga speakers. As a linguist/researcher and teacher, I see the deep gulf that exists between these parties: students, speakers and linguists. I see this dissertation as a bridge over the gulf in question, a bridge of understanding.

One question that is asked of me often is: "So, are you fluent in Onondaga now?" Most often my answer to is that fluency is not a distinct line where at one point one is not fluent and at the next one is fluent. Consider that the level of linguistic competence of a four-year old child is quite different from that of a 52-year old college professor, someone who has a mastery of their native language. We would argue that both are fluent speakers, both can hold meaningful conversations, and both can use their language to communicate. Based upon that I feel it is safe to say then that I am fluent in a number of parts of the grammar and lexicon, but I would readily admit that I have not yet come close to gaining mastery of the Onondaga language.

I feel confident that I can pass along a great deal of what I now know through the discoveries and observations that I have made. Over the past 5 years I have driven the three-hour trip to the Onondaga Nation Territory every week to help with the language program there. I was born and raised there and feel a great obligation to help with language revitalization efforts that are underway. I now live at the Tuscarora Nation with my wife Kim and our three children, Corinne, Pierce and Clark, who are of Tuscarora nationality (in accordance with the Iroquoian custom of following matrilineal decent). This weekly trip to Onondaga keeps me in touch with my elders and the community of people who want to learn the Onondaga language as a part of their heritage. It has also given me considerable opportunity to work out various reorganizations of the Onondaga pronominal prefixes so as to help students figure out a very complicated system of pronominal reference.

It is imperative that students of the Onondaga language have an understanding of the pronominal prefix system of Onondaga. The pronominal prefix system is the key to achieving fluency in the Onondaga language. Without a working knowledge of this system (either conscious or subconscious) the student cannot hope to produce and comprehend the utterances that might be required to hold a simple conversation with a fluent speaker of this language.

The Onondaga pronominal prefix system has proven to be very difficult to learn, and it has been the downfall of some of the most eager students. However I find that once these students figure out that there are rules and order to this system, these same students tend to get back on track quickly and progress really well. In fact, these students find that the pronominal prefix system is the most predictable part of the grammar of the

Onondaga language. They also find that although the pronominal prefix system is vast and complex there are many rules for the selection of the proper pronominal prefix that can be found and explained in terms that the average student can understand.

I recall when I was a young student of the Onondaga language feeling that the pronominal prefix system was random and infinite. The tables that I will provide in this dissertation will show the pronominal prefixes as they really are: systematic and finite. Most students respond well to the establishment of rules and order.

The pronominal prefixes do not occur in isolation, and so it is impossible to think about, talk about, or write about the pronominal prefixes out of the context of the verb to they are attached. To a native speaker of Onondaga there is no concept of these wordparts as independent units. So, to the native speakers of Onondaga, I must apologize for the comments contained herein and for the inane questions you will be asked from students after they have studied this dissertation.

It has been very difficult to write this dissertation in a manner that would accommodate students (all of whom are non-linguists) and yet hold up to the scrutiny of linguists who are familiar with a more technical and broad-reaching approach to the description of a grammatical unit. I tend to favor my students in this regard, and I will try to make descriptions of phenomena in ways that will make sense to second-language learners of Onondaga and native speakers of English. If I can achieve the goal of helping a student become confident using the Onondaga pronominal prefix system, then the choice of this style will be justified.

1.1 What is a language, word and pronominal prefix?

Language is, in essence, a simple matter. A language is a set of symbols (words) that are used for two basic purposes: to represent items and ideas in the world and to describe situations in which the items are involved. Humans have developed a number of ways to accomplish these tasks, as evidenced by the number of different languages in the world. Onondaga, like every other language of the world, has a unique set of rules and a grammar. This dissertation is an investigation into a particular part of the grammar of Onondaga: the pronominal prefix. The pronominal prefix carries the information regarding "who" is involved in the situation being described in a word.

What is a word? Any sound (or combination of sounds) produced by humans could potentially be a word in some language. Each language has its own set of rules or parameters that determine the words of the language. These parameters are a matter of sound, meaning, and usage.

So specifically: "What is a word in the Onondaga language?" For practical purposes we can ask a speaker of Onondaga. A fluent Onondaga speaker will readily tell you if a particular string of sounds actually means something, whether it sounds like something meaningful but is not a word, or if it sounds like "nothing" and has no meaning whatsoever. The speaker has the ability to isolate words and to move words around in larger structures. The speaker can also identify words by characteristic features such as intonation or grammatical elements that occur at word boundaries.

For the average student, word recognition ability involves hearing and studying the language until she is able to extract the parameters of 'word-ness' in the Onondaga language. This is part of acquiring a language which involves the recognition of patterns

and regularities in a system and then applying the rules acquired so that one can predict and produce new forms.

There are many kinds of parameters that determine 'word-ness' in Onondaga. One is phonological: a word must be created from the inventory of sounds that Onondaga uses. Another parameter is syntactic: the word must be able to stand alone. Another is semantic: a word must have meaning or a definite function in the language. Another is morphological: the word must contain the necessary parts as defined by the language. Another is grammatical: the word fit into one of the types prescribed by the language (verb, noun, particle). For example, **ne?** is a word in Onondaga because the speakers use it as a word and it has a functional use in larger structures, but **no?** is not a word in Onondaga because speakers do not use it as a word. It is phonologically acceptable, but has no meaning and no functional use in the larger structures of the language. Both examples can occur as a phonological string within a word (as a part of a word) and may have meaning or function in that respect but of the two, only **ne?** can also stand alone as a separate word.

Words are the set of symbols that the speakers of a language use to represent the world. There can be many types of words in a language, as is the case in Onondaga, but there has to be a reasonable way to divide these into types or parts of speech. The Onondaga language consists of hundreds of thousands, if not millions, of words. This large number is largely due to the organization of information in the words of the language. An Onondaga word that contains an action verb stem is the structural equivalent of at least a simple declarative sentence in English. No one would attempt to write a 'dictionary of sentences' in English because there is no end to the possibilities

available to a sentence of English. This is nearly the case with verb structure in Onondaga, although I do believe that the number of possible Onondaga verb stems would be a large, yet ultimately finite, number.

1.2 Structure of the Onondaga word

The words of Onondaga¹ can be divided into two fundamental types based upon their morphological² characteristics. These two types are defined in (1).

(1) SIMPLE WORDS: words which are not morphologically complex,

i.e., they have no identifiable parts.

COMPLEX WORDS: words which are morphologically complex,

i.e., they have identifiable parts.

A simple word is referred to as a particle by Iroquoianists (see references in footnote 1). The most important characteristic of this class is that these words cannot be broken down into meaningful parts. They often serve as functional words, and it is difficult to assign a clear meaning to them. The meanings are often incomplete and inadequate since the same particle may have a certain meaning or function in one context and a different meaning or function in another. Examples of Onondaga particles are given in (2).

ne? nominal marker; indicates that the following structure is a noun structure or a verb structure whose meaning is interpreted as a person, place or thing.

¹ The structure of Iroquoian languages has been described in Abbott (2000), Chafe (1963, 1967, 1970, 1996), Foster (1974), Lounsbury (1953), G. Michelson (1973), Michelson and Doxtator (2002), Mithun (1976), Mithun and Chafe (1979), Mithun and Henry (1982), Rudes (1987, 1999), and Woodbury (1975, 2003).

² Morphology is the study of parts of words and how they combine.

tsha[?] subordinator: indicates that following clause is subordinate to the previous.

Particle combinations rarely give a meaning equivalent to the sum of the parts, and the meaning of any combination of particles is largely unpredictable.

A small number of particles have meanings usually reserved for substantive words. Some of these include words that may have been verb structures at one time, such as **dyotgut** 'always'; some of them name plants or animals like **jihah** 'dog'; some are onomatopoetic, such as **gwisgwis** 'pig'; and some are borrowings from English, such as **gwenis** 'pennies'.

The complex word types are the content words of Onondaga; these words denote either situations or things. The most significant feature of this word type is that complex words can be "broken down" into smaller, meaningful, and grammatical parts, which follow strict ordering principles that operate within the word. Conversely, complex words are made up of smaller parts.

At their simplest, complex words must consist of the three morphological parts shown in (3). Although many Onondaga words are more complex, i.e. have more parts, a word must contain at least these parts.

(3) pronominal prefix + lexical root + classifying suffix³

It is from this structure that the two basic word constructions of Onondaga emerge: substantive (a true noun construction) in (4), and predicative (a verb construction) in (5). The main difference between the two types is the classifying suffix. These simple

³ 'Classifying suffix' encompasses the various suffixes that can occur in this slot as identified below.

forms can be made more complex with the addition of other grammatical and lexical elements to the structures.

- (4) pronominal prefix + noun root + noun suffix
- (5) pronominal prefix + verb root + aspect suffix

Again, this represents the most basic and obligatory structure, and these simple structures are not terribly common in regular conversation. More commonly, speakers use more complex words in regular conversation. An example of a more complex construction is an action verb stem with an incorporated noun⁴ for 'corn' in (6).

(6) sahanęhayęthwa?

 $sa + ha + nehayethw + a^{2}$

repetitive, factual + he + corn-plant + punctual aspect

'he planted the corn again'

The verb stem in (6) is broken down in (7).

```
(7) -neh + a + yethw-
```

noun root 'corn' + root joiner + verb root 'plant/sow'

'plant corn'

The pronominal prefix is obligatory in all complex words, always occurring as shown, immediately before the lexical stem⁵. The pronominal prefix must convey 'who' the participants are in a situation. Many other word parts may occur before the pronominal prefix as well as between the pronominal prefix and the lexical root, and after the lexical root. These parts, although quite common, are not obligatory.

⁴ For a description of noun incorporation in Onondaga, see Woodbury (1975). See also Mithun (1984).

⁵ A lexical root together with its classifying suffix is a morphologically motivated unit that I refer to as a lexical stem following Lounsbury's (1953) use for Oneida.

1.3 Structure of the Iroquois verb

The Iroquois verb can be analyzed into four major components, which provide the information about 'how', 'who', 'what' and 'when'. These four components are defined in (8).

(8) How: the 'how' slot is the prepronominal prefix slot.This part specifies how the action happens.

Who: The 'who' slot is the pronominal prefix slot.

This part specifies the participants involved in the situation.

What: The 'what' slot is the verb stem slot.

This part specifies what happens in the situation.

When: The 'when' slot is the aspect suffix slot.

This part specifies how the situation happens in 'Iroquois' time⁶.

An Onondaga verb is equivalent to a simple declarative sentence in English, and all of the

parts required of a simple sentence are present in an Onondaga verb. The example in (9)

shows an Onondaga verb with a breakdown into the four major slots plus an

identification of the parts in each slot, and an English translation.

(9) wa'shagoya'dagenha'⁷

wa' + shago + ya'dagenh + a'

factual mode + he > her + help + punctual aspect

'He helped her.'

 $[\]frac{6}{2}$ Onondaga has 4 basic temporal aspects, punctual, habitual, stative and purposive, and an imperative form.

⁷ The penultimate syllable is accented unless marked otherwise.

1.4 Pronominal Prefixes

This dissertation will focus on all aspects of the form, meaning and usage of the pronominal prefixes of Onondaga. In Chapter 2 we will look at the variation and distribution of all the pronominal prefixes. In Chapter 3 we will look at the semantic distinctions that are conveyed by the pronominal prefixes.

The Onondaga language has 59 pronominal prefixes, which designate who the participants are in the situation expressed by the verb stem. Every pronominal prefix is distinct from another by its phonological characteristics (what it sounds like), its semantic characteristics (what it means), and its morphosyntactic characteristics (which verbs it can combine with). Of all the parts of the Onondaga word, the pronominal prefixes are most easily manipulated. Most speakers can recognize and isolate the prefixes and can assign at least some meaning to them; other, more functional, parts of the word are less easily isolated and less easily defined by speakers.

One problem that arises in a discussion of pronominal prefixes is how to refer to a particular prefix. In any reference to a particular pronominal prefix in Onondaga we are necessarily referring to at least two forms and at least two meanings. There is not a single pronominal prefix in Onondaga which has only one form and one meaning. For example two different forms of the "same" prefix, the third person plural prefix 'they', occurs in (10). And the "same" pronominal prefix refers to different relations in the examples in (11). (The pronominal prefixes and interpretations are bolded in the examples.)

(10) wa⁹hudekhunya⁹ 'they ate'wa⁹hadihya·du⁹ 'they wrote'

(11) wa'hgę' 'I saw it'

wa⁹hehsak 'he looked for it'

One could refer to each prefix by its form, but which particular form should we use? One could refer to each prefix by its meaning, but which meaning? For this dissertation I found it easiest to use an arbitrary reference, such as the designated numbers of the cells in a table like that created for Oneida by Lounsbury (1953). This table was adapted for Oneida by Woodbury (2003), and it follows Lounsbury and assigns a number to every pronominal prefix of Onendaga.

1.5 Lounsbury's representation of the pronominal prefixes

This dissertation refers to the Lounsbury table extensively, so it is in the best interest of the reader to have available a pronominal prefix table in the manner of Lounsbury for Onondaga. Fortunately such a table already exists, having been adapted for Onondaga by Woodbury (2003) in Table 11A. This table represents the pronominal prefixes of the Onondaga language spoken at the Onondaga Nation Territory. (Table 11B in Woodbury 2003 gives the pronominal prefixes used at Six Nations near Brantford, Ontario.) I refer to this Onondaga table as the Lounsbury table throughout this dissertation because it essentially follows the same organization as that created by Lounsbury (1953) for Oneida. It is reproduced, with permission, on pages 15 and 16 below.

Lounsbury's organization of the pronominal prefix system can best be described as concise. The Lounsbury table originally represented the Oneida pronominal prefix system on a single page, a feat whose magnitude is lost on those unfamiliar with the complexity of the Iroquois pronominal prefix system.

P A	1 singular	1 dual	1 plural	2 singular	2 dual	2 plural
1 singular			I	5 3 gụ ^{c(i)} gụy ^{aeęoụ}		
1+3 dual					54 gni ^c gn ^{eioų} gy ^{aę}	
1+3 plural					gy	55 gwa ^c gwę ⁽ⁱ⁾ gw ^{aeę} gy ⁰
1+2 dual						gy
1+2 plural						
2 singular	56 sk ^c sge ^{cc} sg ^{vr}					
2 dual		57 sgni ^c sgn ^{eioų} sgy ^{aę}				
2 plural		~5)	58 sgwa ^c sgwę ⁽ⁱ⁾ sgw ^{aeę} sgy ^{ou}			
No Agent	16 (-w)ak ^c (-w)ag ^{vr} (-w)ah ^{kg} (-w)age ^{cc} [ul]k ^c	17 (-y)ųgni ^c (-y)ųgn ^{eioų} (-y)ųgy ^{aę}	18 (-y)ųgwa ^c (-y)ųgwę ⁽ⁱ⁾ (-y)ųgw ^{aeę} (-y)ųgy ^{oų}	$19 \\ sa^{c} \\ se^{(i)} \\ s^{aeeou} \\ sa_{imp}$	7a sni ^c sn ^{eioų} jy ^{aę}	8a swa ^c swę ⁽ⁱ⁾ sw ^{aeę} jy ^{oų}
Neuter&FZ			()/(0)			55
Masculine singular	34 hak ^c hag ^{vr} hah ^{kg} hage ^{cc}	35 shųgni ^c shųgn ^{eioų} shųgy ^{aę}	36 shụgwa ^c shụgwę ⁽ⁱ⁾ shụgw ^{aeę} shụgy ^{oụ}	37 hya ^c hyę ⁽ⁱ⁾ hy ^{aeę} hyay ^o ų	3 1a hesni ^c hesn ^{eio} hejy ^{aę}	32a heswa ^c heswę ⁽ⁱ⁾ hesw ^{aeę} hejy ^{oų}
Feminine- Indefinite singular	46 (-y)ųk ^c (-y)ųg ^{vr} (-y)ųh ^{kg} (-y)ųge ^{cc}	48 (-y)ųkhi ^{c(i)} (-y)ųkhiy ^{aeęoų}		49 (-y)esa ^c (-y)ese ⁽ⁱ⁾ (-y)es ^{aeę} (-y)esay ^{oų}	43a (-y)etci ^{c(i)} (-y)etciy ^{aeçoµ}	
Feminine- Zoic dual						
Feminine- Zoic pl						
Masculine dual	47 hụk ^c hụg ^v					
Masculine plural	hųh ^{kg} hųge ^{cc}					

Table 11A: Pronominal Prefixes: Onondaga Nation

Table 11A (Continued)

No Patient	Neuter &	3 singular		3 non-	Singular				
ito i uticiti	Feminine-Zoic	Masculine	FemIndefinite	FZ du/pl	M du/pl				
1 k ^c g ^{vr}		25 he ^{c(i)}	39 khe ^{c(i)}						
h ^{kg} ge ^{cc}		hey ^{aeęoų}	khey ^{aeęoų}						
2 (-y)agni ^c		26 shagni ^c	40 (-y)akhi ^{c(i)}						
(-y)agn ^{eio} ų		shagn ^{eioų}	(-y)akhiy ^{aeęoų}						
(-y)agy ^{aę}		shagy ^{aę}	(-y)akiiiy						
			_						
3 (-y)agwa ^c (-y)agwę ⁽ⁱ⁾		27 shagwa ^c shagwę ⁽ⁱ⁾							
(-y)agw¢ (-y)agw ^{aeę}		shagw ^{aeę}							
(-y)agy ^{oụ}		shagy ^{ou}							
4 dni ^c		28 shedni ^c	41 () .1 :C(i)						
dn ^{eioµ}		shedn ^{eioµ}	41 $(-y)$ ethi ^{C(i)}						
dy ^{aę}		shedy ^{aę}	(y-)ethiy ^{aeęoų}						
5 dwa ^c		29 shedwa ^c	_						
dwę ⁽ⁱ⁾		shedwe ⁽ⁱ⁾							
dw ^{aeę}		shedwaee							
dy ^{oų}		shedy ^{oµ}							
6 $(-h)s$ $(-h)se^{cc}$		30 hes ^{cv}	42 she ^{$c(i)$}						
j/-hc ^y S _{Imp}		hej ^y	shey ^{aeęoų}						
7 sni ^c		31 hesni ^c	43 (-y)etci ^{c(i)}						
sn ^{eioų}		hesn eiou	(-y)etciy ^{aeęoų}						
jy ^{aę}		hejy ^{aę}							
8 swa ^c		32 heswa ^c							
swę ⁽ⁱ⁾		heswę ⁽ⁱ⁾							
sw ^{aeę}		hesw ^{aeę}							
jу ^{оџ}	_	hejy ^{oų}							
	20	21	22	23	24				
	$(-y)o(w)^{c(a)(i)(e)}$	$ho(w)^{c(a)(i)(\varrho)}$	$((-y)a)go(w)^{c(a)(i)(e)}$	(-y)odi ^c	hodi ^c				
	(-y)aw ^{eę}	haw ^{eę}	((-y)a)gaw ^{eę}	(-y)on ^v	hon ^v				
	(-y)a ^o ų	ha ^{oų}	((-y)a)ga ^{oų}						
9 ga ^c ge ⁽ⁱ⁾ w ^{aee} $(-y)^{ou}$									
$10 \text{ ha}^{\circ} \text{ h} \mathbb{R}^{ae\mu}$		-	38 shago(w) $c(a)(i)(e)$						
$he^{(i)}$ h^{aeeou}			shagaw ^{eę}						
IIÇ. II 🗘			shaga ^{oµ}						
11 (-y)e ^{c(i)}	50 guwa ^c	33 hụwa ^c	59 (-y)udat ^c	51	52 huwadi ^c				
$(-y)\psi(w)^{(a)(e)}$	50 guwa ⁻ guwę ⁽ⁱ⁾	huwe ⁽ⁱ⁾	(-y)udad ^{vr}	guwadi ^c	jhuwan ·v				
(-y)µ(w)(-v) (-y)ag ^{eęoµa}	gųwę gųw ^{aeę}	hụw ^{aeę}	(-y)udad (-y)udade ^{cc}	guwan ^v	íhuwen }				
$(-y)ag^{(i)}(-y)e^{(e)}$	gųway ^{oų}	hųway ^{oų}	())+>	5ų ali	į́hųwadiy]				
12 gni ^c gy ^{aę}			44 ((-y)a)godi ^c	_1	***				
gn(w) ^{eioų}			$((-y)a)gon^v$						
$\frac{\operatorname{gn}(w)^{\operatorname{cup}}}{13 \operatorname{gudi}^{\operatorname{c}} \operatorname{gu}(w)^{(a)}}$	1		(())*)501						
13 gudi [°] gu(w) ^(u) gun ^{eçiou}									
14 hni ^c hn ^{eioų}	-1		45 shapedi ^Q						
			45 shagodi ^c						
hy ^{aę}	-1		shagon ^v						
· · · · · · · · · · · ·									
15 hadi ^c hęn ^{eioų} $h\mu(w)^{(a)(e)}$									

The Lounsbury table is two dimensional. On the vertical axis or dimension are represented the 15 distinct categories labeled "agent." On the horizontal axis or dimension are represented the 11 distinct categories labeled "patient." Also included on both dimensions is the null sign, \emptyset , to represent the absence of an "agent" or a "patient". (12) Category: *person*

1 st	I, we, me, us
$1^{st} + 3^{rd}$	we (I + other) excludes addressee (only 1^{st} person agents)
$1^{st} + 2^{nd}$	we (I + you) includes addressee (only 1^{st} person agents)
2 nd	you
3 rd	he, she, it, they or him, her, them
(13) Category: gender	(third person only)
neuter	refers to inanimate objects
zoic	refers to animals (and female humans ⁸)
feminine	refers to females and nonspecific persons
masculine	refers to male participant in the singular but refers to all
	male or mixed gender participants in the plural
(14) Category: number	
singular	a party of 1 participant
dual	a party of 2 participants
plural	a party of 3 or more participants

no agent null

no patient null

⁸ This usage is not accepted nowadays in regular conversation.

The body of the Lounsbury table consists of 59 numbered cells representing the 59 pronominal prefixes and also blank areas which represent those meanings that are not expressed by any pronominal prefix. Each numbered cell is defined by the distinctions that can be attributed to that pronominal prefix. For example, 1sA, 2sP refers to a first person singular agent 'I' and a second person singular patient 'you'⁹. In order to find and select a pronominal prefix the student must first find the agent and patient distinctions that match the situation and then follow those distinctions to find the cell at the juncture of the two distinctions. Each cell is defined by the participant(s) that it encodes. This particular set of distinctions will lead you to cell #53. In this dissertation I will use a format that was developed with the Onondaga Nation Language Program. The agent will be listed first, followed by the symbol ' >' to symbolize transitivity, followed by the patient. I will also use a system of 'Modified English Pronouns¹⁰. An example of pronominal prefix #53 is given in (15) with the verb stem –**ge**- 'see.'.

(15) ęsgugę?

es + gu + ge +[?]

future mode, repetitive + I > you + see + punctual aspect

'I will see you again'

In the case of single-party (intransitive) verb stems, Lounsbury uses a 0 in the agent column and Woodbury uses 'no agent' to indicate that there is no agent present and that the single party encoded on the pronominal prefix is a patient¹¹. Lounsbury uses a 0 in

⁹ The terms agent and patient will be defined in Chapter 3. See also footnote 11.

¹⁰ See Chapter 3 for an explanation of Modified English Pronouns.

¹¹ In the case of intransitive verbs the use of the labels agent and patient do not apply since either can occur in the pronominal prefix slot with no change of the implied role of the party involved. The use of these terms is merely for convenience as they coincide with pronominal prefixes which do have these roles when used with transitive verbs. See chapter 3.4.2.

the patient row and Woodbury uses 'no patient' to indicate that there is no patient present and that the single party encoded on the pronominal prefix is an agent.

In this dissertation I will exclusively use the Modified English Pronouns to indicate the role of the pronominal prefix in the situation. Pronominal prefix #10 occurs with an intransitive verb stem in the example in (16).

(16) ęha·dyę?

e + h + adye + ?

future + he + sit + punctual

'He will sit'

Every numbered cell has at least two variants and as many as 12; the variants occur with the 16 phonologically defined stem classes of the language. Each variant is followed by the set of phonological environments, written in superscript, that determines the selection of the variant. Verb stems can begin in any of the 16 segmental phonemes of Onondaga: four oral vowels / a, e, i, o /, two nasalized vowels / e, μ /, three resonant consonants / n, w, y /, four oral obstruents / s, j, t, k /, two laryngeal obstruents / °, h /, and / R /. This last phoneme represents a sound that was once present in Onondaga but has been lost in the history of the language. However, the pronominal prefix variants are most easily described if we represent this sound, which is no longer present, with an abstract symbol /R/. See Woodbury (1981) and Michelson (1986), which describe the reflexes of this sound in modern Onondaga. The phonemes / k / and / t / each have two allophones: voiced allophones [g] and [d] and voiceless allophones [k] and [t]. The orthography used at the Onondaga Nation Language Program and in Woodbury (2003) includes **d** and **g** as well as **t** and **k**. However, stems that begin in **d** and **g** are recognized as T stems and K

stems, respectively¹². In addition to the segmental phonemes Onondaga has two prosodic phonemes: vowel length / \cdot / and accent / ' /. Accent is represented only when it is not on the penultimate (second from last) syllable.

