A HISTORY OF THE IROQUOIAN LANGUAGES

by

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ABSTRACT

The Iroquoian language family is indigenous to eastern North America. It has both a

southern branch, represented by Cherokee, and a northern branch, represented by

Huron, Mohawk, and Tuscarora, among others. The languages are notable for their rich

inflectional morphology and complex patterns of allomorphy, as well as their small

numbers of consonant phonemes which nonetheless yield complex consonant clusters.

To date, the history of the Iroquoian languages has been limited to short summaries,

and formal reconstruction of the phonology and morphology of Proto-Iroquoian (PI) has

not been undertaken. This work represents the first systematic attempt to reconstruct PI

phonology and morphology and trace subsequent developments through to modern

languages. The comparative method has been used, but the theoretical disposition of

the work is otherwise neutral and should permit interpretation of the data by

researchers of any theoretical persuasion.

Chapter 1 outlines previous studies in Iroquoian historical linguistics and addresses

issues of time depth, subgrouping, borrowing, and inheritance. Chapter 2 presents the

phonemic inventory, phonology, and morphology of PI as reconstructed through

comparison of Cherokee and Proto-Northern Iroquoian (PNI). Fifteen chapters follow

that relate the phonological and morphological changes separating each descendant

language from its parent stage. Evolution of Cherokee from PI is described in Chapter 3.
The descent of PNI from PI is detailed in Chapter 4. Development of Proto-Tuscarora-
Nottoway (PTN) from PNI is related in Chapter 5, and development of Tuscarora and
Nottoway from PTN in Chapters 6 and 7. Development of Susquehannock and
Laurentian from PNI is discussed in Chapters 8 and 9. Descent of Proto-Mohawk-Oneida
(PMO) from PNI is presented in Chapter 10, and the evolution of Mohawk and Oneida
from PMO in Chapters 11 and 12. Development of Onondaga, Cayuga, Seneca, and
Huron from PNI is related in Chapters 13 through 16, and development of Wyandot
from Huron is described in Chapter 17. Chapter 18 discusses fragmentary languages:
Meherrin, Wenro, Erie, and Neutral.

Data for this study were gathered from primary sources (dictionaries, grammars,
word lists), and cognate sets upon which reconstructions in the study are based are
included in two appendices.

ACKNOWLEDGEMENTS

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LIST OF MAPS

LANGUAGE ABBREVIATIONS

AkMo.	Akwesasne Mohawk
AOo.	Archaic Onondaga
Ca.	Cayuga (Common Cayuga)
CaMo.	Caughnawaga Mohawk
Ch.	Cherokee (Common Cherokee)
CoHu.	Cord Huron
Hu.	Huron (Common Huron-Petun)
La.	Laurentian
LoHu.	Lorette Huron
Mo.	Mohawk (Common Mohawk)
NBeHu.	Northern Bear Huron
No.	Nottoway
Oe.	Oneida (Common Oneida)
OkMo.	Oka Mohawk
OMo.	Old Mohawk
Oo.	Onondaga
OOo.	Old Onondaga
PeHu.	Petun Huron (Dialect)
PI	Proto-Iroquoian
PMO	Proto-Mohawk-Oneida
PNI	Proto-Northern Iroquoian
PTN	Proto-Tuscarora-Nottoway
RoHu.	Rock Huron
SBeHu.	Southern Bear Huron
Se.	Seneca
SNMo.	Six Nations Mohawk
Su.	Susquehannock
Tu.	Tuscarora (Common Tuscarora)
TyMo.	Tyendinaga Mohawk
WaMo.	Wahta Mohawk
Wy.	Wyandot

GRAMMATICAL ABBREVIATIONS

ALPOSS	alienable possession
ASRT	assertive modal suffix
CHAR	characterizer suffix
CLOC	cislocative prefix
COIN	coincident prefix
DEP	dependent verb form
DUPL	duplicative prefix
FACT	factual prefix
FUT	future prefix
FUTR	future suffix
HAB	habitual modal suffix
IMPF	imperfective base
INDC	indicative modal suffix
INDP	independent verb form
INPOSS	inalienable possession
JOIN	joiner vowel
NSA	non-singular animate prefix
NSAM	masculine non-singular animate prefix
NSFX	noun suffix
PART	partitive prefix
PERF	perfect base
PLUR	pluralizer suffix
PPRF	past perfect suffix
PRES	present base
PUNC	punctual base
REFL	reflexive prefix
REP	repetitive prefix
TLOC	translocative prefix

PRONOMINAL PREFIX ABBREVIATIONS

1	first person
1DU	first person dual number
1NS	first person non-singular number
1PL	first person plural number
1SG	first person singular number
1 + 2DU	first person inclusive dual number
1 + 2NS	first person inclusive non-singular number
1 + 2PL	first person inclusive plural number
1 + 3DU	first person exclusive dual number
1 + 3NS	first person exclusive non-singular number
1 + 3PL	first person exclusive plural number
2	second person
2DU	second person dual number
2NS	second person non-singular number
2PL	second person plural number
2SG	second person singular number
3	third person
3A	third person animate
3I	third person indefinite
3DU	third person dual number
3DUM	third person dual number masculine
3M	third person masculine
3NS	third person non-singular number
3PL	third person plural number
3PLM	third person plural number masculine
3SGA	third person singular number animate
3SGM	third person singular number masculine
.DU	at least one argument dual number, neither plural number
.IMP	imperative verb
.M	at least one male present
.PL	at least one argument plural number
.SG	both arguments singular number
(A):(B)	(A) acting on (B)
(A)&(B)	(A) and (B) interacting

Map 1   The Iroquoian Language Family
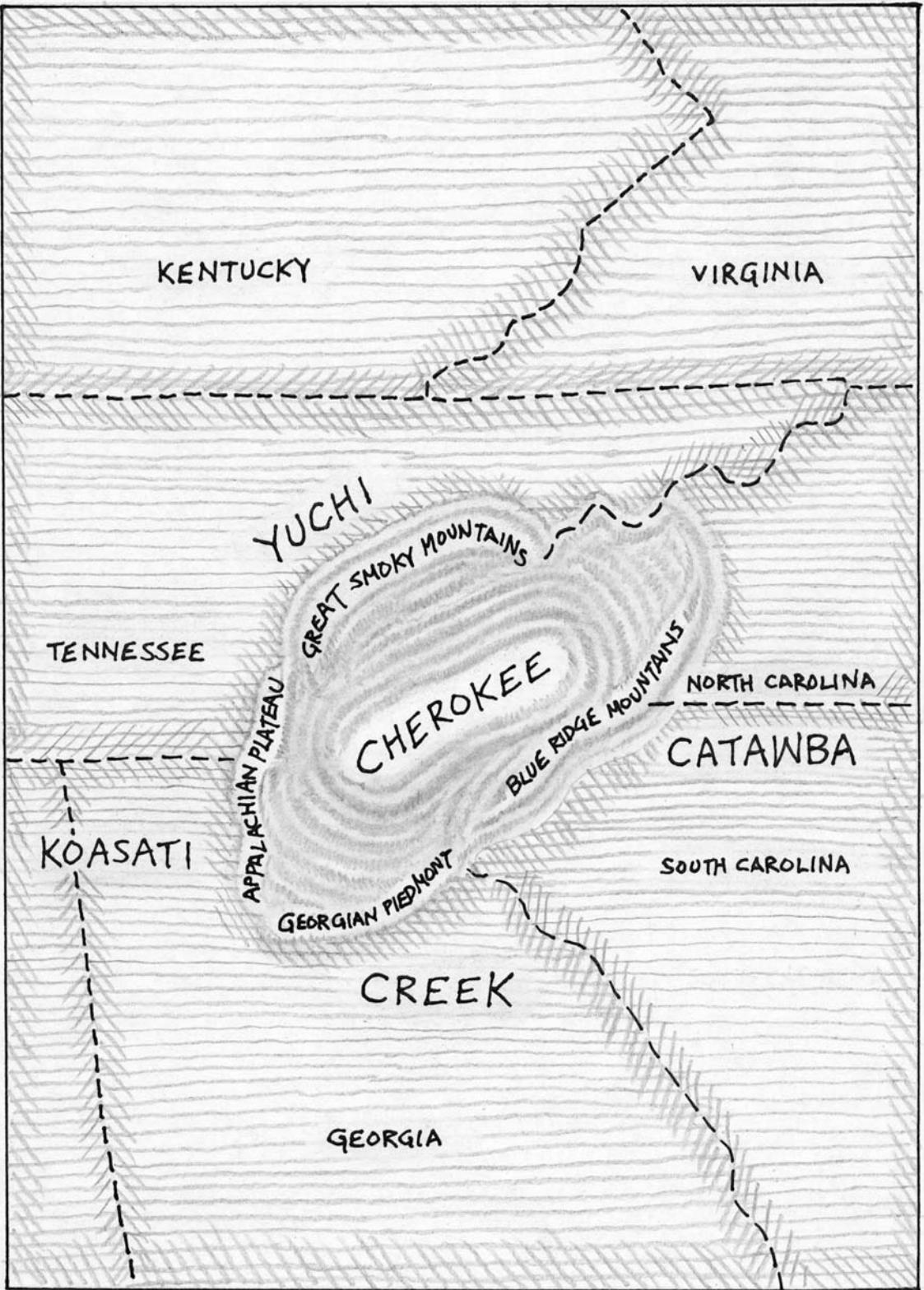
Map 2   Cherokee
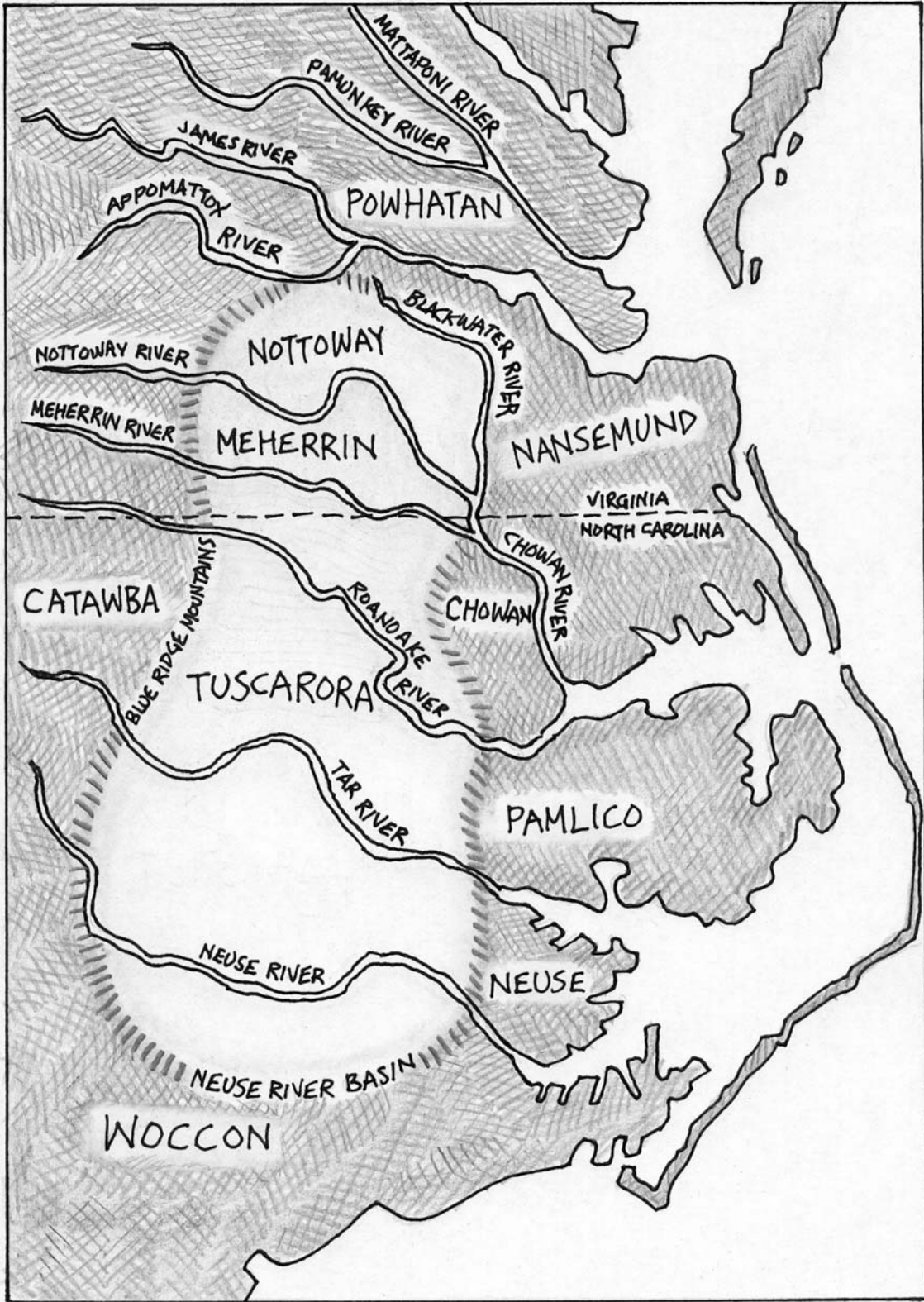
Map 3   The Coastal Plain