1.6 Organization of Chapters 2 and 3

In the following two chapters I will describe the two elements of the Onondaga pronominal prefix: form (Chapter 2) and meaning (Chapter 3). The goal is to identify the principles for selecting the proper pronominal prefix. The Onondaga pronominal prefix system is huge compared to the English personal pronoun system, so selection of the proper pronominal prefix is not usually a simple matter. The pronominal prefix system is however very systematic and learnable, and it has been my experience that fluency in this pronominal prefix system is recognized by speakers as a mark of the progress of a student.

Fluency in a language requires two things: competency in production and competency in comprehension of words of the language. I have found that the polysynthetic¹³ nature of Onondaga motivates a difference in the order of application of the principles that are used during language production (speaking) versus language comprehension (understanding). During comprehension, a student is required to break down and isolate the parts of the verb, in the context of the situation so that he can understand what is being said. During production of language a student is required to describe a situation, which involves identifying a verb stem to match the situation and also identifying the party or parties involved. The tables and information that you will

¹² As explained in Chapter 2, the stem classes are represented with capital letters in this dissertation.

¹³ 'made from many [parts]'

find in the Chapters 2 and 3 are intended to help a student learn how to use the Onondaga pronominal prefix system in both aspects of fluency, comprehension and production.

When trying to comprehend an Onondaga verb, a student could turn first to the form table in Chapter 2 and then go to the meaning table in Chapter 3. I make this suggestion because the comprehension of a verb form requires that a student first identify the pronominal prefix and then determine its meaning in the context of the speech act. When trying to produce an Onondaga verb, a student could turn first to the meaning table in Chapter 3 and then go to the form table in Chapter 2. This suggestion is made because production of a verb form requires that a student first identify the meaning and then determine the proper form of the pronominal prefix. (These suggestions are based upon learning to use the pronominal prefix system myself as well as teaching others to use this system.)

I must not forget to make the point that the tables in this dissertation are meant to complement the Lounsbury table, and there are observations that emerge from the organization of the Lounsbury table that are not apparent in the organization of the tables that I will provide. Given the number of prefixes and the complexities of the system, having different and complementary organizations may ultimately help the student.

I had two presentation styles to choose from when deciding how I would write about the pronominal prefixes: the 'manual style' of presentation versus the 'trail of discovery' style of presentation. The manual style takes more of an instruction manual approach to the presentation of grammatical facts, beginning with a brief introduction, a kind of "quick start" guide, followed by the definitive table of that chapter. This is followed by an in-depth explanation of the details and observations that can be made

from this table for those with an inclination to investigate the Onondaga pronominal prefix system in more detail.

It should be mentioned however that when teaching the Onondaga pronominal prefixes over a longer period of time, I prefer to use the 'trail of discovery' type of presentation. When using this presentation style I present whole words and take the student through the steps of comparing a number of verbs and their meanings to isolate the form and meaning of the pronominal prefixes in order to learn how the pronominal prefix system works. The trail of discovery presentation and method of learning is meant to model the steps taken in the acquisition of language (although this cannot be confirmed). In this method, pattern recognition and the identifying tendencies are encouraged.

Chapter 2: Forms of the Onondaga pronominal prefixes

2.0 Overview

This chapter describes all the variant forms of the pronominal prefixes. My overall purpose in this chapter is to help students become familiar with the form of the prefixes, the distribution of the variants and the conditions that determine the distribution of the variants.

An Onondaga pronominal prefix is an abstract entity encompassing all of the occurring forms, or variants, that fall under the same 'meaning'. The pronominal prefix is an abstract entity for two reasons: one reason is that a pronominal prefix in Onondaga is never isolated from the other parts of a word as it is in our table, and the other reason is that there is always more than one variant form of a particular pronominal prefix. In all, the 59 pronominal prefixes of Onondaga have a total of 271 different variant forms. Of the 59 Onondaga pronominal prefixes, none have only one variant. Nine pronominal prefixes have only two variants, and there are two pronominal prefixes that have twelve variants each. The average number of variants per pronominal prefix is 4.6.

Table 1, Forms of the Onondaga pronominal prefixes, gives all 271 variants of the 59 pronominal prefixes. Each pronominal prefix is represented as its own table of variation and distribution. Thus Table 1 actually consists of 59 individual pronominal prefix variation tables. The organization and content of the columns in Table 1 will be briefly described below. I will present an in-depth discussion in subsequent sections.

Column 1: prefix number (1 – 59)

The number in this column refers to the numbered cells in the Lounsbury table, providing a standardized reference.

Column 2: preceding environs

Indicated in this column are the conditions which cause (or do not cause) a leftside variation of a pronominal prefix. Not all pronominal prefixes have a left-side variation. There are six possible conditions for a left-side variation:

ALL indicates that the pronominal prefix in column 3 occurs with all preceding environments, i.e., there is no left-side variation.

elsewhere indicates that the pronominal prefix in column 3 occurs in allenvironments except when the preceding environment is one of the following:# marks the beginning or end of a word, i.e., the form in column 3 occurs at thebeginning of a word.

FAC? gives the variant that occurs after the *factual* mode prepronominal prefix that ends in glottal stop (?).

t gives the variant that occurs after a preceding t.

* indicates that the conditions for the variation are unclear or that the particular form is not used by all speakers.

Column 3: pronominal prefix

This column gives all of the pronominal prefix variants of Onondaga. The term 'variant' suggests both sameness and difference of form. Variants are considered to have sameness because they have the same meaning; yet they are considered different because they occur with different verb stem classes. Two different variants of the same pronominal prefix cannot occur with the same verb. Consider the four words in (1).

(1)	ę hadi jisdo∙dę²	'they will turn on the light(s)'
	*ę hų jisdo∙dę?	ungrammatical prefix selection
	ę hų dęno·dę?	'they will sing / play (a) musical instrument(s)'
	*ę hadi adęno·dę?	ungrammatical prefix selection

Both variants of the pronominal prefix in (1), pronominal prefix #15, can mean 'they,' but only when selected for the correct verb stem class. Selection of the correct pronominal prefix is not random; verb stems fall into phonologically motivated classes.

Column 4: verb stem class

There are 16 stem classes in Onondaga, identified according to the first sound (or phoneme, see section 1.5) of the verb stem to which the pronominal prefix attaches. I found it helpful to students to represent the stem classes with capital letters and refer to the initial segment of the stem as a sound/letter. An \mathbf{x} in one of the cells below a capital letter indicates that the form in Column 3 must be selected by that verb stem class. An (\mathbf{x}) in parentheses indicates a special situation in which the first sound/letter of the verb stem is dropped when the prefix is added, i.e., it does not occur in the spoken word.

Column 5: var/dist pattern

The patterns are coded according to the right-side variation of the pronominal prefix and the distribution of x's given in column 4. The purpose of Column 5 is to highlight the phonological and distributional similarities that occur in the system.

1	2	3							4										5
	preceding	pronominal					Ver	b Ste	em C	lass									var/dist
#	environs	prefix		vow	vel st	ems					con	sona	nt st	ems					pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern F
#1	ALL	g-	х	x	х	х	х	x		1			-		х	х	х	х	
L		<u>8</u> k-					-		х	х	х	х	х	х					
		h-								X									
		ge-	Bef	ore C	CC st	ems													
I			4																
		variant form	A	Ę	Е	I	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern A
#2	elsewhere	vagy-	х	х						Γ						1			
		yagn-			х	х	х	х	1							1			
		yagni-							х	х	х	х	х	х	х	х	х	х	
	#/FAC?-	agy-						-								-			
		agn-																	
		agni-	1																
_		variant form	A	Ę	Е	I	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern B
#3	elsewhere	yagw-	Х	х	х														
		yagy-					Х	х											
		yagwę-				(x)													
		yagwa-							х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
	#/FAC?-	agw-																	
		agy-																	
		agwę-																	
		agwa-																	
	-	variant form	A	Ę	E	I	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern A
#4	ALL	dy-	Х	Х															
		dn-			х	х	х	Х								<u> </u>			
		dni-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern B
		dw-	х	х	Х														
#5	ALL		_													1			
#5	ALL	dy-					х	х											
#5	ALL					(x)	X	X											

Table 1. Forms of the Onondaga pronominal prefixes

1	2	3		4	5
pref	preceding	pronominal	Verb S	tem Class	var/dist
#	environs	prefix	vowel stems	consonant stems	pattern

		variant form	А	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern I
#6	elsewhere	hs-	Х	Х	Х		Х	х	Х	Х	Х	Х	Х	Х	Х	Х		Х	
		j-				Х											Х		
		hse-	Bef	ore C	CC st	ems													
		ø *	befo	ore H	[S ste	em													
		hs -> hc- *	befo	ore H	[Y st	em													
	#/FAC?-	S-																	
		se-																	
		s -> c-																	
	t-	hs -> sh- *	* th	is va	riant	or e	nviro	onme	nt is 1	10t sl	howr	n on	Woo	dbur	y tab	ole 11	la.		

-			variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern A
	#7	ALL	ју-	Х	Х															
	#7a		sn-			Х	Х	Х	х											
			sni-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

_			variant form	A	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern B
	#8	ALL	sw-	Х	Х	Х														
	#8a		ју-					х	х											
			swę-				(x)													
			swa-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

variant form A E E I O U T K H ? J S N W Y R Pattern E

_		varianti form		÷	_	-	-	Ľ	-			-	v				-	
#9	elsewhere	W-	Х	Х	Х													
		у-					Х	Х										
		gę-				(x)												
		ga-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	#/FAC?-	y -> Ø																
							_											

w -> \emptyset ** ** w-deletion in V -> N, e.g adyędakhwa? - 'chair'

variant form	Α	Е	Е	Ι	0	U	Т	K	Н	2	J	S	Ν	W	Y	R	Unique

#10	ALL	h-	Х	Х	х		х	Х										
		hę-				(x)												
		ha-							Х	Х	х	Х	Х	Х	х	х	х	Х
		hR-	Х	Х	Х			Х										

1	2	3		4	5
pref	preceding	pronominal	Verb S	tem Class	var/dist
#	environs	prefix	vowel stems	consonant stems	pattern

variant form A E E I O U T K H ? J S N W Y R Unique

#11	elsewhere	yų-	(x)	(x)															
-		yę-			(x)														
		ya-				(x)													
		yag-	х	Х	Х		Х	Х											
		ye-				х			х	Х	Х	х	Х	Х	Х	х	х	Х	
		yuw-	Bet	fore	ARV	sten	ns												
	#/FAC?-	ų-																	
		ę-																	
		a-																	
		ag-	-																
		e-	-																
		ųw-																	
_		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern A
#12	ALL	gy-	х	Х															
		gn-			х	х	х	х											
		gn- gni-			Х	х	х	X	X	X	X	X	X	X	X	X	X	X	
					X	X	x	x	X	X	X	X	X	X	X	x	X	X	
			A	Ę	x E			x Ų	x T	x K	x H		x		x	x W	x Y	x R	Pattern H
#13	ALL	gni-	A (x)		E														Pattern H

	01	· /	· /														
	gụn-			х	х	х	х										
	gudi-							Х	Х	х	Х	х	Х	Х	Х	х	х
	gụw-	Bef	ore	ARV	sten	ns		-	-	-		-				_	-

		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern A
#14	ALL	hy-	Х	Х															
		hn-			Х	Х	Х	х											
		hni-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Н	2	J	S	Ν	W	Y	R	Pattern H
--------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	-----------

#15	ALL	hụ-	(x)	(x)														
		hẹn-			х	х	х	х										
		hadi-							х	Х	Х	Х	Х	Х	Х	Х	Х	Х
		hụw-	Bef	ore	ARV	ster	ns	-		-					-	-	-	

1	2	3		4	5
pref	preceding	pronominal	Verb St	tem Class	var/dist
#	environs	prefix	vowel stems	consonant stems	pattern

		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern F
#16	elsewhere	wag-	Х	Х	Х	Х	Х	х							Х	Х	Х	Х	
		wak-							Х	Х	Х	Х	Х	Х					
		wah-								Х									
		wage-	Bef	ore C	CC st	ems	_		-	_	-	_	-	_	_				
	#	ag-																	
		ak-																	
		ah-																	
		age-																	
	wa ⁹ +wag	; -> ųg ***	***	this	varia	ntion	is re	cogn	ized l	out n	ot us	ed p	rodu	ctive	ly				
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern A
#17	elsewhere	yugy-	Х	Х															

1111	cise where	yugy-	л	л														
		yugn-			х	х	х	х										
		yugni-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	#/FAC?-	ųgy-				_	-	_		-	-							
		ugn-																
		ugni-																

		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern B
#18	elsewhere	yųgw-	Х	Х	Х														
-		yugy-					Х	х											
		yųgwę-				(x)													
		yugwa-							х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
	#/FAC?-	ųgw-			-				-			-	-	-			-		
		ųgy-																	
		ųgwę-																	
		ųgwa-																	

_			variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Unique
	#19	ALL	S-	Х	Х	Х		Х	Х											
			sę-				(x)													
			sa-							х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

variant form	A	Ę	Е	Ι	0	Ų	Т	K	Η	2	J	S	Ν	W	Y	R	Pattern G
	()	$\langle \rangle$		$\langle \rangle$													

-				•				•										
#20	elsewhere	yo-	(x)	(x)		(x)			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
		yaw-		Х	Х													
		ya-					Х	х										
		yow-	Bef	ore A	ARV	ster	ns											
	#/FAC?-	0-																
		aw-																
		a-																
		ow-																

1	2	3		4	5
pref	preceding	pronominal	Verb St	tem Class	var/dist
#	environs	prefix	vowel stems	consonant stems	pattern

_			variant form	A	Ę	E	Ι	0	Ų	Т	K	Η	?	J	S	N	W	Y	R	Pattern G
	#21	ALL	ho-	(x)	(x)		(x)			х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
-			haw-		Х	х														
			ha-					Х	Х											
			how-	Bef	ore A	ARV	sten	ns												

variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern G
--------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	-----------

#22	elsewhere	yago-	(x)	(x)		(x)			X	Х	Х	Х	Х	Х	Х	Х	Х	Х
		yagaw-		Х	Х													
		yaga-					Х	х										
		yagow-	Bet	fore	ARV	ster	ns											
	?-	ago-																
		agaw-																
		aga-																
		agow-																
	#	go-																
		gaw-																
		ga-																
		gow-																

_			variant form	A	Ę	Е	Ι	0	Ų	Т	K	Η	?	J	S	N	W	Y	R	Pattern D
ĺ	#23	elsewhere	yon-	х	Х	х	х	Х	х											
			yodi-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
		#/FAC?-	on-																	
			odi-																	

		A	÷	12	Ι	U	Ų	I	ĸ	Η	ſ	J	S	Ν	W	Y	R	Pattern D
#24 ALL	hon-	Х	Х	Х	Х	Х	Х											
	hodi-							х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

_			variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Η	?	J	S	Ν	W	Y	R	Pattern C
	#25	ALL	hey-	Х	Х	Х		Х	Х											
			he-				х			х	х	х	х	х	х	х	х	х	х	

_			variant form	A	Ę	Е	Ι	0	Ų	Т	K	Η	?	J	S	Ν	W	Y	R	Pattern A
	#26	ALL	shagy-	х	х															
_			shagn-			Х	х	х	х											
			shagni-							Х	Х	Х	х	Х	Х	Х	Х	Х	Х	

_			variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern B
	#27	ALL	shagw-	Х	Х	Х														
-			shagy-					х	х											
			shagwę-				(x)													
			shagwa-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

1	2	3	1						4										5
pref	preceding	pronominal					Ver	b St	em C	lass									var/dist
#	environs	prefix		vow	vel st	ems					con	sona	nt st	ems					pattern
		variant form	A	Ę	E	Ι	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern A
#28	ALL	shedy-	х	Х															
		shedn-			Х	Х	Х	Х											
		shedni-							Х	х	Х	х	х	х	Х	Х	х	х	
		variant form	A	Ę	Е	I	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern B
#29	ALL	shedw-	х	х	х														
		shedy-					Х	Х											
		shedwę-				(x)													
		shedwa-							Х	Х	Х	Х	Х	Х	Х	Х	х	Х	
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	s	N	W	Y	R	Pattern I
#30	ALL	hes-	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		х	
		hej-				х											х		
		hese-	Bef	ore C	CC st	ems													
		variant form	A	Ę	Е	I	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern A
#31	ALL	hejy-	Х	Х															
#31a		hesn-			Х	Х	Х	Х	_										
		hesni-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
	****	shejy-					occu	r occ	asion	ally	but I	am i	not s	ure v	vhat	cont	rols		
		shesn-	this	s vari	iatio	n													
		shesni-																	
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern B
#32	ALL	hesw-	Х	X	х														
#32a		hejy-	<u> </u>		<u> </u>		х	х				-	-	-					
- 24		heswę-			-	(x)	Λ	Λ	-	\vdash		-	-	-	-				
		heswa-			-	(Λ)			х	х	х	х	х	х	х	х	х	х	
	****	shesw-	***	* _c_	vari	ante	000011	r occ	asion									л	
		shejy-			iatio		occu	1 000	a5101	any	out I	am	101.3		, mai	cont	1013		
			uns	o val	atiol	1													
		sheswę-	1																
		sheswa-																	
		variant form	А	Е	Е	I	0	U	Т	K	н	?	Ţ	S	N	w	Y	R	Pattern E
_		, and ionin		~~		-	÷	τ				-		.9			-		-

_			variant form	A	Ę,	Ľ	I	U	Ų	I	N	11	I	J	9	IN	vv	1	N	1 4
ſ	#33	ALL	hụw-	Х	Х	Х														
			hụway-					Х	Х											
			hụwę-				(x)													
			hụwa-							Х	Х	Х	х	х	х	х	х	х	х	

1	2	3							4										5
pref	preceding	pronominal					Ver	b Ste	em C	lass									var/dist
#	environs	prefix		vov	vel st	ems					con	sona	nt st	tems					pattern
		variant form	A	Ę	Е	I	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern F
#34	ALL	hag-	х	Х	Х	Х	Х	х							Х	Х	Х	Х	
-		hak-							х	х	Х	Х	Х	Х					
		hah-								Х									
		hage-	Bef	ore (CC st	ems													-

		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Η	?	J	S	Ν	W	Y	R	Pattern A
#35	ALL	shugy-	Х	х															
		shugn-			Х	Х	Х	Х											
		shugni-							Х	х	х	х	х	х	х	х	Х	х	

_			variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern B
	#36	ALL	shụgw-	Х	Х	Х														
-			shụgy-					х	х											
			shụgwę-				(x)													
			shugwa-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

variant form A E E I O U T K H ? J S N W Y R Pattern E

#37	ALL	hy-	х	х	Х													
		hyay-					Х	Х										
		hyę				(x)												
		hya-							Х	Х	Х	х	х	х	Х	х	х	Х

_			variant form	Α	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern G
ſ	#38	ALL	shago-	(x)	(x)		(x)			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
			shagaw-		х	Х														
			shaga-					Х	х											
			shagow-	Bef	ore /	ARV	sten	ns		-	-	_	_				_			

-		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Η	?	J	S	N	W	Y	R	Pattern C
#39	ALL	khey-	Х	Х	Х		Х	х											
		khe-				Х			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern C
#40	elsewhere	yakhiy-	Х	Х	Х		Х	х											
		yakhi-				Х			Х	Х	Х	Х	Х	Х	Х	Х	х	Х	
	#/FAC?-	akhiy-																	
		akhi-																	

			variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern C
	#41	elsewhere	yethiy-	Х	Х	Х		Х	х											
-			yethi-				х			х	х	Х	Х	Х	х	х	Х	Х	Х	
		#/FAC?-	ethiy-																	
			ethi-																	

1 1	2	2	1						4										5
pref p	receding	pronominal	1				Ver	b Ste	em C	ass									var/dist
	nvirons	prefix		vow	vel st	ems		~			con	sona	nt st	tems					pattern
			Α	Ę	Е	I	0	Ų	Т	K	н	?	J	S	Ν	w	Y	R	Pattern C
#42	ALL	variant form			-	1				K		1	J	6	11		1	K	
#4Z	ALL	shey-	Х	Х	Х		Х	Х								~ ~			
		she-				Х			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	_
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern C
#43 e	elsewhere	yetshiy-	Х	Х	Х		Х	Х											
#43a		yetshi-				х			х	х	х	х	х	Х	х	Х	Х	х	
	#/FAC?-	etshiy-																	
		etshi-																	
_		-	-																
			Α	Ę	Е	Ι	0	Ų	Т	K	Н	2	J	S	Ν	w	Y	R	Pattern D
#44 e	elsewhere	variant form	1		1		1		1	17			J	5	11	•••	1	T.	
π44 €	eisewiiere	10	Х	х	Х	х	Х	Х	v	v	v	v	v	v	v	v	v	v	
⊢	?-	yagodi- agon-	-	I					Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	l
	1	agodi-	-																
-	#	gon-																	
		godi-	-																
		goui-	J																
#45	ALL	variant form	A	Ę	E	I	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern D
#45	ALL	shagon-	Х	Х	Х	х	Х	X											
		shagodi-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern F
#46 e	elsewhere	yug-	Х	Х	Х	Х	Х	х							х	Х	Х	х	
		yųk-							х	х	х	х	х	х					
		yuh-								х									
		yųge-	Bef	ore (CC st	ems									_	-			
	#/FAC?-	ųg-	1																
		ųk-	1																
		ųh-	1																
		ųge-																	
L		75V	J																
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern F
#47	ALL	hụg-	Х	Х	Х	Х	Х	Х							Х	Х	Х	Х	
		hụk-							х	х	Х	Х	Х	Х					
		hụh-								х									
		hụge-	Bef	ore (CC st	ems	-								-	-			•
-		-																	
				Б	F	т	0	T	T	V	п	n	т	F	NT	VX 7	v	р	Pattern C
#40 I	, ,	variant form	T	Ę		Ι	-	_	Т	N	Н	?	J	S	IN	W	Y	R	rauern C
#48 e	elsewhere		Х	Х	Х		Х	Х	-						<u> </u>	<u> </u>			
	#/FAC?-	yųkhi-	<u> </u>			Х			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

#/FAC?-

ųkhiyųkhi-

1	2	3		4	5
pref	preceding	pronominal	Verb St	em Class	var/dist
#	environs	prefix	vowel stems	consonant stems	pattern

		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern E
#49	elsewhere	yes-	Х	Х	Х														
-		yesay-					Х	х											
		yesę-				(x)													
		yesa-							х	Х	х	х	Х	Х	Х	Х	Х	Х	
	#/FAC?-	es-																	
		esay-																	
		esę-																	
		esa-																	
		variant form	A	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern E
#50	ALL	gụw-	Х	Х	Х														
		ouway_					v	v											1

guway-			х	Х										
gụwę-		(x)												
guwa-					Х	х	х	х	х	х	х	х	х	х

-		variant form	A	Ę	E	I	0	Ų	Т	K	Η	3	J	S	Ν	W	Y	R	Pattern D
#51	ALL	guwan-	х	х	Х	Х	х	х											
		guwadi-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

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_	-		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern D
	#52	ALL	hụwan-	Х	Х	Х	Х	Х	х											
			(hụwẹn-)			h	h	h	h											(pat h)
			(hųwadiy-)	с	с	с		с	с											(pat c)
			hụwadi-				с			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

			variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern C
#	53	ALL	gụy-	Х	Х	Х		Х	х											
			gų-				Х			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
			gụw-	Bet	fore	ARV	sten	ns												

variant form A E E I O U T K H ? J S N W Y R Pattern	variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Η	2	J	S	Ν	W	Y	R	Pattern A
--	--------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	-----------

N IN I D D

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#54	ALL	gy-	х	Х														
-		gn-			Х	Х	Х	Х										
		gni-							х	Х	х	х	х	х	х	х	х	х

		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern B
#55	ALL	gw-	Х	Х	Х														
		gy-					х	х											
		gwę-				(x)													
		gwa-							х	Х	Х	Х	Х	х	х	Х	Х	Х	

1	2	3							4										5
-	preceding	pronominal					Ver	b Ste	em C	lass									var/dist
#	environs	prefix		vow	el st	ems					con	sona	nt st	tems					pattern
		variant form	A	Ę	Е	I	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Unique
#56	ALL	sg-	х	Х	х	х	х	х							х	х	х	Х	
		sk-							х		х	х	х	х					
		sge-	Bef	ore	K ste	ms a	und (CC st	tems										
			-																
		variant form	A	Ę	Е	I	0	Ų	Т	K	Н	?	J	S	N	w	Y	R	Pattern A
#57	ALL	sgy-	х	Х															
-		sgn-			х	х	Х	х											
		sgni-							Х	х	х	х	х	Х	х	х	х	х	
		variant form	1		_	I	0	Ų	Т	K	Н	?	J	s	N	w	Y	R	Pattern B
#58	ALL	sgw-	Х	Х	Х				_										
		sgy-					Х	Х	_										
		sgwę-				(x)			_										
		sgwa-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
		variant form	A	Ę	E	Ι	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Unique
#59	elsewhere	yudad-	х	Х	Х	Х	Х	Х							Х	Х	Х	Х	
		yudat-							Х	х	х	х	х	Х					
		yudade-	Bef	ore (CC st	ems	-			-				-	-	-	-	-	
	#/FAC?-	udad-	1																
		udat-	1																
		udade-	1																
		ب ب																	

The five columns in Table 1 will be discussed in greater detail in the order shown in (2).

(2)	Column 3	pronominal prefix (271 variant forms)
	Column 4	verb stem class (16 classes)
	Column 2	preceding environs (6 conditions)
	Column 1	prefix number (#1 - #59)
	Column 5	variation/distribution (Patterns A-I)

This order is consistent with the importance of the two environmental factors that control the selection of the variants: primarily, which sound/letter follows the pronominal prefix, and secondarily, what (if anything) precedes the prefix. The fifth column analyzes the pronominal prefixes into 9 larger categories (plus a class of 'unique' prefixes) according to their pattern of phonological variation. Finally I introduce the concept of a homomorph.

2.1 Column 3: pronominal prefix

In this column are listed all 271 variants of the 59 pronominal prefixes, an average of 4.6 variants per prefix. Every possible occurring form of every pronominal prefix appears in this column. The environments which condition a variation in a particular pronominal prefix are described in the adjacent columns (columns 2 and 4). The form of the variants adheres to the spelling conventions used in the *Onondaga-English/English-Onondaga Dictionary* (Woodbury 2003) and a similar orthography used¹⁴ at the Onondaga Nation in the Onondaga Nation Language Program. This spelling is mostly phonemic, with the

¹⁴ The only difference is how nasal vowels are written, e and u (Woodbury) versus en and \tilde{u} (ONLP); also the low front vowel æ (Woodbury) versus ä (ONLP).

exception of the phoneme / t /, which is represented by t and d, and the phoneme / k /, which is represented by k and g (see section 1.5).

The variants in column 3 are the actual forms as they occur in words, except that the forms are isolated, or segmented, from the word to which they are normally attached. These variants only have real validity when they are part of a fully inflected verb; and cannot stand on their own as a word by themselves. For example, pronominal prefix (#45) **shagodi-** has three syllables and sounds like a possible word of Onondaga, but it never occurs in isolation as a word, and you could not ask a fluent speaker what it means and expect to get an interpretation of the prefix. For the most part, speakers will correctly interpret pronominal prefixes only in the context of a fully formed verb. An example of prefix #45 in a fully formed verb structure is given in (3).

(3) shagodiyenaus

shagodi + yenau + s
they > them + grab + habitual aspect
'the police'

Onondaga pronominal prefixes always occur immediately adjacent to the verb stem, and it is the verb stem that determines the variant form of the prefix. It is important to differentiate between a variant and a variation set. A variant of a pronominal prefix is the form that occurs in an actual spoken verb form. A variation set refers to the collection of all of the variants forms of a particular pronominal prefix.

I will discuss the primary or right-side variation of the prefix followed by a discussion of the secondary or left-side variation of the prefix in the next two subsections.

37

2.1.1 Primary or right-side variations

This refers to all variations that occur at the right-side boundary of a pronominal prefix. These right-side variations are caused by the phonological environment that follows that pronominal prefix, which is always part of the verb stem. Thus the resulting variants are caused by the juxtaposition of the pronominal prefix and the verb stem. Every single pronominal prefixes has a right-side variation; therefore I will refer to the right-side variations as primary because they affect every pronominal prefix in Onondaga.

2.1.2 Secondary or left-side variations

This refers to all variations that occur at the left-side boundary of a pronominal prefix. These left-side variations are caused by the phonological environment preceding the pronominal prefix, which is either a prepronominal prefix or the word-initial environment. Not all pronominal prefixes have left-side variation. Since only 19 of the 59 pronominal prefixes have a left-side variation I will refer to left-side variations as secondary.

2.1.3 Representing primary and secondary variation in column 340 of the 59 pronominal prefixes have only a right-side variation and no left-side variation. (The word ALL is written in the cell in column 2 for these 40 pronominal prefixes, see section 2.3.) The variation table for prefix #24 is given in (3) below.

(3)

_			variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern D
	#24	ALL	hon-	Х	Х	Х	Х	Х	Х											
			hodi-							х	Х	х	Х	Х	х	х	Х	Х	Х	

The remaining 19 pronominal prefixes (approximately one-third) have both left-side and right side variation. Furthermore, with the exception of #6 and #9, every right-side variant has at least one corresponding left-side variant. For example, pronominal prefix #22 ('her') has the twelve variants given in (4).

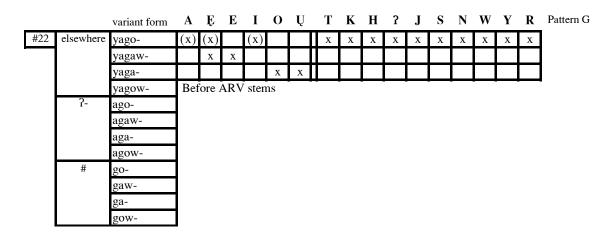
(4)	yago-	ago-	go-
	yagaw-	agaw-	gaw-
	yaga-	aga-	ga-
	yagow-	agow-	gow-

The problem was how to best represent the distribution of these forms in column 3 of Table 1. There are at least 2 possible solutions that are consistent with the goals of Table 1. The solution that Lounsbury used to present these variants is given in (5). This solution uses parentheses to combine all of the left-side variants in each row of (4) into a single form.

- (5) ((y)a)go-((y)a)gaw-
 - ((y)a)ga-
 - ((y)a)gow-

The alternative solution and the way that I have chosen to represent this variation is to list all of the variants in column 3, as shown in (6) below. Like Lounsbury this solution recognizes that the right-side variation is primary, but unlike Lounsbury it avoids the use of parentheses and instead spells out every variant. Notice that the right-side environments appear only once (for the first variation set); therefore I am asserting that the second and third sets of variants have the same right-side variations and listing the right-side environments again would be redundant.

(6)



The twelve variants of prefix #22 are sorted into three variation sets in (6). The first variation set is the maximal form of the pronominal prefix without any reduction of the left side. The second variation set contains a set of reduced forms, where the initial **y** is absent from all the forms in the variation set. The third variation set contains a set of reduced forms, where the initial **ya** is absent from all the forms, where the initial **ya** is absent from all the forms in the variation set. The third variation set. The variation set. The variation set.

We should also recognize, however, that variants that share the same right-side variation (yago-, ago-, go-), (yagaw-, agaw-, gaw-), (yaga-, aga-, ga-), and (yagow-, agow-, gow-) occur with the same right-side environment and have a cohesiveness (i.e. consanguinity) that doesn't occur with an arbitrary collection of variants like (yago-, agaw-, ga-), despite the fact that these are all variants of the same pronominal prefix and all share the same meaning. I will refer to the variants that share the same right-side variation and have the same right-side environments as 'sibling variants.' There is not

40

much need for the use of the term in this dissertation but it may be useful when explaining the pronominal prefix system to prospective language teachers.

2.2 Column 4: verb stem class

The first sound/letter of the verb stem is such an important element in morphology of Iroquoian verbs that all verb stems are divided into classes according to their first sound/letter; for example: A stems, E stems, T stems, K stems, etc. Woodbury's (2003) Onondaga dictionary lists all verb stem entries 'alphabetically' according to the first sound of the verb stem¹⁵. This is the part of the system that is learnable. Over the years I have tried many ways to show that the large number of variant forms can be managed by organizing the pronominal prefix forms into smaller categories so that learning the language is less challenging.

Every verb stem class must select a particular variant of a pronominal prefix from a set of variants because every pronominal prefix has at least two right-side variants. The essence of fluency is that a fluent speaker has the ability to tell you how to say the correct form of any word. Even more important (I think) is that a fluent speaker can tell you when a particular form is incorrect. In other words, the speaker can tell you when you are wrong and correct you. Therefore, Table 1 also makes clear what the Lounsbury table does not, and that is the 'negative condition' or the conditions that a pronominal prefix cannot occur in. An 'x' in a cell means that the pronominal prefix variant *can* be used with a particular verb, and an empty cell means that form of the prefix *cannot* occur in that environment.

¹⁵ Barbeau (1915) was the first to recognize the importance of the stem class in Iroquoian languages.

I have wondered why there is such a large number of variants in an already complex language (as if such a question could be asked). What is the motivation for so much pronominal prefix variation? I have no definite answer, but the variations are not random; they are motivated by the phonological patterning in the Onondaga language itself. The most important fact is that there is no single pronunciation (variant) of a pronominal prefix that can be pronounced correctly with all verbs. Phonological rules forbid certain combinations of sounds from occurring in a spoken word of Onondaga. For example, the two sequences **wo** and **wu** do not occur in an Onondaga word. Because of the large number of parts that can make up a word these sequences could potentially come up in the process of forming a word. There are two possible solutions when this situation comes up. One solution applies if the combination is at the boundary between a pronominal prefix and verb stem. The following rule shows what happens.

(7) w + O stem -> y- + O stem.

The other solution applies when other (parts of words) combine, such as a noun root (**-Rahgw-** 'sun / orb') and a verb root (the state root **-owanę-** 'be large') as in (8). In this situation, the w of the noun root is dropped.

(8) -Rahgw- + -owanę- -> -Rahgowanę- 'large sun or moon' Looking back, I think that unraveling rules such as these was the motivation behind my becoming a linguist in the first place.

2.2.1 Horizontal and vertical readings of Column 4

There are two ways in which column 4 can be read: horizontally and vertically. In the horizontal reading a student can look up a particular pronominal prefix and find the forms

42

that are selected by every verb stem class. For example, pronominal prefix #10 in (9) below has the four variants **h-, hę-, ha-, hR-**, where the distribution is determined by the stem class of the verb.

(9)

		variant form	A	Ę	Е	Ι	0	Ų	,	Т	K	Η	?	J	S	Ν	W	Y	R	Unique
#10	ALL	h-	Х	Х	Х		Х	Х												
		hę-				(x)														
		ha-								Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
		hR-	Х	Х	х			х												

In the horizontal reading we see that the form **h**- occurs with verb stems from the following stem classes: *A* stem, E stem, C stem and U stem. The form **h**e- occurs with I stems. The form **h**a- occurs with the following stem classes: T stem, K stem, H stem, ? stem, J stem, S stem, N stem, W stem, Y stem, and R stem. The form **h**R- occurs with U stems regularly; otherwise it has a complex distribution involving a complicated historical explanation which I will not discuss it in detail here (see Woodbury 2003).

The variant \mathbf{h} - is shown in (10) with examples from all the verb stem classes to which it can attach. The examples are in the habitual aspect.

(10)	A stem	-adeyęstha?	'he is studying'	hade•yęstha?
	Ę stem	-ęnidagäha?	'he lies down'	hęnidagä•ha ⁹
	E stem	-ehsaks	'he looks for it'	hehsaks
	O stem	-ohaek	'he washes it'	hohaek
	Ų stem	-ųtgas	'he moves it'	hų²tgas

The variant **he** is shown in (11) with an I stem verb in the habitual aspect.

(11)	I stem	-i [?] dųyotha [?]	'he piles it'	hę²dųyotha²
------	--------	--------------------------------------	---------------	-------------

The variant hR- is shown in (12) with a U stem verb in the habitual aspect.

(12) U stem -uda·s 'he is putting it into it¹⁶, heda·s
The variant ha- is shown in (13) with examples from all the verb stem classes to which it can attach. The examples are all in the habitual aspect.

(13)	R stem ¹⁷	-Rihwihsaks	'looks for news'	haihwihsaks
	T stem	-tha·ha?	'be a speaker'	hatha•ha ⁹
	K stem	-ga•hathwas	'turns it over'	haga·hathwas
	? stem	-'nekha'	'begs'	ha [°] nekha [°]
	S stem	-stha?	'uses it'	hastha ⁹
	Y stem	-yes	'be waking up'	ha•yes
	H stem	-hyadųk	'writes'	hahya•dųk
	N stem	-nµhwe's	'likes it'	hanųhwe ⁹ s
	W stem	-węnadenyųs + duali	c 'translates'	dehawęnade•nyųs

The variant that comes before the consonant-initial stems has the widest distribution of all the variants, but A stem verbs are the most numerous in the Onondaga language. I usually teach A stems first for this reason.

The horizontal readings, and even the variation tables themselves, are not meant as a model of speakers' organization and are not meant to show how a speaker thinks. The tables are intended to give an accurate representation of the pronominal prefix that a fluent speaker would chose for any verb stem in the language.

¹⁶ This is also an informal term for Santa Claus.

¹⁷The phoneme /R/ (probably once pronounced \mathbf{r}) no longer occurs in spoken Onondaga; however the phoneme exists in roots and stems and has predicable effects in the language. The sounds \mathbf{r} or \mathbf{l} are found in cognate forms in other Iroquoian languages.

In the vertical reading a student chooses a particular verb stem class and follows that column down throughout Table 1 to determine the specific forms of all the 59 pronominal prefixes that occur with that stem class. In this way the student can 'conjugate' the Onondaga verb by making up 16 tables, where each table represents a stem class.

For example, in Table 2 below I provide the conjugation table for A stem verbs. I use this table as an example here because A stem verbs are very numerous; I also use this table a lot when I am teaching the combination rules for Onondaga.

Both horizontal and vertical readings give the student interesting and valuable information. In the horizontal reading the pronominal prefix is held constant and the various stem classes are the variables, whereas in the vertical reading the stem class is held constant and the various pronominal prefixes are the variables. The information from either reading can be used to find tendencies in the system and help the student to select the proper variant of the pronominal prefix. Moreover, every 'x' in these tables is attested by an example, and sometimes by many examples, from fluent speakers. I repeat that I do not claim that the organization of these tables represents how a speaker conceptualizes the pronominal prefixes or how a speaker stores this information.

45

		A-Stem	
		variant	
#1	ALL	g-	F
#2	elsewhere	yagy-	А
	#/FAC?-	agy	
#3	elsewhere	yagw-	В
	#/FAC?-	agw	
#4	ALL	dy-	А
#5	ALL	dw-	В
#6	elsewhere	hs-	Ι
	#/FAC?-	S-	
#7	ALL	ју	А
#8	ALL	SW-	В
#9	elsewhere	W-	E
		w -> Ø **	k
#10	ALL	h-	U
		hR *	
#11	elsewhere	yų-	U
		yag-	
	#/?-	ų-	
		ag-	
#12	ALL	gy-	А
#13	ALL	gų-	Н
#14	ALL	hy-	А
#15	ALL	hų-	Н
#16	elsewhere	wag-	F
	#	ag-	
#17	elsewhere	yųgy-	
	#/?-	ųgy-	
#18	elsewhere	yųgw-	В
	#/?-	ųgw	
#19	ALL	S-	U
#20	elsewhere	yo-	G
	#/?-	0-	
#21	ALL	ho-	G

Table 2. A	A vertical	l reading	for A	A stem	verbs
------------	------------	-----------	-------	--------	-------

		n otom	
		Variant	
#22	elsewhere	yago-	G
	?-	ago-	
	#	go-	
#23	elsewhere	yon	D
	#/?-	on	
#24	ALL	hon-	D
#25	ALL	hey-	С
#26	ALL	shagy-	A
#27	ALL	shagw-	В
#28	ALL	shedy-	A
#29	ALL	shedw-	В
#30	ALL	hes-	Ι
#31	ALL	hejy-	A
#32	ALL	hesw-	В
#33	ALL	hụw-	E
#34	ALL	hag-	F
#35	ALL	shugy-	A
#36	ALL	shugw-	В
#37	ALL	hy-	E
#38	ALL	shago-	G
#39	ALL	khey-	С
#40	elsewhere	yakhiy-	С
	#/?-	akhiy-	
#41	elsewhere	yethiy-	С
	#/?-	ethiy-	
#42	ALL	shey-	С
	elsewhere	yetshiy-	С
	#/?-	etshiy-	
#44	elsewhere	yagon-	D
	?-	agon-	
	#	gon-	
#45	ALL	shagon-	D
#46	elsewhere	yug	F
	#/?-	ųg	
			_

A- Stem

_		A-Stem variant	
#47	ALL	hụg	F
#48	elsewhere	yųkhiy-	С
	#/?-	ųkhiy-	
#49	elsewhere	yes-	E
	#/?-	es-	
#50	ALL	gụw-	E
#51	ALL	guwan-	D
#52	ALL	hụwan-	D
#53	ALL	gųy-	С
#54	ALL	gy-	А
#55	ALL	gw-	В
#57	ALL	sgy-	А
#58	ALL	sgw-	В
#59	elsewhere	yudd-	U
	#/?-	ųdad-	

2.3 Column 2: preceding environs

This column represents the environments preceding the pronominal prefix and demonstrates how these preceding environments affect the pronominal prefix. Of the 59 pronominal prefixes, 40 (approximately two-thirds) are not affected at all by the preceding environment. For these 40 pronominal prefixes the word ALL is written in the preceding environment cell, as shown in example (15) from prefix #10 below.

(15)

			variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Unique
ĺ	#10	ALL	h-	х	Х	Х		х	Х											
			hę-				(x)													
			ha-							X	Х	Х	Х	Х	Х	Х	Х	Х	Х	
			hR-	Х	Х				Х											

The word ALL in column 2 indicates that it doesn't matter what comes before the prefix; there is no left-side variation of the pronominal prefix. Recall that the ALL environment includes the word-initial environment, so that even when the pronominal prefix comes at the beginning of a word there is no left-side variation, as in the example in (16).

(16) hadeyęstha?

 $h + adeyęst + ha^{9}$

he + study, read, practice + habitual aspect

'he studies, he is studying'

The example in (17) has pronominal prefix #23. This pronominal prefix has two left-side variations: one set of variants in **y** and another set of otherwise identical variants in which is **y** is absent. **odi-** is the variant that is selected when this pronominal prefix occurs at the beginning of a word as in (17).

(17) odikhunih

odi + khuni +h

they + cook + stative aspect

'they are cooking, they have cooked'

It is important to note that the symbol **#** is not a prepronominal prefix, and it does not occupy the prepronominal slot in the verb structure. The word-initial symbol indicates the fact that all words must begin at some point, and that point can be marked as a type of environment. Since there is nothing in the prepronominal slot, the word-initial slot is now located next to the pronominal prefix. The prepronominal slot remains, but in a state of emptiness. The word-initial boundary point precedes the prepronominal slot in the morphosyntactic order. It is also important to note that the word-initial position and word-final position use the same symbol since they are essentially the same thing, that is, a word boundary. Thus the symbol **#** could actually indicate the word-initial or word-final position; however, it is only the word-initial position that has any bearing in this discussion of pronominal prefixes. In the following subsections the types of left side variation are described.

2.3.1 Y-drop pronominal prefixes

By far the most common type of left-side variation is that in which the pronominal prefix has two variation sets: one set with **y** and the other in which the **y** is absent, as in (18).

(18) eyagyadekhunya?

ę + yagy + adekhuny + a[?] future mode + we2 + eat a meal + punctual aspect 'we will eat.'

```
wa<sup>9</sup>agyadekhunya<sup>9</sup>
wa<sup>9</sup> + agy + adekhuny + a<sup>9</sup>
factual mode + we2 + eat a meal + punctual aspect
'we ate.'
```

The variation for this prefix is given in (19) below. This table reads as follows:

"Pronominal prefix #2 has the three forms **agy- / agn- / agni-** when it is preceded by a prepronominal prefix that ends in a glottal stop [?] or when it occurs at the beginning of a word. The forms **yagy- / yagn- / yagni-** occur elsewhere."

(19)

		variant form	A	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern A
#2	elsewhere	yagy-	Х	Х															
-		yagn-			Х	х	Х	х											
		yagni-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
	#/FAC?-	agy-																	
		agn-																	
		agni-																	

The same left-side variation occurs with the following 15 pronominal prefixes: 2, 3, 9, 11, 17, 18, 20, 23, 40, 41, 43 /43a, 46, 48, 49 and 59.

2.3.2 Y/A-drop pronominal prefixes

There are only two prefixes of this type: #22 and #44. Each of these prefixes has three variation sets: one set with initial **y**, another in which the **y** is absent, and a third in which the initial **ya** is absent. Examples of verbs with pronominal prefix #22 are given in (20).

(20) ęyago'niguhiyók

ę + yago + ²nigųhiyo + k

future mode + her + good mind + stative, future aspect

'one will have a good mind'

wa'agoyo'deha'

 $wa^{9} + ago + yo^{9}deh + a^{9}$

factual mode + her + work + punctual aspect

'she worked'

go⁹nigųhiyóh

go + [?]niguhiyo + h

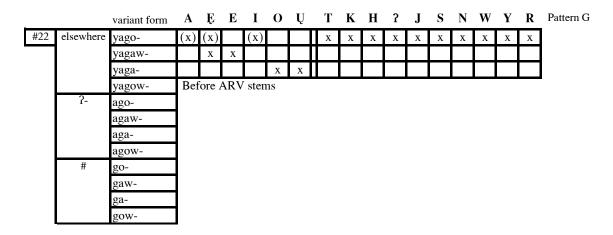
her + good mind + stative aspect

'she has a good mind'

The variation for this prefix is given in (21) below. This table reads as follows:

"Pronominal prefix #22 has the three forms **go- / gaw- / ga-** when the prefix occurs at the beginning of a word (marked by #); it has the forms **ago- / agaw- / aga-** when the prefix occurs after the factual prepronominal prefix when it ends in ⁹; and it has the forms **yago- / yagaw- / yaga-** when the prefix occurs elsewhere (in any other environment)."

(21)



The Y-drop and Y/A-drop left-side variations account for 17 of the 19 pronominal prefixes that have left-side pronominal prefix variation. The two remaining prefixes are #10 and #16; each of these have a different type of left-side pronominal prefix variation and therefore are unique. They are discussed in the next two subsections

2.3.3 W-drop and fusion

Pronominal prefix #16 has 2 distinct left side variations; one of them, W–drop, applies when the prefix occurs at the beginning of the word, as in the example in (22).

(22) agyo'dęhs
ag + yo'dęh + s
me + work + habitual aspect
'I work'

The last line of the table in (23) reads as follows; "Pronominal prefix #16 has the four forms **ag-** / **ak-** / **ah-** / **age-** at the beginning of a word. It has the forms **wag-** / **wak-** / **wah-** / **wage-** when it occurs elsewhere (i.e. with any other preceding environment).

А Ę Е Ι 0 Ų Т Κ Н 2 J S Ν W Y R Pattern F variant form #16 elsewhere Х wagх х х х х х х х х wakх wahwage-Before CC stems agakahage-*** this variation is recognized but not used productively wa[?] +wag -> µg ***

The other variation of pronominal prefix #16 is completely unique, and it is one reason why the Iroquois languages are described as fusional. This variation is shown in (23) as **wa**² + **wag** -> **ųg**, which reads as follows: "When the variant **wag**- is preceded by the factual prepronominal prefix **wa**²-, then both the prepronominal prefix **wa**²- and the pronominal prefix **wag**- combine to make a new, fused form **ųg**-. The fused form occupies the prepronominal prefix and pronominal prefix slots and carries the meaning of both." I have found that this variation is not common in the speech of Onondaga speakers today at the Onondaga Nation. The speakers no longer fuse the two morphemes; instead the two are pronounced **wa**²**wag**- without any change. The older speakers do recognize and understand the fused version, and they will produce these forms with a little prompting; however it is my impression that this variation has passed out of regular use.

Finally, there is one more occurrence of W-Drop, which applies only under special circumstances with prefix #9, as seen in the first example in (24) below. The Ø in the second line represents that the w has been dropped. W-drop applies only to verb structures that have become lexicalized (i.e. have developed specialized meaning) and

(23)

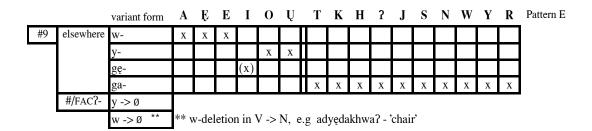
52

refer to specific objects. The second example in (24) is a regular verb structure, and so W –drop has not applied in this case.

(24) adyędakhwa?
Ø + adyędakhw + a?
it + use to sit + habitual
'chair'
wadohaeh
w + adohae + h
it + wash + stative aspect
'it is washed'

The W-drop is described in the last cell under column 3 in the table in (25).

(25)



2.3.4 H-drop and HS-metathesis

Pronominal prefix #6 has two left-side variations. One is called 'h-drop'; it occurs under the same conditions as 'y drop', described in section 2.4.1. The other is called HSmetathesis; in this variation the form **hs** is replaced by **sh** when preceded by **t**-. The examples in (26) demonstrate H-drop and HS metathesis, respectively. sadekhunyah s + adekhuny + ah you + eat a meal + imperative 'Eat!'

wa[°]tshaéhdat wa[°]t + sh + aæhdat + Ø factual, dualic + you + run + punctual aspect 'you ran'

The table for prefix #6 is given in (27); it reads: "Pronominal prefix #6 has the form **s** when it follows a factual prepronominal prefix that ends in ?, or when it occurs at the beginning of a word #. It has the form **sh** when it is preceded by a prepronominal prefix ending in **t**. It has the form **hs** when it occurs elsewhere (in any other preceding environment)."