Map 4   Susquehannock
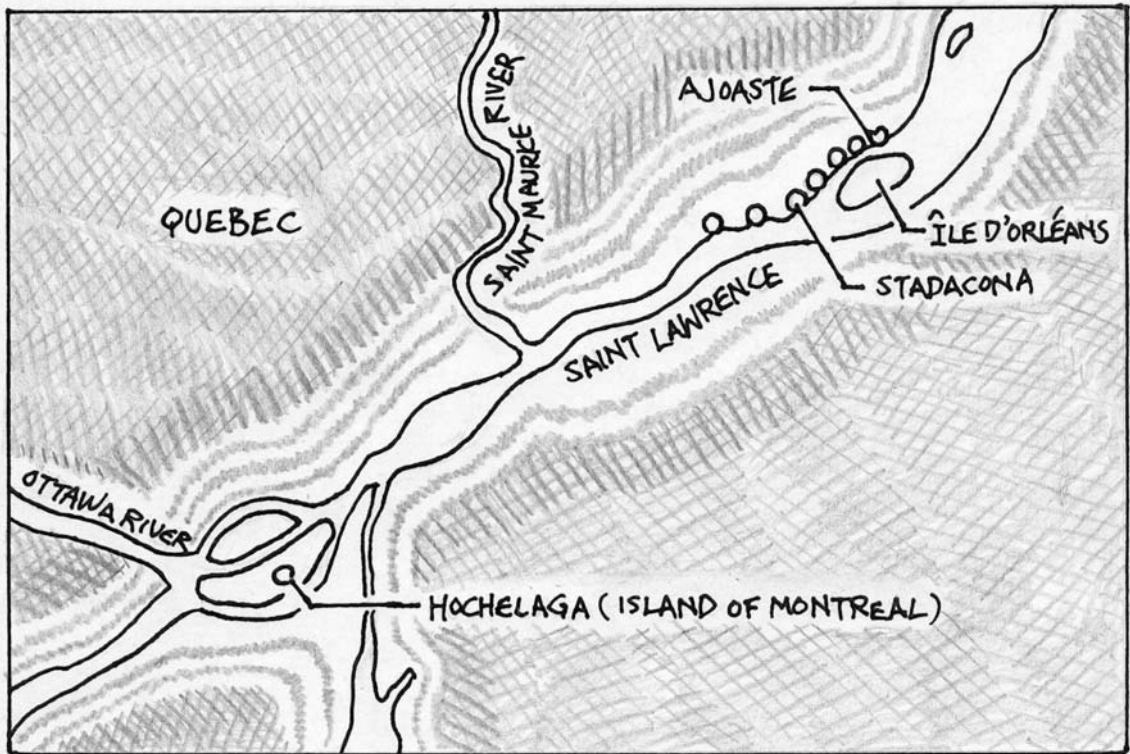
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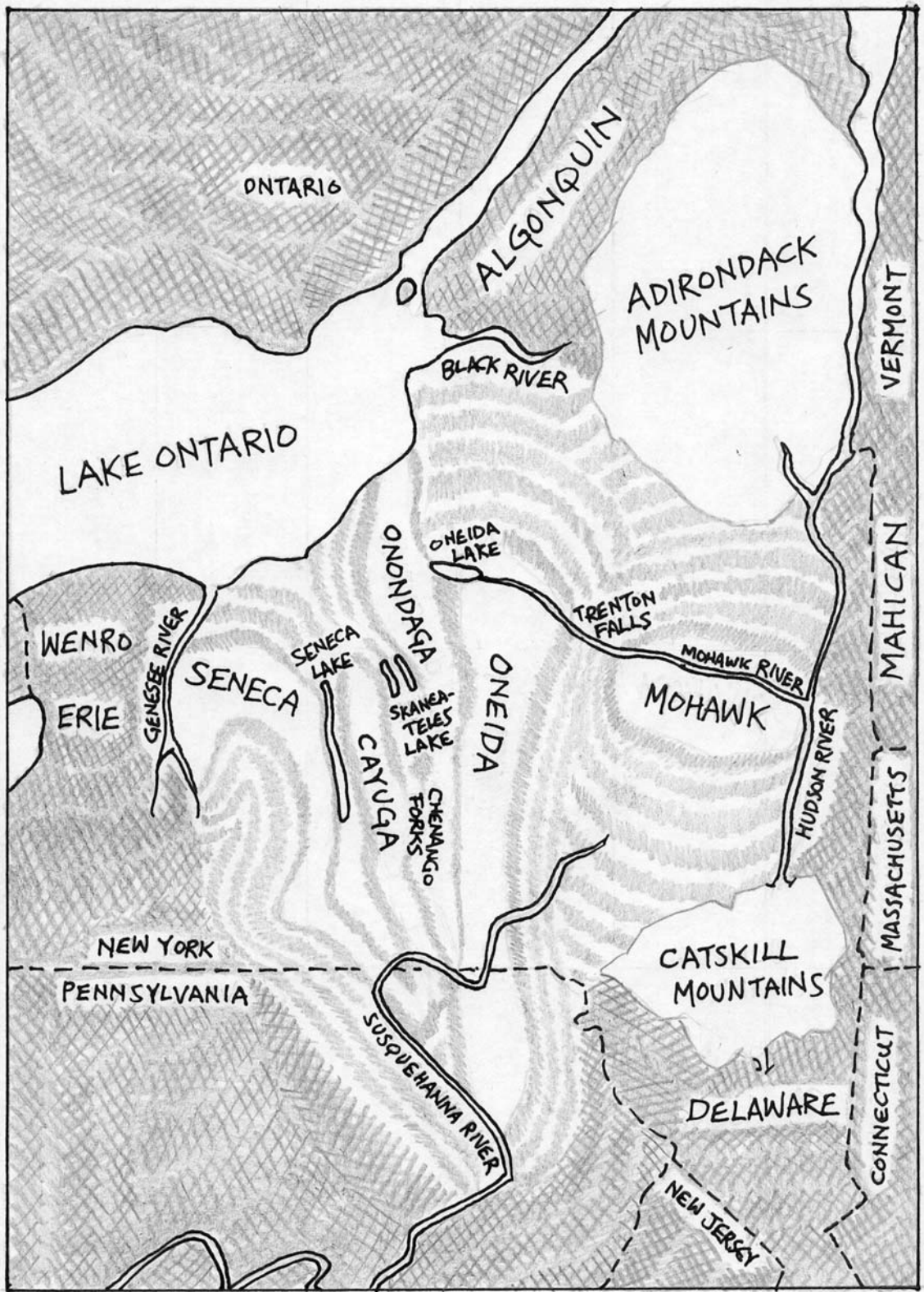
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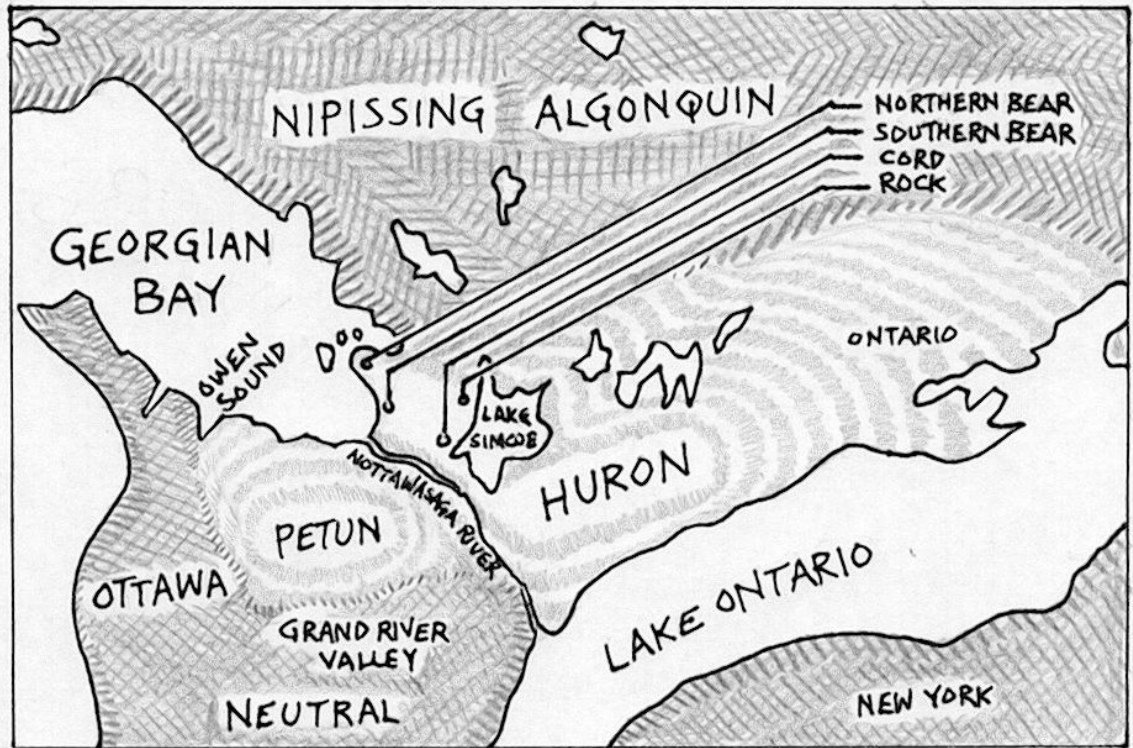
Map 7   Huronia
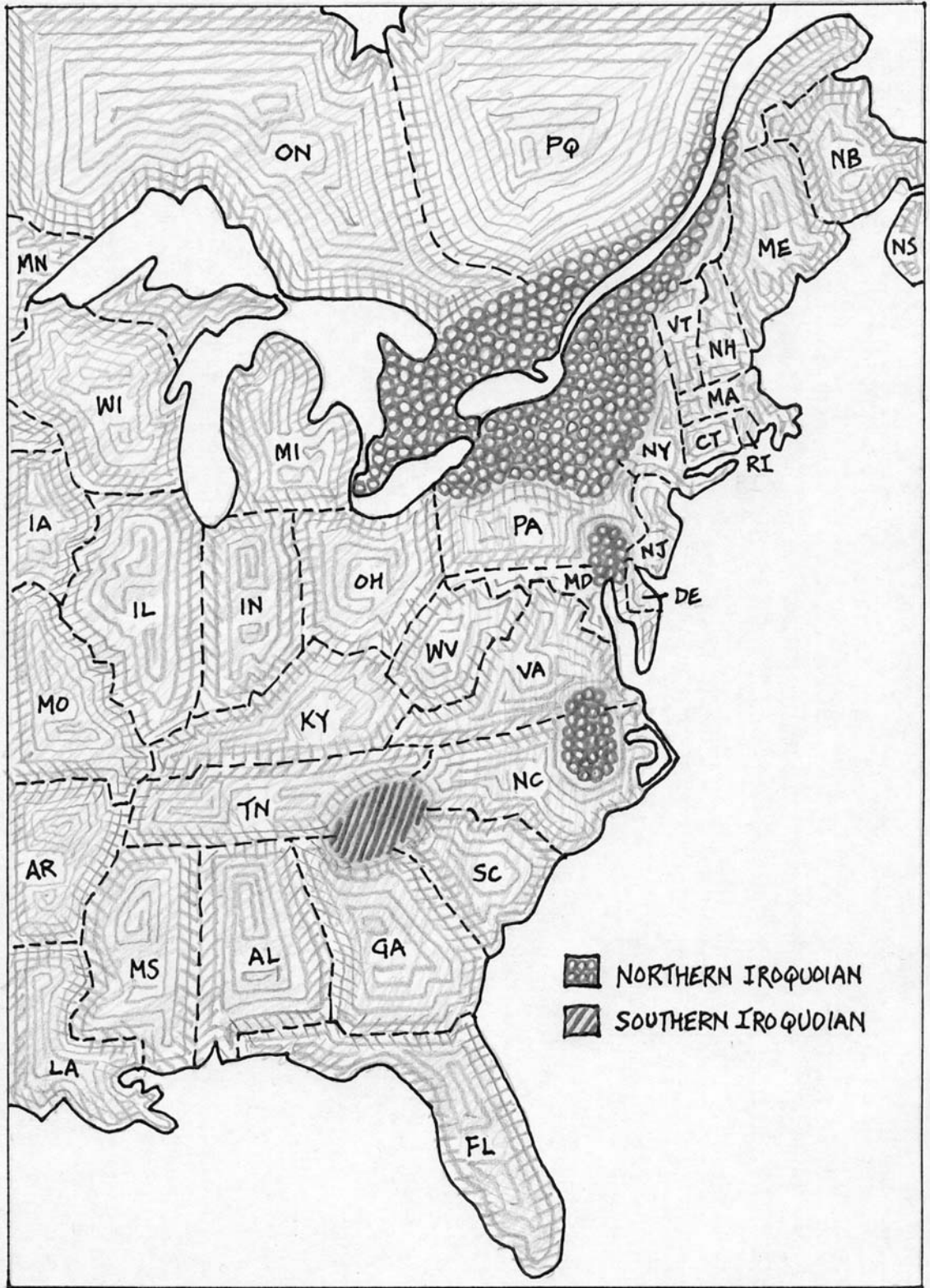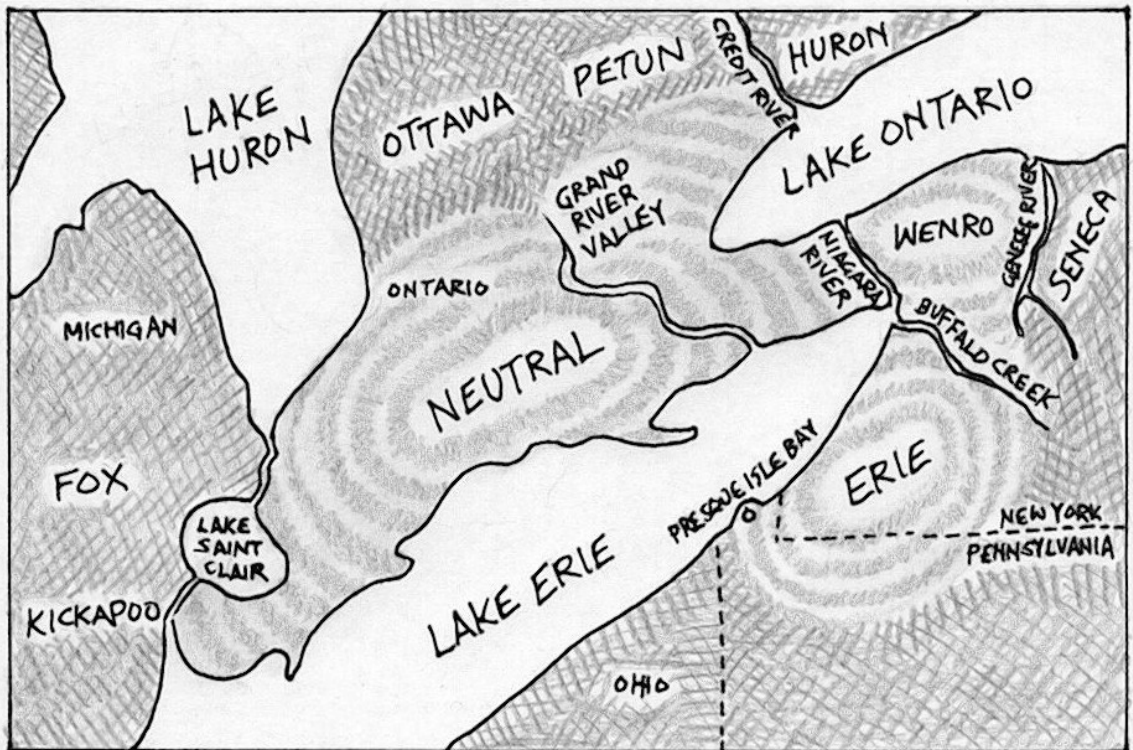

Map 8   Wenro, Erie, and Neutral

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

I have written this dissertation with the aim of addressing questions that I myself

had about the Iroquoian language family when I began my research, in particular

questions about Proto-Iroquoian, the ancestor from which all of the languages derive.

My hope is that it can serve as a basis for future diachronic inquiry, and as an

introduction to the developmental history of the language family as a whole for anyone

who might be interested. The bulk of the work consists of sixteen chapters, each

diachronically descriptive in nature, seven of which relate to living Iroquoian languages

(Cherokee, Tuscarora, Mohawk, Oneida, Onondaga, Cayuga, and Seneca), five of

which relate to extinct Iroquoian languages for which some reasonable written record

has survived (Nottoway, Susquehannock, Laurentian, Huron, and Wyandot), and four

of which relate to unattested earlier stages in the Iroquoian family tree, which have

here been reconstructed by means of the comparative method (Proto-Iroquoian, Proto-

Northern Iroquoian, Proto-Tuscarora-Nottoway, and Proto-Mohawk-Oneida). With the

exception of the chapter on Proto-Iroquoian, each of the chapters 'descends' from

another (e.g. Mohawk from Proto-Mohawk-Oneida, Proto-Mohawk-Oneida from Proto-

Northern-Iroquoian, and Proto-Northern Iroquoian from Proto-Iroquoian), so that

innovations alone are noted, and continuity from mother language chapter to daughter

language chapter can otherwise generally be assumed. A final chapter provides

information relating to fragmentary Northern Iroquoian languages (Meherrin, Wenro,

Erie, and Neutral), and two appendices supply 498 cognate sets upon which

reconstructions in this dissertation are based; these cognate sets are referenced

throughout the work using superscript numbers that resemble footnotes

(e.g. PNI * { -õweh } 'authenticative suffix' [124], PI * { -hsnuːɹiʔ } 'be fast' [258]).

I have used IPA to represent phonological forms throughout the text, with a star

(*) to represent reconstructed forms and x ([x]) to represent non-existent forms. The

methodology I have employed in reconstructing the four proto-language stages is

related in introductions to these respective chapters. In reconstituting Susquehannock,

Laurentian, and Huron forms from orthographic sources, I have adhered to a 'principle

of conservative reconstruction', whereby phonological features of the reconstructed

mother language (Proto-Northern Iroquoian) that have not demonstrably changed in

orthographic forms are assumed to have been continued. Thus, for example, Huron

<i8at> 'il y a q.c. dedans' is taken to represent / ˈiːwaːt /, with lengthening of the

penultimate vowel and long / aː / in the final syllable (cf. PNI * / ˈiːwaːt /

'it is within' [159]), since definitive change of these features in Huron relative to

Proto-Northern Iroquoian cannot be discerned from the orthography in which Huron was recorded.

Three sections follow which provide background information relating to the languages, previous diachronic studies relating to Iroquoian, and theoretical issues relating to time depth, subgrouping, borrowing, and genetic inheritance.

1.2 THE IROQUOIAN LANGUAGE FAMILY

The Iroquoian language family is indigenous to eastern North America (see Map 1). The southern branch of Iroquoian consists of a single language, Cherokee, which historically was spoken in the Allegheny Mountains at the juncture of what are now the states of North Carolina, Georgia, Alabama, and Tennessee. Cherokee differs substantially from all other known Iroquoian languages, which, in contrast, belong to the Northern branch of Iroquoian.

Attested Northern Iroquoian languages include Tuscarora, originally spoken in what is now northeastern North Carolina; Nottoway, an extinct language once spoken in what is now southeastern Virginia; Susquehannock, an extinct language once spoken in what is now eastern Pennsylvania; Laurentian, an extinct language spoken along the northern shore of the Saint Lawrence River prior to the seventeenth century; the languages of the

Five Nations Iroquois Confederacy (Mohawk, Oneida, Onondaga, Cayuga, and Seneca),

historically spoken in what is now New York State; Huron, the extinct common

language of the Huron and Petun Confederacies, originally spoken south and east of

Lake Huron in what is now Ontario; and Wyandot, a language that descends from the

Petun dialect of Huron and was spoken at the Wyandotte Reservation in Oklahoma until

the early twentieth century. Several other Northern Iroquoian languages are known to

have existed, but became extinct before they could be sufficiently documented

(see Chapter 18).

1.3 PREVIOUS STUDIES IN IROQUOIAN HISTORICAL LINGUISTICS

The most significant studies in Iroquoian historical linguistics to date are Chafe

(1977a) and Michelson (1988), in which the accent pattern of Proto-Lake Iroquoian is

reconstructed through comparison of accent patterns in the languages of the Five

Nations Proper (note that the reconstructed pattern holds for Proto-Northern Iroquoian

even after evidence from Tuscarora and Huron has been introduced) and Rudes (1995),

in which the vowel system of Proto-Iroquoian is reconstructed through comparison of

Cherokee and Northern Iroquoian lexical items, and 100 items of reconstructed

vocabulary are presented. Another, somewhat briefer study of Proto-Iroquoian is

Lounsbury (1961), which gives a glottochronological estimate of 3,500 to 3,800 years

for the separation of Proto-Iroquoian and Proto-Northern Iroquoian, and posits a set of

peripheral vs. inner Iroquoian isoglosses on the basis of five vocabulary items and one

shared morphological trait. Lounsbury (1978) and Mithun (1979) present summaries of

the family, as well as models for the subgrouping of the Northern Iroquoian languages

and sketches of characteristic sound changes that have occurred in some of the

languages, and Mithun (1999) also presents an overview of the family. Mithun (1982)

examines the diachronic development of particles and interjections across the family,

and Mithun (1986) examines the diachronic development of evidentials. Chafe (1984),

Chafe & Foster (1981), and Mithun (1985) examine internal relations among the

Northern Iroquoian languages.

Several works have investigated diachronic aspects of individual Iroquoian

languages. Allophonic and allomorphic properties of Seneca are accounted for using

language-internal reconstruction in Chafe (1959). Historical-comparative aspects of

Proto-Tuscarora-Nottoway phonology are discussed in Rudes (1976), and the

reconstructed phonology of Nottoway is presented in Rudes (1981a). The reconstructed

phonology of Susquehannock is presented in Mithun (1981a), and philological

comparison of Old Mohawk and Modern Mohawk is presented in Michelson (1981a).

Diachronic loss of the phoneme * / ɹ / in Onondaga is discussed in Woodbury (1981)

and in Michelson (1986). Diachronic development of Cayuga accent is investigated in

Foster (1982), and diachronic aspects of the phonology and morphology of Wyandot are

discussed in Kopris (2001).

Mithun (1984b) undertakes a linguistically-based study of Proto-Iroquoian and

Proto-Northern Iroquoian origins, in which potentially cognate lexical items from

different Iroquoian languages are assembled in order to discern what flora, fauna, and

other items may have been present in the Proto-Iroquoian and Proto-Northern Iroquoian

homelands. Several studies by Chafe (1964a, 1973, 1976) have examined possible deep

genetic links between the Iroquoian, Siouan, and Caddoan language families, and the

potential subgrouping of these into a Macro-Siouan stock. Rudes (1974) outlines

possible sound changes separating Proto-Siouan-Yuchi from Proto-Iroquoian-Caddoan.

Chafe (1977b) examines the evolution of third person pronominal prefixes in Proto-

Iroquoian and Proto-Northern Iroquoian within a Macro-Siouan paradigm.

Reconstructions in the latter study differ from those found in the present work, but do

present an interesting alternative reconstruction for third person pronominal prefixes.

Note that although marginally recoverable genetic links between Iroquoian and other

language families remain a real possibility, reconstructions in the present study have

been based only on evidence internal to the Iroquoian language family.

1.4 TIME DEPTH, SUBGROUPING, BORROWING, AND INHERITANCE

The approximate time depth at which Proto-Iroquoian may initially have broken

into Northern and Southern branches is difficult to assess due to uncertain rates of

lexical replacement and retention in descendant languages. Lounsbury (1961:11)

proposes a glottochronological estimate of 3,500 to 3,800 years before present on the

basis of 37.8% to 34.3% retention of core vocabulary between Cherokee and two

Northern Iroquoian languages (Oneida and Tuscarora). My own comparison of core

vocabulary across Iroquoian languages (below) suggests far lower rates of cognacy

between the two branches of Iroquoian, however, ranging from 24% between Cherokee

and Onondaga to just 19% between Cherokee and Cayuga.

Theoretical issues also arise in the subgrouping of the Northern Iroquoian

languages, where one must take into account the influence that areal innovation and

borrowing of vocabulary from neighbouring languages may have had on present rates

of cognacy among the languages. Generally speaking, the Northern languages have not

borrowed vocabulary from non-Iroquoian languages with the exception of a very few

recent loanwords from European languages, all of which are nouns (e.g. Modern

Mohawk / ˈtsihs / 'cheese' from English, and / akʷaˈtə̃ht / 'my aunt', from French '*(ma) tante*'). In contrast to this marginal pattern of borrowing from non-Iroquoian languages, however, borrowings from neighbouring Iroquoian languages may have been frequent and unimpeded by restrictions of lexical class. For example, among the core vocabulary of the Swadesh 100-word list, at least the following lexical items appear to have been borrowed into Cayuga from Seneca or another Northern Iroquoian language: { -hsoht- } 'hand', { -ẽjõhs- } 'heart', { -hskwa- } 'stone', and { -nehs- } 'sand'. Examples like these can be identified owing to irregular development of reflexes: in the event that these items had been inherited by Cayuga directly from Proto-Northern Iroquoian, one would expect to find reflexes ˣ { -ʔsoht- }, ˣ { -enjahs- }, ˣ { -ʔskwa- }, and ˣ { -ʔnehs- }, but instead one finds slightly deviant forms. In still other cases, borrowed words may be of so simple a structure to begin with that no evidence of borrowing, as distinct from direct inheritance, can be recognized. In this way several Northern Iroquoian languages may eventually have come to resemble their immediate neighbours more than their closest genetic relatives (see Chafe & Foster 1981 for discussion of potential Five Nations areal influence on Cayuga).