(27)

(26)

		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern I
#6	elsewhere	hs-	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	
		j-				Х											Х		
		hse-	Befo	ore C	CC st	ems													
		ø *	befo	before HS stem before HY stem															
		hs -> hc- *	befo	re H	Y st	em													
	#/FAC?-	S-																	
		se-																	
		s -> c-																	
	t-	hs -> sh- *	* th	is va	riant	or e	nvirc	nmei	nt is r	not sl	nowr	n on '	Woo	dbur	y tab	ole 11	la.		

2.4 Column 1: prefix numbers

This gives the pronominal prefix number according to the Lounsbury table in order to keep uniformity in reference. There are 59 pronominal prefixes represented in this table. The numbering system of Lounsbury follows semantic criteria (see Chapter 3). The order of Lounsbury's chart is such that two or more meanings that have the same form are included in a cell and are considered a single pronominal prefix. However, the following pronominal prefixes:7/7a, 8/8a, 31/31a, 32/32a and 43/43a, each have the same form but cannot be represented in a single cell, as a single pronominal prefix, in Lounsbury's organization because the meanings are not adjacent. (See the discussion in Lounsbury 1953:53-54.)

2.5 Column 5: variation/distribution

The variation/ distribution pattern to which a pronominal prefix belongs is determined primarily by the phonological variation on the right side of the pronominal prefix. This observation came from teaching students to analyze phonological patterns and to extend that analysis to other pronominal prefixes. I wanted them to recognize and be conscious of similarities in the phonological variation of the prefixes. The patterns are secondarily obtained from observations about the distribution of x's in the tables, which I will refer to as the x-pattern. The x-pattern is an abstract representation of the distribution of the variants of a prefix. The phonological patterns and x-patterns of the pronominal prefixes can be compared and contrasted to recognize phonological and distributional similarity. The 59 pronominal prefixes can be divided into 9 such patterns, which I have labeled Pattern A-I. Five pronominal prefixes have unique right-side variations and distributions;

55

these do not belong to any pattern and would have to be learned individually. In the sections to follow I will provide and discuss the 9 variation / distribution patterns followed by the five unique pronominal prefixes.

2.5.1 Variation / distribution Pattern A

This pattern can be characterized as the $\mathbf{y} / \mathbf{n} / \mathbf{n}i$ pattern, depicting the phonological shape of the right-side variation. An example of this variation/distribution (var/dist) pattern can be seen in pronominal prefix #2 in (28) below.

(28)

		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern A
#2	elsewhere	yagy-	Х	х															
		yagn-			Х	Х	Х	Х											
		yagni-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
	#/FAC?-	agy-																	ļ.
		agn-																	
		agni-																	

The distribution pattern (x-pattern) of Pattern A is as follows:

A variant that ends in **y** occurs with A and E verb stems.

A variant that ends in **n** occurs with E, I, O and U verb stems.

A variant that ends in **ni** occurs with T, K, H, ?, J, S, N, W, Y and R verb stems.

Pattern A includes the following twelve pronominal prefixes: # 2, 4, 7/7a, 12, 14, 17, 26, 28, 31/31a, 35, 54 and 57. All these prefixes share the same x-pattern. This means that the distribution of the variant forms of the pronominal prefixes in this pattern is the same throughout the language. This is very important since it is plausible that a student could learn to predict the selection of the proper variant form of a pronominal prefix by analogy. In other words, if a student has learned that prefix #22 has the variant **yagy**-

before an A stem verb, and the variant **yagni**- with a T stem verb, then when the student encounters prefix #17, **yųgy**-, with an A stem verb, he or she will surmise that the prefix has the variant form **yųgni**- with a T stem, paralleling prefix #22. In sum, while the basic form of these twelve pronominal prefixes is indeed unique to each prefix, there is a systematic approach to the correct selection, and this is key to learning the language.

2.5.2 Variation / distribution Pattern B

This pattern can be characterized as the $\mathbf{w} / \mathbf{y} / \mathbf{w} \mathbf{e} / \mathbf{w} \mathbf{a}$ pattern. An example of this variation/distribution (var/dist) pattern can be seen in pronominal prefix #3 in (29). (29)

			variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern B
	#3	elsewhere	yagw-	Х	Х	Х														
_			yagy-					Х	Х											
			yagwę-				(x)													
			yagwa-							Х	Х	х	х	х	Х	х	х	х	х	
		#/FAC?-	agw-																	
			agy-																	
			agwę-																	
			agwa-																	

The distribution pattern (x-pattern) of Pattern B is as follows:

A variant that ends in **w** occurs with A, E and E verb stems.

A variant that ends in **y** occurs with O and U verb stems.

A variant that ends in **we** occurs with I verb stems.

A variant that ends in wa occurs with T, K, H, ?, J, S, N, W, Y and R verb stems.

Pattern B includes the following ten pronominal prefixes: #3, 5, 8/8a, 18, 27, 29, 32/32a, 36, 55 and 58. All these prefixes share the same x-pattern. This means that the distribution of the variant forms of the pronominal prefixes in this pattern is the same

throughout the language. As mentioned at the end of the previous section on Pattern A, students may use these patterns to learn the Onondaga language more efficiently.

2.5.3 Variation / distribution Pattern C

This pattern can be characterized as the **Vy** / **V** pattern. An example of this variation/distribution (var/dist) pattern can be seen in pronominal prefix #25 in (30). (30)

			variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern C
#2	5	ALL	hey-	х	х	Х		Х	х											
			he-				Х			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

The distribution pattern (x-pattern) of Pattern C is as follows:

A variant that ends in Vy occurs with A, Ę, E, O and U verb stems.

A variant that ends in V occurs with I, T, K, H, ?, J, S, N, W, Y and R verb stems.

The capital V represents the vowels: e, i or ų.

Pattern C includes the following eight pronominal prefixes: #25, 39, 40, 41, 42, 43/43a,

48 and 53. The right-side phonological variation of these prefixes though similar is not

identical so the importance of the x-pattern becomes clear here since all members of this

stem class variation pattern share their x-pattern.

2.5.4 Variation / distribution Pattern D

This pattern can be characterized as the \mathbf{n} / \mathbf{di} pattern. An example of this variation/distribution (var/dist) pattern can be seen in pronominal prefix #23 in (31).

_			variant form	A	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern D
	#23	elsewhere	yon-	Х	Х	Х	Х	Х	х											
			yodi-							Х	х	Х	Х	Х	Х	х	Х	Х	Х	
		#/FAC?-	on-																	
			odi-																	

The distribution pattern (x-pattern) of Pattern D is as follows:

A variant that ends in **n** occurs with A, E, E, I, O and U verb stems.

A variant that ends in **di** occurs with T, K, H, ?, J, S, N, W, Y and R verb stems.

Pattern D includes of the following 6 pronominal prefixes: # 23, 24, 44, 45, 51 and 52

2.5.5 Variation / distribution Pattern E

This pattern can be characterized as the C / Cay / Ce / Ca pattern. An example of this variation/distribution (var/dist) pattern can be seen in pronominal prefix #33 in (32). (32)

_			variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern E
	#33	ALL	hụw-	Х	Х	Х														
			huway-					Х	х											
			hụwę-				(x)													
			huwa-							Х	х	х	х	Х	Х	х	Х	Х	Х	

The distribution pattern (x-pattern) of Pattern E is as follows:

A variant that ends in C occurs with A, E and E verb stems

A variant that ends in **Cay** occurs with O and U verb stems.

A variant that ends in Ce occurs with before I verb stems.

A variant that ends in **Ca** occurs with T, K, H, ?, J, S, N, W, Y and R verb stems.

The capital C represents the any consonant.

Pattern E includes the following 5 pronominal prefixes: #9, 33, 37, 49 and 50

2.5.6 Variation / Distribution Pattern F

This pattern can be characterized as the $\mathbf{g} / \mathbf{k} / \mathbf{h} / \mathbf{ge}$ pattern. An example of this variation/distribution (var/dist) pattern can be seen in pronominal prefix #1 in (33). (33)

			variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern F
	#1	ALL	g-	Х	Х	Х	Х	Х	х							Х	Х	Х	Х	
_			k-							х	х	х	х	х	Х					
			h-								Х									
			ge-	Bef	ore C	CC st	ems													

The distribution pattern (x-pattern) of Pattern F is as follows:

A variant that ends in g occurs with A, E, E, I, O and U verb stems.

A variant that ends in **k** occurs with T, H, ?, J, S, N, W, Y and R verb stems.

A variant that ends in **h** occurs with K verb stems

A variant that ends in **ge** occurs with consonant cluster initial verb stems.

Pattern F consists of the following 5 pronominal prefixes: #1, 16, 34, 46 and 47.

2.5.7 Variation / distribution Pattern G

This pattern can be characterized as the **o** / **aw** / **a** pattern. An example of this

variation/distribution (var/dist) pattern can be seen in pronominal prefix #20 in (34).

(34)

		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern G
#20	elsewhere	yo-	(x)	(x)		(x)			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
-		yaw-		Х	х														
		ya-					Х	х											
		yow-	Bef	ore A	ARV	sten	ns												
	#/FAC?-	0-																	
		aw-																	
		a-																	
		ow-																	

The distribution pattern (x-pattern) of Pattern G is as follows:

A variant that ends in o occurs with (A), I, T, K, H, P, J, S, N, W, Y and R verb stems.

A variant that ends in **aw** occurs with E, and E verb stems.

A variant that ends in **a** occurs with O and U verb stems.

Pattern G consists of the following 4 pronominal prefixes: # 20, 21, 22 and 38.

2.5.8 Variation / distribution Pattern H

This pattern can be characterized as the $\mathbf{u} / \mathbf{n} / \mathbf{di}$ pattern. An example of this variation/distribution (var/dist) pattern can be seen in pronominal prefix #13 in (35).

(35)

_			variant form	A	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern H
	#13	ALL	gų-	(x)	(x)															
			gụn-			Х	Х	Х	х											
			gụdi-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
			guw-	Bef	ore A	ARV	sten	ns		-				-	-	-				1

The distribution pattern (x-pattern) of Pattern H is as follows:

A variant that ends in \mathbf{u} occurs with A and \mathbf{E} verb stems

A variant that ends in **e** or **u** occurs with E, I, O and U verb stems.

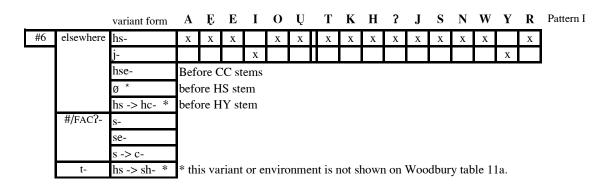
A variant that ends in **di** occurs with T, K, H, ?, J, S, N, W, Y and R verb stems.

Pattern H consists of the following 2 pronominal prefixes: # 13, 15, 45.

2.5.9 Variation / distribution Pattern I

This pattern can be characterized as the s / j / se pattern. An example of this

variation/distribution (var/dist) pattern can be seen in pronominal prefix #6 in (36).



The distribution pattern (x-pattern) of Pattern I is as follows:

A variant ending in **s** occurs with A, Ę, E, O, Ų, T, K, H, ?, J, S, N, W and R verb stems. A variant that ends in **j** occurs with I and Y Verb Stems.

A variant that ends in **hse** occurs with certain consonant cluster verb stems Pattern I includes the following 2 pronominal prefixes: # 6 and 30

2.6 Unique pronominal prefixes

Finally a few prefixes do not belong to any of these patterns. Either they do not display the same phonological right-side variation as any other prefix, or they do not have the same distribution of variants throughout the verb stem classes. When one or both of these factors exist, the prefix is considered unique. In fact, there are different types of uniqueness. For example, a prefix may share the right-side variation pattern with another prefix, or with a set of prefixes, but have a different x-pattern. Or, a prefix may have the same x-pattern, but a different right-side variation as another prefix or set of prefixes. Finally, a prefix may have both a different right-side variation and a different x-pattern, in which case, the prefix is completely unique. Prefixes #10, 11, 19, 56 and 59 in (37) below are completely unique. These pronominal prefixes have to be learned individually.

(36)

(37)

		variant form	A	Ę	E	I	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Unique
#10	ALL	h-	х	Х	Х		х	х											
-		hę-				(x)													
		ha-							х	х	Х	Х	Х	Х	Х	х	Х	Х	
		hR-	х	Х				Х											
																			-
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Unique
#11	elsewhere	yų-	(x)	(x)															
		yę-			(x)														
		ya-				(x)													
		yag-	х	Х	Х		х	х											
		ye-				Х			х	х	х	Х	Х	Х	Х	х	Х	Х	
		yụw-	Bet	fore .	ARV	ster	ns												
	#/FAC?-	ų-																	
		ę-																	
		a-																	
		ag-																	
		e-																	
		uw-																	
		0																	
			4																
		variant form	A	Ę	E	Ι	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Unique
#19	ALL		A x	Ę	E x		O x	Ų x	Т	K	Н	?	J	S	N	W	Y	R	Unique
#19	ALL	variant form				I (x)			Т	K	H	?	J	S	N	W	Y	R	Unique
#19	ALL	variant form s-							T x	K	H	?	J	S x	N x	W	Y	R x	Unique
#19	ALL	variant form s- sę-																	Unique
#19	ALL	variant form s- sę-																	Unique Unique
#19 #56	ALL	variant form s- sę- sa-	X	X	X	(x)	X	X	X	X	X	X	x	X	x	X	x	X	
		variant form s- sę- sa- variant form	x A x	x E x	x E x	(x) I x	x O x	x U X	x T	X	X	X	x	X	x	x	x Y	x R	
		variant form S- Sę- sa- variant form Sg-	x A x	x E x	x E x	(x) I x	x O x	x Ų	x T	X	x H	x ?	x	x S	x	x	x Y	x R	
		variant form s- sę- sa- variant form sg- sk-	x A x	x E x	x E x	(x) I x	x O x	x U X	x T	X	x H	x ?	x	x S	x	x	x Y	x R	
		variant form s- sę- sa- variant form sg- sk-	x A x	x E x	x E x	(x) I x	x O x	x U X	x T	X	x H	x ?	x	x S	x N x	x W x	x Y	x R	
		variant form s- se- sa- variant form sg- sk- sge- variant form	A A Bef	x E x	x E x K ste	(x) I x ems a	x O x und 0	X U X CC st	x T x ems	x K	x H	x ? x	x J x	x S x	x N x	x W x	x Y x	x R x	Unique
#56	ALL	variant form s- se- sa- variant form sg- sk- sge- variant form	X A X Bef	x E x ore E	x E X K ste	(x) I x ems a	x O x und 0	X U X CC st	x T x ems	x K	x H	x ? x	x J x	x S x	x N x	x W x W	x Y x Y	x R x R	Unique
#56	ALL	variant form s- se- sa- variant form sg- sk- sge- variant form yudad-	A A Bef A	x E x ore E	E X K ste E X	I x ems a I x	x O x und 0	X U X CC st	T T T T	x K	x H x H	x ? x ?	x J X J	x S x	x N x	x W x W	x Y x Y	x R x R	Unique
#56	ALL	variant form s- se- sa- variant form sg- sk- sge- variant form yudad- yudat-	A A Bef A	E E x E X	E X K ste E X	I x ems a I x	x O x und 0	X U X CC st	T T T T	x K	x H x H	x ? x ?	x J X J	x S x	x N x	x W x W	x Y x Y	x R x R	Unique
#56	ALL	variant form s- se- sa- variant form sg- sk- sge- variant form yudad- yudad- yudad- yudade-	A A Bef A	E E x E X	E X K ste E X	I x ems a I x	x O x und 0	X U X CC st	T T T T	x K	x H x H	x ? x ?	x J X J	x S x	x N x	x W x W	x Y x Y	x R x R	Unique
#56	ALL	variant form s- se- sa- variant form sg- sk- sge- variant form yudad- yudad- yudad- udad-	A A Bef A	E E x E X	E X K ste E X	I x ems a I x	x O x und 0	X U X CC st	T T T T	x K	x H x H	x ? x ?	x J X J	x S x	x N x	x W x W	x Y x Y	x R x R	Unique

2.7 Homomorphs

A surprisingly large number of forms occur as a variant of more than one pronominal prefix. There are twenty-two of these forms in the Onondaga pronominal prefix system. Twenty forms occur as variants of two different prefixes, and two occur as variants of three different prefixes. I use the term 'homomorph' to refer to a form that occurs as a variant of two or more pronominal prefixes, modeled after the term 'homonym'. We can distinguish two types of homomorphs: the YA-YO type and the 'coincidental' type. The YA-YO homomorphs share a common right-side variation. There are twelve of these. The coincidental homomorphs are random occurrences of the same form with different pronominal prefixes.

Pronominal prefixes #2 and #3 illustrate the notion of homomorph, and specifically of the YA-YO type of homomorph. The variation tables for these prefixes are given in (38). The cells of the YA-YO homomorphs are shaded.

(38)

		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern A
#2	elsewhere	yagy-	Х	Х															
		yagn-			Х	Х	Х	Х											
		yagni-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
	#/FAC?-	agy-				_	_												
		agn-																	
		agni-																	
			-																

_		variant form	п	12	1.7	T	U	Ų	1	IX	11	1	J	6	1	••	T	N
#3	elsewhere	yagw-	Х	Х	Х													
		yagy-					Х	Х										
		yagwę-				(x)												
		yagwa-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	#/FAC?-	agw-																
		agy-																
		agwę-																
		agwa-	1															

variant form A E E I O U T K H ? J S N W Y R Pattern B

Notice that in the var/dist column that prefix #2 has Pattern A, but prefix #3 has pattern B. Prefix #2 has two variants that that end in **y** (**yagy**- and **agy**-); prefix #3 also has two variant that end in y (**yagy**- and **agy**-). The variants of prefix #2 occur before A stems and E stems, while the variants of prefix #3 occur before O stems and U stems. In other words, the variants are the same, but their distribution, as reflected by the x-patterns, is different: they have the same form, but different meanings. The term 'mutually exclusive' can be used to describe the fact that these occur in different verb stem environments.

The reason for assigning a label to this type of homomorphy is that there are several pairs (twelve pairs, as mentioned above) of these homomorphs, and these twelve also share a meaning component. The variants that have the **y** before A stems and E stems are dual forms (see Chapter 3 for a definition) while the variants that have **y** before O stems and U stems are plural forms. So in this case, clearly understanding the meaning helps us understand something about the form.

An example of a coincidental homomorph is given in (39) below. Here the variant form **h**- occurs as a variant of both prefix #1 and prefix #10.

(39)

		variant form	Α	Ę	E	Ι	0	Ų	Т	K	Η	?	J	S	N	W	Y	R	Pattern F
#1	ALL	g-	Х	Х	Х	Х	Х	Х							Х	Х	Х	Х	
		k-							Х	Х	х	х	х	х					
		h-								Х									
		ge-	Befe	ore C	CC st	ems													-

			variant form	A	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Unique
Ŧ	#10	ALL	h-	Х	Х	Х		Х	Х											
			hę-				(x)													
			ha-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
			hR-	Х	Х				Х											

Pronominal prefix #1 refers to a first person singular participant ('I'). Pronominal prefix #10 refers to a third person masculine singular participant ('he'). However, the variant form h- of prefix #1 is different from the variant form h- of prefix #10 for two reasons. First, they cannot co-occur with the same verb stem class. The variant **h**- of pronominal prefix #1 occurs only with K stems, and the variant **h**- of pronominal prefix #10 occurs only with A, Ę, E, O and Ų-stems. Secondly, they have different meanings.

In the example below these two prefixes are attached to the verb stem -ge- 'see', a K stem. Prefix #1 has the variant form **h**- with K stems¹⁸, but pronominal prefix #10 has the variant form ha- before K stems.

(40) wa'hgę? I saw itwa'hagę? he saw it

In (41) below the same pronominal prefixes, #1 and #10, are attached to the A stem -**adeyęsd**- 'study, read, practice'. Prefix #1 has the variant form **g**- when attached to A-stems. Pronominal prefix #10 has the variant form **h**- when attached to A-stems.

(41) wa?hadeyęsda?

'he studied'

wa²gadeyęsda²

'I studied'

I will not illustrate the remaining nine homomorphs with examples, but a complete list of homomorphs is given below in Table 3.

¹⁸ The variant can occur in this environment for speakers of a certain family dialect at Onondaga.

	Pron Prefix #	Homomorph	Туре	Mutually Exclusive?
1.	1/10	h	Incidental	Yes
2.	2/3	yagy	YA-YO	Yes
3.	2/3	agy	YA-YO	Yes
4.	4/5	dy	YA-YO	Yes
5.	7/8	jy	YA-YO	Yes
6.	6/9	Ø	Incidental	Yes
7.	6/19	S	Incidental	Yes
8.	11/16	ag	Incidental	Yes
9.	12/(54/55)	gy	Inc./(YA-YO)	No/Yes
10.	12/54	gn	Incidental	No
11.	12/54	gni	Incidental	No
12.	13 /53	gų	Incidental	Yes
13.	13/50/53	gųw	Incidental	Yes
14.	14/37	hy	Incidental	No
15.	15/33	hụw	Incidental	Yes
16.	17/18	yųgy	YA-YO	Yes
17.	17/18	ųgy	YA-YO	Yes
18.	26/27	shagy	YA-YO	Yes
19.	28/29	shedy	YA-YO	Yes
20.	31/32	shejy	YA-YO	Yes
21.	35/36	shųgy	YA-YO	Yes
22.	57/58	sgy	YA-YO	Yes

Table 3: Homomorphs in the Onondaga pronominal prefix system

2.9 Multiple choices

A morphological opposite of the homomorph is the situation where a verb stem class apparently selects more than one variant of a single pronominal prefix, which should not happen. This does happen because different families use different variants of the same prefix. An example is prefix #1 in (42).

(42)

		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern F
#1	ALL	g-	Х	х	Х	Х	х	х							Х	Х	Х	Х	
		k-							х	х	х	Х	х	х					
		h-								Х									
		ge-	Bef	ore C	CC st	ems													

In this case, the occurrence of two x's in the same vertical column means that either variant could be selected. It so happens that the selection of **k**- before a K stem is only used by one family of speakers of Onondaga. The majority of speakers use **h**- before a K stem.

Chapter 3: Meanings of the pronominal prefixes

3.0 Overview

In this chapter we will investigate the meanings of the 59 pronominal prefixes of Onondaga. But first we must consider the concept of meaning, and how this concept relates to the Onondaga pronominal prefixes¹⁹. Generally, meaning is the relation between a spoken word and a specific concept in the real world. Some words have meanings that are relatively concrete, while other words which have meanings that are more functional or grammatical. An example of a more functional meaning is the definite article 'the' in English; it is used to indicate that a particular person or thing is already known to the listener. The Onondaga particle **ne**² also has a more functional meaning; it is used to indicate that the following word or clause is interpreted as a person, place or thing. The function of pronouns is that they "stand for," or refer to, a person or thing. The meaning of pronouns (and pronominal prefixes) can be described in terms of a set of semantic features that categorize the world. The focus of this chapter is an explication of these features.

3.1 Basic concepts

Five parameters or semantic features, are needed to describe the semantic distinctions made by the pronominal prefixes of Onondaga. They are listed in (1). Each feature is followed by the possible values:

¹⁹ Lyons (1980) was especially helpful in writing this chapter.

(1) Person: 1st (speaker), 2nd (listener), 3rd (other)
Number: singular, dual, plural
Gender: masculine, feminine, zoic, neuter
Role: agent, patient
Inclusive / Exclusive: including listener, excluding listener

The sum of the feature values is the 'meaning' of a prefix. For example, the meaning of pronominal prefix #1 **g-, k-, h-, ge-** is first person singular agent. Any participant involved in any situation must be classified in order to have a pronominal prefix assigned to it, and any and everything in the world can be assigned to a pronominal prefix in Onondaga.

When we talk about Onondaga pronominal prefixes using English, we normally use the closest English approximation to the Onondaga prefix; these are the personal pronouns of English. There are 12 personal pronouns in English (I, me, we, us, you, it, he, him, she, her, they, and them) but 59 pronominal prefixes in Onondaga, a significant disparity in number. The English system cannot adequately describe many of the Onondaga pronominal prefixes. Therefore, something must be added to the existing English pronouns in order to do the job. I found it useful to create a set of 'Modified English Pronouns'.

Let's begin with Onondaga pronominal prefixes #1 - #24. These 24 pronominal prefixes occur with single-party (intransitive) verbs. These are often referred to as 'intransitive' pronominal prefixes, but I find this term misleading since these 24 pronominal prefixes can also occur with verb stems normally understood to be two-party

verbs (i.e. transitive verbs). Table 3, given below, is intended to provide useful translations of the Onondaga prefixes by using a set of modified English pronouns. Table 3 has six columns. Column 1 lists the features (the meaning) of the prefixes. Column 2 gives these same features, but in the abbreviated form used in the Lounsbury table. Column 3 is the pronominal prefix number. Column 4 gives an example of the Onondaga pronominal prefix as it occurs before an A stem verb. Then, column 5 describes the meaning of the prefixes in terms of Modified English Pronouns, which are meant to capture an 'equivalent meaning' of the distinctions that occur in Onondaga. The symbol '>' in column 5 is needed to distinguish between a second person singular agent 'you >' versus a second person singular patient '> you'; this is necessary because prefix #10 hs-('you >') and #19 s- ('> you') are both translated into English with the pronoun 'you'. In other words, Onondaga has two distinct forms where English has only one. Similarly, pronominal prefix #9 w- ('it >') is distinct from #20 yo- ('> it'). Finally, in column 6, I give the English personal pronouns that would be used when translating Onondaga verbs into English without modification.

Semantic features (meaning)	Lounsbury coding	Lounsbury Chart #	Pronominal Prefix	Modified English Pronoun	English Pronoun
1st person, singular, agent	1sA	1	g	Ι	Ι
1st person, exclusive, dual, agent	1+3dA	2	yagy	We2, exclusive	
1st person, exclusive, plural, agent	1+3pA	3	yagw	We3+,exclusive	
1st person, inclusive, dual, agent	1+2dA	4	dy	We2, inclusive	WE
1st person, inclusive, plural, agent	1+2pA	5	dw	We3+,inclusive	

Table 4: Modified English Pronouns for Onondaga prefixes #1 - #24

2nd person, singular, agent	2sA	6	hs	You>	
2nd person, dual, *	2d	7	jy	You2*	You*
2nd person, plural, *	2p	8	SW	You3+*	-
zna person, prana,	-P	0		1005	
3rd person, neuter, agent	NA	9	w	It>	It*
3rd person, fem./zoic, singular, agent	FZsA			She	
					-
3rd person, masculine, singular, agent	MsA	10	h	Не	Не
	<u> </u>		•		
3rd person, fem./indef, singular, agent	FIsA	11	yų	She	She
			-	"One"	
3rd person, feminine/zoic, dual, agent	FZdA	12	gy	They2fem	
3rd person, fem. /zoic, plural, agent	FZpA	13	C11	They3+fem	4
ord person, tem. / zoic, piurai, agent	гдра	15	gų	They3+tem	They
3rd person, masculine, dual, agent	MdA	14	hy	they2masc	- ,
3rd person, masculine, plural, agent	MpA	15	hų	they3+masc	
1st person, singular patient	1sP	16	wag	Me	Me
1st person, dual, patient	1dP	17	yųgy	Us2	
1st person, plural, patient	1pP	18	yųgw	Us3+	Us
ist person, pidra, patent	ipi	10	yusw	0351	
2nd person, singular, patient	2sP	19	s	>You	
2.14 person, ongann, parent	201		0	104	1
2nd person, dual, *	2d	7a	jy	You2*	You*
2nd person, plural, *	2p	8a	SW	You3+*	
			-		
3rd person, neuter, patient 3rd person, fem/zoic, singular, patient	NP FZsP	20	yo	>It Her	It*
ord person, teni/ zoic, singular, pauent	1.772.81			TIEL	
	N D	21	, .	× *	T. T.
3rd person, masculine, singular, patient	MsP	21	ho	Him	Him
3rd person, fem/indef singular patient	F/IsP	22		Her	Her
ord person, rem/inder singular patient	F/18P	22	yago	"Another"	Her
				moulei	
3rd person, fem/zoic, du/pl, patient	FZd/pP	23	yon	Them2+fem	
· · · · · · · · · · · · · · · · · · ·	· 1			<u>.</u>	Them
3rd person, masculine, du/pl, patient	Md/pP	24	hon	Them2+masc	

3.2 Meanings and their distribution

In order to use a pronominal prefix appropriately (in order to select the right prefix and in order to correctly recognize the meaning of a prefix) a student must know, specifically, how many participants are implied by the verb stem. The selection of a pronominal prefix is done by matching the party / parties involved in the situation that is being described by the verb to those encoded in the pronominal prefix. Therefore, in this section I have developed a table which is, in effect, a 'reading' of the meanings provided by the Lounsbury table to clearly show the meanings that are available to each of the pronominal prefixes, provided below, is arranged into a list format of five columns. The first column is the pronominal prefix number from the Lounsbury table. The second column provides a variant form of the pronominal prefix as it would occur before an A stem verb. The meanings are displayed in columns three, four and five.

The third column gives the meanings that occur with a single-party verb stem, such as -**adyen-** 'sit oneself'. Only pronominal prefixes #1 – #24 have meanings that can occur in this column.

The fourth column shows the meanings that can occur with a two-party verb stem, such as **-ahędų-** 'ask (someone)'. All 59 pronominal prefixes can occur with a two-party verb (although here is some question about #12, 13, 14, and 15). There are thirty-five pronominal prefixes, #25 - #59, which can only be selected by two-party or three-party verb stems; these cannot be selected by a single-party verb stem. I hesitate to refer to these as "transitive pronominal prefixes" because this does not distinguish prefixes #25 - #59 from prefixes #1 - #24. Furthermore, transitivity is a property of a verb stem, not of

the pronominal prefix. The symbol > is used to show the relation between the two parties, as in pronominal prefix #38 **shago-** 'he > her' with a two-party verb.

Finally, the fifth column shows the meanings that can occur with three-party verb stems such as **-athoyęni-/-athoyę-** 'tell it to someone'. The question mark in the fifth column for pronominal prefixes #1 - #20 and #22 - #24 indicates that it is unclear whether these meanings are available to these prefixes. The symbols > and >> indicate the relationships between the three parties as in the pronominal prefix # 38 **shago-** 'he > it >> her' with a three-party verb stem.

A major difference between the Onondaga pronominal prefix system and the English pronoun system is that Onondaga pronominal prefixes can encode two parties in a single pronominal prefix. It is this property that accounts for the vast different in number between the pronominal prefixes of Onondaga (59 prefixes) versus the pronouns of English (12 personal pronouns). This property is difficult to understand for new students who expect everything to look like English or other Indo-European languages that they may have studied.

The distribution of the meanings of the pronominal prefixes with respect to single-party, two-party, and three-party verb stems is not represented in the Lounsbury table; yet this is essential to selecting a pronominal prefix.

		pronominal prefix 'meanings'	
chart variant for # A-stem	rwith 1-party verb stem	with 2-party verb stem	with 3-party verb stem
			* *
1 g	Ι	I > it	ø/?
		I > her	
2 yagy	we2exc	we2exc > it	ø/?
	•	we2exc > her	
3 yagw	we3+exc	we3+exc > it	ø/?
yugw	westere	we3+exc > her	ыл :
			10
4 dy	we2inc	we2inc > it we2inc > her	ø/?
		wezhie z nei	
5 dw	we3+inc	we3+inc > it	ø/?
i	·	we3+inc > her	
6 hs	you >	you > it	ø/?
	, you	you > her	~.
			10
7 ју	you2	you2 > it you2 > her	ø/?
		,	
8 sw	you3+	you3+>it	ø/?
		you3+> her	
9 w	it >	it > it ?	ø/?
	she	she > it	
10 h	he	he > it	ø/?
		he > her	
11	aha	aha Nit	ø/?
11 yụ	she	she > it she > her	10/ :
	E E		
12 gy	they2fem	? they2fem > it (see 50)	ø/?
		they2fem > her	
13 gų	they3+fem	? they3+fem > it (see 50)	ø/?
		they3+fem > her	
14 h	theydmass	2 they 2 mass > it (222.50)	ø/?
14 hy	they2masc	? they2masc > it (see 50) they3+masc > her	10/ !
	-		
15 hụ	they3+masc	? they3+masc > it (see 50)	ø/?
		they3+masc > her	

Table 5. Meanings of the Onondaga pronominal prefixes

_			pronominal prefix 'meanings'	
chart #	variant for	with 1 parts work stop	with 2 parts work storm	
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
16	1100	ma	it > me	ø/?
10	wag	me	she > me	Ø/ !
		-	She × me	
17	yųgy	us2	it > us2	ø/?
			she > us2	
18	yụgw	us3+	it>us3+	ø/?
			she > us3+	
10		N 1101	it >	~/9
19	S	> you	it > you she > you	ø/?
		-	sile > you	
7a	ју	you2	it > you2	ø/?
	ر ر	,	she > you2	
8a	SW	you3+	it > you3+	ø/?
			she > you3+	
20	yo	> it	it > it ?	ø/?
		her	she > it	
21	ho	him	it > him	he > it >> him
21	110	11111	she > him	ne > n >> mm
			he > him	
		_		
22	yago	her	it > her	ø/?
			she > her	
				2
23	yon	them2+fem	it > them2+fem she > them2+fem	ø/?
		-	she > them2+1em	
24	hon	them2+masc	it > them2+masc	ø/?
21	поп	them2 + muse	she > them2+masc	<i>bi</i> :
25	hey	Ø	I > him	I > it >> him
	ž	_		
26	shagy	Ø	we2exc > him	we2exc > it >> him
27	shagw	Ø	we3+exc > him	we3+exc > it >> him
	U	L		
28	hedy	Ø	we2inc > him	we2inc > it >> him
-	<u>-</u> J	L	I	
29	hedw	Ø	we3+inc > him	we3+inc > it >> him
_/		~		
30	hes	Ø	you > him	you > it >> him
50	1105	ν.	you - mm	your nee min

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
31	hejy	Ø	you2 > him	you2 > it >> him
32	hesw	Ø	you3+>him	you3+> it >> him
	Letter			
33	huw	Ø	she > him	she > it >> him
	i		they2fem > him	they2fem > it >> him
			they3+fem > him	they3+fem > it >> him
			they2masc > him	they2masc > it >> him
			they3+masc > him	they3+masc > it >> him
34	hag	Ø	he > me	he > it >> me
35	shụgy	Ø	he > us2	he > it >> us2
·				
36	shųgw	Ø	he > us3+	he > it >> us3+
50	51145 **	Û		
37	hri	~	ha > you	ha > it >> you
37	hy	Ø	he > you	he > it >> you
31a	hejy	Ø	he > you2	he > it >> you2
32a	hesw	ø	he > you3	he > it >> you3
38	shago	Ø	he > her	he > it >> her
			he > them2+fem	he > it >> them2+fem
			he > them2+masc	he > it >> them2+masc
39	khey	ø	I > her	I > it >> her
			I > them2+fem	I > it >> them2+fem
			I > them2+masc	I > it >> them2+masc
40	.11.			
40	yakhiy	Ø	we2exc > her we2exc > them2+fem	we $2 \exp 2 it >> her$
			we2exc > them2+masc	we2exc > it >> them2+fem we2exc > it >> them2+masc
			we2+exc > her	$we_2 exe \rightarrow w^{2} \rightarrow ue_{12} + mase$ $we_3 + exc > it >> her$
			we3+exc > them2+fem	we3+exc > it > > them2+fem
			we3+exc > them2+masc	we3+exc > it >> them2+masc
41	yethiy	Ø	we2inc > her	we2inc > it >> her
			we2inc > them2+fem	we2inc > it >> them2+fem
			we2inc > them2+masc	we2inc > it >> them2+masc
			we3+inc > her	we3+inc > it >> her
			we3+inc > them2+fem	we3+inc > it > > them2+fem
			we3+inc > them2+masc	we3+inc > it >> them2+masc
42	shey	ø	you > her	you > it >> her
			you > them2+fem	you > it >> them2+fem
			you > them2+masc	you > it >> them2+masc

			pronominal prefix 'meanings'	
chart #	variant for A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
43	yetshiy	Ø	you2 > her	you2 > it >> her
-	yetsiny	Ø	vou2 > them2+fem	you2 > it >> them2+fem
		-	you2 > them2+masc	$you_2 > it >> them_2+nem_2$
			you3+> her	$you_2 > it >> itical indicating indicating in the second second$
		-	you3+> them2+fem	you3+>it>>them2+fem
		-	you3+> them2+masc	you3 +> it >> them2+masc
		L	yous and another muse	yous with theme muse
44	yagon	Ø	they2fem > her	they2fem > it >> her
	<u> </u>		they3+fem > her	they3+fem > it >> her
		L	y	
45	shagon	Ø	they2masc > her	they2masc > it >> her
			they3+masc > her	they3+masc > it >> her
			they2masc > them 2+fem	they2masc > it >> them2+fem
		[they3+masc > them2+fem	they3+masc > it >> them2+fem
46	yųg	Ø	she > me	she > it >> me
			they2fem > me	they2fem > it >> me
		l	they3+fem > me	they3+fem > it >> me
47	hụg	Ø	they2masc > me	they2masc > it >> me
		ļ	they3+masc > me	they3+masc > it >> me
10	mlthin	~	aba > ya	$sh_2 \times it \times y_2$
48	yụkhiy	ø	she > us2	she > it >> us2
		-	they2fem > us2 they3+fem > us2	$\frac{\text{they2fem} > \text{it} >> \text{us2}}{\text{they3+fem} > \text{it} >> \text{us2}}$
		-	they2masc > us2	$\frac{\text{they}3 + \text{term} > \text{tt} >> \text{us}2}{\text{they}2\text{masc} > \text{it} >> \text{us}2}$
			they3+masc > us2	$\frac{\text{they2masc} > \text{tt} >> \text{us2}}{\text{they3+masc} > \text{it} >> \text{us2}}$
		-	she > us3+	she > it >> us2+
		-	they2fem > us3+	they2fem > it >> us3+
		-	they3+fem>us3+	they3+fem > it >> us3+
		•	$\frac{1}{10000000000000000000000000000000000$	$\frac{1}{10000000000000000000000000000000000$
			they3+masc >us3+	they3+masc > it >> us3+
		L	5	
49	yes	Ø	she > you	she > it >> you
			they2fem > you	they2fem > it >> you
			they3+fem > you	they3+fem > it >> you
			they2masc > you	they2masc > it >> you
		[they3+masc > you	they3+masc > it >> you
43a	yetshi	ø	she > you2	she>it>>you2
			they2fem > you2	they2fem > it >>you2
			they3+fem > you2	they3+fem > it >>you2
			they2masc > you2	they2masc > it >>you2
			they3+masc > you2	they3+masc > it >>you2
			she > you3+	she > it >> you3+
			they2fem > you3+	they2fem > it >> you3+
		•	they3+fem > you3+	they3+fem > it >> you3+
		ļ	they2masc > you3+	they2masc > it >> you3+
		l	they3+masc > you3+	they3+masc > it >> you3+

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			pronominal prefix 'meanings'	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	50	~	aha N han	aha Nita Nhan
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	50 gụw	Ø		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				
? they3+masc > it (see15)o?51guwanoshe > them2+femshe > it >> them2+femthey2fem > they3+fem > they3+fem > they3+fem > it >> them2+femthey2fem > it >> them2+fem52hµwanoshe > them2+mascshe > it >> them2+mascthey3+fem > them2+mascthey2fem > it >> them2+mascthey2fem > it >> them2+mascthey3+fem > them2+mascthey2fem > it >> them2+mascthey3+fem > it >> them2+mascthey3+fem > them2+mascthey3+fem > it >> them2+mascthey3+masc > it >> them2+mascthey3+masc > them2+mascthey3+masc > it >> them2+mascthey3+masc > it >> them2+mascthey3+masc > them2+mascthey3+masc > it >> them2+mascthey3+masc > it >> them2+mascthey3+masc > them2+mascthey3+masc > it >> them2+mascthey3+masc > it >> them2+mascthey3+masc > them2+mascthey3+masc > it >> them2+mascthey3+masc > it >> them2+mascthey3+masc > them2+mascthey3+masc > it >> them2+mascthey3+masc > it >> them2+mascthey3+masc > them2+mascthey3+masc > it >> them2+mascthey3+masc > it >> them2+mascthey3+masc > them2+mascthey3+masc > it >> you2wc2(exc) > you2set(exc) > you2wc2(exc) > you2wc2(exc) > it >> you2they3+masc > they3+masc > they3+masc > it >> they3+mascthey3+masc > it >> they3+masc55gwo1 > you3+wc2(exc) > it >> you3+wc2(exc) > you3wc2(exc) > you3+wc2(exc) > it >> you3+set(exc) > you3wc3+(exc) > you3+wc3+(exc) > it >> you3+you3 > us2you3 > us2you3 > it >> us3+				
51guwanøshe > hem2+femshe > it >> them2+femthey2fem > they2fem > they2fem > it >> them2+femthey3+fem > it >> them2+femthey3+fem > it >> them2+fem52hµwanøshe > them2+mascshe > it >> them2+mascthey3fem > them2+mascthey3+fem > it >> them2+mascthey2fem > it >> them2+mascthey3fem > them2+mascthey3+fem > it >> them2+mascthey3+fem > it >> them2+mascthey4fem > them2+mascthey3+fem > it >> them2+mascthey3+fem > it >> them2+mascthey3+masc > them2+mascthey3+masc > it >> them2+mascthey3+masc > it >> them2+mascthey3+masc > them2+mascthey3+masc > it >> them2+mascthey3+masc > it >> them2+mascthey3+masc > them2+mascthey3+masc > it >> them2+mascthey3+masc > it >> them2+mascthey3+masc > them2+mascthey3+masc > they3+masc > it >> them2+mascthey3+masc > it >> them2+masc53guyø1 > you11 > it >> you254gyø1 > you21 > it >> you2wc2(exc) > you2wc2(exc) > it >> you2wc2(exc) > it >> you2wc2(exc) > you3+wc3+(exc) > it >> you3+wc3+(exc) > it >> you3+wc3+(exc) > you1wc3+(exc) > it >> you2wc3+(exc) > it >> you255ggøyou2 > us2you2 > it >> us2you2 > wc3+(exc) > you2wc3+(exc) > it >> you2wc3+(exc) > you2 > meyou2 > it >> us2you2 > meyou2 > it >> us2you2 > meyou2 > it >> us3+you3+ > us3+you3+> it >> us3+you3+ > us3+you3+> it >> us3+			X X X X	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		l	$\frac{1}{2}$ they $\frac{1}{2}$ that $\frac{1}{2}$ is the set of $\frac{1}{2}$	107 i
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	51 guwan	ø	she > them2+fem	she > it >> them2+fem
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			they2fem > them2+fem	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			they3+fem > them2+fem	they3+fem > it >> them2+fem
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	52 hụwan	ø	she > them2+masc	she > it >> them2+masc
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				
$\begin{tabular}{ c c c c c c } \hline they3+masc > them2+masc & they3+masc > it >> them2+masc \\ \hline they3+masc > them2+masc & they3+masc > it >> them2+masc \\ \hline they3+masc > them2+masc & they3+masc > it >> you \\ \hline 1 > you & 1 > it >> you \\ \hline 1 > you2 & they3+masc > they3+masc > they3+masc > they3+masc \\ \hline 1 > you2 & we2(exc) > it >> you2 \\ \hline we2(exc) > you & we2(exc) > it >> you2 \\ \hline we2(exc) > you3+ & they3+masc > they3+t > they3$			-	they3+fem > it >> them2+masc
53guyø $1 > you$ $1 > it >> you$ 54gyø $1 > you2$ $1 > it >> you2$ we2(exc) > you2we2(exc) > it >> you2we2(exc) > youwe2(exc) > it >> you2we2(exc) > youwe2(exc) > it >> you3+55gwø55gwø55gwø56sgø57sgyø58sgwø58sgwø58sgwø59yudadø59yudadø59yudadø59yudadø			-	
54gyø $1 > you2$ $1 > it >> you2$ $we2(exc) > you2$ $we2(exc) > it >> you2$ $we2(exc) > you4$ $we2(exc) > it >> you3$ 55 gwø 55 gwø $1 > you3+$ $1 > it >> you3+$ $we2(exc) > you3+$ $we2(exc) > it >> you3+$ $we2(exc) > you3+$ $we2(exc) > it >> you3+$ $we3+(exc) > you3+$ $we3+(exc) > it >> you3+$ $we3+(exc) > you2$ $we3+(exc) > it >> you2$ $we3+(exc) > you2$ $we3+(exc) > it >> you2$ $we3+(exc) > you2$ $we3+(exc) > it >> you2$ $vou2 > us2$ $you2 > it >> us2$ $you2 > us2$ $you2 > it >> us2$ $you2 > me$ $you2 > it >> us2$ $you2 > we3+$ $you2 > it >> us2$ $you3+> us2$ $you3+> it >> us3+$ $you3+> us2$ $you3+> it >us3+$ $you3+> us2$ $you3+> it >> us2$ $you3+> it >> us2$ $you3+> it >> us2$ $you3+> it >> me$ $you3+> it >> me$ 59 $yudd$ $ø$			they3+masc > them2+masc	they3+masc > it >> them2+masc
54gyø $1 > you2$ $1 > it >> you2$ $we2(exc) > you2$ $we2(exc) > it >> you2$ $we2(exc) > you4$ $we2(exc) > it >> you3$ 55 gwø 55 gwø $1 > you3+$ $1 > it >> you3+$ $we2(exc) > you3+$ $we2(exc) > it >> you3+$ $we2(exc) > you3+$ $we2(exc) > it >> you3+$ $we3+(exc) > you3+$ $we3+(exc) > it >> you3+$ $we3+(exc) > you2$ $we3+(exc) > it >> you2$ $we3+(exc) > you2$ $we3+(exc) > it >> you2$ $we3+(exc) > you2$ $we3+(exc) > it >> you2$ $vou2 > us2$ $you2 > it >> us2$ $you2 > us2$ $you2 > it >> us2$ $you2 > me$ $you2 > it >> us2$ $you2 > we3+$ $you2 > it >> us2$ $you3+> us2$ $you3+> it >> us3+$ $you3+> us2$ $you3+> it >us3+$ $you3+> us2$ $you3+> it >> us2$ $you3+> it >> us2$ $you3+> it >> us2$ $you3+> it >> me$ $you3+> it >> me$ 59 $yudd$ $ø$				
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59 yudad ϕ she > her she > it > her			you3+ > us2	you3+>it>>us2
			you3+>me	you3+>it>>me
one > another $one > it >> another$	59 yudd	ø	she > her	she > it > her
		l	one > another	one > it >> another

The 59 Onondaga pronominal prefixes have a total of 277 meanings which can be attested to as being "in use" and acceptable at this time in spoken Onondaga. The number of meanings available to any single Onondaga pronominal prefix is at two and the greatest is thirty-two. This is an average of 4.69 meanings per pronominal prefix.

Certain meanings, which are shaded, are not used productively in everyday conversational Onondaga; however these meanings occur in historical texts, in personal names, and in kin terms.

One aspect of pronominal prefix meaning that is not provided by this list is the meanings that do not occur as a pronominal prefix in Onondaga. For example, any situation in which person is acts upon himself or herself is expressed by a derivational prefix to the verb stem; for example, there is no pronominal prefix which has the meaning 'I > myself'. The Lounsbury table provides this negative information by showing blank spaces in the table.

3.3 Comparing the use of English pronouns and Onondaga pronominals Both English and Onondaga have words for persons, places, things, and ideas in their languages. In common speech, however, these languages make use of forms that stand in for these nouns in the sentence: pronouns in English, pronominal prefixes in Onondaga. Are the two systems really the same?

One difference between the two systems is that English pronouns are not an obligatory component in every sentence. Nouns or pronouns can be used interchangeably in a sentence. In Onondaga, however, every verb must have a pronominal prefix, nouns and pronominal are not interchangeable; if anything the noun can be left out.

In the English sentences in (2) below, the sentences in the first row have two proper names (Tom and Jane) and two nouns (dog and pizza). In the second row the direct object is replaced by the corresponding accusative pronoun. In the third row the subject is replaced by the corresponding nominative pronoun. In the fourth row both subject and object are replaced by the corresponding nominative and accusative pronouns, respectively.

(2)

1.	a. Tom ate the pizza.	b. The dog ate the pizza.	c. Tom kissed Jane.
2.	a. Tom ate it.	b. The dog ate it.	c. Tom kissed her.
3.	a. He ate the pizza.	b. It ate the pizza.	c. He kissed Jane.
4.	a. He ate it.	b. It ate it.	c. He kissed her.

The sentences in each column are essentially equal (in the sense of truth conditions) assuming that the situational context remains the same. The difference between them is knowledge the situation. For example, if the sentence is said "out of the blue" then the proper names would have to be used. However, if we have been talking about Tom and Jane for the past 1 or 2 sentences then the understanding of (4.c) 'He kissed her' is that 'Tom kissed Jane'.

In the Onondaga examples in (3) below similar events are described.

(3)

Wa'hahæ·hgwek pizza ne' Tom	He bread-ate it, the pizza, Tom
Tom Wa²hahæ∙hgwek	Tom He bread-ate it
Wa'hahæ·hgwek ne' pizza	He bread-ate it, the pizza
Wa ⁹ hahæ·hgwek	He – bread-ate – it

Wa'shagohsohgwak mary ne' Tom	He - kissed her, Mary, Tom
Tom wa ⁹ shagohsohgwak	Tom, he – kissed – her
Wa'shagohsohgwak ne' Mary	he – kissed her, Mary
Wa'shagohsohgwak	he – kissed - her

Wa'ohæ·hgwek pizza ne' jihah	It bread-ate it, pizza, the dog
Jihah wa ⁹ ohæ·hgwek	Dog it – bread-ate – it
Wa'ohæ·hgwek pizza	it - bread-ate – it, pizza
Wa [?] ohæ∙hgwek	it – bread-ate - it

These examples reinforce the point made above that the pronominal prefixes of Onondaga are obligatory and they are not interchangeable with the nouns.