Previous subgroupings of the Iroquoian language family have not generally drawn a sharp distinction between synchronic similarity arising from areal influences and

borrowing on the one hand, and similarities attributable to shared genetic inheritance

on the other. Two previous subgroupings of the family, as proposed by Lounsbury

(1978:336) and Mithun (1999:418), are presented in (1).

(1)   Previous Subgroupings of the Iroquoian Language Family

I. After Lounsbury (1978:336)   II. After Mithun (1999:418)

IROQUOIAN   IROQUOIAN
    SOUTHERN [IROQUOIAN]   SOUTHERN IROQUOIAN
        Cherokee   **Cherokee**
    NORTHERN [IROQUOIAN]   NORTHERN IROQUOIAN
        [TUSCARORA-NOTTOWAY]   TUSCARORA-NOTTOWAY
            Tuscarora   **Tuscarora**
            Nottoway *   **Nottoway** *
        [LAKE IROQUOIAN]   PROTO-LAKE IROQUOIAN
            Laurentian ? *   **Laurentian** *
        FIVE NATIONS & SUSQUEHANNOCK   IROQUOIS PROPER
            Susquehannock *   **Susquehannock** *
            [MOHAWK-ONEIDA]   ONEIDA-MOHAWK
                Mohawk   **Mohawk**
                Oneida   **Oneida**
            Onondaga   **Onondaga**
            Cayuga   SENECA-CAYUGA
            Seneca   **Cayuga**
    HURONIAN   **Seneca**
        HURON-PETUN   **Huron-Wyandot** *
            Lorette Huron *   **Laurentian** *
            Wyandot *
        NEUTRAL ?   [* extinct at time of writing]

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The models in (1) are essentially correct in that those Northern Iroquoian languages

which bear the greatest synchronic resemblance to one another and which share the

largest amount of cognate vocabulary have been grouped together. Contrasting with

these models, albeit only to a minor extent, is the genetic model presented in (2), which

is employed in the present work.

(2)   Genetic Subgrouping of the Iroquoian Languages in the Present Work

* Proto-Iroquoian	(Chapter 2)
Cherokee	(Chapter 3)
* Proto-Northern Iroquoian	(Chapter 4)
* Proto-Tuscarora-Nottoway	(Chapter 5)
Tuscarora	(Chapter 6)
Nottoway	(Chapter 7)
Susquehannock	(Chapter 8)
Laurentian	(Chapter 9)
* Proto-Mohawk-Oneida	(Chapter 10)
Mohawk	(Chapter 11)
Oneida	(Chapter 12)
Onondaga	(Chapter 13)
Cayuga	(Chapter 14)
Seneca	(Chapter 15)
Huron	(Chapter 16)
Wyandot	(Chapter 17)

The model in (2) differs from those in (1) primarily in its lack of a separate Proto-Lake

Iroquoian stage (no shared phonological innovations, and arguably no morphological

innovations, appear to separate the remaining Northern Iroquoian languages from

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Proto-Tuscarora-Nottoway, which would appear to make Proto-Lake Iroquoian formally

equivalent to Proto-Northern Iroquoian), and its lack of a separate Proto-Five Nations

or Iroquois Proper stage (no shared phonological innovations and no morphological

innovations seem to separate the Five Nations languages from Huron, which again

would appear to make Proto-Five Nations Iroquoian formally equivalent to Proto-

Northern Iroquoian). Wyandot is here interpreted as a direct descendant of Common

Huron, and similarities between Seneca and Cayuga (of which there are admittedly

many) are interpreted as recent and the result of areal influence, since few regular

sound changes link them and a handful of significant morphological features separate

them (including, for example, Cayuga's retention of the non-singular animate prefix,

which is absent from Seneca and all of the remaining Five Nations languages).

　　Posing an additional theoretical problem for subgrouping of the Northern languages

are shared phonological innovations, relative to Proto-Northern Iroquoian, that are

present in more than one of the daughter languages, apparently owing to areal

influence or to chance rather than to genetic inheritance. Twelve such innovations that

are common to at least four of eight Northern Iroquoian languages are presented in (3),

where Δ indicates that the innovation is present in at least one dialect of the language

and ✓ indicates that the innovation is present in all dialects.

(3)   Post-PNI Innovations Common to at Least Four Northern Iroquoian Languages

Innovation	Tu.	Mo.	Oe.	Oo.	Ca.	Se.	Hu.	Wy.
* h > Ø / _nh	✔		✔		✔	✔		✔
* h > Ø / _sk, st		Δ	✔	✔		✔		
* h > Ø / #_w	✔	✔	✔			✔	✔	✔
* h > Ø / V:_#	✔	✔	✔		✔			
* j > Ø / ts_	✔	Δ			✔	✔	✔	✔
* n > Ø / _sh	Δ	✔	✔	✔	✔	✔	✔	✔
* n > t / _k, kʷ	✔			✔	✔	✔		
* ns > ts / _k, kʷ		✔	✔	✔	✔			
* t > k / _j		Δ			Δ		Δ	✔
* ts > (h)s / _k, kʷ	Δ	✔	✔	✔	✔	✔	✔	✔
* ts > (h)s / _ɹ	Δ	✔	✔	✔	Δ	✔	✔	✔
* w > Ø / _j	Δ			✔		✔	✔	✔

From data in (3) one could theoretically posit that Tuscarora, Mohawk, Oneida, Seneca, Huron, and Wyandot descend from the same ancestral language stage (Proto-Tuscarora-Mohawk-Oneida-Seneca-Huron-Wyandot), from which they inherited loss of word-initial Proto-Northern Iroquoian * / h / when * / w / followed; but since this change is the only post-Proto-Northern-Iroquoian innovation common to this particular grouping of languages, it is here interpreted as having more likely been areally-induced or coincidental rather than genetically inherited. In contrast, two post-Proto-Northern-Iroquoian stages that are accepted in the present work, Proto-Tuscarora-Nottoway and Proto-Mohawk-Oneida, have been posited on the basis of the significant numbers of

post-PNI phonological innovations that are common to Tuscarora and Nottoway (six),

and to Mohawk and Oneida (thirteen), and which share a feeding order that allows

them to be placed at the beginning of the post-PNI developmental stage of both

languages in each respective subgrouping before subsequent, language-specific sound

changes apply (note that the only instance in Iroquoian where rule re-ordering seems

to have resulted in developmental discrepancies relative to predictable phonological

derivation of attested forms from proto-forms involves sound changes WY-12 and

WY-13, related in Chapter 17).

It should be noted that my model of subgrouping, in particular my position that

Proto-Lake Iroquoian and Proto-Five Nations are formally indistinguishable from Proto-

Northern Iroquoian itself, is not a consensus in the field. Marianne Mithun (p.c.) notes

that, "[t]he case for an early separation of Northern Iroquoian into 8 parallel branches,

with subsequent convergence of the Iroquois Proper languages due to contact, would be

strengthened if we could see old, deep differences but new, superficial similarities. At

present, although we do have some evidence of contact, the differences do not appear to

be very old." However, I would contend that old, deep similarities among the Five

Nations languages would first need to be evident in order to allow grouping of the Five

Nations languages as a subgroup to the exclusion of Huron, and that old, deep

similarities among the Lake Iroquoian languages would first need to be evident in order to allow the grouping of the Lake Iroquoian languages to the exclusion of Tuscarora-Nottoway – that is, a set of early, shared innovations, of similar quality and quantity to those that serve to distinguish Proto-Tuscarora-Nottoway (six changes) and Proto-Mohawk-Oneida (thirteen changes) as subgroups within Northern Iroquoian. However, no early shared phonological innovations relative to PNI, and arguably no morphological innovations relative to PNI, appear to occur in the languages of the Five Nations subgrouping or the languages of the Lake subgrouping that would serve to set them apart from other Northern Iroquoian languages in general (for discussion of the development of PI * / u(:) / in PNI and its implications for a Five Nations subgrouping, see section 4.3, and for discussion of the development of non-singular third person pronominal prefixes in PNI and its implications for a Lake Iroquoian subgrouping, see section 4.4).

Although the current work is concerned with direct genetic inheritance (e.g. the chapter on Cayuga 'descends' directly from the chapter on Proto-Northern Iroquoian), figures relating to similarity of a subset of vocabulary ('core vocabulary'), regardless of whether this has been borrowed or inherited, may nonetheless provide an idea of how long each has been isolated (culturally or geographically) from the other languages.

The percentage of core vocabulary shared between eight well-attested Iroquoian languages, based on the Swadesh 100-word list, is presented in (4).

(4)   Percentage of Shared Core Vocabulary Across Iroquoian Languages

	Ch.	Tu.	Mo.	Oe.	Oo.	Ca.	Se.	Hu.
Ch.	---	20	23	22	24	19	21	19
Tu.	20	---	69	65	66	65	65	67
Mo.	23	69	---	95	85	83	86	76
Oe.	22	65	95	---	80	82	81	72
Oo.	24	66	85	80	---	86	93	74
Ca.	19	65	83	82	86	---	91	71
Se.	21	65	86	81	93	91	---	76
Hu.	19	67	76	72	74	71	76	---

It is intriguing to note that each Northern Iroquoian language in (4) shares roughly 20% of its core vocabulary with Cherokee (Cayuga and Huron the least at 19%, Onondaga the most at 24%), and that although Tuscarora was historically spoken in close geographical proximity to Cherokee, it nevertheless shares roughly the same amount of core vocabulary with Cherokee (20%) as other Northern languages. The latter finding

would seem to suggest that Tuscarora has been culturally and geographically isolated

from Cherokee for roughly the same amount of time as all of the other Northern

languages have been. Within Northern Iroquoian, Tuscarora shares only about 65% of

its core vocabulary with Huron and the Five Nations languages, which suggests that

Tuscarora has been culturally and geographically isolated from both Huron and the Five

Nations languages for roughly an equal amount of time. Among the Northern languages

in the Great Lakes region, Huron stands apart in sharing only 71-76% of its core

vocabulary with the Five Nations Iroquois languages, which in contrast all share at least

80% and in some cases as much as 95% of their core vocabulary with each other. This

suggests that Huron has been isolated (culturally, if not geographically) from all of the

Five Nations languages for roughly the same amount of time.

The number of unique core vocabulary items (that is, instances in which a core

vocabulary item from the Swadesh 100-word list has no known cognate in any other

Iroquoian language) in eight well-attested Iroquoian languages may also provide some

idea of the degree of developmental isolation each language has had relative to others,

and this is presented in (5).

(5)   Unique Core Vocabulary Items in Iroquoian Languages (Swadesh 100-word list)

language	unique core vocabulary items
Cherokee	69
Tuscarora	16
Huron	12
Cayuga	4
Onondaga	4
Oneida	3
Mohawk	1
Seneca	1

Numbers in (5) are again in keeping with the chronological sequence of isolation

outlined above, in which Cherokee has been isolated from other Iroquoian languages for

the longest period of time, followed by Tuscarora, Huron, and finally by the Five

Nations languages, all of which fall in the single digit range.

Finally, the total amount of cognate lexical (as opposed to functional) vocabulary

shared by Cherokee and Proto-Northern Iroquoian can also provide some idea of the

potential age of the Proto-language, though figures in this regard will be lower than

those in (4), owing to the greater propensity of general vocabulary to be replaced over

time compared to core vocabulary. In the dictionary of North Carolina Cherokee

included in King (1975), which contains 2050 lexical roots, 100 entries (4.88%) have

identifiable Northern Iroquoian cognates. In Feeling and Pulte's (1975) dictionary of

Oklahoma Cherokee, which contains 2000 lexical roots, 98 entries (4.90%) have

identifiable Northern Iroquoian cognates. These figures suggest that just under 5% of all

lexical roots, or slightly less than 1 in 20 vocabulary items, remains cognate between

the two principal branches of Iroquoian.

CHAPTER 2: PROTO-IROQUOIAN

2.1 INTRODUCTION

This chapter describes Proto-Iroquoian (PI), the reconstructed language from which

Cherokee and Proto-Northern Iroquoian (PNI) derive. PI is reconstructed on the basis of

cognate forms common to both daughter languages, but because there are many points

on which Cherokee and PNI do not agree, I have at times had to interpret a feature

found in one of the daughter languages as more archaic than a feature found in the

other. The second half of this approach is admittedly arbitrary, and other researchers

may certainly differ as to whether Cherokee or PNI is more likely to continue a feature

original to PI. In order that the more interpretive portion of my presentation of the

proto-language obscure only minimally the facts that are based on secure cognate forms

in both branches, however, I will here list the more theoretical of my assumptions.

Features of Cherokee (but not of PNI) that I have interpreted as archaic include a

distinction between independent verb forms (verbs that occur in matrix clauses and

were characterized in the proto-language by word-initial glide retention and final

accent) and dependent verb forms (verbs that occur in subordinate clauses or as

deverbalized nouns and were characterized phonologically by word-initial glide loss

and penultimate accent). I have also interpreted the animate vs. inanimate distinction

found in Cherokee pronominal prefixes (as opposed to the feminine-indefinite vs.

neuter-zoic distinction found in PNI) as the original semantic distinction found in PI

third person pronominal prefixes, and have interpreted Cherokee's lack of a third person

gender distinction as archaic, with PNI masculine gender pronominal prefixes reflecting

subsequent innovation, as also proposed previously by Chafe (1977b). Features of PNI

(but not of Cherokee) that I have interpreted as archaic include lack of distinctive tone

on vowels, and lack of productive modal suffixes, with word-final presence of present,

punctual, imperfective, and perfect bases in PI verbs.

2.2 PHONEMIC INVENTORY AND PHONOLOGY

As noted previously by Lounsbury (1978:337), the Iroquoian languages are notable

typologically for their relatively small consonant phoneme inventories, a lack of labial

consonants, a lack of contrastive voicing in consonant phonemes, and for having

complex consonant clusters of considerable length (cf. e.g. the cluster * / -ʔtskhɹj- / in

PNI * / waʔtskhɹjeːnẽʔts / 'I fell over again' [006] [011] [019] [245]). The reconstructed phonemic

inventory of PI is presented in (1).

(1)   Phonemic Inventory of Proto-Iroquoian

CONSONANTS

	Alveolar	Palatal	Velar	Glottal
Plosive	t		k kʷ	ʔ
Nasal	n			
Fricative	s			h
Affricate	ts			
Approximant	ɹ	j	w	

VOWELS

	Front	Central	Back
Close	iː		uː
	i		u
Mid	eː ẽː		oː õː
	e ẽ		o õ
Open		aː	
		a	

The consonants * / ts / and * / kʷ / are here analyzed as internally complex

consonants (rather than as clusters of / t + s / and / k + w /) primarily because their

reflexes in Cherokee pattern with reflexes of the plosives * / t / and * / k / in showing

phonetic voicing to [dz] and [gʷ] when they precede vowels, and because their

reflexes, like those of single not-glottal consonants, permit penultimate vowel

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lengthening in PNI (cf. Michelson 1988:55; see also Postal 1968 and Chafe 1970b for arguments concerning / kʷ / vs. / k + w /). Analyzing these segments as clusters rather than phonemes is theoretically also possible, but makes fluid diachronic description of certain sound changes, especially those that pertain to * / ts / but not * / s /, somewhat more cumbersome.

The identity of PI phoneme * / ɹ / is somewhat uncertain, but it is here represented by an alveolar approximant, and will also be represented as such in the daughter languages where contrary evidence is lacking, as in the case of Huron and Old Onondaga; Cayuga and Six Nations Mohawk have the alveolar approximant / ɹ /, as apparently did Wyandot ("corresponding to the English r" according to Barbeau 1960:57), while Tuscarora has an alveolar trill / r / (Rudes 1999:xxxviii), Caughnawaga and Oka Mohawk have a retroflex lateral approximant / ɭ /, and Akwesasne Mohawk and Oneida have a lateral approximant / l /; all surviving dialects of Cherokee also have / l /, although Mooney notes that the extinct eastern dialect of Cherokee had "r instead of l" (1900:188).

If any phonetic rules pertaining to consonants were present in PI, they are not reconstructable. The fact that reflexes of PI plosives remain voiceless in all environments in Huron and Wyandot suggests that phonetic voicing of obstruents, a

rule now common in some form to all of the surviving Iroquoian languages, is an areal

innovation that only later spread to both branches of Iroquoian following the separation

of Cherokee and PNI (cf. Rudes 1976:17).

2.2.1 VOWELS

PI short * / a / is reconstructed based on a correspondence between Cherokee short

/ a / and PNI short * / a / in non-final syllables (cf. Rudes 1995:20), as in

PI * { -atawẽ- } 'swim' [161] (cf. Ch. { -àtàwò- }, PNI * { -atawẽ- }), PI * { -atkahthw- }

'look at' [179] (cf. Ch. { -àkàhth- }, PNI * { -atkahthw- }), and PI * { -hskanẽ- } 'slow' [252]

(cf. Ch. { -hskànò- }, PNI * { -hskanẽ- }), and on the basis of a correspondence

between Cherokee long / aː / and PNI short / a / in final syllables (cf. Rudes 1995:28),

as in PI nouns such as * { tawiːhskaɹaʔ } 'flint' [437] (cf. Ch. { tàwǐːhskálã́ː },

PNI * { tawihskaɹaʔ }). PI long * / aː / is reconstructed on the basis of a

correspondence between Cherokee long / aː / and PNI short * / a / in non-final

syllables (cf. Rudes 1995:20), as in the PI reflexive morpheme * { -ataːt- } [076]

(cf. Ch. { -àtàːt- }, PNI * { -atat- }), as well as in PI * { -aːhs- } 'foot' [139]

(cf. Ch. { -àːhs- }, PNI * { -ahs- }) and PI * { -aɹaːhsu- } 'shoe' [156]

(cf. Ch. { -àlã̀ːhsǔːl- }, PNI * { -aɹahso- }), and on the basis of a regular correspondence

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between Cherokee long / aː / and PNI long * / aː / in final syllables

(cf. Rudes 1995:28), as in PI * { koːhkaːʔ } 'crow' [343] (cf. Ch. { khóːkáː },

PNI * { kahkaːʔ }).

PI short * / e / is reconstructed where Cherokee short / e / corresponds to PNI short

* / e / in non-final syllables (cf. Rudes 1995:20), as in PI * { -e- } 'go' [209] (cf. Ch. { -è- },

PNI * { -e- }), PI * { -je- } 'wake up' [299] (cf. Ch. { -jè- }, PNI * { -je- }), and

PI * { -we- } 'speak' [475] (cf. Ch. { -wè- }, PNI * { -we- }), and where Cherokee long

/ eː / corresponds to PNI short * / e / in final syllables (cf. Rudes 1995:28), as in

PI * { aɹeʔ } 'about' [158] (cf. Ch. { àlếː }, PNI * { aɹeʔ }) and PI * { kuːɹeh } 'acorn' [348]

(cf. Ch. { kùːlếː }, PNI * { koɹeh }). PI long * / eː / is reconstructed where Cherokee

long / eː / corresponds to PNI short * / e / in non-final syllables (cf. Rudes 1995:20), as

in PI * { -ateːhẽːh- } 'be ashamed' [163] (cf. Ch. { -àtèːhòːh- }, PNI * { -atehẽh- }),

PI * { -eːɹ- } 'believe' [211] (cf. Ch. { -èːl- }, PNI * { -eɹ- }), and PI * { -nsteːɹ- } 'help' [391]

(cf. Ch. { -hstèːl- }, PNI * { -ansteɹihst- }), and where Cherokee long / eː / corresponds

to PNI long * / eː / in final syllables (cf. Rudes 1995:28), as in PI * { -atseːʔ }

'be new' [189] (cf. Ch. { àtsếːʔ- }, PNI * { atseːʔ }) and PI * { -kaweː- } 'paddle' [330]

(cf. Ch. { -kàwèː- }, PNI * { -kaweː- }).