3.4 More about semantic distinctions

Table 3 in section 3.2 gave the meaning of all 59 pronominal prefixes in a list. There are other ways to organize the parameters; for example, a two-dimensional table, with a vertical and horizontal axis. In this section several of these tables are developed. The advantage of these tables is that they show how the values of various features or parameters combine to define distinctions expressed by the pronouns or prefixes. For example, the table in (4) combines the parameters of *person* and *number*. Three values for person are given on the horizontal axis, and three values for number are given on the vertical axis. The combination of these two semantic distinctions is reflected in the cells of the table where nine possible combinations are given.

	1st person	2nd person	3rd Person
singular	1s	2s	3s
dual	1d	2d	3d
plural	1р	2р	Зр

A student can use this table in two different ways. First, a student can look at a cell and determine the features that define that cell, or a student can look for certain distinctions and find the cell at the juncture of those distinctions. In the subsections below, I will show how these tables are useful in comparing the meanings of English pronouns to Onondaga pronominal prefixes.

3.4.1 Semantic distinctions of English pronouns

In order to fully describe the distinctions made by pronouns in English, we need to add two kinds of information: gender and case. English has three genders: masculine (for male beings), feminine (for female beings), and neuter (everything else). Only third person has gender in English. In Table 6 gender distinction are given for 3rd person. Table 6. *Person, number* and *gender* in English

English	1st person	2nd person	3rd Person		
Pronouns			masculine	feminine	Neuter
singular	1s / I	2 / You	Ms /He	Fs / She	Ns / it
plural	1p / We			3p / They	

Table 6 also shows the merger of two distinctions, or meanings. In other words, a distinction that holds elsewhere is neutralized, or eliminated. In Table 6 there are ten

(4)

logically possible combinations of features (meanings) but only seven actual pronouns. This means that a distinction that is observed in one part of the system is not observed in another, which results in a pronoun that has two (or more) meanings.

The second kind of information is case, which indicates the relation of the noun or pronoun to the verb. When the pronoun is the subject of the verb the nominative form has to be used and when the pronoun is the object of the verb the accusative form has to be used. Nominative and accusative pronouns are given in Table 7.

English	nominative pronouns	accusative pronouns
1s	1sSubj / I	1sObj / Me
1p	1pSubj /We	1pObj / Us
2	2	/ You
Ms	MsSubj / He	MsObj / Him
Fs	FsSubj / She	fsObj / Her
Ns	Ň	ls / It
3p	3pSubj / They	3pObj / Them

Table 7. English nominative and accusative pronouns

In this table, there are twelve forms. Ten pronouns have a unique meaning; four pronouns which have multiple meanings. The pronoun 'you' has four meanings: 2sSubj, 2pSubj, 2sObj and 2pObj. In other words the pronoun 'you' can be used for any second person. Therefore, it is unnecessary to mention any distinction other than second person, since this covers all meanings. Similarly, the pronoun 'it' has two meanings: NsSubj and NsObj. The pronoun 'it' stands in for neuter nouns in either nominative or accusative contexts. The pronouns 'they' and 'them' have three meanings each, as can be seen from Table 7. It is important to recognize that this rather simple pronoun system of English nevertheless has pronouns with multiple meanings as a result of the neutralization of semantic distinctions.

3.4.2 Semantic distinctions of Onondaga pronominal prefixes

Onondaga makes distinctions for number and person, like English, but there are more distinctions within the Onondaga system, which accounts, in part, for the greater number of pronominal prefixes. Like English there are also neutralizations of semantic distinctions.

Onondaga has three number distinctions: singular, dual, and plural. In the person category there is an additional distinction: inclusive (including the addressee) versus exclusive (excluding the addressee); this distinction is relevant for first person dual and plural parties (and specifically only for agents; see below). In earlier work on Onondaga, four genders were recognized: masculine (for male beings, and in the dual and plural for a mixed group of males and females), feminine (for female beings in the singular, and non-specific reference), neuter (for inanimates) and zoic (for animals and certain female beings). The zoic still occurs in many personal "Indian names". For example, the name **Ganiyutha**? can be interpreted as 'it hangs' or 'it was hung by it' as well as 'she hangs it.' Lounsbury (1953) mentions that in Oneida the zoic is used for women are of childbearing age, while the feminine is used for younger as well as older women. (See also Abbott 1984 for the use of these forms in contemporary Oneida speech.) In modern Onondaga, single female persons are consistently referred to with the feminine pronominal prefix in the speech of most speakers. I have recorded usage of the zoic form

in the Onondaga Nation dialect during the conversation of older speakers where it is used to refer to a woman.

Finally, there is the parameter known as role. In the system of Modified English Pronouns, which I have introduced and which I use in classes at Onondaga Nation, prefixes #1 - #15, which are called "agent" prefixes by Iroquoianists, are translated into English with nominative pronouns. Prefixes #16 - #24 are translated into English with accusative pronouns. It is important however, to recognize that "agent" is not the same as "nominative", and "patient" is not the same as "accusative" from a deeper perspective. Agent prefixes (#1 - #15) occur with verbs which have just one party, but they can also occur with verbs that have two parties, so long as the second party is neuter. Patient prefixes (#16 - #24) also occur with verbs that have just one party, and they can sometimes occur with verbs that have two parties.

When pronominal prefixes #1 - #24 occur with a single-party verb (intransitive) the terms agent and patient may be misleading to students, because in this usage they are not necessarily semantic agents or patients. The use of the terms agent and patient with intransitives is a product of Lounsbury's organization. However, the terms agent and patient *may* be appropriate when prefixes #1 - #24 (with the possible exception of #11 - #15) occur with a two-party verb. My analysis of prefixes #1 - #24 is that they are each actually two different pronominal prefixes which are treated in as one in Lounsbury and coincidentally have the same form. I continue to use these terms because this treatment makes the table more elegant although it perpetuates the idea that these are semantic agents or patients with intransitive verbs.

The student must learn, for each intransitive or single-party verb, whether to select agent prefixes or patient prefixes. The remaining prefixes (#25 - #59) are selected by transitive (two-party) verbs where both parties are animate, and they combine agent and patient categories. Verbs that are ditransitive also take these prefixes; technically they have three roles: agent, patient, and usually beneficiary (or dative), but the patient in this case is always neuter. Ditransitive or two party verbs still only encode two parties in the prefixes. It is impossible to encode three human parties in an Onondaga verb.

The agent category makes more distinctions than the patient, and this can be seen by comparing Table 8 and Table 9 below. Table 8 gives the parameters that define the 15 agent categories, while Table 9 gives the parameters that define the11 patient categories. Table 8. Onondaga agent prefixes

Onondaga	1st Person		2nd person		3rd Person	
Agent Prefixes	Exclusive Inclusive			masculine	feminine	Neuter/Zoic
singular	1s	A	2sA	MsA	F/IsA	NZsA
dual	1dAexc	1dAinc	2dA	MxdA	FZ	ZdA
plural	1pAexc	1pAinc	2pA	MxpA	FZ	ŹрА

 Table 9. Onondaga patient prefixes

Onondaga		1st Person	2nd person	3rd Person		
Patient Prefixes				masculine	feminine	Neuter
singul	lar	1sP	2sP	MsP	FIsP	NZsP
(non- singular)	dual	1dP	2dP	MxdpP	FZ	dpP
	plural	1pP	2pP			

Notice that there are 18 logically possible combinations of features; however only 15 are realized in the agents (Table 8) and only 11 in the patients (Table 9). A distinction that holds in one part of the pronominal prefix system is not realized in another resulting in pronominal prefixes that have a meaning that is applicable in a broader context.

3.5 Using the pronominal prefixes in conversational pairs

This section elaborates on the use of the pronominal prefixes in everyday conversations by providing a set of "Conversational Pairs." These pairs of sentences are intended as one more tool to help students select the correct pronominal prefix for any context. The conversational pairs work as described by the rule in (5) below.

(5) "If *Speaker A* asks a question of *Speaker B* using pronominal prefix *x*, and if the response is positive: then *Speaker B* must reply to *Speaker A* using pronominal prefix *y*, where *x* and *y* are found in Table 10, Onondaga conversational pairs."

In Table 10, if the prefix under column x is used in the question, then the corresponding prefix under column y must be used in the answer (assuming the answer is positive). The table of pairs of prefixes is given below; following the table are given possible questions and answers which demonstrate how the table can be used.

2 yagy 7 jy 3 yagw 8 sw 4 dy 4 dy 5 dw 5 dw 6 hs 1 g 7 jy 2 yagy 8 sw 3 yagw 9 w 9 w 9 w 9 w 10 h 10 h 11 yu 11 yu 12 gy 12 gy 13 gu 13 gu 14 hy 14 hy 15 hu 15 hu 16 wag 19 s 17 yugy 7a jy 18 yugw 8a sw 19 s 16 wag 7a jy 17 yugy 8a sw 18 yugw 20 yo 20 yo 21 ho<		х		У
3 yagw 8 sw 4 dy 4 dy 5 dw 5 dw 6 hs 1 g 7 jy 2 yagy 8 sw 3 yagw 9 w 9 w 10 h 10 h 11 yu 11 yu 12 gy 12 gy 13 gu 13 gu 14 hy 14 hy 15 hu 15 hu 16 wag 19 s 17 yugy 7a jy 18 yugw 8a sw 19 s 16 wag 20 yo 20 yo 21 ho 21 ho 22 yago 22 yago 23 yon 23 yon 24 hon 24 hon 25		g	6	hs
4 dy 4 dy 5 dw 5 dw 6 hs 1 g 7 jy 2 $yagy$ 8 sw 3 $yagw$ 9 w 9 w 10 h 10 h 11 yu 11 yu 12 gy 12 gy 13 gu 13 gu 14 hy 14 hy 15 hu 15 hu 16 wag 19 s 17 $yugw$ $8a$ sw 19 s 16 wag 7a jy 17 $yugw$ 20 yo 20 yo 21 ho 21 ho 22 $yago$ 22 $yago$ 23 yon 23 yon 24 hon 24 hon <t< td=""><td></td><td>yagy</td><td></td><td>ју</td></t<>		yagy		ју
5 dw 5 dw 6 hs 1 g 7 jy 2 yagy 8 sw 3 yagw 9 w 9 w 10 h 10 h 11 yu 11 yu 12 gy 12 gy 13 gu 13 gu 14 hy 14 hy 15 hu 15 hu 16 wag 19 s 17 yugy 7a jy 18 yugw 8a sw 19 s 16 wag 7a jy 17 yugy 8a sw 18 yugw 20 yo 20 yo 21 ho 21 ho 22 yago 22 yago 23 yon 23 yon 24 hon 24 hon 25		yagw		
6 hs 1 g 7 jy 2 yagy 8 sw 3 yagw 9 w 9 w 10 h 10 h 11 yu 11 yu 12 gy 12 gy 13 gu 13 gu 14 hy 14 hy 15 hu 15 hu 16 wag 19 s 17 yugy 7a jy 18 yugw 8a sw 19 s 16 wag 7a jy 17 yugy 8a sw 18 yugw 20 yo 20 yo 21 ho 21 ho 22 yago 22 yago 23 yon 23 yon 24 hon 24 hon 25 hey 30 hes 26<		dy		dy
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7a jy 17 yugy 8a sw 18 yugw 20 yo 20 yo 21 ho 21 ho 22 yago 22 yago 23 yon 23 yon 24 hon 24 hon 25 hey 30 hes 26 shagy 31 shejy 27 shagw 32 shesw 28 shedy 28 shedy 29 29 shedw 29 shedw 29	18	yųgw	8a	
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24hon24hon25hey30hes26shagy31shejy27shagw32shesw28shedy28shedy29shedw29shedw	22	yago	22	yago
25hey30hes26shagy31shejy27shagw32shesw28shedy28shedy29shedw29shedw	23	yon	23	yon
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27shagw32shesw28shedy28shedy29shedw29shedw	25	hey	30	hes
28shedy28shedy29shedw29shedw	26	shagy		shejy
28shedy28shedy29shedw29shedw	27	shagw		
				shedy
30 hes 25 hev	29	shedw	29	shedw
	30	hes	25	hey
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Table In	()nondaga	conversational	noire
	Ononuaga	conversational	Dalls

	x		у			
33	hụw	33	hụw			
34	hag	37	hy			
35	shụgy	31a	shejy			
36	shųgw	32a	shesw			
37	hy	34	hag			
31a	shejy	35	shųgy			
32a	shesw	36	shugw			
38	shago	38	shago			
39	khey	42	shey			
40	yakhiy	43	yetshiy			
41	yethiy	41	yethiy			
42	shey	39	khey			
43	yetshiy	40	yakhiy			
44	yagon	44	yagon			
45	shagon	45	shagon			
46	yųg	49	yes			
47	hụg					
48	yụkhiy	43a	yetshi			
49	yes	46	yųg			
		47	hụg			
43a	yetshi	48	yųkhiy			
50	gụw	50	gụw			
51	guwan	51	guwan			
52	hụwan	52	hụwan			
53	gųy	56	sg			
54	gy	57	sgy			
55	gw	58	sgw			
56	sg	53	gųy			
57	sgy	54	gy			
58	sgw	55	gw			
59	yudd	59	yudd			

These 'conversational pairs' of Onondaga pronominal prefixes help to simplify a complex system by giving the students a simple model for selecting the proper pronominal prefix in conversation.

3.5.1 The positive-iterative response model

This is a simple conversational model consisting of two parts:

1. Onondaga question particle construction: consists of a verb followed by the Onondaga question particle **khęh**. These constructions generally can be translated as a 'closed question' (yes-no question) in English.

2. Positive – iterative response construction: consists of an Onondaga particle **Hęhęh** 'yes' followed by a verb. This construction requires that the verb is reiterated but with the proper pronominal prefix selected to reflect the change in viewpoint. These constructions can be generally translated as a 'Yes, I verb-ed' reply in English.

In the examples in Table 11 the verbs are grammatically acceptable with the selected pronominal prefixes. The glosses are given with the Modified English Pronouns (Chapter 3, Table 4). Because the pronominal prefixes have more that one meaning I will give the meaning that has the least number of participants followed by an asterisk. Any meaning that is given without the asterisks is the only meaning that is available for that combination of pronominal prefix and verb stem.

 Table 11. Onondaga questions and answer sentence pairs

Q1.	wa ⁹ gadyęsda ⁹ khęh 'Did I study?'	A6.	hęhęh wa'sadeyęsda' 'Yes, you> studied.'
Q2.	wa [°] agyadeyęsda [°] khęh 'Did we2exc study?'	A7.	hệhệh we'jyadeyęsda' 'Yes, you2 studied.'
Q3.	wa?agwadeyęsda? khęh 'Did we3+exc study?'	A8.	hęhęh we'swadeyęsda' 'Yes, you3+exc studied.'
Q4.	we ⁹ dyadeyęsda ⁹ khęh 'Did we2inc study?'	A4.	hệhệh we²dyadeyęsda² 'Yes, we2inc studied.'

Q5.	we'dwadeyęsda' khęh 'Did we3+inc study?'	A5.	hęhęh we'dwadeyęsda' 'Yes, we3+inc studied.'
Q6.	wa'sadeyęsda? khęh 'Did you study?'	A1.	hẹhẹh wa ⁹ gadeyẹsda ⁹ 'Yes, I studied.'
Q7.	we?jyadeyęsda? khęh 'Did you2 study?'	A2.	hęhęh wa'agyadeyęsda' 'Yes, we2 studied.'
Q8.	we'swadeyęsda' khęh 'Did you3+ study?'	A3.	hẹhẹh wa'agwadeyẹsda' 'Yes, we3+ studied.
Q9.	wa'wadeyęsda' khęh 'Did it> study?'	A9.	hẹhẹh wa'wadeyẹsda' 'Yes, it> studied.
Q10.	wa?hadeyęsda? khęh 'Did he study?'	A10.	hẹhẹh wa'hadeyẹsda' 'Yes, he studied.'
Q11.	wa²udeyęsda? khęh 'Did she study?'	A11.	hẹhẹh wa²ụdeyẹsda? 'Yes, she studied.'
Q12.	wa ⁹ gyadeyęsda ⁹ khęh 'Did they2fem study?'	A12.	hęhęh wa ² gyadeyęsda ² 'Yes, they2fem studied.'
Q13.	wa ⁹ gudeyęsda ⁹ khęh 'Did they3+fem study?'	A13.	hęhęh wa'gudeyęsda' 'Yes, they3+fem studied.'
Q14.	wa'hyadeyęsda' khęh 'Did they2masc study?'	A14.	hęhęh wa'hyadeyęsda' 'Yes, they2mas studied.'
Q15.	wa'hudeyęsda' khęh 'Did they3+masc study?'	A15.	hẹhẹh wa'hụdeyẹsda' 'Yes, they3+masc studied.'
Q16.	wa'wagathudeha' kheh 'Did me get to hear?'	A19	hẹhẹh we²sathụdẹha² 'Yes, >you got to hear.'
Q.17	wa²ugyathudeha² kheh 'Did us2 get to hear?	A7a	hẹhẹh we²jyathụdẹha² 'Yes, you2 got to hear.'
Q.18	wa'ugwathudeha' kheh 'Did us3+ get to hear?'	A8a	hẹhẹh we'swathụdẹha' 'Yes, you3+ got to hear.'
Q.19	we'sathudeha' kheh 'Did >you get to hear?'	A16	hẹhẹh wa'wagathụdẹha' 'Yes, me got to hear.'

Q.7a	we ⁹ jyathudeha ⁹ kheh 'Did you2 get to hear?'	A17	hệhệh wa [?] ụgyathụdệha [?] 'Yes, us2 got to hear.'
Q.8a	we'swathudeha' kheh 'Did you3+ get to hear?'	A18	hệhệh wa²ụgwathụdệha² 'Yes, us3+ got to hear.'
Q.20	wa²othụdẹha² khẹh 'Did >it get to hear?'	A20	hẹhẹh wa'othụdẹha' 'Yes, >it got to hear.'
Q.21	wa²hothụdẹha? khẹh 'Did him get to hear?'	A21	hẹ̀hẹ́h wa'hothụdẹ́ha' 'Yes, him got to hear.'
Q.22	wa'agothudeha' kheh 'Did her get to hear?'	A22	hẹ̀hẹ̀h wa'agothụdẹ́ha' 'Yes, her got to hear.'
Q.23	wa'onathudeha' kheh 'Did them2+fem get to hear?	,A23	hẹ̀hẹ́h wa'onathụdẹ́ha' 'Yes, them2+fem got to hear.'
Q24.	wa²honathụdẹha² khẹh 'Did them2+fem get to hear?	,A23	hẹhẹh wa'honathụdẹha' 'Yes, them2+fem got to hear.'
Q25.	wa ⁹ heyatho·yę? khęh 'Did I tell him?'	A30.	hẹhẹh wa'hesatho∙yẹ' 'Yes, you told him'
Q.26	wa'shagyatho•yę' khęh 'Did we tell him*?'	A.31	hęhęh wa'hejyatho∙yę' 'Yes, you told him*'
Q.27	wa'shagwatho·yę' khęh 'Did we tell him*?'	A.32	hệhệh wa'heswatho·yệ' 'Yes, you told him*'
Q.28	wa'shedyatho·yę' khęh 'Did we tell him*?'	A.28	hệhệh wa'shedyatho•yệ' 'Yes, we told him*'
Q.29	wa'shedwatho·yę? khęh 'Did we tell him*?'	A.29	hệhệh wa'shedwatho·yệ' 'Yes, we told him*'
Q.30	wa²hesatho∙yę? khęh 'Did you tell him?'	A.25	hęhęh wa'heyatho•yę' 'Yes, I told him.'
Q.31	wa'hejyatho∙yę' khęh 'Did you tell him*?'	A.26	hệhệh wa'shagyatho yệ' 'Yes, we told him*'
Q.32	wa'heswatho·yę' khẹh 'Did you tell him*?'	A.27	hệhệh wa'shagwatho·yệ' 'Yes, we told him*'

wa'hụwatho·yę' khẹh 'Did she tell him*?'	A.33	hẹhẹh wa?hụwatho·yẹ? 'Yes, she told him*'
wa'hagatho·yę' khęh 'Did he tell me?'	A.37	hẹhẹh wa²hyatho•yẹ² 'Yes, he told you'
wa'shugyatho yę' khęh 'Did he tell us*?'	A.31a	hẹ̀hẹ̀h wa'shejyatho·yẹ́' 'Yes, he told you*'
wa'shugwatho·yę' khęh 'Did he tell us*?'	A.32a	hẹhẹh wa'sheswatho·yẹ' 'Yes, he told you*'
wa'hyatho•yę' khęh 'Did he tell you?'	A.34	hẹhẹh wa²hagatho∙yẹ² 'Yes, he told me'
wa?hejyatho∙yę? khęh 'Did he tell you*?'	A.35	hệhệh wa²shụgyatho∙yệ² 'Yes, he told us*'
wa?heswatho•yę? khęh 'Did he tell you*?'	A.36	hệhệh wa²shụgwatho∙yệ² 'Yes, he told us*'
wa'shagotho·yę' khẹh 'Did he tell her*?'	A.38	hệhệh wa²shagotho∙yę² 'Yes, he told her*'
wa²kheyatho•yę² khęh 'Did I tell her*?'	A.42	hệhệh wa²sheyatho•yệ? 'Yes, you told her*'
wa²akhiyatho∙yę² khęh 'Did we tell her*?'	A.43	hệhệh wa [?] etshiyatho·yệ [?] 'Yes, you told her*'
wa'ethiyatho•yę' khęh 'Did we tell her*?'	A.41	hệhệh wa [?] ethiyatho∙yę [?] 'Yes, we told her*'
wa²sheyatho∙yę² khęh 'Did you tell her*?'	A.39	hęhęh wa²kheyatho∙yę² 'Yes, I told her*'
wa ⁹ etshiyatho•yę ⁹ khęh 'Did you tell her*?'	A.40	hệhệh wa²akhiyatho·yệ² 'Yes, we told her*'
wa'agonatho·yę' khęh 'Did they tell her*?'	A.44	hẹhẹh wa'agonatho·yẹ' 'Yes, they told her*'
wa'shagonatho·yę' khęh 'Did they tell her*?'	A.45	hệhệh wa [?] shagonatho·yệ [?] 'Yes, they told her*'
	 'Did she tell him*?' wa'hagatho·yę' khęh 'Did he tell me?' wa'shugyatho·yę' khęh 'Did he tell us*?' wa'shugwatho·yę' khęh 'Did he tell us*?' wa'hyatho·yę' khęh 'Did he tell you?' wa'hejyatho·yę' khęh 'Did he tell you*?' wa'heswatho·yę' khęh 'Did he tell her*?' wa'kheyatho·yę' khęh 'Did I tell her*?' wa'akhiyatho·yę' khęh 'Did we tell her*?' wa'ethiyatho·yę' khęh 'Did we tell her*?' wa'sheyatho·yę' khęh 'Did we tell her*?' wa'ethiyatho·yę' khęh 'Did you tell her*?' wa'asheyatho·yę' khęh 'Did you tell her*?' 	'Did she tell him*?'wa?hagatho·yę? khęhA.37'Did he tell me?'A.31a'Did he tell us*?'A.31a'Did he tell us*?'A.32a'Did he tell us*?'A.32a'Did he tell us*?'A.34'Did he tell you?'A.34'Did he tell you?'A.35'Wa?hejyatho·yę? khęhA.36'Did he tell you*?'A.36'Did he tell you*?'A.36'Did he tell her*?'A.38'Did he tell her*?'A.38'Did he tell her*?'A.42'Did I tell her*?'A.43'Did we tell her*?'A.41'Did we tell her*?'A.39'Did you tell her*?'A.40'Did you tell her*?'A.40'Did you tell her*?'A.44'Did they tell her*?'A.44

Q.46	wa'ugatho·yę' khęh 'Did she tell me*?'	A.49	hệhệh wa'esatho·yệ' 'Yes, she told you*'
Q.47	wa'hugatho·yę' khęh 'Did they tell me*?'	A.49	hệhệh wa'esatho•yệ' 'Yes, they told you*'
Q.48	wa?ukhiyatho·yę? khęh 'Did she tell us*?'	A.43a	hệhệh wa'etshiyatho·yệ' 'Yes, she told you*'
Q.49	wa'esatho·yę' khęh 'Did she tell you*?'	A.46	hệhệh wa²ụgatho·yệ² 'Yes, she told me*'
Q.43a	wa'etshiyatho•yę' khęh 'Did she tell you*?'	A.48	hệhệh wa²ụkhiyatho•yę² 'Yes, she told us*'
Q.50	wa'guwatho·yę' khęh 'Did she tell her*?'	A.50	hệhệh wa²gụwatho·yệ² 'Yes, she told her*'
Q.51	wa'guwanatho·yę' khęh 'Did they tell them*?'	A.51	hệhệh wa²gụwanatho·yệ² 'Yes, they told them*'
Q.52	wa'huwanatho·yę' khęh 'Did they tell them*?'	A.52	hẹhẹh wa'hụwanatho·yẹ' 'Yes, they told them*'
Q.53	wa'guyathoyę' khęh 'Did I tell you?'	A.56	hệhệh wa'sgatho yệ' 'Yes, you told me'
Q.54	wa'gyatho·yę' khęh 'Did we tell you*?'	A.57	hệhệh wa'sgyatho•yệ' 'Yes, you told us*'
Q.55	wa'gwatho·yę' khęh 'Did we tell you*?'	A.58	hệhệh wa'sgwatho·yệ' 'Yes, you told us*'
Q.56	wa'sgatho·yę' khęh 'Did you tell me?'	A.53	hệhệh wa'gụyatho·yệ' 'Yes, I told you'
Q.57	wa'sgyatho∙yę' khęh 'Did you tell us*?'	A.54	hệhệh wa²gyatho•yệ² 'Yes, we told you*'
Q.58	wa'sgwatho·yę? khęh 'Did you tell* us?'	A.55	hẹhẹh wa'gwatho·yẹ' 'Yes, we told you*'
Q.59	wa²udadatho·yę? khęh 'Did she tell her?'	A.59	hẹhẹh wa'ụdadatho·yẹ' 'Yes, she told her'

Chapter 4: Conclusion

This dissertation is part of an ongoing revitalization effort of the Onondaga language. The main purpose of this dissertation was to develop and make available a set of tables that would help a student correctly identify and select pronominal prefixes in the Onondaga language. The tables in this dissertation show that the 59 pronominal prefixes have a total of 271 variant forms and 277 meanings. Another purpose of this dissertation was to complement the organization of Woodbury's (2003) dictionary. Students will be able to use the tables and apply them directly with the dictionary entries. In other words once a student has chosen a verb stem he or she can find and attach the right prefix.