PI short * / ẽ / is reconstructed on the basis of a regular correspondence between

Cherokee short / o / and PNI short * / ẽ / in non-final syllables (cf. Rudes 1995:20), as

in PI * { -ẽʔ- } 'fall' [221] (cf. Ch. { -òʔ- }, PNI * { -ẽʔ- }), PI * { -kẽ- } 'see' [332]

(cf. Ch. { -kò- }, PNI * { -kẽ- }), and PI * { -nẽh- } 'grain' [366] (cf. Ch. { -nòh- },

PNI * { -nẽh- }), and on the basis of a regular correspondence between Cherokee long

/ a: / and PNI short * / ẽ / in final syllables (cf. Rudes 1995:20), as in PI * { awẽʔ }

'water' [196] (cf. Ch. { àmá̋: }, PNI * { awẽʔ }), PI * { kanõ:nowẽʔ } 'pipe' [323]

(cf. Ch. { kànʌ̏:nòwá̋: }, PNI * { kanõnawẽʔ }), and PI * { kihɹjuʔkẽh } 'chipmunk' [340]

(cf. Ch. { khìjû:ká̋: }, PNI * { tsihɹjoʔkẽh }); occasionally, as in non-final syllables,

Cherokee shows long / o: / rather than long / a: / in the latter position, as in

PI * { tsi:jẽh } 'otter, seal' [455] (cf. Ch. { tsì:jő: }, PNI * { tsijẽh }), though this is less

common. Note that while Rudes (1995:20) also posits that correspondence of Cherokee

short / a / to PNI short * / ẽ / reflects PI short * / ẽ / on the basis of the reconstructed

roots meaning 'domesticate' and 'slow', the former root is probably not cognate, and the

latter is root is perhaps better reconstructed as PI * { -hskanẽ- } [252]

(cf. Ch. / ù:hskànő:lî / 'slow', Oe. / oskanʌ̃ʔˈshũha / 'slowly') rather than

ˣ { -hskẽnõ- }, with the latter form likely reflecting a variant in the Northern Iroquoian

languages. PI long * / ẽ: / is reconstructed on the basis of a correspondence between

Cherokee long / o: / and PNI short * / ẽ / in non-final syllables (cf. Rudes 1995:20), as

in PI * { -kẽ:h } 'have seen' [332] (cf. Ch. { -kò:h- }, PNI * { -kẽh- }), PI * { -nẽ:hskʷ- }

'steal' [368] (cf. Ch. { -nò:hsk- }, PNI * { -nẽhskw- }), and PI * { -nẽ:j- } 'sand, stone' [369]

(cf. Ch. { -nò:j- }, PNI * { -nẽj- }), and on the basis of a correspondence between

Cherokee long / a: / and PNI long * / ẽ: / in final syllables (cf. Rudes 1995:20), as in

PI * { kahna:wẽ:h } 'butterfly' [317] (cf. Ch. { khàmà:mã́: }, PNI * { kahnawẽ:h }).

   PI short * / i / is reconstructed based on a correspondence between Cherokee short

/ i / and PNI short * / e / in non-final syllables (cf. Rudes 1995:20), as in PI * { ki- }

'1SG:3' [019] (cf. Ch. { tsì- }, PNI * { ke- }) and PI * { hsi- } '2SG:3' [022] (cf. Ch. { hì- },

PNI * { hse- }), and on the basis of a correspondence between Cherokee long / i: / and

PNI short * / e / in final syllables (cf. Rudes 1995:20), as in PI * { -hsnu:ɹiʔ } 'be fast' [258]

(cf. Ch. { -hsìnű:lî: }, PNI * { -hsnoɹeʔ }), PI * { -koʔtiʔ } 'be a lot' [344]

(cf. Ch. { -kò:tĩ́: }, PNI * { -kaʔteʔ }), and PI * { -õ:taɹiʔ } 'be a lake' [412]

(cf. Ch. { ʎ̃:tàlĩ́: }, PNI * { -õtaɹeʔ }). Occasionally before consonant clusters beginning

in a glottal consonant both Cherokee and PNI appear to retain short / i /

(cf. Rudes 1995:32), as in PI * { hwihsk } 'five' [273] (cf. Ch. { hìhskĩ́: },

PNI * { hwihsk }) and PI * { kihɹjuʔkẽh } 'chipmunk' [340] (cf. Ch. { khìjû:kã́: },

PNI * { tsihɹjoʔkẽh }); an interesting example is found in PI * { tiʔɹ } 'skunk' [443]

(cf. Ch. { -tíʔl- }, PNI * { -teʔɹ- }, * { -tiʔɹ- }), in which both short * / e / and short

* / i / are reflected in Northern Iroquoian. PI long * / iː / is reconstructed on the basis

of a correspondence between Cherokee long / iː / and PNI short * / i / in non-final

syllables (cf. Rudes 1995:20), as in PI * { -nõːtsiː- } 'brain, head' [387] (cf. Ch. { -nʌ̃ːtsí:- },

PNI * { -nõtsi- }), PI * { -tsiːɹ- } 'fire' [458] (cf. Ch. { -tsìːl- }, PNI * { -tsiɹ- }), and

PI * { -wiːnõːh } 'young person' [478] (cf. Ch. { -wí̃ːnâ: }, PNI * { -winõːh }), and on the

basis of a correspondence between Cherokee long / iː / and PNI long * / iː / in final

syllables (cf. Rudes 1995:28), as in PI * { -iː- } 'exist' [275] (cf. Ch. { -ìː- }, PNI * { -iːh }).

    PI short * / o / is reconstructed where Cherokee short / o / corresponds to PNI

short * / a / in non-final syllables (cf. Rudes 1995:20), as in PI * { -oʔnj- } 'hand' [400]

(cf. Ch. { -oʔj- }, PNI * { -aʔnj- }), PI * { -ɹhok- } 'paternal aunt' [425] (cf. Ch. { -lhòk- },

PNI * { -ɹhak- }), and PI * { -tsoʔ- } 'daughter-in-law' [468] (cf. Ch. { -tsòʔ- },

PNI * { -tsaʔw- }); in accordance with reflexes of other PI short vowels, PI * / o / is

assumed also to have been preserved as Cherokee long / oː / and as PNI short * / a / in

final syllables, but no cognates are available. PI long * / oː / is reconstructed where

Cherokee long / oː / corresponds to PNI short * / a / in non-final syllables

(cf. Rudes 1995:20), as in PI * { -tsjoːɹ- } 'tobacco' [465] (cf. Ch. { -tsòːl- },

PNI * { -tsjaɹ- }). Again, in accordance with reflexes of other PI long vowels, PI * / oː /

is assumed also to have been preserved as Cherokee long / oː / and as PNI long * / aː /

in final syllables, though no cognates are available.

    PI short * / õ / is reconstructed on the basis of a regular correspondence between

Cherokee short / ʌ̃ / and PNI short * / õ / in non-final syllables, as in PI * { -jeːɹõʔ- }

'body' [304] (cf. Ch. { -jèːlʌ̃̀ʔ- }, PNI * { -jeɹõʔ }), PI * { -nõhs- } 'house' [382]

(cf. Ch. { -nʌ̃̀hs- }, PNI * { -nõhs- }), and PI * { -nuːɹõ- } 'fail to do' [393]

(cf. Ch. { -nùːlʌ̃̀- }, PNI * { -noɹõ- }), and on the basis of a correspondence between

Cherokee long / aː / and PNI short * / õ / in final syllables (cf. Rudes 1995:20), as in

PI * { iːnõh } 'far' [281] (cf. Ch. { iːnâ: }, PNI * { inõh }); Rudes (1995:20) also posits that

correspondence of Cherokee short / o / to PNI short * / õ / reflects PI short * / õ / on

the basis of the reconstructed root meaning 'slow', but see discussion under PI short

* / ẽ / above. PI long * / õː / is reconstructed on the basis of a regular correspondence

between Cherokee long / ʌ̃: / and PNI short * / õ / in non-final syllables

(cf. Rudes 1995:20), as in PI * { -kõːhs- } 'face' [345] (cf. Ch. { -kʌ̃̀:hs- }, PNI * { -kõhs- }),

PI * { -õːnh- } 'be alive' [406] (cf. Ch. { -ʌ̃̀:hn- }, PNI * { -õnh- }), and PI * { -ʔnjõːhs- }

'nose' [494] (cf. Ch. { -ʔjʌ̃̀:hs- }, PNI * { -ʔnjõhs- }), and on the basis of a correspondence

between Cherokee long / aː / and PNI long * / õː / in final syllables

(cf. Rudes 1995:20), as in PI * { -wiːnõːh } 'young person' [478] (cf. Ch. { -wíːnâ: },

PNI * { -winõːh }).

PI short * / u / is reconstructed based on a correspondence between Cherokee short / u / and PNI short * / o / in non-final syllables (cf. Rudes 1995:20), as in reflexes of PI * { kihɹjuʔkẽh } 'chipmunk' [340]; PI * / u / is assumed also to have been preserved as Cherokee long / u: / and as PNI short * / o / in final syllables, in accordance with reflexes of other PI short vowels, but no cognates are available. PI long * / u: / is reconstructed on the basis of a correspondence between Cherokee long / u: / and PNI short * / o / in non-final syllables (cf. Rudes 1995:20), as in PI * { -htsu:hw- } 'dye' [268] (cf. Ch. { -hsù:hw- }, PNI * { -ahtsohw- }), PI * { -nu:ɹ- } 'corn husk' [392] (cf. Ch. { -nù:l- }, PNI * { -noɹ- }), and PI * { -õ:ku:h- } 'pass through' [403] (cf. Ch. { -ʌ̃:kù:h- }, PNI * { -õkoh- }). Again, PI * / õ: / is assumed also to have been preserved as Cherokee long / u: / in final syllables and as PNI long * / o: / in final syllables, in accordance with reflexes of other PI long vowels, though no cognates are available.

2.2.2 SINGLE CONSONANTS

PI * / k / is reconstructed where Cherokee / k / corresponds to PNI * / k / (cf. Lounsbury 1978:338, Rudes 1995:56), as in PI * { -k- } 'eat' [316] (cf. Ch. { -k- }, PNI * { -k- }), PI * { -kawe:- } 'paddle' [330] (cf. Ch. { -kàwè:- }, PNI * { -kawe:- }), and

PI * { kuːɹeh } 'acorn' [348] (cf. Ch. { kùːlɛ́ː }, PNI * { koɹeh }), as well as where

Cherokee / ts / corresponds to PNI * / k / and a vowel * / i(ː) / follows, as in

PI * { ki- } '1SG:3' [019] (cf. Ch. { tsì- }, PNI * { ke- }) and PI * { kiji- } '1SG:3A' [020]

(cf. Ch. { tsìː- }, PNI * { khe- }). Two cognates appear to show the opposite

correspondence, with Cherokee / k / and PNI * / ts / before * / i(ː) /:

PI * { kihɹjuʔkēh } 'chipmunk' [340] (cf. Ch. { khìjûːkɛ́ː }, PNI * { tsihɹjoʔkēh }) and

PI * { kiːɹ } 'dog' [341] (cf. Ch. { kìːlhíː }, PNI * { tsiɹ }). In the latter cases a shift in

Cherokee of * / ki / to / tsi / may have been levelled, as initial * / k / seems to

represent an allomorph of the 3SG:3 pronominal prefix, and the 3SG:3 prefix of

Cherokee lacks an allomorph * / ts / before bases beginning in * / i /; in Northern

Iroquoian * / k / may have shifted to * / ts / in the same words due to semantic

association with other animal names (cf. PNI * / tsihˈskoʔkoʔ / 'robin' [454],

PNI * / ˈtsiːjēh / 'seal' [455], PNI * / ˈtsitshoʔ / 'fox, lynx' [460]).

PI * / kʷ / is reconstructed on the basis of a regular correspondence between

Cherokee / kʷ / and PNI * / kʷ /, as in the prevocalic PI pronominal prefix allomorphs

* { wakʷ- } '3:1SG' [025] (cf. Ch. { àːkʷ- }, PNI * { wakʷ- }) and * { jõːkʷ- } '3A:1SG' [026]

(cf. Ch. { ƛ̃ːkʷ- }, PNI * { jõkʷ- }). A significant number of cognates also show

Cherokee / ki(ː) / where PNI has * / kʷ /, * / kw / or * / ko /, as in PI * { -kʷ- }

'pick up' [350] (cf. Ch. { -kì- }, PNI * { -kʷ- }), PI * { -õːtakʷ- } 'remove from fire' [411]

(cf. Ch. { -ʌ̃ːtàkì- }, PNI * { -õtakw- }, * { -õtako- }), and PI * { -uːkʷ- } 'remove from

water' [471] (cf. Ch. { -ùːkì- }, PNI * { -okw- }, * { -oko- }); such sets are likewise

hypothesized to derive from original * / kʷ /, with a shift to / k / in Cherokee before a

following vowel / i(ː) /. Previous works (Mithun 1984b:260, Rudes 1995:56) have

noted a probable correspondence between Cherokee / w / or / hw / and PNI * / kʷ /,

as between Ch. / àh(à)wíː / and a PNI form * / ˈaːkʷ / 'deer' (cf. Rudes 1995:42),

between Ch. / àjʌ̃ːwíː / and PNI * / ˈõːkʷeh / 'person' [405], and between Ch. / nʌ̃ːwôːthíː /

and PNI * / oˈnõhkʷaʔt / 'medicine' [279]. The pairs just noted should not be dismissed as

potential cognates, but show enough irregularities relative to correspondences found in

archaic functional allomorphs that their cognate status can be questioned (e.g. from a

hypothetical PI form ˣ / õ(ː)kʷih / one would expect a Cherokee reflex ˣ / ʌ̃ːkíː /, and

from a hypothetical PI form ˣ / ajõːkʷih / one would expect a PNI reflex

ˣ / aˈjõːkʷeh /). Consequently the correspondence observed in archaic functional

allomorphs will here be interpreted as a regular pattern.

   PI * / t / is reconstructed based on a correspondence between Cherokee / t / and

PNI * / t / (cf. Lounsbury 1978:338, Rudes 1996:56), as in PI * { -atawẽːhɹat- }

'climb over' [162] (cf. Ch. { -àtàwòːhìlàt- }, PNI * { -atawẽhɹat- }), PI * { -õːt- }

'put into fire' [409] (cf. Ch. { -ʌ̀:t- }, PNI * { -õt- }), and PI * { tawi:hskaɹaʔ } 'flint' [437]

(cf. Ch. { tàwǐ:hskálấ: }, PNI * { tawihskaɹaʔ }).

   PI * / s / is unique in that it appears always to have been preceded by * / h / unless

preceded by another consonant; it is reconstructed where Cherokee / s / corresponds to

PNI * / s / (cf. Rudes 1995:56), as in PI * { -kõ:hs- } 'face' [345] (cf. Ch. { -kʌ̀:hs- },

PNI * { -kõhs- }), PI * { -nõhs- } 'house' [382] (cf. Ch. { -nʌ̀hs- }, PNI * { -nõhs- }), and

PI * { -ʔnjõ:hs- } 'nose' [494] (cf. Ch. { -ʔjʌ̀:hs- }, PNI * { -ʔnjõhs- }), as well as where

Cherokee / h / corresponds to PNI * / s / in word-initial position, as in PI * { hsi- }

'2SG:3' [022] (cf. Ch. { hì- }, PNI * { hse- }) and PI * { hsiji- } '2SG:3A' [023] (cf. Ch. { hì:- },

PNI * { hshe- }).

   PI * / ts / is reconstructed on the basis of a regular correspondence between

Cherokee / ts / and PNI * / ts / (cf. Rudes 1995:56), as in PI * { tsa- } '3:2SG' [028]

(cf. Ch. * { tsà- }, PNI * { tsa- }), PI * { -atse:ʔ } 'be new' [189] (cf. Ch. { àtsế:ʔ- },

PNI * { atse:ʔ }), PI * { -tsi:ɹ- } 'fire' [458] (cf. Ch. { -tsì:l- }, PNI * { -tsiɹ- }), and

PI * { -tsoʔ- } 'daughter-in-law' [468] (cf. Ch. { -tsò:ʔ- }, PNI * { -tsaʔw- }).

   PI * / n / is reconstructed based on a correspondence between Cherokee / n / and

PNI * / n / (cf. Lounsbury 1978:338, Rudes 1995:56), as in PI * { -hskanẽ- } 'slow' [252]

(cf. Ch. { -hskànò- }, PNI * { -hskanẽ- }), PI * { kanõ:nowẽʔ } 'pipe' [323]

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(cf. Ch. { kàn $\overset{\grave{\lambda}}{\,}$:nòwã́: }, PNI * { kanõnawẽʔ }), and PI * { -nuːɹ- } 'corn husk' [392]

(cf. Ch. { -nùːl- }, PNI * { -noɹ- }). In at least one cognate PNI * / n / appears to have

assimilated to / m / in Cherokee where / m / follows: PI * { kahnaːwẽːh } 'butterfly' [317]

(cf. Ch. { khàmàːmã́: }, PNI * { kahnawẽːh }).

PI * / ɹ / can be reconstructed where Cherokee / l /, which was still realized as "r"

in the extinct Eastern dialect (Mooney 1900:188), corresponds to PNI * / ɹ /

(cf. Lounsbury 1978:341, Rudes 1995:56), as in PI * { kuːɹeh } 'acorn' [348]

(cf. Ch. { kùːlẽ́: }, PNI * { koɹeh }), PI * { -nuːɹõ- } 'be difficult' [393] (cf. Ch. { -nùːl $\overset{\grave{\lambda}}{\,}$- },

PNI * { -noɹõ- }), and PI * { -tsjoːɹ- } 'tobacco' [465] (cf. Ch. { -tsòːl- }, PNI * { -tsjaɹ- }).

PI * / w / is reconstructed on the basis of a regular correspondence between

Cherokee / w / and PNI * / w / (cf. Rudes 1995:56), as in PI * { kanõːnowẽʔ } 'pipe' [323]

(cf. Ch. { kàn $\overset{\grave{\lambda}}{\,}$:nòwã́: }, PNI * { kanõnawẽʔ }), PI * { -kaweː- } 'paddle' [330]

(cf. Ch. { -kàwèː- }, PNI * { -kaweː- }), and PI * { -wiːnõːh } 'young person' [478]

(cf. Ch. { -wĩ́ːnâ: }, PNI * { -winõːh }), and on the basis of a correspondence in

word-initial position between Cherokee / Ø / followed by a long vowel with low falling

tone and PNI * / w /, as in PI * { wakʷ- } '3:1SG' [025] (cf. Ch. { ã̀ːkʷ- }, PNI * { wakʷ- })

and PI * { wantiː- } '3NS:3' [058] (cf. Ch. { ã̀ːnì- }, PNI * { wati- }). At least two cognates

show a correspondence of Cherokee / m / to PNI * / w / where a vowel * / ẽ(ː) /

followed: PI * { awẽʔ } 'water' [196] (cf. Ch. { àmɛ̋: }, PNI * { awẽʔ }), and

PI * { kahna:wẽ:h } 'butterfly' [317] (cf. Ch. { khàmà:mɛ̋: }, PNI * { kahnawẽ:h }). The

latter correspondence is also attributed to PI * / w /, though exceptions to this

development can be seen, for example, in reflexes of PI * { -atawẽ- } 'swim' [161] and

* { kanõ:nowẽʔ } 'pipe' [323].

PI * / j / is reconstructed based on a correspondence between Cherokee / j / and

PNI * / j / (cf. Rudes 1995:56), as in PI * { -je- } 'wake up' [299] (cf. Ch. { -jè- },

PNI * { -je- }), PI * { tsi:jẽh } 'otter, seal' [455] (cf. Ch. { tsì:jő: }, PNI * { tsijẽh }), and

PI * { -nẽ:j- } 'sand, stone' [369] (cf. Ch. { -nò:j- }, PNI * { -nẽj- }), and on the basis of a

correspondence in word-initial position between Cherokee / Ø / followed by a long

vowel with low falling tone and PNI * / j /, as in PI * { je:tsa- } '3A:2SG' [029]

(cf. Ch. { è:tsà- }, PNI * { jetsa- }), PI * { ju- } '3:3SG' [054] (cf. Ch. { ǜ:- }, PNI * { jo- }),

and PI * { ju:nti:- } '3:3NS' [061] (cf. Ch. { ǜ:nì- }, PNI * { joti- }). A correspondence

between Ch. / Ci: / and PNI * / Che / is here also reconstructed as * / Ciji / in light of

internal analysis of the PI animate pronominal prefixes * { kiji- } '1SG:3A' [020]

(cf. Ch. { tsì:- }, PNI * { khe- }) and * { hsiji- } '2SG:3A' [023] (cf. Ch. { hì:- },

PNI * { hshe- }; see 2.6 for discussion of these prefixes).

PI * / h / is reconstructed where Cherokee / h / corresponds to PNI * / h /, as in

PI * { -ate:hẽ:h- } 'be embarrassed' [163] (cf. Ch. { -àtè:hò:h- }, PNI * { -ate:hẽ:h- }),

PI * { -nawẽ:h- } 'be melted' [358] (cf. Ch. { -nàwò:h- }, PNI * { -nawẽ:h }), and

PI * { -nẽh- } 'kernel' [366] (cf. Ch. { -nòh- }, PNI * { -nẽh- }), and where Cherokee / Ø /

corresponds to PNI * / h / in word-final position, as in PI * { i:nõh } 'far' [281]

(cf. Ch. { i:nâ: }, PNI * { inõh }), PI * { ku:ɹeh } 'acorn' [348] (cf. Ch. { kù:lế: },

PNI * { koɹeh }), and PI * { tsi:jẽh } 'otter, seal' [455] (cf. Ch. { tsì:jố: }, PNI * { tsijẽh }).

Reflexes of PI * / ʔ / are subject to glottal alternation in Cherokee (see 3.4) so that

/ ʔ / will be found in place of the first / h / of a verb base when certain pronominal

prefixes are present (e.g. Ch. / ã:tè:h̬ǒ:hskấ: / 'she's embarrassed', but / kàtè:ʔǒ:hskấ: /

'I'm embarrassed'; cf. also Rudes 1995:56 where Proto-Southern Iroquoian * / ʔ / is

listed as the intervocalic reflex of PI * / h /).

PI * / ʔ / is reconstructed on the basis of a regular correspondence between

Cherokee / ʔ / and PNI * / ʔ /, as in PI * { -tsoʔ- } 'daughter-in-law' [468]

(cf. Ch. { -tsòʔ- }, PNI * { -tsaʔw- }) and PI * { -ẽʔ- } 'drop, fall' [221] (cf. Ch. { -òʔ- },

PNI * { -ẽʔ- }), and where Cherokee / Ø / corresponds to PNI * / ʔ / in word-final

position, as in PI * { aɹeʔ } 'about' [158] (cf. Ch. { àlế: }, PNI * { aɹeʔ }), PI * { awẽʔ }

'water' [196] (cf. Ch. { àmấ: }, PNI * { awẽʔ }), and PI * { -koʔtiʔ } 'be a lot' [344]

(cf. Ch. { -kò:tíʔ }, PNI * { -kaʔteʔ }). Like reflexes of PI * / h /, reflexes of * / ʔ / are

subject to glottal alternation in Cherokee (see 3.4) so that / h / will be found in place

of the first / ʔ / of a verb base when certain pronominal prefixes are present

(e.g. Ch. / kòʔòhská: / 'I'm falling', but / kòhòhskǎ: / 'it's falling'). Note that Rudes

(1995:56) has listed the Proto-Southern Iroquoian reflex of intervocalic PI * / ʔ / as Ø,

but evidence to support this correspondence is not known to me.

2.2.3 CONSONANT CLUSTERS

Reflexes of PI consonant clusters are often predictable as normal developments of

two or more segments in sequence (e.g. PI * / ʔt / > Ch. / ʔt /, PNI * / ʔt /), although

many are not. In nearly all of these exceptional cases PNI appears to have maintained

the original cluster, since a contrast exists in PNI that is not found in Cherokee

(e.g. PI * / ʔnj / is reconstructed where Cherokee / ʔj / corresponds to PNI * / ʔnj /,

since PNI has both * / ʔj / and * / ʔnj /, whereas Cherokee contains only the former,

which thus suggests merger of the two reflexes).

PI * / tk / can be reconstructed based on a correspondence between Cherokee / k /

and PNI * / tk /, as in PI * { -atkahthw- } 'look at' [179] (cf. Ch. { -àkàhth- },

PNI * { -atkahthw- }) and PI * { -tkẽ:- } 'spoil' [446] (cf. Ch. { -kò:- }, PNI * { -tkẽ:- }).

PI * / tn / can be reconstructed where Cherokee / n / corresponds to PNI * / tn /, as in

PI * { tni:- } '1 + 2DU:3' [036] (cf. Ch. { tì:- }, PNI * { tni- }). PI * / tw / can be

reconstructed on the basis of a correspondence between Cherokee / t / and

PNI * / tw /, as in PI * { -ne:hstwaɹ- } 'ice' [365] (cf. Ch. { -nè:hstàl- },

PNI * { -nehstwaɹ- }) and PI * { -hstwih } 'be small' [263] (cf. Ch. { -hstih },

PNI * { -hstwih }), and PI * / thw / can be reconstructed on the basis of a

correspondence between Cherokee / th / and PNI * / thw /, as in PI * { -atkahthw- }

'look at' [179] (cf. Ch. { -àkàhth- }, PNI * { -atkahthw- }).

PI * / tsn / can be reconstructed based on a correspondence between Cherokee

/ hst / and PNI * / tsn /, as in PI * { tsni:- } '2DU&3' [031] (cf. Ch. { hstì:- },

PNI * { tsni- }). PI * / tsj / can be reconstructed where Cherokee / ts / corresponds to

PNI * / tsj /, as in PI * { -tsjo:ɹ- } 'tobacco' [465] (cf. Ch. { -tsò:l- }, PNI * { -tsjaɹ- }) and

PI * { -tsjõʔt- } 'fish' [467] (cf. Ch. { -tsàʔt- }, { -tsⱰ̃ʔt- }, PNI * { -itsjõʔt- }). PI * / nst /

may be reconstructed on the basis of a correspondence between Cherokee / hst / and

PNI * / nst /, as in PI * { -nste:ɹ- } 'help' [391] (cf. Ch. { -hstè:l- }, PNI * { -ansteɹihst- }).

PI * / nh / can be reconstructed based on a correspondence between Cherokee / hn /

and PNI * / nh /, as in PI * { -õ:nh- } 'be alive' [406] (cf. Ch. { -Ⱥ̃̀:hn- }, PNI * { -õnh- }).

PI * / hts / can be reconstructed where Cherokee / hs / corresponds to PNI * / hts /, as

in PI * { -ahtsõ:h- } 'night' [149] (cf. Ch. { -ahsⱰ̃̀:h- }, PNI * { -ahtsõh- }) and

PI * { -htsu:hw- } 'colour' [268] (cf. Ch. { -hsù:hw- }, PNI * { -ahtsohw- }).

PI * / hw / can be reconstructed on the basis of a correspondence between Cherokee / h / and PNI * / hw / where a vowel * / i(:) / follows, as in PI * { hwihsk } 'five' [273] (cf. Ch. { hìhskí: }, PNI * { hwihsk }).

PI * / hnj / can be reconstructed based on a correspondence between Cherokee / hj / and PNI * / hnj /, as in PI * { -hnj- } 'neck' [239] (cf. Ch. { -hj- }, PNI * { -hnj- }), and PI * / hɹj / can be reconstructed on the basis of a correspondence between Cherokee / hj / and PNI * / hɹj /, as in PI * { kihɹjuʔkẽh } 'chipmunk' [340] (cf. Ch. { khìjû:ká: }, PNI * { tsihɹjoʔkẽh }). PI * / ʔnj / may be reconstructed where Cherokee / ʔj / corresponds to PNI * / ʔnj /, as in PI * { -oʔnj- } 'hand' [400] (cf. Ch. { -òʔj- }, PNI * { -aʔnj- }) and PI * { -ʔnjõ:hs- } 'nose' [494] (cf. Ch. { -ʔjⱥ̀:hs- }, PNI * { -ʔnjõhs- }).

Several PI consonant clusters that end in a resonant consonant appear to have developed an epenthetic / ì / in Cherokee, and in these cases PNI again seems to have maintained the original cluster because a contrast exists in PNI that is not found in Cherokee (e.g. PI * / kn / can be reconstructed where Cherokee / kìn / corresponds to PNI * / kn /, since PNI has both * / ken / and * / kn /, whereas Cherokee has the sequence / kìn / but lacks a cluster ˣ / kn /). PI * / sn / can be reconstructed on the

basis of a correspondence between Cherokee / sìn / and PNI * / sn /, as in

PI * { -hsnuːɹiʔ } 'be fast' [258] (cf. Ch. { -hsìnṹːlî }, PNI * { -hsnoɹeʔ }). PI * / kn / can

be reconstructed based on a correspondence between Cherokee / kìn / and PNI * / kn /

(cf. Lounsbury 1978:339), as in PI * { kniː- } '3:1DU' [044] (cf. Ch. { kìnìː- },

PNI * { kni- }) and PI * { hskniː- } '2:1.DU' [017] (cf. Ch. { hskìnìː- }, PNI * { hskni- }).

PI * / kɹ / may be reconstructed where Cherokee / kìl / corresponds to PNI * / kɹ /

(cf. Lounsbury 1978:339), as in PI * { -nakɹ- } 'reside' [354] (cf. Ch. { -nàkìl- },

PNI * { -nakɹ- }). PI * / hr / may be reconstructed on the basis of a correspondence

between Cherokee / hìl / and PNI * / hɹ /, as in PI * { -atawẽːhɹat- } 'climb over' [162]

(cf. Ch. { -àtàwòːhìlàt- }, PNI * { -atawẽhɹat- }). PI * / khj / can be reconstructed

based on a correspondence between Cherokee / khìj / and PNI * / khj /, as in

PI * { -khjuːhs- } 'elbow' [338] (cf. Ch. { -khìjùːhs- }, PNI * { -khjohs- }).

PI * / nt / can be internally reconstructed on the basis of a correspondence between

Cherokee / n / and PNI * / t / in preconsonantal allomorphs of the pronominal prefixes

* { wantiː- } '3NS:3' [058] (cf. Ch. { àːnì- }, PNI * { wati- }), * { juːntiː- } '3:3NS' [061]

(cf. Ch. { ùːnì- }, PNI * { joti- }), and * { kõːwantiː- } '3A:3NSA' [068]

(cf. Ch. { kɻ̃ːwànì- }, PNI * { kõwati- }), and on the basis of a correspondence between

Cherokee / n / and PNI * / n / in reflexes of prevocalic allomorphs of the same

pronominal prefixes, * { waːnt- } '3NS:3' [058] (cf. Ch. { ãːn- }, PNI * { wẽn- }),

* { juːnt- } '3:3NS' [061] (cf. Ch. { ũːn- }, PNI * { jon- }), and * { kõːwaːnt- } '3A:3NSA' [068]

(cf. Ch. { kã̀ːwàn- }, PNI * { kõwẽn- }).

The precise phonotactic constraints of PI are difficult to determine owing to the

small amount of cognates shared by Cherokee and PNI. Consonant clusters that are

attested in reconstructed PI vocabulary have the shapes presented in (2), where G is

* / w / or * / j /, R is * / n / or * / ɹ /, K is * / k / or * / kʷ / or * / t /, S is * / s / or

* / ts /, and H is * / h / or * / ʔ /.

(2)   Shapes of Consonants Clusters in Reconstructed PI Vocabulary

Final C	2-consonant	3-consonant	4-consonant
G	RG	HRG	
		SKG	HSKG
	SG		
	HG	KHG	HKHG
R	KR	SKR	HSKR
	SR	HSR	
	HR		
K	RK		
	KK		
	SK	RSK, HSK	
	HK		
S	HS		
H	RH	HRH	
	KH		
	SH		

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Since nearly all of the cluster correspondences established for PI show retention of the cluster in PNI and reduction or epenthesis of the cluster in Cherokee, it is possible that the phonotactic constraints of PI were relatively close to those still found in the Northern Iroquoian languages.

Finally note that PI verbs, like Cherokee verbs, may have had independent and dependent forms that were suprasegmentally distinct. The contrast between independent and dependent verb forms can be illustrated through comparison of the independent Cherokee verb form ∕ ùːjòːhlʌ̌ːʔíː ∕ 'he has shot it' with its corresponding dependent form ∕ ùːjòːhlʌ̋ːʔîː ∕ 'he who has shot it, him who shot it, his having shot it' (cf. forms in Feeling & Pulte 1975:64, 354). The independent form, ∕ ùːjòːhlʌ̌ːʔíː ∕, occurs only as the verb in a matrix clause; it is characterized by low falling tone on the initial syllable (the reflex of a word-initial glide that has been lost – in this case PI * ∕ j ∕) and by high rising tone (the reflex of PI word accent – see 3.3) on the final syllable. In contrast, the dependent form, ∕ ùːjòːhlʌ̋ːʔîː ∕, occurs only as a verb in a subordinate clause (e.g. "she saw <u>him shoot it</u>") or as a deverbalized noun (e.g. "the shooter", "him who shot it"); it is characterized by low level tone on the initial syllable (owing to the absence of an initial glide in PI) and by high rising tone on the penultimate syllable rather than the final syllable. Like Cherokee, PNI appears to

have maintained word-initial glide loss as an indicator of deverbalized nouns and of

nouns in general (cf. Michelson 1988:43 and 2.10 below), but has generalized PI

penultimate (dependent) accent to all word forms.

2.3 VERB MORPHOLOGY

PI had at least three lexical categories: verbs, nouns, and particles. These lexical

categories were continued in PNI, while Cherokee has added a fourth category,

adjectives, which are essentially stative verbs lacking the full range of inflection shown

by other verbs, and requiring the reflex of an existential auxiliary verb * { -iː- }

'be, be the one, exist' [275] in order to convey the full range of inflection associated with

active verbs (see 3.4).

The verb was the most complex of the three lexical categories of PI and appears to

have had the morphological structure presented in (3).

(3)   Morphological Structure of the PI Verb

        1. Prepronominal Prefix(es)   optional, more than one could occur
        2. Non-Singular Animate Prefix   optional
        3. Pronominal Prefix   obligatory
        4. Reflexive or Semireflexive Prefix optional
        5. Incorporated Noun Stem   optional
        6. Verb Base   obligatory

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Prepronominal prefixes, an optional component of the verb, conveyed a number of different ideas ranging from temporal co-ordination (e.g. the coincident prefix) to direction (e.g. the translocative and cislocative prefixes). Eight prepronominal prefixes are found in Cherokee and ten can be reconstructed for PNI; the exact number of prepronominal prefixes present in PI is difficult to determine, but at least seven can be reconstructed on the basis of comparative evidence: the coincident, translocative, partitive, duplicative, future, cislocative, and repetitive. Prepronominal prefixes are described in 2.4.

The non-singular animate prefix, likewise an optional component of the verb, could precede any pronominal prefix that had '3A' (animate third person) as one of its arguments and make this argument non-singular. The non-singular animate prefix is described in 2.5.

The pronominal prefix, an obligatory component, contained information about both the agent and the patient involved in the action or state of the verb (e.g. 'it acts on me', 'you act on it', 'it acts on them', etc). PI had an inventory of at least 28 pronominal prefixes, which are described in 2.6.

The reflexive and semireflexive prefixes, optional and mutually exclusive components of the verb, directed the effect or benefit of an action back on a pronominal

agent, somewhat like the reflexive and 'middle voice' of Indo-European languages. The reflexive and semireflexive prefixes are described in 2.7.

PI verbs optionally contained an incorporated noun stem, which represented the grammatical subject of an intransitive verb or the grammatical object of a transitive verb. PI noun incorporation is discussed in 2.8.

The final component of the PI verb was the verb base, which had four lexically-determined aspectual forms (present, punctual, imperfective, and perfect) and could also contain one or more lexically-determined derivational elements. The verb base is described in 2.9.

2.4 PREPRONOMINAL PREFIXES

The prepronominal prefixes of PI seem to have had a general preconsonantal allomorph and a general prevocalic allomorph, and at least four of the prefixes (the partitive, distributive, cislocative, and repetitive) seem to have had two sets of allomorphs, one of which was associated with independent verb forms, the other with dependent forms. Reflexes of the prepronominal prefixes that can be reconstructed for PI occur in a set order in both Cherokee and PNI, and this order differs only with regard to the respective position of the translocative and partitive prefixes: in Cherokee the

translocative precedes the partitive, while in PNI the partitive preceded the

translocative. The order of the prefixes in Cherokee is here interpreted as the archaic

pattern, if only because the allomorphy of the partitive includes a separate set of

dependent allomorphs (typical of those prepronominal prefixes nearer the verb base),

whereas the allomorphy of the translocative does not seem to have differentiated

between independent and dependent forms. The probable order of PI prepronominal

prefixes is presented in (4).

(4)   PI Prepronominal Prefixes

coincident * / ts / [002]
| translocative * / wi / [005]
| | partitive * / iji: / [004]
| | | duplicative * / te: / [007]
| | | | future * / ẽ: / [008]
| | | | | cislocative * / t / [010]
| | | | | | repetitive * / tsi: / [011]
| | | | | | |
1   2   3   4   5   6   7

    The PI coincident prefix appears to have had a prevocalic allomorph * / ts / [002], and

at least one of its grammatical functions can be reconstructed for PI, which was the

marking of temporal coordination; compare the examples from Cherokee and Mohawk

in (5), where reflexes of the PI coincident are underlined.