The categories that are proposed in this dissertation are motivated by the structure and morphology of the Onondaga language. Previously, one approach to teaching the pronominal prefixes had been to invent Onondaga "pronouns" on the model of English pronouns. These were used in addition to the pronominal prefixes, which is not natural in Onondaga and was contrived. This approach forced the use of these "pronouns" in a language that doesn't have them and doesn't need them. This approach taught me two things: one was that a native speaker is not necessarily aware of the workings of the language he or she speaks, and the other is that students need a clear explanation of how the Onondaga language works and how it is different from English.

Another problem with this approach was that it presented the pronominal prefix system primarily according to the hierarchy of features: *number:person;gender* (cf. Lounsbury's organization *person:number:gender*). A small difference perhaps, but the resulting reorganization of the prefixes is drastically muddled as can be seen in Table 12.

	>0	me	you	him	her	it	us2	you2	them2M	them2F	us3+	You3+
0>	*	wag	sa	ho-	yago-	yo-	yoñgy	ју	hon	yon	yoñgw	swa
Ι	g	*	goñy	hey	khey	đđ	*	gy	khey	khey	*	gw
you	hs	sg	*	hes	shey	hs	sgn	*	shey	shey	sgw	*
he	h	hag	hy	ho-	shago-	h	shoñgy	hejy	shagon	shagon	shoñgw	hesw
she	yoñ-	yoñg	yes	hoñw	yondad	goñw	yoñkhiy	yetshiy	hoñwan	goñwan	yoñkhiy	yetshiy
it	w	wag	sa	ho-	yago-	yo-	yoñgy	ју	hon	yon	yoñgwa	swa
we2exc	yagy	*	sgy	shagy	yakhiy	yagy	*	gy	yakhiy	yakhiy	*	gwa
you2	ју	sgy	*	hejy	yetshiy	ју	sgy	*	yetshiy	yetshiy	sgw	*
They2Mx	hy	hoñg	yetshiy	hoñw	shagon	goñw	yoñkhiy	yetshiy	Х	Х	yoñkhiy	yetshiy
They2Fz	gy	yoñg	yetshiy	hoñw	yagon	goñw	yoñkhiy	yetshiy	Х	Х	yoñkhiy	yetshiy
We2inc	dy	*	*	shedy	yethiy	dy	*	*	yethiy	yethiy	*	*
We3+exc	yagw	*	gw	shagw	yakhiy	yagw	*	gw	yakhiy	yakhiy	*	gw
You3+	sw	sgw	*	hesw	yetshiy	sw	sgw	*	yetshiy	yetshiy	sgw	*
They3+M	hoñ-	hoñg	yetshiy	hoñw	shagon	goñw	yoñkhiy	yetshiy	Х	Х	yoñkhiy	yetshiy
Гhey3+F	goñ-	yoñg	yetshiy	hoñw	yagon	goñw	yoñkhiy	yetshiy	Х	Х	yoñkhiy	yetshiy
W3+inc	dw	*	*	shedw	yethiy	dw	*	*	yethiy	yethiy	*	*

 Table 12. Disorganization of Onondaga pronominal prefixes

Table 12 can be used to correctly select a pronominal prefix but it misses the fact that many of these cells contain a form that also occurs in another cell. A single form can have more than one meaning which is apparent from Lounsbury's organization but not from Table 12.

The tables in this dissertation are also a reorganization of Lounsbury's table but they are meant to complement it. Both Lounsbury's and the tables I have developed reflect the categories of Onondaga the way that people use them. The tables in this dissertation can be used in conjunction with Lounsbury's table so that a student can get a better understanding of the Onondaga pronominal prefix system. Another goal this dissertation was to show people how to use Woodbury's (2003) Onondaga dictionary. The verb stems in this dictionary are arranged alphabetically according to the first sound of the verb stem. I was questioned many times on the arrangement of the dictionary because people wanted an 'alphabetical' arrangement of whole words like English. Chapter 2 explains why the arrangement in Woodbury (2003) works and is actually useful.

There are fewer and fewer native speakers of Onondaga. However there is an active effort to revitalize the language. This dissertation is a part of that revitalization effort and is pedagogical in the following sense: the tables were developed from my experience in the classroom, and they will return to the classroom.

Da ne?thoh

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APPENDIX

Properties

- (1) Forms 4
- (2) Meanings 2
- (3) Conversational Pair #1/#6

(1)																			
1 pref	2 preceding	3 pronominal					Ver	b Ste	<u>4</u> m C	lass									5 var/dist
#	environs	prefix		vow	vel st	tems					con	sona	nt st	ems					pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern F
#1	ALL	g-	Х	Х	х	Х	х	х							х	х	х	Х	
		k-							х	Х	Х	Х	Х	Х					
		h-								Х									
		ge-	Bef	ore (CC st	ems			-	-	-		_	_	_	-			

(2)

pronominal prefix 'meanings

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
1	g	Ι	I > it	ø/?
			I > her	

(3)

Q1. wa²gadeyęsda² khęh ? A6. hęhęh wa²sadeyęsda² 'Did I study?' 'Yes, you studied.'

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair

1	2	3								4										5
pref	preceding	pronominal					Ver	b St	em	l Cl	ass									var/dist
#	environs	prefix		vow	vel st	ems						con	sona	nt st	ems					pattern
		variant form	Α	Ę	E	Ι	0	Ų		Т	K	H	?	J	S	N	W	Y	R	Pattern A
#2	elsewhere	yagy-	Х	Х																
		yagn-			Х	Х	х	х												
		yagni-								х	Х	Х	х	х	х	х	х	х	Х	
	#/FAC?-	agy-																		
		agn-																		
		agni-	1																	

pronominal prefix 'meanings'

	chart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
ſ	2	yagy	we2exc	we2exc > it	ø/?
				we2exc > her	

- Q2. wa'agyadeyęsda' khęh 'Did we2exc study?'
- A7. hęhęh we⁹jyadeyęsda⁹ 'Yes, you2 studied.'

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair

1	2	3							4	4										5
-		pronominal						b St	em	Cl	ass									var/dist
#	environs	prefix		vow	vel st	tems						con	sona	nt st	tems					pattern
		variant form	Α	Ę	Е	Ι	0	Ų]	Г	K	H	?	J	S	N	W	Y	R	Pattern B
#3	elsewhere	yagw-	Х	Х	Х															
		yagy-					Х	Х												
		yagwę-				(x)														
		yagwa-							2	X	Х	х	х	Х	Х	Х	Х	Х	Х	
	#/FAC?-	agw-																		-
		agy-																		
		agwę-																		
		agwa-																		

pronominal prefix 'meanings'

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
3	yagw	we3+exc	we3+exc > it	ø/?
			we3+exc > her	

- Q3. wa'agwadeyęsda' khęh 'Did we3+exc study?'
- A8. hẹhẹh we'swadeyẹsda' 'Yes, you3+exc studied.'

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q4. we'dyadeyęsda' khęh A4. hęł 'Did we2inc study?' 'Ye
- hęhęh we'dyadeyęsda' 'Yes, we2inc studied.'

1	2	3							4										5
pref	preceding	pronominal					Ver	b Ste	em C	lass									var/dist
#	environs	prefix		vow	vel st	ems					con	sona	nt st	ems					pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern A
#4	ALL	dy-	х	х															
-		dn-			х	х	х	х											
		dni-							х	Х	Х	х	х	х	х	Х	Х	х	

pronominal	prefix	'meanings'
P-0	P	

C	chart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
	4	dy	we2inc	we2inc > it	ø/?
				we2inc > her	

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q5. we'dwadeyęsda' khęh hęhęh we'dwadeyęsda' A5. 'Did we3+inc study?'
 - 'Yes, we3+inc studied.'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	vel st	tems		b Ste	em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern B
#5	ALL	dw-	Х	Х	Х														
	1	dy-					Х	х											
		dwę-				(x)													
		dwa-							Х	Х	Х	Х	Х	Х	х	х	Х	Х	

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
5	dw	we3+inc	we3+inc > it	ø/?
			we3+inc > her	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q6. wa'sadeyęsda' khęh 'Did you study?'
- A1. hẹhẹh wa⁹gadeyẹsda⁹ 'Yes, I studied.'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	vel st	ems		b Ste	em C	lass	con	sona	int st	tems	1				var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern I
#6	elsewhere	hs-	х	х	Х		х	х	Х	Х	Х	Х	Х	Х	Х	Х		х	
		j-				Х											Х		
		hse-	Bef	ore C	CC st	ems													
		ø *	befo	ore H	[S ste	em													
		hs -> hc- *	befo	ore H	[Y st	em													
	#/FAC?-	S-																	
		se-																	
		s -> c-																	
	t-	hs -> sh- *	* th	is va	riant	or e	nviro	onme	nt is 1	not s	howr	n on	Woo	dbur	y tab	ole 1	1a.		

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
6	hs	you >	you > it	ø/?

you > her

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q7. we⁹jyadeyęsda⁹ khęh 'Did you2 study?'
- Q.7a we'jyathudeha' kheh 'Did you'2 get to hear?'

A2. hẹhẹh wa'agyadeyẹsda' 'Yes, we2 studied.'
A17 hẹhẹh wa'ugyathudẹha' 'Yes, us2 got to hear.'

1	2	3							4										5
pref	preceding	pronominal					Ver	b Ste	em C	ass									var/dist
#	environs	prefix		vow	vel st	ems					con	sona	nt st	tems					pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern A
#7	ALL	ју-	Х	х															
#7a		sn-			х	х	х	Х											
		sni-							Х	Х	х	х	Х	Х	х	х	х	Х	

meanings'
1

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
7	ју	you2	you2 > it	ø/?
			you2 > her	
7a	ју	you2	it > you2	ø/?
			she > you2	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q8. we'swadeyęsda' khęh 'Did you3+ study?'
- Q.8a we'swathudeha' kheh 'Did you3+ get to hear?'

A3. hẹhẹh wa'agwadeyẹsda' 'Yes, we3+ studied.
A18 hẹhẹh wa'ugwathudẹha' 'Yes, us3+ got to hear.'

1	2	3							4										5
		pronominal prefix		vow	vel st	tems		b Ste	em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern B
#8	ALL	sw-	Х	Х	Х														
#8a		ју-					х	х											
		swę-				(x)													
		swa-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

pronominal pro	efix 'mea	nings'
----------------	-----------	--------

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
8	SW	you3+	you3+>it	ø/?
			you3+>her	
8a	SW	you3+	it > you3+	ø/?
			she > you3+	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q9. wa'wadeyęsda' khęh A 'Did it> study?'
 - A9. hẹhẹh wa'wadeyẹsda' 'Yes, it> studied.

1	2	3							4										5
pref #		pronominal prefix		vow	vel st	ems		b Ste	em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern E
#9	elsewhere	W-	Х	Х	Х														
		у-					Х	х											
		gę-				(x)													
		ga-							х	Х	Х	Х	Х	Х	х	Х	Х	Х	
	#/FAC?-	y -> Ø							-		_		_						
		w ->Ø **	** v	v-del	letio	n in V	V ->	N, e	.g ad	yęda	ıkhw	a? -	'chai	r'					

pronominal	prefix	'meanings'	
prononnia	prena	meanings	

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
9	W	it >	it>it?	ø/?
		she	she > it	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q10. wa?hadeyęsda? khęh 'Did he study?'
- A10. hẹhẹh wa'hadeyẹsda' 'Yes, he studied.'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	vel st	tems	Ver	b Ste	em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Unique
#10	ALL	h-	Х	х	Х		Х	Х											
		hę-				(x)													
		ha-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
		hR-	х	х	Х			Х											

pronominal	prefix	'meanings'	
prononnia	prenix	meanings	

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
10	h	he	he > it	ø/?
			he > her	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q11. wa²udeyęsda² khęh 'Did she study?'
- A11. hẹhẹh wa'udeyẹsda' 'Yes, she studied.'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb St vowel stems						lass	con	sona	nt st	tems					var/dist pattern
		variant form	A	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Unique
#11	elsewhere	yų-	(x)	(x)															
		yę-			(x)														
		ya-				(x)													
		yag-	Х	Х	Х		Х	Х											
		ye-				Х			х	Х	х	Х	х	Х	Х	Х	Х	Х	
		yụw-	Bef	ore .	ARV	ster	ns												-
	#/FAC?-	ų-																	
		ę-																	
		a-																	
		ag-																	
		e-																	
		ųw-																	

				pronominal prefix 'meanings'	
	chart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
	11	уџ	she	she > it	ø/?
-				she > her	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q12. wa²gyadeyęsda² khęh 'Did they2fem study?'
- A12. hęhęh wa'gyadeyęsda' 'Yes, they2fem studied.'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb vowel stems					em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern A
#12	ALL	gy-	Х	Х															
		gn-			Х	Х	Х	Х											
		gni-							х	Х	Х	Х	Х	Х	Х	х	Х	Х	

pronominal	nrefiv	'meanings'
pronominai	prenx	meanings

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
12	gy	they2fem	? they2fem > it (see 50)	ø/?
			they2fem > her	

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q13. wa'gudeyęsda' khęh 'Did they3+fem study?' A13. hęhęh wa'gudeyęsda' 'Yes, they3+fem studied.'

1	2	3							4										5
pref #	· · ·	pronominal prefix		Verb S vowel stems					em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	Α	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern H
#13	ALL	gų-	(x)	(x)															
		gụn-			х	х	Х	Х											
		gudi-							Х	Х	Х	Х	Х	Х	Х	х	Х	х	
		gụw-	Bef	ore A	ARV	sten	ns												•

		the second second
pronominal	prefix	meanings

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
13	gų	they3+fem	? they3+fem > it (see 50)	ø/?
			they3+fem > her	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic infofin

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q14. wa'hyadeyęsda' khęh 'Did they2masc study?' A14. hęhęh wa'hyadeyęsda' 'Yes, they2mas studied.'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb vowel stems					em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	A	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern A
#14	ALL	hy-	Х	Х															
		hn-			Х	Х	Х	Х											
		hni-							Х	Х	Х	х	Х	Х	Х	х	Х	х	

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
14	hy	they2masc	? they2masc > it (see 50)	ø/?
			they3+masc > her	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q15. wa'hudeyesda' kheh 'Did they3+masc study?' A15. heheh wa'hudeyesda' 'Yes, they3+masc studied.'

1	2	3							4										5
pref	preceding	pronominal					Ver	b Ste	em C	ass									var/dist
#	environs	prefix		vow	vel st	ems					con	sona	nt st	ems					pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern H
#15	ALL	hụ-	(x)	(x)															
		hẹn-			Х	Х	Х	Х											
		hadi-							Х	Х	х	х	Х	х	Х	х	Х	Х	
		hụw-	Bef	Before ARV stems									-						

pronominal prefix 'meanings'

ſ	chart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
ſ	15	hụ	they3+masc	? they3+masc > it (see 50)	ø/?
				they3+masc > her	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q16. wa'wagathudeha' kheh A19 h 'Did me get to hear?'
- hęhęh we'sathudęha''Yes, >you got to hear.'

1	2	3							4											5
		pronominal prefix		vow	vel st	ems		b Ste	em (Clas		con	sona	nt st	ems					var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų	T		K	H	?	J	S	Ν	W	Y	R	Pattern F
#16	elsewhere	wag-	Х	Х	Х	Х	Х	Х								Х	Х	Х	Х	
		wak-							Х	1	Х	Х	Х	Х	Х					
		wah-									X									
		wage-	Bef	ore (CC st	ems														
	#	ag-																		
		ak-																		
		ah-																		
		age-																		

pronominal prefix 'meanings'

	chart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
ĺ	16	wag	me	it > me	ø/?
				she > me	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugatiIdiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.17 wa'ugyathudeha' kheh A7a heheh we'jyathudeha' 'Did us2 get to hear? 'Yes, you2 got to hear.'

1	2	3		4 Verb Stem Class												5			
pref #	preceding environs	pronominal prefix		vow	el st	ems		b Ste	em (lass	con	sona	nt st	tems					var/dist pattern
		variant form	A	Ę	Е	I	0	Ų	Т	K	H	?	J	S	N	W	Y	R	Pattern A
#17	elsewhere	yugy-	Х	Х															
		yugn-			Х	Х	Х	Х											
		yugni-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
	#/FAC?-	ugy-																	_
		ugn-																	
		ugni-																	

-			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
17	yųgy	us2	it > us2	ø/?
			she > us2	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.18 wa'ugwathudeha' kheh A8a heheh we'swathudeha' 'Did us3+ get to hear?' 'Yes, you3+ got to hear.'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems											var/dist pattern				
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern B
#18	elsewhere	yugw-	Х	Х	Х														
		yugy-					Х	х											
		yųgwę-				(x)													
		yugwa-							Х	Х	х	Х	Х	Х	Х	х	Х	Х	
	#/FAC?-	ųgw-		-	-			-	-	-	-	-	-	_	-	-		_	
		ųgy-																	
		ųgwę-																	
		ugwa-	1																

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
18	yųgw	us3+	it > us3+	ø/?
			she > us3+	

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info fin

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.19 we'sathudeha' kheh 'Did >you get to hear?' A16 heheh wa'wagathudeha' 'Yes, me got to hear.'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	vel st	tems		b Ste	em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	H	2	J	S	Ν	W	Y	R	Unique
#19	ALL	S-	Х	Х	Х		Х	Х											
		sę-				(x)													
		sa-							Х	х	х	х	х	х	х	х	х	х	

			pronominal prefix 'meanings'	
cha	rt variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
19	S	> you	it > you	ø/?
			she > vou	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.20 wa'othudeha' kheh 'Did >it get to hear?' A20 heheh wa'othudeha' 'Yes, >it got to hear.'

1	2	3							- 4											5
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems										var/dist pattern						
		variant form	A	Ę	Е	Ι	0	Ų	Т	ŀ	Κ	H	?	J	S	Ν	W	Y	R	Pattern G
#20	elsewhere	yo-	(x)	(x)		(x)			Х	2	x	х	Х	Х	Х	Х	Х	Х	Х	
		yaw-		Х	Х															
		ya-					Х	х												
		yow-	Bet	fore A	ARV	⁷ sten	ns													-
	#/fac?-	0-																		
		aw-																		
		a-																		
		ow-																		

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
20	yo	> it	it > it ?	ø/?
		her	she > it	

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info fin

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.21 wa'hothudeha' kheh 'Did him get to hear?' A21 heheh wa'hothudeha' 'Yes, him got to hear.'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	vel st	tems		b Ste	em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern G
#21	ALL	ho-	(x)	(x)		(x)			Х	Х	Х	Х	х	х	х	Х	Х	Х	
		haw-		Х	Х														
		ha-					Х	Х											
		how-	Bef	fore A	ARV	⁷ ster	ns			_	-					-			

pronominal	prefix	'meanings'
prononnia	prenz	meanings

С	hart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
	21	ho	him	it > him	he > it >> him
				she > him	
				he > him	

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.22 wa'agothudeha' kheh 'Did her get to hear?' A22 heheh wa'agothudeha' 'Yes, her got to hear.'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	vel st	tems		b Ste	em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern G
#22	elsewhere	yago-	(x)	(x)		(x)			Х	х	х	х	х	Х	Х	Х	Х	х	
	1	yagaw-		х	Х														
		yaga-					Х	Х											
		yagow-	Bet	fore A	ARV	ster	ns		-		-	-		_	-	-			
	?-	ago-																	
		agaw-																	
		aga-																	
		agow-																	
	#	go-																	
		gaw-																	
		ga-																	
		gow-																	

	c.	1
pronominal	prefix	'meanings'

1	chart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
ſ	22	yago	her	it > her	ø/?
-				she > her	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic inffin

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.23 wa'onathudeha' kheh A23 heheh wa'onathudeha' 'Did them2+fem get to hear?' 'Yes, them2+fem got to hear.'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	vel st	ems		b Ste	em C	lass	con	sona	nt st	ems					var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern D
#23	elsewhere	yon-	Х	Х	Х	Х	Х	х											
		yodi-							Х	Х	Х	Х	Х	Х	Х	х	Х	Х	
	#/FAC?-	on-																	
		odi-																	

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
23	yon	them2+fem	it > them2+fem	ø/?
			she > them2+fem	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q24. wa'honathudeha' kheh A23 heheh wa'honathudeha' 'Did them2+fem get to hear?' 'Yes, them2+fem got to hear.'

1	2	3							4										5
pref	preceding	pronominal					Ver	b St	em C	lass									var/dist
#	environs	prefix		vow	el st	ems					con	sona	nt st	ems					pattern
		variant form	A	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern D
#24	ALL	hon-	х	х	х	х	х	Х											
		hodi-							Х	Х	Х	Х	Х	Х	х	Х	Х	Х	

				pronominal prefix 'meanings'	
	chart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
ĺ	24	hon	them2+masc	it > them2+masc	ø/?
				she $>$ them2+masc	

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q25. wa²heyatho·yę² khęh 'Did I tell him?' A30. hęhęh wa²hesatho·yę² 'Yes, you told him'

1	2	3							4										5
pref	preceding	pronominal					Ver	b St	em C	lass									var/dist
#	environs	prefix		vow	el st	ems					con	sona	nt st	tems					pattern
_		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern C
#25	ALL	hey-	Х	Х	х		Х	Х											
		he-				Х			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
25	hey	Ø	I > him	I > it >> him

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.26 wa'shagyatho·yę' khęh A. 'Did we tell him*?'
- A.31 hẹhẹh wa?hejyatho·yẹ? 'Yes, you told him*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb vowel stems					em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern A
#26	ALL	shagy-	Х	Х						1									
		shagn-			Х	Х	х	Х											
		shagni-							Х	х	х	х	х	Х	х	х	Х	х	

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
26	shagy	Ø	we2exc > him	we2exc > it >> him

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.27 wa'shagwatho ye' kheh A. 'Did we tell him*?'
- A.32 hẹhẹh wa'heswatho·yẹ' 'Yes, you told him*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems									var/dist pattern						
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern B
#27	ALL	shagw-	Х	Х	Х														
		shagy-					х	х											
		shagwę-				(x)													
		shagwa-							Х	Х	Х	х	х	х	Х	х	Х	Х	

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
27	shagw	Ø	we3+exc>him	we3+exc > it >> him

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.28 wa²shedyatho²ye² khęh 'Did we tell him^{*}?'
 - A.28 heheh wa'shedyatho·ye' 'Yes, we told him*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems										var/dist pattern					
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern A
#28	ALL	shedy-	Х	Х															
		shedn-			Х	Х	х	х											
		shedni-							Х	Х	х	Х	Х	Х	х	Х	Х	х	

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
28	hedy	Ø	we2inc > him	we2inc > it >> him

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.29 wa'shedwatho·yę' khęh A.2 'Did we tell him*?'
- A.29 hẹhẹh wa'shedwatho·yẹ? 'Yes, we told him*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	vel st	ems	Ver	b Ste	em C	lass	con	sona	nt st	ems					var/dist pattern
L		<u> </u>																	
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Η	?	J	S	Ν	W	Y	R	Pattern B
#29	ALL	shedw-	Х	Х	Х														
		shedy-					х	х											
		shedwę-				(x)													
		shedwa-							х	х	х	Х	х	х	х	х	Х	х	

_				pronominal prefix 'meanings'	
	chart #	variant for A-stem	with 1-party verb stem	with 2-party verb stem	with 2 parts work store
	# 29	1.1	with 1-party vero stem	we3+inc > him	with 3-party verb stem we3+inc > it >> him
l	29	hedw	Ø	wes+inc > iiiii	westing $2 \text{ tr} = 1000 \text{ mm}$

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info fin

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.30 wa'hesatho·yę' khęh 'Did you tell him?'
- A.25 hẹhẹh wa'heyatho·yẹ' 'Yes, I told him.'