(5)   Ch.   / <u>tsì</u>tsì:kò:ʔѮ̃:kî: <u>tsì</u>tsì:jʔkhě:hѮ́ʔsѮ̃:kî́: /
{ tsì-tsì-kò:ʔ-Ѯ̃:kî: tsì-tsì-j-àhkhě:hѮ́ʔs-Ѯ̃:kî́: }
COIN-1SG:3A-see.PERF-ASRT.DEP COIN-1SG:3A-chase.PERF-ASRT.INDP
'when I saw him, I chased him' (cf. Cook 1979:62)

   Mo.   / wakekhũ'nihneʔ 'shâ:raweʔ /
{ wake-khũnih-neʔ sh-aʔ-ra-weʔ }
3:1SG-cook.PERF-PPRF COIN-FACT-3SGM:3-arrive.PUNC
'I was cooking when he arrived' (cf. Deering & Delisle 1976:434)

Etymologically the coincident prefix was probably also the source of various relativizer

particles of Northern Iroquoian languages (e.g. Mo. / tsi /, Oe. / tsiʔ /, Oo. / tshaʔ /,

Ca. / tshēh /, Hu. / stiʔ /), all of which precede relative clauses and carry a meaning

'who, which, when, where, that'. The coincident prefix shows a comparable relativizer

function in Cherokee subordinate clauses; compare the examples in (6).

(6)   Ch.   / àhskàjá: <u>ts</u>ù:wő:hlâ: /
{ à-hskàjá: ts-ù:-wő:hl-â: }
3SG:3-man COIN-3:3SG-sit.PRES-INDIC.DEP
'the man who is sitting' (cf. Feeling & Pulte 1975:242)

   Ch.   / kì:lhî́: <u>ts</u>ù:jò:hlѮ̃:kî: tsĭ:mî́: /
{ k-ì:lhî́: ts-ù:-jò:hl-Ѯ̃:kî: tsĭ:mî́: }
3SG:3-dog COIN-3:3SG-shoot.PERF-ASRT.DEP Jim
'the dog that Jim shot' (cf. Cook 1979:61)

   The PI translocative prefix had at least a preconsonantal allomorph * / wi / [005] and

a prevocalic allomorph * / w /. Its primary grammatical function was to indicate that

an action was taking place at a distance from, or in a direction leading away from, the

speaker or the location of a narrative; compare the examples from Cherokee and

Tuscarora in (7), where reflexes of the PI translocative are underlined.

(7)   Ch.   / <u>w</u>á:ʔíːˈ /
                { w-á:ʔíː-âː }
                TLOC-3SG:3-walk.PRES-INDC.INDP
                'he's walking away' (cf. Feeling & Pulte 1975:244)

        Tu.   / <u>wɛ</u>hraʔnə̃ˈkohthaʔ /
                { wɛ-hr-aʔnə̃kohthaʔ }
                TLOC-3SG:3-go.beyond.IMPF
                'he goes beyond it' (cf. Rudes 1999:490)

It is possible that the translocative prefix was also used to indicate a superlative

meaning in connection with certain stative verbs (i.e. 'the most X'). Compare the

examples in (8) from Cherokee and Tuscarora.

(8)   Ch.   / <u>w</u>ǔːhstîːkhə̃́ːʔîː /
                { w-ùː-hstîːkhə̃́ːʔîː }
                TLOC-3:3SG-smallest
                'smallest' (cf. Feeling & Pulte 1975:337)

        Tu.   / <u>wɛ</u>hˈrahsthə̃ /
                { wɛ-hr-ahsthə̃ }
                TLOC-3SGM:3-be.small.PERF
                'he is the smallest' (cf. Rudes 1999:489)

In independent verb forms the PI partitive prefix had at least a prevocalic allomorph * / n / [004], and in dependent verb forms it seems to have had a preconsonantal allomorph * / i:ji /. The primary grammatical function of the partitive appears to have been specification of quantity or quality. In both branches of Iroquoian the partitive occurs when a number greater than two precedes a noun enumerating living things, in which case it appears on an intermediary stative verb meaning 'be that many'; compare the forms in (9) from Cherokee and Mohawk, where reflexes of the PI partitive are underlined.

(9)　　Ch.　　/ tsòʔíí: **ìj**áníː:ʔî: tsùwěːtsíː /
　　　　　　　　{ tsòʔíí: ìj-àníː-ʔ-âː ts-ùw-ěːtsíː }
　　　　　　　　three PART-3NS:3-be.that.many.PERF-INDC.DEP DUPL-3SG:3-child
　　　　　　　　'three of his sons' (cf. Feeling & Pulte 1975:21)

　　　　Mo.　　/ ˈahsᴧ̃ **ni**ˈhaːti ronaraʔseʔoˈkṹːʔa /
　　　　　　　　{ ahsᴧ̃ ni-hat-i ron-araʔseʔ-okṹʔ-ha }
　　　　　　　　three PART-3PLM:3-be.PERF 3:3NS-be.cousins-PLUR-CHAR
　　　　　　　　'three cousins' (cf. Deering & Delisle 1976:178)

A comparable pattern may thus be posited for PI. The partitive prefix probably also occurred in PI interrogative formulas, though the formulas cannot themselves be reconstructed; compare the sets in (10) from Cherokee and Mohawk where reflexes of the PI partitive are underlined.

(10)   Ch.   / hìlǎ: ǐ:kǎ:ʔî̀ / 'how much? how many?'
         / hìlǎ: ǐ:kó:hǐ́:tâ: / 'how long?' (time)
         / hìlǎ: ìkánˈ̄:hǐ́:tâ: / 'how long?' (distance)
         / hìlǎ: ìjátànˈ̄:hǐ́:tâ: / 'how far'
         / kàtò̀: ìjǘ:stî̀ / 'what kind?' (cf. forms in Feeling & Pulte 1975)

        Mo.   / to: ˈ**ni:**kũ / 'how much? how many?'
         / to: ˈ**n**aheʔ / 'how long?' (time)
         / to: ˈ**ni:**jɐ̃s / 'how long?' (distance)
         / to: **ni**ˈjo:ɹeʔ / 'how far?'
         / oh **n**aˈhô:tɐ̃ʔ / 'what kind?' (cf. forms in Maracle 1990)

Answers to the questions in (10), which will likewise specify quality or quantity, also

employ the partitive prefix (e.g. Ch. / sǔ:tálǐ́ **nì**ká:ʔǎ̀: / 'there are six of them',

Mo. / ˈjâ:jaʔk ˈ**ni:**kũ / 'there are six of them').

   The PI duplicative prefix had at least a pre-vocalic allomorph * / t / [007] that

appeared before the future prefix; it may also have had a pre-consonantal allomorph

* / ti / in dependent verb forms, and had a preconsonantal allomorph * / te: / in

independent verb forms. Although reflexes of the duplicative are among the most

frequently employed prefixes in both Cherokee and PNI, the precise grammatical

function of the prefix in PI is difficult to discern; in Cherokee it is principally used to

pluralize adjectives referring to inanimate objects (e.g. Ch. / ùwě:thî̀ / 'old thing' →

/ tsùwě:thî̀ / 'old things', cf. Feeling & Pulte 1975:184), as well as to signal the

plurality of an object in transitive verbs that have a singular patient pronominal prefix

(e.g. Ch. ⁄ tsìkɔ̀ːwthíhǽ: ⁄ 'I see it (one object)' → ⁄ tèːtsíkɔ̀ːwthíhǽː ⁄ 'I see them

(several objects)', cf. Feeling & Pulte 1975:247), and to signal plural, individual acts in

intransitive verbs with a non-singular patient pronominal prefix

(e.g. Ch. ⁄ kàtsìːjàʔlɑ̃́ːʔìhǽ: ⁄ 'I am tying them up [one act]' → ⁄ <u>tèː</u>kátsìːjàʔlɑ̃́ːʔìhǽ: ⁄

'I am tying them up [several acts]', cf. Feeling & Pulte 1975:257). The Cherokee

duplicative also occurs obligatorily in certain verbs that share no easily definable

characteristic apart, perhaps, from a semantically subjective sense of distributivity

(e.g. Ch. ⁄ <u>t</u>ã̀ːhlìhkéhǽ: ⁄ 'it is rocking [here and there, back and forth]',

cf. Feeling & Pulte 1975:68; ⁄ <u>tèː</u>kálìʔthàtéːkǽ: ⁄ 'I am jumping [up off the ground]',

cf. Feeling & Pulte 1975:69). In PNI, the duplicative is used to signal the presence or

involvement of two similar objects (e.g. PNI * ⁄ tekaˈnõhsakeːh ⁄ 'two houses' [152] [382],

PNI * ⁄ teˈwatjaʔks ⁄ 'it breaks in two' [297]), and occurs obligatorily in a number of verbs

that share no easily definable characteristic apart, perhaps, from a subjective sense of

duality or a change of state (e.g. PNI * ⁄ tekwẽˈninkẽʔts ⁄ 'I speak [out against

the silence]' [280] [476], PNI * ⁄ teˈkehkhwaʔ ⁄ 'I pick it up [off the ground]' [350]).

Consequently the meaning of the duplicative in PI is difficult to define, but in vaguest

terms it would seem to have expressed the presence or involvement of more than one

entity, more than one physical state, or more than one location.

The future prefix, which is present in all Northern Iroquoian languages but absent

from synchronic Cherokee grammar, is believed to have been present in PI on the basis

of unusual patterns of allomorphy associated with the cislocative and duplicative

prefixes in Cherokee future tense verb forms, as previously observed by Cook (1979:68).

In the forms in question, an otherwise unexplained segment / ò: / surfaces between the

cislocative prefix (which is used to form a periphrastic future construction) and the

duplicative prefix; this is believed to be the reflex of a PI future prefix * / ẽ: / [008], which

has a reflex in the same position in PNI. Cherokee and Oneida forms are presented in

(11) for comparison, with reflexes of an original duplicative-future-translocative

sequence underlined.

(11)   Ch.   / **tò:t**àtsíkò?íĩ: /
               { tò:-tà-tsì-kò?-ì:-ắ: }
               DUPL-CLOC-1SG:3-see.PERF-FUTR-INDC.INDP
               'I will see them' (cf. Feeling & Pulte 1975:248)

        Oe.   / **tʌ̃ˈt**jô:kalawe? /
               { t-ʌ̃-t-jo-a?kala?we? }
               DUPL-FUT-CLOC-3:3SG-become.night.PUNC
               'it will get dark again' (cf. Michelson & Doxtator 2002:315)

Presumably the PI future prefix had a meaning and function similar to that found in PNI, where co-occurrence with the cislocative and duplicative prefixes is not obligatory, and the prefix places events in the future tense (e.g. PNI * / ˈkheːkẽh / 'I see someone' [332] → * / ẽˈkheːkẽʔ / 'I will see someone'). Whether a punctual aspect base was also required when the future occurred, as is the case in Northern Iroquoian, is uncertain; Cherokee does not have this requirement.

The PI cislocative prefix seems to have had a basic preconsonantal allomorph * / ta / [010] in dependent verb forms, and an allomorph * / t / in most other environments. An allomorph with the form * / k / or * / ka / seems to have occurred with some common imperatives, perhaps on a lexically-determined basis (cf. e.g. PNI * / ˈkaːtsih / 'come here!' [329], Ch. / khěːnã́ː / 'come here!' (King 1975:67)). The primary grammatical function of the cislocative was to indicate that an action was taking place at a distance from, or in a direction leading toward, the speaker or the location of a narrative, and it was thus the functional inverse of the translocative morpheme; compare the examples from Cherokee and Mohawk in (12), where the reflex of the PI cislocative is underlined.

(12)　Ch.　/ **t̠àj**á:ʔí̃: /
　　　　　　{ t̠àj-à:ʔì-ã́: }
　　　　　　CLOC-3SG:3-walk.PRES-INDC.INDP
　　　　　　'she's coming this way' (cf. Feeling & Pulte 1975:251)

　　　Mo.　/ ˈt̠â:jɑ̃ʔ /
　　　　　　{ t̠-aʔ-jɑ̃-eʔ }
　　　　　　CLOC-3I:3-walk.PUNC
　　　　　　'she's coming this way' (cf. Deering & Delisle 1976:351)

　　　The PI repetitive prefix seems to have had a basic form * / tsi: / [011] before certain pronominal prefixes that involve the second person in imperative verbs; PNI maintains this allomorph only before the 1 + 2DU:3 and 1 + 2PL:3 prefixes, while Cherokee maintains it before the 3:2SG prefix as well. In every other environment, however, Cherokee has reshaped the repetitive prefix, making secure reconstruction of other allomorphs difficult. The primary grammatical function of the repetitive was to indicate that an action was repeated ('again') or that an action restored the original position of an object ('back'); compare the Cherokee and Cayuga forms in (13), where reflexes of the PI repetitive are underlined.

(13)　Ch.　/ **tsǐ:**tsátû:kã́: /
　　　　　　{ tsǐ:-ts-àtùʔk-ã́: }
　　　　　　REP-3:2SG-throw.PUNC-INDC.INDP
　　　　　　'throw it back, throw it again!' (cf. Feeling & Pulte 1975:244)

Ca. / <u>tsi</u>'twahshe:t /

{ tsi-tw-ahshe:t }

REP-1 + 2PL:3-count.PUNC

'let's count it again!' (cf. Froman et al. 2002:681)

2.5 NON-SINGULAR ANIMATE PREFIX

The PI non-singular animate prefix * / ka / [012] could precede any pronominal prefix

(2.6) having '3A' ('animate third person') as one of its arguments. The effect of the

non-singular animate prefix was to change the meaning of the '3A' argument to that of

non-singular animate (NSA). Compare the sets in (14) and (15), taken from Cherokee

(Feeling & Pulte 1975:268) and Cayuga (Froman et al. 2002:731), where a reflex of the

non-singular animate prefix, underlined, is added before the pronominal prefix in order

to alter the meaning; note that the '3I' or 'indefinite third person' pronominal prefix

series of Tuscarora is cognate with the '3A' pronominal prefix series of PI and Cherokee.

(14) Ch. / tsì:kò:wthíhá: /   / <u>kà</u>tsì:kò:wthíhá: /

{ tsì:-kòhwthìh-á: }   { kà-tsì:-kòhwthìh-á: }

1SG:3A-see.PRES-INDC.INDP   NSA-1SG:3A-see.PRES-INDC.INDP

'I see someone'   'I see them'

Ch. / hì:kò:wthíhá: /   / <u>kà</u>hì:kò:wthíhá: /

{ hì:-kòhwthìh-á: }   { kà-hì:-kòhwthìh-á: }

1SG:3A-see.PRES-INDC.INDP   NSA-2SG:3A-see.PRES-INDC.INDP

'you see someone'   'you see them'

(15) Ca.   / ʔaˈkheːkẽʔ /   / ʔa<u>ka</u>ːˈkheːkẽʔ /
           { aʔ-khe-kẽʔ }   { aʔ-ka-khe-kẽʔ }
           FACT-1SG:3I-see.PUNC   FACT-NSA-1SG:3I-see.PUNC
           'I saw someone'   'I saw them'

      Ca.   / ʔaˈsheːkẽʔ /   / ʔa<u>ka</u>hˈsheːkẽʔ /
           { aʔ-she-kẽʔ }   { aʔ-ka-hshe-kẽʔ }
           FACT-2SG:3I-see.PUNC   FACT-NSA-2SG:3I-see.PUNC
           'you saw someone'   'you saw them'

PNI preserved the original range of the non-singular animate prefix intact, although

subsequent changes in many Northern Iroquoian languages have either altered its

functional range (as in Huron) or eliminated it (as in Seneca).

2.6 PRONOMINAL PREFIXES

   PI pronominal prefixes were grammatically transitive, and each was capable of

referencing both a grammatical agent and a grammatical patient. In the present work

these core arguments are separated by a colon, with the grammatical agent preceding

the grammatical patient, e.g. * / ki / '1SG:3' ('I act on it'), * / wakʷi / '3:1SG'

('it acts on me'), * / jeːtsa / '3A:2SG' ('someone acts on you'). Semantically

intransitive verbs employed prefixes having an inanimate / null third person

(here glossed as '3') in place of a semantically vacant agent or patient argument, so

that the verbs meaning 'I walk' and 'I am cold' might literally be translated as 'I walk it'

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(1SG:3) or 'it colds me' (3:1SG). Note that while prefixes employed with semantically

intransitive verbs have traditionally been analyzed separately from transitive

pronominal prefixes, as subjective intransitive prefixes and objective intransitive

prefixes (cf. e.g. Lounsbury 1978:337, Chafe 1967:13-19), all pronominal prefixes are

capable of bearing transitive meaning when paired with semantically transitive verbs,

and for purposes of diachronic description, particularly with regard to etymology and

grouping of formally similar prefixes, it is preferable to treat all traditional classes of

pronominal prefix (agentive, patientive, transitive) as inherently transitive.

PI appears to have had a grammatical rule whereby an inanimate or null third

person argument ('3') could not occur as grammatical patient of a perfect aspect verb

base (see 2.9), and instead occurred as grammatical agent; as a result, while e.g.

'I see it' (imperfective) was expressed with the prefix 1SG:3, the equivalent perfect form,

'I have seen it', was expressed with a prefix '3:1SG', yielding a form that also meant

'it has seen me'; this peculiarity is preserved in both branches of Iroquoian, and is

illustrated with examples in (16) and (17) from Cherokee (Feeling & Pulte 1975:268)

and Mohawk (Michelson 1973:69), where the relevant pronominal prefixes are

underlined.

(16)   Ch.   / tsìk�ò:whthìhskóʔíː /
       { tsì-kòHwàhthìhsk-óʔíː }
       1SG:3-see.IMPF-HAB.INDP
       'I see it'

       Ch.   / ã̀:kìkò:hʌ̃̌:kíː /
       { ã̀:kì-kò:h-ʌ̃̌:kíː }
       3:1SG-see.PERF-ASRT.INDP
       'I have seen it' (also: 'it has seen me')

(17)   Mo.   / ˈikkʌ̃hs /
       { k-kʌ̃hs }
       1SG:3-see.IMPF
       'I see it'

       Mo.   / ˈwakkʌ̃ /
       { wak-kʌ̃ }
       3:1SG-see.PERF
       'I have seen it' (also: 'it has seen me')

PI seems to have had an inventory of at least 28 pronominal prefixes, which marked various semantic distinctions among grammatical agents and patients. For descriptive purposes the prefixes can be divided into 5 pronominal prefix groups, which are described below. The following conventions of parsing are used in the descriptions that follow: numbers (1, 2, 3) in all cases designate person; an ampersand (&) designates ambiguity of agent and patient (the 2PL&3 prefix, for example, could mean '2PL:3' or '3:2PL'); 3A designates animate third person; the small capital letter sequences SG, DU,

PL, and NS in all cases designate singular, dual, plural, and non-singular number; where the number categories SG, DU, PL, or NS are attached with a period to the prefix, they designate the maximum number of people present in either group (e.g. 1:2.DU signified 'first person acts on second person, where at least one group has two people, and neither group has more than two people').

PI pronominal prefixes appear to have had two principal allomorphs, one of which occurred before at least some consonants and clusters (e.g. * / ki / '1SG:3'), the other of which occurred before vowels and possibly before certain other consonants and clusters (e.g. * / k / '1SG:3'). Preconsonantal allomorphs (e.g. * / ki /) are presented below as basic forms.

In PI pronominal prefix group 1, prefixes encoded interactions between first and second persons; agents were distinguished from patients, and number was distinguished as singular when both agent and patient were singular, dual when one or both were dual and neither was plural, and plural when one or both were plural. The six pronominal prefixes of group 1 are presented in (18).

(18)   PI Pronominal Prefix Group 1

      1:2.SG   PI * / kõː / [013]   (cf. Ch. / kʌ̀ː /; PNI * / kõ /)

      1:2.DU   PI   ?   (cf. Ch. / hstʌ̀ː /; PNI * / kni /)

      1:2.PL   PI   ?   (cf. Ch. / ì:tsʌ̀ː /; PNI * / kwa /)

      2:1.SG   PI * / hskʷi / [016]   (cf. Ch. / hskì /; PNI * / hske /)

      2:1.DU   PI * / hskniː / [017]   (cf. Ch. / hskìnì: /; PNI * / hskni /)

      2:1.PL   PI * / hskʷ… / [018]   (cf. Ch. / hskì /; PNI * / hskwa /)

Morphemes that can be identified in PI pronominal prefix group 1 are { k(i) } 'first person singular agent', { hs(i) } 'second person agent', { kʷ(i) } 'first person patient', { õː } 'second person patient', and { niː } 'dual number'. The 1:2.SG prefix had an allomorph * / kõːj / before vowels (cf. Ch. / kʌ̀ːj /; PNI * / kõj /), the 2:1.SG prefix had an allomorph * / hsk / before vowels (cf. Ch. / hsk /; PNI * / hsk /), and the 2:1.DU prefix had an allomorph * / hskn / before vowels (cf. Ch. / hskìn /; PNI * / hskn /); the initial / h / of the 2:1 prefixes may have been lost word-initially and when following a consonant. The forms of the 1:2.DU and 1:2PL prefixes differ in PNI and Cherokee, but since the Cherokee forms are morphologically opaque, they may represent reflexes of original PI forms (perhaps * / tsnõː / and * / tswõː /).

In pronominal prefix group 2, prefixes described interactions between singular first or second person and third persons. Agents were distinguished from patients, and animate third persons were distinguished from inanimate or unmarked third persons. PI

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pronominal prefix group 2 is presented in (19).

(19)   PI Pronominal Prefix Group 2

1SG:3	PI * / ki / [019]	(cf. Ch. / tsì /; PNI * / ke /)
1SG:3A	PI * / kiji / [020]	(cf. Ch. / tsìː /; PNI * / khe /)
2SG:3	PI * / hsi / [022]	(cf. Ch. / hì /; PNI * / hse /)
2SG:3A	PI * / hsiji / [023]	(cf. Ch. / hìː /; PNI * / hshe /)
3:1SG	PI * / wakʷi / [025]	(cf. Ch. / àːkì /; PNI * / wake /)
3A:1SG	PI * / jõːkʷi / [026]	(cf. Ch. / ᷆ƛ̃ːkì /; PNI * / jõke /)
3:2SG	PI * / tsa / [028]	(cf. Ch. / tsà /; PNI * / tsa /)
3A:2SG	PI * / jeːtsa / [029]	(cf. Ch. / èːtsà /; PNI * / jetsa /)

Morphemes that can be identified in pronominal prefix group 2 are { k(i) } 'first person singular agent', { hs(i) } 'second person agent', { wa } 'third person agent', { kʷ(i) } 'first person patient', and { tsa } 'third person agent acting on second person singular patient'.

A morpheme { ji } was added initially to signal an animate third person agent and finally to signal an animate third person patient. The underlying combinations { ji + wakʷi } and { ji + tsa } appear to have yielded * / jõːkʷi / and * / jeːtsa /, respectively. The 1SG:3 prefix had an allomorph * / k / before vowels (cf. Ch. / k /; PNI * / k /), and the 1SG:3A prefix had an allomorph * / kijij / before vowels (cf. Ch. / tsìːj /; PNI * / khej /). The 2SG:3 prefix had an allomorph * / hs / before vowels (cf. Ch. / h /; PNI * / hs /), and the 2SG:3A prefix had an allomorph * / hsijij / before vowels (cf. Ch. / hìːj /; PNI * / hshej /). The 3:1SG prefix had an allomorph

* / wakʷ / before at least some vowels (cf. Ch. / à:kʷ / before all vowels;

PNI * / wakʷ / before bases beginning in * / a /), and the 3A:1SG prefix had an

allomorph * / jõ:kʷ / before at least some vowels (cf. Ch. / ʌ̃:kʷ / before all vowels;

PNI * / jõkʷ / before bases beginning in * / a /). The 3:2SG prefix had an allomorph

* / ts / before vowels (cf. Ch. / ts /; PNI * / ts /), and the 3A:2SG prefix had an

allomorph * / je:ts / before vowels (cf. Ch. / è:ts /; PNI * / jets /).

In pronominal prefix group 3, prefixes described interactions between non-singular

second persons and a third person. Agents and patients were not distinguished, but

second person dual and plural number were distinguished. PI pronominal prefix group 3

is presented in (20).

(20)   PI Pronominal Prefix Group 3

2DU&3	PI * / tsni: / [031]	(cf. Ch. / hstì: /; PNI * / tsni /)
2PL&3	PI * / ts… / [033]	(cf. Ch. / ì:tsì: /; PNI * / tswa /)

Morphemes that can be identified in pronominal prefix group 3 are { ts } 'non-singular

second person' and { ni: } 'dual number'. The final element of the 2PL&3 prefix is

unclear. The 2DU&3 prefix had an allomorph * / tsn / before at least some vowels

(cf. Ch. / hst / before all vowels; PNI * / tsn / before vowels other than * / a /).

In pronominal prefix group 4, prefixes described interactions between non-singular

first persons and a third person. Dual and plural number were distinguished in first

persons, agents were distinguished from patients, and inclusive and exclusive first

person agents were distinguished. The prefixes of group 4 are presented in (21).

(21)   PI Pronominal Prefix Group 4

      1+2DU:3   PI * / tni: / [036]   (cf. Ch. / ì:nì: /; PNI * / tni /)
      1+2PL:3   PI * / t... / [038]   (cf. Ch. / ì:tì: /; PNI * / twa /)
      1+3DU:3   PI   ?   (cf. Ch. / ò:hstì /; PNI * / jakni /)
      1+3PL:3   PI   ?   (cf. Ch. / ò:tsì /; PNI * / jakwa /)
      3:1DU   PI * / kni: / [044]   (cf. Ch. / kìnì: /; PNI * / jõkni /)
      3:1PL   PI * / kʷ... / [046]   (cf. Ch. / ì:kì: /; PNI * / jõkwa /)

Morphemes that can be identified in pronominal prefix group 4 are { t } 'inclusive first

person agent', { kʷ(i) } 'first person patient', and { ni: } 'dual number'. The reconstructed

forms of the 1+2PL:3 and 3:1PL prefixes are unclear, as are the forms of the exclusive

first person agent prefixes. The 1DU:3 prefix had an allomorph * / tn / before at least

some vowels (cf. Ch. / ì:n /; PNI * / tn / before vowels other than * / a /) and the

3:1DU prefix had an allomorph * / kn / before at least some vowels (cf. Ch. / kìn /;

PNI * / jõkn / before vowels other than * / a /).

In pronominal prefix group 5, prefixes described interactions between two third

persons. Singular and non-singular number were distinguished in either the agent or

patient prefix, and unique 3A:3SGA and 3A:3NSA prefixes encoded interaction between

two animate third persons. PI pronominal prefix group 5 is presented in (22).

(22)   PI Pronominal Prefix Group 5

3SG:3	PI * / ka / [051]	(cf. Ch. / kà /; PNI * / ka /)
	PI * / wa / [052]	(cf. Ch. / à: /; PNI * / w /)
3:3SG	PI * / ju: / [054]	(cf. Ch. / ù: /; PNI * / jo /)
3NS:3	PI * / wanti: / [058]	(cf. Ch. / à:nì /; PNI * / wati /)
3:3NS	PI * / ju:nti: / [061]	(cf. Ch. / ù:nì /; PNI * / joti /)
3A:3SGA	PI * / kõ:wa / [066]	(cf. Ch. / kÃ̀:wà /; PNI * / kõwa /)
3A:3NSA	PI * / kõ:wanti: / [068]	(cf. Ch. / kÃ̀:wànì /; PNI * / kõwati /)

Morphemes that can be identified in pronominal prefix group 5 are { ka } 'third person', { wa } 'third person', { ju: } 'third person patient', and { nti: } 'non-singular number'.

The 3A:3SGA and 3A:3NSA prefixes appear to have underlying compositions { ka + wa + wa } and { ka + wa + wa + nti: } respectively, and do not occur with the non-singular animate prefix. The functional or semantic distinction between the prefixes * / ka / [051] and * / wa / [052] is not clear (cf. Cook 1979:16) and they appear to have been lexically-determined variants in PI; in Cherokee they continue to be associated with certain verbs on a lexically-conditioned basis, while in PNI they merged as allomorphs of a single morpheme. Note that though Chafe's (1977b) reconstruction of Iroquoian third person pronominal prefixes does not project the last four prefixes in (22) back to PI, I regard the Northern and Southern Iroquoian forms as probable

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cognates in light of their preconsonantal allomorphs in * / i(:) / and prevocalic

allomorphs in * / n / (cf. e.g. Ch. / ũ:nì:- /, / ũ:n- / and PNI * / joti- /, * / jon- /

'3NS:3').

The 3SG:3 prefix * / ka / had an allomorph * / k / before vowels (cf. Ch. / k /;

PNI * / k / before certain verb bases beginning in a vowel). The 3SG:3 prefix * / wa /

had an allomorph * / w / before vowels (cf. Ch. / Ø / with low falling tone on a

following vowel; PNI * / w / before certain verb bases beginning in a vowel), and the

3A:3SGA prefix * / kõ:wa / had an allomorph * / kõ:w / before vowels

(cf. Ch. / kλ̃:w /; PNI * / kõw /). The 3:3SG prefix * / ju: / replaced at least the vowel

* / a: / of a following base, as do its reflexes in PNI and Cherokee. The 3NS:3 prefix had

an allomorph * / want / or * / wan / before vowels (cf. Ch. / ã:n /; PNI * / wan / or

* / wẽn /), and the 3A:3NSA prefix * / kõ:wanti: / has an allomorph * / kõ:want / or

* / kõ:wan / before vowels (cf. Ch. / kλ̃:wan /; PNI * / kõwan / or * / kõwẽn /). The

3:3NS prefix had an allomorph * / ju:nt / or * / ju:n / before vowels (cf. Ch. / ũ:n /;

PNI * / jon /).

Four pronominal prefixes whose forms in Cherokee and PNI are at least partially

cognate appear to end in the same plural morpheme, as presented in (23).

(23)   PI Pronominal Prefixes Ending in a Plural Morpheme

2:1.PL	PI * / hskʷ... / [018]	(cf. Ch. / hskì: /; PNI * / hskwa /)
2PL&3	PI * / ts... / [033]	(cf. Ch. / ì:tsì: /; PNI * / tswa /)
1 + 2PL:3	PI * / t... / [038]	(cf. Ch. / ì:tì: /; PNI * / twa /)
3:1PL	PI * / kʷ... / [046]	(cf. Ch. / ì:kì: /; PNI * / jõkwa /)

In PNI, the unknown suffix in (23) regularly corresponds to * / wa / before a consonant, * / j / before * / o / and * / õ /, and * / w / before the other vowels, while in Cherokee it regularly corresponds to / ì: / before a consonant and / Ø / before a vowel, except in the case of * / hskʷ... / [018] where it corresponds to / ì:j / before a vowel. A plural morpheme with the form * / iwa / before consonants seems plausible, with reduction of this sequence to / ì: / in Cherokee; lack of penultimate lengthening in PNI forms such as * / wa'ʔakweʔ / 'we go' [209] (rather than ˣ / wa'ʔa:kʷeʔ /) could then be attributed to the origin of a PNI cluster * / kw / in pre-PNI * / kʷew / or * / kʷw / (e.g. pre-PNI * / wa'ʔakʷweʔ / 'we go'). Evidence from other reflexes that would confirm or refute such a hypothesis is not presently at hand, however.

Another subset of pronominal prefixes is also worthy of note, due to the odd effect that these prefixes have on allomorphy both in Cherokee and PNI. In Cherokee, reflexes of the prefixes * { hsi } '2SG:3', * { tsni: } '2DU&3', * { ts... } '2PL&3', * { tni: } '1 + 2DU:3', * { t... } '1 + 2PL:3' and * { kʷ... } '3:1PL' trigger certain preceding

prepronominal prefix allomorphs that show a vowel / e / rather than / a /

(cf. Cook 1979:83). Similarly in PNI, reflexes of the prefixes * { tsa } '3:2SG', * { tsni: } '2DU&3', * { ts… } '2PL&3', * { tni: } '1 + 2DU:3' and * { t… } '1 + 2PL:3' trigger certain preceding pronominal prefix allomorphs that show a vowel * / e / rather than * / a /, as well as certain allomorphs that show a vowel * / i / rather than * / e /. The cause of this variation is unclear, but it is conceivable that at least some of the prefixes, all of which involve the second person, originally began in a vowel * / e / or similar segment that has subsequently been lost (i.e. * / (e)tsa /, * / (e)tsni: /, * / (e)tni: /, etc); this may additionally explain why the underlying combination * { ji + tsa } yields * / jeːtsa / '3A:2SG' in PI. Although the vowel alternants preceding these prefixes almost certainly have origins in the pronominal prefixes themselves, synchronic descriptions of allomorphy in the daughter languages can be greatly simplified by analyzing these alternants as part of preceding prepronominal prefixes, and consequently this is the approach that will be adopted in subsequent chapters.

2.7 REFLEXIVE AND SEMIREFLEXIVE PREFIXES

The PI reflexive prefix had the basic form * / ataːt / [076] (cf. Ch. / àtàːt /, PNI * / atat /), while the PI semireflexive prefix had the basic forms * / at / [077] and

* / aɹ / [078], apparently on a lexically-determined basis (cf. Ch. / àt /, / àl /;

PNI * / at /, * / aɹ /). The reflexive prefix was fully productive in PI and consistently

rendered a meaning 'self'; compare the forms in (24) and (25) from Cherokee

(Feeling & Pulte 1975:296) and Old Mohawk (cf. Bruyas 1863:47).

(24)   Ch.   / ã̀:kìkò:hʌ̃̌:kí: /
                  { ã̀:kì-kò:h-ʌ̃̌:kí: }
                  3:1SG-see.PERF-ASRT.INDP
                  'I have seen it'

        Ch.   / ã̀:kʷàtà:kò:hʌ̃̌:kí: /
                  { ã̀:kʷ-àtà:-kò:h-ʌ̃̌:kí: }
                  3:1SG-REFL-see.PERF-ASRT.INDP
                  'I have seen myself'

(25)   OMo.   / ˈwakkʌ̃ /
                  { wak-kʌ̃ }
                  3:1SG-see.PERF
                  'I have seen it'

        OMo.   / wakaˈtatkʌ̃ /
                  { wak-atat-kʌ̃ }
                  3:1SG-REFL-see.PERF
                  'I have seen myself'

    The semireflexive prefix did not always render a consistent meaning, though often

verbs containing it involved a part of oneself rather than the whole; in such cases it

might be translated as 'own', e.g. 'I wash my (own) hands', 'I cut my (own) hair', etc.

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Just as often, however, the semireflexive had become an integral part of the verb base,

no longer analyzed separately, as in e.g. PI * / wakʷataˈwẽːh / [161] 'I have swum',

consisting apparently of semireflexive * { at } [077] and a verb base related to the noun

root * { awẽʔ } [196] 'water' (cf. PNI * / joˈtaːwẽːh / 'she has swum'; Ch. / ùːtàwóːʔǎ̃ːkí�́ː /

'she has swum, cf. Feeling & Pulte 1975:8). Reflexes of semireflexive * { at } and

* { aɹ } are found in both branches of Iroquoian, although PNI has greatly generalized

the former at the expense of the latter.

2.8 INCORPORATED NOUN STEM

PI verbs could optionally incorporate a noun stem if the noun was the grammatical

subject of an intransitive verb or the grammatical object of a transitive verb

(e.g. 'the house is strong' → 'it house-strongs'; 'I build houses' → 'I house-build'). Noun

incorporation remains extremely productive in all the Northern Iroquoian languages.

A detailed semantic and syntactic description of noun incorporation in Onondaga is

found in Woodbury (1975); with only minor semantic differences, it may be extended to

all of the Northern Iroquoian languages, and probably to PI as well. For purposes of

illustration, two examples of noun incorporation from Mohawk

(cf. Michelson 1973:72, 83) are presented in (26).

(26)   Mo.   / kanũhso'waːnʌ̃ /   (< PNI * / kanõhso'waːnẽh / [237] [382])

                    { ka-nũhs-owanʌ̃ }

                    3:3SG-house-JOIN-be.big.PERF

                    'the house is strong'

        Mo.   / kenũh'sũːni /   (< PNI * / knõh'sõːnih / [260] [382])

                    { ke-nũhs-ũni }

                    1SG:3-house-build.PRES

                    'I am building a house'

As can be seen in the examples in (26), the incorporated noun stem is preposed to the verb base, and a 'joiner vowel' * / a / [079] is inserted between the two if the noun stem ends in a consonant and the verb root begins in a consonant (cf. Michelson 1988:157). Residual traces of this process survive in Cherokee, although the number of verbs that permit synchronic noun incorporation has decreased considerably in the language. Among the few Cherokee verbs that do permit some degree of productive noun incorporation is { -t- } 'lay down, put down', some reflexes of which are presented in (27) with incorporated noun stems underlined.

(27)   Ch.   / ã:tíʔã́: /

       { ã:-tìʔ-ã́: }

       3SG:3-lay.down.PRES-INDC.INDP

       'she is laying it down' (cf. Feeling & Pulte 1975:10)

       Ch.   / kànì:hslátíʔã́: /   (cf. / kànì:hslí: / 'bed')

       { kà-**nì:hsl**-à-tìʔ-ã́: }

       3SG:3-ice-JOIN-lay.down.PRES-INDC.INDP

       'she is setting up a bed' (cf. Feeling & Pulte 1975:108)

       Ch.   / kànĕ:hstálàtìʔã́: /   (cf. / ù:nĕ:hstálã́: / 'ice')

       { kà-**nè:hstàl**-a-tìʔ-ã́: }

       3SG:3-ice-JOIN-lay.down.PRES-INDC.INDP

       'it is freezing' (cf. Feeling & Pulte 1975:107)

       Ch.   / tã:hskî:ná:tìʔã́: /   (cf. / àhskĭ:nã́: / 'demon')

       { t-ã:-**hskì:n**-à:-tìʔ-ã́: }

       DUPL-3SG:3-demon-JOIN-lay.down.PRES-INDC.INDP

       'she is cursing' (cf. Feeling & Pulte 1975:76)

     More numerous in Cherokee than the examples in (27), however, are bound or

'fossilized' examples of noun incorporation. In a few cases, mainly involving items of

clothing, the noun stem exists independently in the language, but the accompanying

verb root is bound and does not occur elsewhere (e.g. Ch. { -àlìhstù:lʌ̃̀ʔk- }

'put on a cap', { -àhsù:lʌ̃̀ʔk- } 'put on pants', { -àlìjèʔsù:lʌ̃̀ʔk- } 'put on shoes';

Ch. { -àlìhstù:làkì:- } 'take off a cap', { -àhsù:làkì:- } 'take off pants', { -àlìjèʔsù:làkì:- },

'take off shoes', cf. bases in Feeling & Pulte 1975). In other cases, involving what are

most often described as classificatory verbs (cf. King 1975:97, Cook 1979:185), a

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recurring incorporated noun stem no longer exists independently in the language, but

precedes a verb root that does occur independently (e.g. Ch. { -nè:hwàhth- }

'find a liquid', { -jλ̀:hwàhth- } 'find a long object', { -nàhwàhth- } 'find a flexible object';

Ch. { -nè:hwì:t- } 'take a liquid', { -jλ̀:hwì:t- } 'take a long object', { -nàhwì:t- } 'take a

flexible object', cf. bases in Feeling & Pulte 1975). In still other cases, perhaps most

numerous, semantically related verbs clearly contain the same verbal element, but

neither the noun stem nor the verb base occurs independently in the language

(cf. Ch. { -àhskò:l- } 'dig', { -hnù:kò:l- } 'claw', { -àtlàkò:l- } 'scratch', { -hstλ̀:kò:l- }

'grind corn', { -àtànhò:kò:l- } 'undergo scratch ritual'; Ch. { -λ̀:hskʷàlò?ts- } 'crack',

{ -nə̀:kʷàlò?ts- } 'hammer', { -hjə̀:tàkʷàlò?ts- } 'thunder', { -hnàhskʷàlò?ts- }

'stub one's toe', { -àtà:hskʷàlò?ts- } 'bump one's head', cf. bases in King 1975). Forms

such as these suggest that PI did indeed have productive noun incorporation, on a level

comparable to that found in PNI, and support previous studies asserting that productive

noun incorporation in Cherokee has been considerably reduced

(cf. Lounsbury 1978:337, Mithun 1984a:883).