1	2	3							4										5
pref	preceding	pronominal					Ver	b Ste	em C	ass									var/dist
#	environs	prefix		vowel stems							con	sona	nt st	ems					pattern
		variant form	Α	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern I
#30	ALL	hes-	х	Х	х		х	Х	х	Х	Х	х	Х	Х	Х	х		х	
		hej-				Х											Х		
		hese-	Bef	Before CC stems															

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
30	hes	Ø	you > him	you > it >> him

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.31 wa?hejyatho·yę? khęh 'Did you tell him*?'
- Q.31a wa'shejyatho ye' kheh 'Did he tell you*?'

A.26 hẹhẹh wa'shagyatho·yẹ' 'Yes, we told him*'A.35 hẹhẹh wa'shugyatho·yẹ' 'Yes, he told us*'

1	2	3							4										5
pref	preceding	pronominal					Ver	b Ste	em C	lass									var/dist
#	environs	prefix		vow	el st	ems					con	sona	nt st	tems					pattern
		variant form	A	Ę	E	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern A
#31	ALL	hejy-	х	х															
#31a		hesn-			Х	Х	х	Х											
		hesni-							х	Х	Х	Х	Х	Х	Х	Х	Х	Х	
	**** shejy- **** -s- variants occur occasionally but I am not sure what controls										-								
		shesn-	this	us variation															
		shesni-																	

pronominal prefix 'meanings'

	chart #	variant for A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
Ľ	31	hejy	Ø	you2 > him	you2 > it >> him
Ľ	31a	hejy	Ø	he > you2	he > it >> you2

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.32 wa'heswatho·yę' khęh 'Did you tell him*?'
- A.27 hẹhẹh wa'shagwatho·yẹ' 'Yes, we told him*'
- Q.32a wa²sheswatho³ye² kheh ⁶Did he tell you^{*}?

A.36 hẹhẹh wa'shugwatho·yẹ' 'Yes, he told us*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems											var/dist pattern				
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern B
#32	ALL	hesw-	х	Х	х														
#32a		hejy-					Х	х											
		heswę-				(x)													
		heswa-							Х	Х	Х	Х	Х	Х	Х	х	Х	Х	
	****	shesw-	***	* -s-	vari	ants	occu	r occ	asion	ally	but I	am	not s	ure v	vhat	cont	rols		•
		shejy-	this	s vari	iatio	n													
		sheswę-																	
		sheswa-																	

pronominal	prefix	'meanings'
prononnia	prena	meanings

chart	variant for								
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem					
32	hesw	Ø	you3+>him	you3+>it>> him					
32a	hesw	Ø	he > you3	he > it >> you3					

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.33 wa⁹huwatho·yę⁹ khęh 'Did she tell him*?'

A.33 hẹhẹh wa⁹hụwatho·yẹ⁹ 'Yes, she told him*'

1	2	3		4										5					
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems									var/dist pattern						
		1	A					Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern E
#33	ALL	hụw-	Х	Х	х														
	1	hụway-					х	х											
		hụwę-				(x)													
		huwa-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

pronominal prefix 'meaning	ronominal	refix 'm	eanings'
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chart	variant for								
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem					
33	hụw	Ø	she > him	she > it >> him					
			they2fem > him	they2fem > it >> him					
			they3+fem > him	they3+fem > it >> him					
			they2masc > him	they2masc > it >> him					
			they3+masc > him	they3+masc > it >> him					

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.34 wa?hagatho·yę? khęh 'Did he tell me?'
- A.37 hẹhẹh wa'hyatho·yẹ' 'Yes, he told you'

1	2	3		4									5						
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems									var/dist pattern						
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern F
#34	ALL	hag-	х	Х	х	х	х	х							Х	Х	х	х	
		hak-							х	Х	Х	Х	Х	Х					
		hah-								Х									
		hage-	Bef	fore CC stems															

pronominal prefix 'meanings'

C	hart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
	34	hag	Ø	he > me	he > it >> me

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Pronominal Prefix #35 Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.35 wa'shugyatho·yę' khęh 'Did he tell us*?' A.31a hęhęh wa'shejyatho·yę' 'Yes, he told you*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems								var/dist pattern							
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern A
#35	ALL	shugy-	Х	Х															
		shugn-			Х	Х	х	Х											
		shugni-							Х	Х	Х	Х	Х	Х	Х	Х	Х	х	

pronominal prefix 'meanings'

char	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
35	shụgy	Ø	he > us2	he > it >> us2

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.36 wa'shugwathoye' kheh 'Did he tell us*?'

A.32a hẹhẹh wa'sheswatho·yẹ' 'Yes, he told you*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems										var/dist pattern					
		variant form	A		-			Ų	Т	K						W	Y	R	Pattern B
#36	ALL	shugw-	Х	Х	Х														
	1	shụgy-					х	Х											
		shugwę-				(x)													
		shugwa-							Х	х	Х	Х	Х	Х	Х	х	Х	Х	

pronominal prefix 'meanings'

	chart #	variant for A-stem	with 1-party verb stem	with 2-party verb stem	with 2 north work storm
	#	A-stelli	with 1-party vero stelli	with 2-party vero stem	with 3-party verb stem
ſ	36	shụgw	Ø	he > us3+	he > it >> us3+

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Pronominal Prefix #37 Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.37 wa²hyatho·yę² khęh 'Did he tell you?' A.34 hęhęh wa²hagatho·yę² 'Yes, he told me'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb Stem Class									var/dist pattern						
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern E
#37	ALL	hy-	Х	Х	Х														
		hyay-					Х	Х											
		hyę				(x)													
		hya-							Х	х	х	х	х	х	х	х	Х	х	

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
37	hy	Ø	he > you	he > it >> you

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.38 wa'shagotho·yę' khęh 'Did he tell her*?'

A.38 hẹhẹh wa'shagotho·yẹ' 'Yes, he told her*'

1	2	3								4										5
pref	preceding	pronominal					Ver	b St	em	Cl	ass									var/dist
#	environs	prefix		vowel stems consonant stems								pattern								
		variant form	Α	Ę	E	Ι	0	Ų	r	Т	K	H	?	J	S	Ν	W	Y	R	Pattern G
#38	ALL	shago-	(x)	(x)		(x)				Х	Х	Х	Х	х	Х	х	х	Х	х	
		shagaw-		Х	Х															
		shaga-					Х	Х												
		shagow-	Bef	ore A	ARV	sten	ns								_					

pronominal prefix 'meanings'

(chart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
	38	shago	Ø	he > her	he > it >> her
-				he > them2+fem	he > it >> them2+fem
				he > them2+masc	he > it >> them2+masc

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info (fin

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.39 wa⁹kheyatho¹yę⁹ khęh A. ¹Did I tell her^{*}?¹
- A.42 hẹhẹh wa⁹sheyatho·yẹ⁹ 'Yes, you told her*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	el st	ems		b St	em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern C
#39	ALL	khey-	Х	Х	Х		Х	Х											
		khe-				Х			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

pronominal prefix 'meanings'

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
39	khey	Ø	I > her	I > it >> her
-			I > them2+fem	I > it >> them2+fem
			I > them2+masc	I > it >> them2+masc

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.40 wa'akhiyathoye' kheh 'Did we tell her*?'
- A.43 hẹhẹh wa'etshiyatho·yẹ' 'Yes, you told her*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems								var/dist pattern							
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern C
#40	elsewhere	yakhiy-	Х	Х	Х		Х	х											
		yakhi-				Х			х	Х	Х	Х	Х	Х	х	х	Х	Х	
	#/FAC?-	akhiy-																	
		akhi-																	

pronon	ninal prefix	'meanings'	

cha	rt variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
40	yakhiy	Ø	we2exc > her	we $2exc > it >> her$
-		-	we2exc > them2+fem	we2exc > it >> them2+fem
			we2exc > them2+masc	we2exc > it >> them2+masc
			we3+exc > her	we3+exc > it >> her
			we3+exc > them2+fem	we3+exc > it > > them2+fem
			we3+exc > them2+masc	we3+exc > it >> them2+masc

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.41 wa'ethiyatho·yę' khęh 'Did we tell her*?'
- A.41 hẹhẹh wa'ethiyatho·yẹ' 'Yes, we told her*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	vel st	ems		b Ste	em C	lass	con	sona	nt st	ems					var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	2	J	S	Ν	W	Y	R	Pattern C
#41	elsewhere	yethiy-	Х	Х	Х		х	х	1										
		yethi-				Х			х	Х	Х	х	Х	Х	Х	Х	Х	Х	
	#/FAC?-	ethiy-																	
		ethi-																	

			pronominal prefix 'meanings'	
chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
41	yethiy	Ø	we2inc > her	we2inc > it >> her
			we2inc > them2+fem	we2inc > it >> them2+fem
			we2inc > them2+masc	we2inc > it >> them2+masc
			we3+inc > her	we3+inc $>$ it $>>$ her
			we3+inc > them2+fem	we3+inc > it >> them2+fem
			we3+inc > them2+masc	we3+inc > it >> them2+masc

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.42 wa'sheyatho·yę' khęh A 'Did you tell her*?'
- A.39 hẹhẹh wa'kheyatho·yẹ' 'Yes, I told her*'

1	2	3							4										5
	preceding	pronominal			_			b Ste	em C	lass									var/dist
#	environs	prefix		vow	el st	ems					con	sona	nt st	ems					pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern C
#42	ALL	shey-	Х	х	х		Х	Х											
		she-				Х			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

pronominal prefix 'meanings'

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
42	shey	Ø	you > her	you > it >> her
			you > them2+fem	you > it >> them2+fem
			you > them2+masc	you > it >> them2+masc

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.43 wa²etshiyatho·yę² khęh 'Did you tell her*?'
- A.40 hệhệh wa'akhiyatho yệ' 'Yes, we told her*'
- Q.43a wa²etshiyatho³ye² kheh ²Did she tell you²?

A.48 hẹhẹh wa'ukhiyatho yẹ' 'Yes, she told us*'

1	2	3							4										5
pref	preceding	pronominal					Ver	b St	em (lass									var/dist
#	environs	prefix		vow	el st	ems					con	sona	nt st	tems					pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern C
#43	elsewhere	yetshiy-	х	Х	х		х	х											
#43a		yetshi-				Х			х	Х	х	Х	Х	Х	Х	х	Х	Х	
	#/FAC?-	etshiy-																	
		etshi-																	

			prononiniai prenx meanings					
chart #	variant for A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem				
43	yetshiy	Ø	you2 > her	you2 > it >> her				
-			you2 > them2+fem	you2 > it >> them2+fem				
			you2 > them2+masc	you2 > it >> them2+masc				
			you3+>her	you3+ > it >> her				
			you3+> them2+fem	you3+>it>>them2+fem				
			you3+> them2+masc	you3+> it >> them2+masc				
43a	yetshi	Ø	she > you2	she > it >>you2				
			they2fem > you2	they2fem > it >>you2				
			they3+fem > you2	they3+fem > it >>you2				
			they2masc > you2	they2masc > it >>you2				
			they3+masc > you2	they3+masc > it >>you2				
			she > you3+	she > it >> you $3+$				
			they2fem > you3+	they2fem > it >> you3+				
			they3+fem > you3+	they3+fem > it >> you3+				
			they2masc > you3+	they2masc > it >> you3+				
			they3+masc > you3+	they3+masc > it >> you3+				

pronominal prefix 'meanings'

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation Idiosyncratic infofin

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.44 wa'agonatho·yę' khęh 'Did they tell her*?'

A.44 hẹhẹh wa²agonatho·yẹ² 'Yes, they told her*'

1	2	3								4										5
pref #	preceding environs	pronominal prefix		vow	vel st	ems		b St	em	n Cl	ass	con	sona	nt st	tems					var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų		Т	K	Н	?	J	S	Ν	W	Y	R	Pattern D
#44	elsewhere	yagon-	х	х	х	х	х	х												
		yagodi-								Х	Х	Х	Х	Х	Х	х	х	Х	Х	
	?-	agon-																		-
		agodi-																		
	#	gon-																		
		godi-	1																	

pronominal	prefix	'meanings'	

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
44	yagon	Ø	they2fem > her	they2fem > it >> her
			they3+fem > her	they3+fem > it >> her

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.45 wa'shagonatho·yę' khęh A.45 hęh 'Did they tell her*?' 'Ye

A.45 hẹhẹh wa'shagonatho·yẹ' 'Yes, they told her*'

1	2	3							4										5
pref	preceding	pronominal					Ver	b Ste	em C	lass									var/dist
#	environs	prefix		vow	vel st	tems					con	sona	nt st	tems					pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern D
#45	ALL	shagon-	х	Х	Х	Х	Х	х											
		shagodi-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

pronominal prefix 'meanings'

L	chart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
	45	shagon	Ø	they2masc > her	they2masc > it >> her
_				they3+masc > her	they3+masc > it >> her
				they2masc > them 2+fem	they2masc > it >> them2+fem
				they3+masc > them2+fem	they3+masc > it >> them2+fem

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Pronominal Prefix #46 Properties

(1) Forms

- (2) Meanings
- (3) Conversational Pair
- Q.46 wa²ugatho²ye² kheh 'Did she tell me^{*}?' A.49 heheh wa²esatho²ye² 'Yes, she told you^{*}'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems									var/dist pattern						
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern F
#46	elsewhere	yug-	х	Х	Х	Х	Х	х							Х	Х	Х	Х	
		yųk-							Х	Х	Х	Х	Х	Х					
		yụh-								Х									
		yųge-	Bef	ore C	CC st	ems				_	_			_	_	_		_	
	#/FAC?-	ųg-																	
		ųk-																	
		uh-																	
		ųge-																	

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
46	yụg	Ø	she > me	she > it >> me
			they2fem > me	they2fem > it >> me
			they3+fem > me	they3+fem > it >> me

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.47 wa'hugatho·yę' kheh 'Did they tell me*?' A.49 heheh wa'esatho·ye' 'Yes, they told you*'

1	2	3		4								5							
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems							var/dist pattern								
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern F
#47	ALL	hụg-	х	Х	Х	Х	Х	х							Х	Х	Х	Х	
	1	hụk-							Х	Х	Х	Х	Х	Х					
		hụh-								Х									
		hụge-	Bef	efore CC stems															

pronominal prefix 'meanings'

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
47	hụg	Ø	they2masc > me	they2masc > it >> me
-			they3+masc > me	they3+masc > it >> me

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.48 wa'ukhiyatho ye' kheh 'Did she tell us*?'

A.43a heheh wa'etshiyatho·ye' 'Yes, she told you*'

1	2	3							4										5
	preceding	pronominal		Verb Stem Class							var/dist								
#	environs	prefix		vowel stems consonant stems						pattern									
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern C
#48	elsewhere	yukhiy-	Х	х	х		х	х											
		yukhi-				Х			х	Х	Х	Х	Х	Х	Х	Х	Х	х	
	#/FAC?-	ųkhiy-																	•
		ukhi-																	

_			pronominal prefix 'meanings'	
chart #	variant for A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
48	yụkhiy	Ø	she > us2	she > it >> us2
			they2fem > us2	they2fem > it >> us2
			they3+fem > us2	they3+fem > it >> us2
			they2masc > us2	they2masc > it >> us2
			they3+masc > us2	they3+masc > it >> us2
			she > us3+	she > it >> us3+
			they2fem > us3+	they2fem > it >> us3+
			they3+fem>us3+	they3+fem > it >> us3+
			they2masc > us3+	they2masc > it >> us3+
			they3+masc >us3+	they3+masc > it >> us3+

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Pronominal Prefix #49 Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.49 wa'esatho·yę' khęh 'Did she tell you*?' A.46 hęhęh wa'ugatho·yę' 'Yes, she told me*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems										var/dist pattern					
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Η	?	J	S	Ν	W	Y	R	Pattern E
#49	elsewhere	yes-	Х	Х	Х														
		yesay-					Х	х											
		yesę-				(x)													
		yesa-							Х	Х	Х	Х	Х	Х	Х	х	Х	Х	
	#/FAC?-	es-																	
		esay-																	
		esę-																	
		esa-																	

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
49	yes	Ø	she > you	she > it >> you
			they2fem > you	they2fem > it >> you
			they3+fem > you	they3+fem > it >> you
			they2masc > you	they2masc > it >> you
			they3+masc > you	they3+masc > it >> you

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.50 wa⁹guwatho·yę⁹ khęh 'Did she tell her*?'
- A.50 hẹhẹh wa²guwatho·yẹ² 'Yes, she told her*'

1	2	3							4										5
pref	preceding	pronominal		Verb Stem Class									var/dist						
#	environs	prefix		vowel stems consonant stems								pattern							
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern E
#50	ALL	gųw-	Х	Х	Х														
		gụway-					Х	Х											
		gụwę-				(x)													
		gụwa-							Х	х	Х	Х	х	х	х	х	Х	Х	

pronominal prefix 'meanings'

C	chart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
	50	gųw	Ø	she > her	she > it >> her
				? they2fem > it (see 12)	ø/?
				? they3+fem > it (see13)	ø/?
				? they2masc > it (see14)	ø/?
				? they3+masc > it (see15)	ø/?

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.51 wa'guwanatho·yę' khęh A.51 he 'Did they tell them*?'
- A.51 hẹhẹh wa²guwanatho·yẹ² 'Yes, they told them*'

1	2	3							4										5
	preceding environs	pronominal			al at			b St	em C	lass		aana	nt at						var/dist pattern
#	environs	prefix		vow	vel st	ems					con	sona	int si	ems					pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	H	?	J	S	Ν	W	Y	R	Pattern D
#51	ALL	guwan-	Х	Х	Х	Х	Х	Х											
		gụwadi-							Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

pronominal prefix 'meanings'

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
51	guwan	Ø	she > them2+fem	she > it >> them2+fem
			they2fem > them2+fem	they2fem > it >> them2+fem
			they3+fem > them2+fem	they3+fem > it >> them2+fem

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.52 wa'huwanatho ye' kheh A 'Did they tell them*?'
- A.52 hẹhẹh wa?hụwanatho·yẹ? 'Yes, they told them*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		VOW	vel st	ems		b Ste	em C	lass	con	sona	nt st	ems					var/dist pattern
		prenx				-								-					
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Η	?	J	S	Ν	W	Y	R	Pattern D
#52	ALL	hụwan-	Х	Х	Х	Х	Х	Х	1										
		(hụwẹn-)			h	h	h	h											(pat h)
		(hụwadiy-)	с	с	с		с	с											(pat c)
		hụwadi-				с			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	

pronominal prefix 'meanings'

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
52	hụwan	Ø	she > them2+masc	she > it >> them2+masc
-			they2fem > them2+masc	they2fem > it >> them2+masc
			they3+fem > them2+masc	they3+fem > it >> them2+masc
			they2masc > them2+masc	they2masc > it >> them2+masc
			they3+masc > them2+masc	they3+masc > it >> them2+masc

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.53 wa'guyatho·yę' khęh A.56 'Did I tell you?'
- A.56 hẹhẹh wa'sgatho·yẹ' 'Yes, you told me'

1	2	3							- 4										5
pref #	preceding environs	pronominal prefix		vow	vel st	ems		b Ste	em (Class	con	sona	nt st	tems					var/dist pattern
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern C
#53	ALL	gụy-	Х	Х	Х		Х	Х											
		gų-				Х			Х	Х	Х	Х	Х	Х	Х	х	Х	х	
		gųw-	Before ARV stems																

pronominal	prefix	'meanings'
promonina	prom	meanings

ch	rt variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
5		Ø	I > you	I > it >> you

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.54 wa'gyathoye' kheh 'Did we tell you*?'
- A.57 hẹhẹh wa'sgyatho·yẹ' 'Yes, you told us*'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	vel st	ems	Ver	b Ste	em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern A
#54	ALL	gy-	Х	Х															
		gn-			Х	Х	Х	Х											
		gni-							Х	Х	Х	х	х	Х	Х	х	Х	х	

pronominal prefix 'meanings'

	chart	variant for			
	#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
ĺ	54	gy	Ø	I > you2	I > it >> you2
				we2(exc) > you2	we2(exc) > it >> you2
				we2(exc) > you	we2(exc) > it >> you

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.55 wa⁹gwatho·yę⁹ khęh 'Did we tell you*?'
- A.58 hẹhẹh wa'sgwatho·yẹ' 'Yes, you told us*'

1	2	3							4										5
pref	preceding	pronominal					Ver	b Ste	em C	lass									var/dist
#	environs	prefix		vow	vel st	ems					con	sona	nt st	ems					pattern
		A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern B	
#55	ALL	gw-	Х	х	Х														
		gy-					х	х											
		gwę-				(x)													
		gwa-							Х	х	х	х	х	х	х	х	х	х	

pronominal prefix 'meanings'

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
55	gw	Ø	I > you3+	I > it >> you3+
			we2(exc) > you3+	we2(exc) > it >> you3+
			we3+(exc) > you3+	we3+(exc) > it >> you3+
			we3+(exc) > you 2	we3+(exc) > it >> you 2
			we3+(exc) > you	we3+(exc) > it >> you

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.56 wa'sgathoye' kheh 'Did you tell me?'
- A.53 hẹhẹh wa'guyatho·yẹ' 'Yes, I told you'

1	2	3							4										5
pref #	preceding environs	pronominal prefix		vow	el st	ems	Ver	b Ste	em C	lass	con	sona	nt st	tems					var/dist pattern
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Unique
#56	ALL	sg-	х	Х	Х	Х	Х	Х							Х	Х	Х	Х	
		sk-							х		х	Х	Х	Х					
sge- Before K stems and CC stems																			

pronominal	prefix	'meanings'

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
56	sg	Ø	you > me	you > it >> me

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.57 wa'sgyathoyę' khęh 'Did you tell us*?'
- A.54 hẹhẹh wa'gyatho·yẹ' 'Yes, we told you*'

1	2	3		4										5					
pref #	preceding environs	pronominal prefix		Verb Stem Class vowel stems consonant stems									var/dist pattern						
		variant form	Α	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	N	W	Y	R	Pattern A
#57	ALL	sgy-	Х	Х															
		sgn-			Х	Х	Х	Х											
		sgni-							Х	Х	Х	Х	Х	х	х	Х	Х	х	

pronominal prefix 'meanings'

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
57	sgy	Ø	you > us2	you > it >> us2
			you2 >us2	you2 > it >> us2
			you2 > me	you2 > it >> me

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.58 wa²sgwatho·yę² khęh 'Did you tell* us?'
- A.55 hẹhẹh wa'gwatho·yẹ' 'Yes, we told you*'

1	2	3							4										5
pref	preceding	pronominal		Verb Stem Class										var/dist					
#	environs	prefix		vowel stems					consonant stems									pattern	
		variant form	A	Ę	Е	Ι	0	Ų	Т	K	Н	?	J	S	Ν	W	Y	R	Pattern B
#58	ALL	sgw-	Х	х	Х														
		sgy-					Х	Х											
		sgwę-				(x)													
		sgwa-							Х	Х	х	Х	х	х	х	х	х	Х	

pronominal prefix 'meanings'

chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
58	sgw	Ø	you > us3+	you > it >> us3+
			you2 > us3+	you2 > it >> us3+
			you3+>us3+	you3 + > it >> us3 +
			you3+>us2	you3+>it>>us2
			you3+>me	you3+>it>>me

Other var/dist pattern #s

Conversational Pair -example

Horizontal conjugation

Idiosyncratic info

Properties

- (1) Forms
- (2) Meanings
- (3) Conversational Pair
- Q.59 wa'udadatho yę' khęh 'Did she tell her?'

A.59 hẹhẹh wa'udadatho·yẹ' 'Yes, she told her'

1	2	3		4										5						
		pronominal prefix		Verb Stem Class vowel stems consonant stems										var/dist pattern						
		variant form	A	Ę	Е	Ι	0	Ų		Т	K	Н	?	J	S	Ν	W	Y	R	Unique
#59	elsewhere	yudad-	Х	Х	Х	Х	Х	Х								х	Х	Х	х	
		yudat-								х	Х	Х	Х	Х	Х					
		yudade-	Bef	ore C	CC st	ems														-
	#/FAC?-	udad-																		
		ųdat-																		
		ųdade-	1																	

pronominal prefix 'me	anings'
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chart	variant for			
#	A-stem	with 1-party verb stem	with 2-party verb stem	with 3-party verb stem
59	yuddad	Ø	she > her	she > it > her
			one > another	one > it >> another

Other var/dist pattern #s

Conversational Pair –example

Horizontal conjugation

Idiosyncratic info