2.9 VERB BASE

Under the heading of the PI verb base I include everything that Lounsbury

(1978:337) treats as a verb root, followed optionally by various derivational suffixes,

followed obligatorily by an aspectual suffix. This is in part due to formal

unpredictability (the form that derivational and aspectual suffixes have is determined

lexically by the verb base), and in part due to a subsequent development in Cherokee,

whereby productive and predictable modal suffixes were affixed to the PI 'verb base' as

a whole.

The PI verb base appears to have had four principal forms, each of which reflected a

different tense or aspect. The present base, which has reflexes in the present base of

Cherokee and in the present base of certain verbs in Mohawk and Cayuga, signaled that

an event was taking place at the present time. The punctual verb base, which has

reflexes in imperative verbs in both Cherokee and Northern Iroquoian, signaled that an

event was taking place at any single point in time except the present. The imperfective

base, which has reflexes in the imperfective base of Cherokee and in the imperfective

base of certain verbs in Mohawk and Cayuga, signaled that the action of a verb was

incomplete and ongoing. The perfect verb base, which has reflexes in the perfect base of

Cherokee, and in the perfect base (sometimes referred to as the stative base) of

modern Northern Iroquoian languages, signaled that the action of a verb was complete

or that a state existed.

   Because relatively few verb bases remain cognate between Cherokee and PNI

(and the few that do have often been reshaped in Cherokee through addition of

derivational elements), cognate status of the verb bases themselves is often difficult to

demonstrate, though their meanings remain essentially the same. Cherokee and PNI

reflexes for the verbs 'climb over' (PI * { -atawẽ:hɹat- } [162]) and 'see'

(PI * { -kẽ(:)- } [332]) are presented in (28) and (29) in their four basic forms.

(28)   'climb over'   Cherokee   PNI

       present   { -àtàwò:hìlàtì?- }   * { -atawẽhɹatha? }
       punctual   { -àtàwò:hìlàt- }   * { -atawẽhɹat }
       imperfective   { -àtàwò:hìlàtìhsk- } * { -atawẽhɹathsk }
       perfect   { -àtàwò:hìlàt- }   * { -atawẽhɹatõh }

(29)   'see'   Cherokee   PNI

       present   { -kòhwàhthìh- }   * { -kẽh }
       punctual   { -kòhwàhth- }   * { -kẽ? }
       imperfective   { -kòhwàhthìhsk- }   * { -kẽhsk }
       perfect   { -kò:h- }   * { -kẽ:h }

   Although the shapes of verb bases like those in (28) and (29) were lexically

determined and formally unpredictable, they nonetheless did often contain derivational

and aspectual morphemes with recurring forms that followed the constant form of the verb root, occasionally with vowels and glottal consonants of uncertain meaning interceding. Derivational morphemes that can be reconstructed at the level of PI include a causative-instrumental morpheme that had the basic form * { -t- } [082] or * { -hst- } [083] and the meaning 'make X, cause to X, use to X'; a reversive morpheme that had the basic form * { -kʷ- } [085] and carried the meaning 'un-X', 'de-X'; and a dative-benefactive morpheme that had the basic form * { -ts- } [088] and carried the meaning 'X to, X for, X on behalf of'. No demonstrably cognate pairs can be given to illustrate these morphemes, but their meanings and their placement at some point after the constant form of the verb root is identical in both branches of Iroquoian.

2.10 NOUN MORPHOLOGY

Many PI nouns were probably dependent verb forms that functioned as noun phrases – e.g. 'they hunt' (independent verb form) → 'they who hunt; hunters' (dependent verb form/deverbalized noun); 'they are hunting again' (independent verb form) → 'those who are hunting again; re-hunters' (dependent verb form/deverbalized noun); 'one uses it to hunt' (independent verb form) → 'that which one uses to hunt; hunting place' (dependent verb form/deverbalized noun). Deverbalized nouns had the

same form and morphological structure as verbs except that word-initial glides were

lost from pronominal prefixes so that, for example, the PI pronominal prefix

* { wakʷi- } '3:1SG' has become * { akʷi- } '3:1SG' in a deverbalized noun, and the

pronominal prefix * { juːntiː- } '3:3NS' has become * { uːntiː- } '3:3NS'. This distinction

has been retained in nouns both in Cherokee and in PNI, so that one finds

e.g. Ch. / à̠kèːhjűːtsâ: / '(she is a) girl' rather than / à̠:kèːhjùːtsá̃: / and Mo. / a̠ˈkũːkʷeh /

'(she is a) woman' rather than / j̠aˈkũːkʷeh /.

In addition to deverbalized nouns, PI had simple nouns, which consisted of a noun

stem optionally preceded by a noun prefix and optionally followed by a noun suffix.

The two basic forms of the noun prefix were based on the 3SG:3 pronominal prefix

(both * / ka / [051] and * / wa / [052]) and the 3:3SG pronominal prefix (* / juː / [054]).

These were lexically conditioned: some nouns took the former while others took the

latter. As in deverbalized nouns, word-initial glides were lost in simplex noun prefixes,

so that, for example, the allomorph * / w / has become * / Ø /, the allomorph * / wa /

has become * / a /, and the allomorph * / juː / has become * / uː / (cf. Ch. / Ø- /,

/ à- /, and / ùː- /; PNI * / Ø- / before bases beginning in * / a /, * / o- /). The basic

form of the noun suffix may have been a glottal stop preceded by * / a / when a root

ended in a consonant (cf. PNI * / -aʔ / [123]). Some examples of simple nouns in PI

include * { kanõːnowẽʔ } 'pipe' [323] (cf. Ch. / kànʎ̀ːnòwǽː /; PNI * / kaˈnõnawẽʔ /) and

* { ukiʔɹhaʔ } 'hair' [342] (cf. Ch. / ùkìʔlhǽː /; PNI * / uˈkeʔɹhaʔ /).

Possession of nouns was indicated in PI by replacing the noun prefix of a simple

noun with a prefix from one of two sets of possessive pronominal prefixes. One of the

sets seems to have been used to mark inalienable possession (the soul and body parts),

and was cognate with pronominal prefixes where the possessor was agent and '3' was

patient (e.g. * / ki / '1SG:3' → * / ki / '1SG.INPOSS'). The second set of possessive

prefixes seems to have been used to mark alienable possession of objects

(e.g. 'my house'), and was cognate with pronominal prefixes where '3' was agent and

the possessor was patient (e.g. * / wakʷi / '3:1SG' → * / akʷi / '1SG.ALPOSS'). The

only formal difference between pronominal prefixes and their possessive counterparts

again seems to have been loss of initial glides: cf. Mo. / w̲akeˈnũhsajʎʔ / 'I have a house'

(verb), but / akeˈnũhsaʔ / 'my house' (noun); Mo. / j̲ũkwaˈnũhsajʎʔ / 'we have a house',

but / ũkwaˈnũhsaʔ / 'our house' (cf. Deering & Delisle 1976:198). There appears also to

have been a tendency, if not a rule, whereby inalienably possessed body parts occurred

with a locative suffix (cf. PNI * / kjeˈɹõʔk̲e̲h̲ / '(on/at) my body' [304] and

Ch. / tsìjèːlʎ̃ːʔ̲î̲ː̲ / '(on/at) my body', Cook 1979:193).

Relationships between people were expressed using prepronominal prefixes on

dependent stative verbs, e.g. * { akʷi-ɹhok } 'my paternal aunt' [425]

(lit. 'it is a paternal aunt to me'), * { tsa-ɹhok } 'your paternal aunt'

(lit. 'it is a paternal aunt to you'), * { kõ:-ɹhok } 'I am your paternal aunt'

(lit. I am a paternal aunt to you)', etc. As in the first two examples, pronominal

prefixes with an argument '3' appear to have been used in place of prefixes that

employed an argument '3A' when a third person was involved in a relationship

(cf. PNI * / aˈkeɹhok / 'my paternal aunt' [425], rather than [x] / jõˈkeɹhok /;

Ch. / àkìlhò:kɨ́: / 'my paternal aunt', rather than [x] / ʌ̀kìlhò:kɨ́: /, cf. Cook 1975:185).

2.11 PARTICLES AND CLITICS

The third lexical category of PI consisted of particles, which were small, generally

monomorphemic function words that served to quantify, emphasize, or clarify the

relationship between other words in an utterance. Due to a high rate of lexical

replacement, even among sub-branches of Northern Iroquoian, only a few particles have

cognates in both branches of Iroquoian; among those that can be projected back to PI

are a temporal particle * { nẽh } 'now, then, at this or that time' [367] (cf. Ch. / nǒ:kʷʌ̃́: /;

PNI * / ˈo:nẽ /), * { i:nõh } 'far, distant' [281] (cf. Ch. / ɨ́:nâ: / 'far', / ì:nʌ̃:hɨ́: / 'too far';

PNI * / ˈi:nõh / 'far'), and * { aɹeʔ } 'about, approximately' [158] (cf. Ch. / àlɛ́: /;

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PNI * / ˈaːɹeʔ /). PI seems also to have had a particle of the form * { nV(H) } [352]

(cf. Ch. / náː /; PNI * / neʔ /) that preceded nouns and may have served a deictic

function ('the', 'this', 'that') or been used to mark out deverbalized nouns. Iroquoian

numbers, which are invariably preposed to their referent, are invariable

morphologically, and are thus also effectively particles; due to lexical replacement,

however, only one number is reconstructable at the level of PI: * / hwihsk / 'five' [273].

PI may also have had clitics: small morphemes, perhaps originally derived from

verbs, which were suffixed to their referents rather than preceding them. A clitic of the

form * { -hnõʔ } may have signified 'and' (cf. Ch. * / -hnɛ̃ː / 'also, and, moreover';

PMO * / ˈtahnũʔ / 'and, besides' [434]). PI probably also a locative clitic or suffix that

followed nouns, although its exact form is unclear; Cherokee has * { -îː } 'at, on, in'

where PNI had * { -keh } 'at, on, in' [128].

CHAPTER 3: CHEROKEE

3.1 INTRODUCTION

This chapter describes the language of the Cherokee (/ ànì:tsàlàkí: /, a name of

uncertain etymology), whose territory in the early seventeenth century appears to have

ranged north to the foot of the Great Smoky Mountains, bordering on the territory of

the Yuchi, west to the foot of the Appalachian Plateau, bordering on the territory of the

Koasati, south to the Georgian Piedmont, bordering on the territory of the Creek, and

east to the foothills of the Blue Ridge Mountains, bordering on the territory of the

Catawba (cf. village locations in Mooney 1900:507-548; see Map 2). Today speakers of

Cherokee are located primarily on the Eastern Cherokee Indian Reservation in western

North Carolina and on the lands of the Cherokee Nation in eastern Oklahoma.

The earliest record of the Cherokee language appears to be a list of vocabulary

recorded at some point between 1751 and 1771 by the early American surveyor

William Gerard De Brahm, entitled *Compendium of the Cherokee Indian Tongue in English*,

which is reproduced in De Vorsey (1971). De Brahm's vocabulary contains a handful of

archaisms, but is essentially in keeping with the modern language. Another list of

Cherokee vocabulary published in Castiglioni (1790) likewise appears to reflect the

modern language.

Within modern Cherokee there exists a wide array of dialects and idiolects that have yet to be charted and described. My preliminary analysis of early Cherokee sources has suggested there may have been as many as ten dialects, which differ primarily with regard to reflexes of Common Cherokee consonant clusters; e.g. Common Cherokee * / hsl / has become dialectal Cherokee / hs /, / thl /, or / lh /; Common Cherokee * / tsl / has become dialectal Cherokee / ts /, / tl /, / thl /, and so on. Because differing developments of Common Cherokee reflexes cannot yet be tied to definite geographic locations, nor even generally to the two Cherokee settlements in North Carolina and Oklahoma, Cherokee dialectal developments are not addressed in the present work, but rather require further investigation. Cherokee forms presented in this chapter are intended to represent pre-dialectal Cherokee forms, in so far as these can at present be ascertained.

A late eighteenth-century glossary of Cherokee is in Mooney (1900), and modern grammars are in King (1975), Feeling & Pulte (1975), Cook (1979), and Montgomery-Anderson (2008). A teaching grammar is in Holmes and Smith (1977), and dictionaries are in King (1975) and Feeling & Pulte (1975); unless otherwise stated, Cherokee forms in this chapter are based on data in King (1975) and Feeling & Pulte (1975).

3.2 PHONEMIC INVENTORY

The phonemic inventory of Common Cherokee is presented in (1).

(1)   Phonemic Inventory of Common Cherokee

CONSONANTS

	Bilabial	Alveolar	Palatal	Velar	Glottal
Plosive		t		k kʷ	ʔ
Nasal	m	n			
Fricative		s			h
Affricate		ts			
Approximant			j	w	
Lateral Approximant		l			

VOWELS

	front	central	back
close	iː		uː
	i		u
mid	eː	ʌ̃ː	oː
	e	ʌ̃	o
open		aː	
		a	

Reflexes of PI * / ẽ(ː) / and * / o(ː) / have merged as / o(ː) / in most environments

in Cherokee, while reflexes of PI * / õ(ː) / have shifted to / ʌ̃(ː) / in most environments.

Cherokee / m / appears to have developed from reflexes of PI * / w / in the vicinity of

a nasal vowel. PI * / ɹ / appears to have been preserved in the extinct Eastern dialect of

Cherokee (cf. Mooney 1900:188), but has undergone a shift to / l / in all surviving

dialects of Cherokee; I here represent the reflex of PI * / ɹ / as Common Cherokee / l /,

in part to make the formal relationship between pre-dialectal Cherokee and modern

Cherokee forms more transparent for the reader.

All Cherokee vowels carry one of six tones: low level (e.g. / à: /), low falling

(/ ȁ: /), low rising (/ ǎ: /), high level (/ á: /), high falling (/ â: /), or high rising

(/ a̋: /) (cf. Feeling & Pulte 1975:xi); falling and rising tones occur only on long vowels

(cf. Wright 1996:11). The plosives / t /, / k /, and / kʷ / have voiced allophones [d],

[g], and [gʷ] respectively before vowels, and / ts / has an allophone [dz] or [dʒ]

in the same environment (cf. King 1975:19).

3.3 PHONOLOGICAL CHANGES

The complete, and probably vast, inventory of sound changes separating Cherokee

from PI is imperfectly understood at present due to the scarcity of secure PNI and

Cherokee cognates. Sound changes that do appear to be secure are described below as

CH-1 through CH-29. Where morphological disparity between PNI and Cherokee forms

has made comparison of whole words impossible, only morphological roots have been given and cognate segments underlined. Where ordering of two changes appears to be necessary in order to produce a correct output in Cherokee, this has been noted.

By CH-1, * / k / has become * / ts / before * / i / (e.g. PI * { ki- } '1SG:3' [019] > Ch. { tsì- }; PI * { kiji- } '1SG:3A' [020] > Ch. { tsì:- } '1SG:3A'). This change seems to have been levelled out in the 3SG:3 prefix * { ka- } [051], which has the allomorph / k / before all vowels, including / i / (e.g. PI * { k-ihɹjuʔkẽh } '(it is a) chipmunk' [340] > Ch. / khìjûːkǎː /; PI * { k-iːɹ } '(it is a) dog' [341] > Ch. / kìːlhíː /); it must precede CH-2 and CH-22.

By CH-2, * / kʷ / has become * / k / before * / i / (e.g. PI * { wakʷi- } '3:1SG' [025] > Ch. { àːkì- }; PI * { jõkʷi- } '3A:1SG' [026] > Ch. { ʌ̃ːkì- }; PI * { -kʷ- } 'pick up' [350] → Ch. / hìkíː / 'pick it up!'). This change must follow CH-1.

By CH-3, * / w / has been lost after * / h / before * / i / (e.g. PI * / hwihsk / 'five' [273] > Ch. / hìhskíː /). This change must precede CH-22.

By CH-4, * / w / has been lost after * / t / and * / th / (e.g. PI * { -neːhstwaɹ- } 'ice' [365] → Ch. / ùněːhstálǎː /; PI * { -atkahthw- } 'look at' [179] → Ch. / hàkhthǒːhstǎ / 'look at it!'). This change must precede CH-22.

By CH-5, the approximant * / w / has been lost word-initially and the following

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vowel has been lengthened and has acquired low falling tone (e.g. PI * { wakʷi- }

'3:1SG' [025] > Ch. { ǎːkì- }; PI * { wantiː- } '3NS:3' [058] > Ch. { ǎːnìː- }). This change does

not appear to have affected the translocative morpheme (cf. PI * { wi- } [005] >

Ch. { wì- }) or words of onomatopoeic origin (cf. PI * { waʔkuhɹiʔ } 'whippoorwill' [474]

> Ch. / wàʔkùːlíˊ /). Similarly, by CH-6, the approximant * / j / has been lost word-

initially and the following vowel has been lengthened and has acquired low falling tone

(e.g. PI * { jǒːkʷi- } '3A:1SG' [026] > Ch. { ˆΛ̀ːkì- }; PI * { jeːtsa- } '3A:2SG' [029] >

Ch. { ěːtsà- }; PI * { juː- } '3:3SG' [054] > Ch. { ǔː- }; PI * { juːntiː- } '3:3NS' [061] >

Ch. { ǔːnìː- }).

By CH-7, vowels have been lost after a consonant when they preceded * / hC /

(e.g. PI * { -atkahthw- } 'look at' [179] → Ch. / hàkhthǒːhstǎː / 'look at it!'). The

synchronic effect of this change can be seen in Cherokee verbs bases containing / h /

(like the example above), which alternates with / ʔ / on a pronominally-determined

basis (cf. / hìːjàkǎːthǒːhstǎː / 'look at her!', in which vowel deletion has not applied,

owing to underlying { -àkàʔth- } occurring in place of { -àkàhth- } whenever the

2SG:3A pronominal prefix is present; this phenomenon is discussed further in 3.4). This

change must precede CH-22.

By CH-8, * / ʔ / has been lost before a consonant and the preceding vowel has been

lengthened and acquired low falling tone (e.g. PI * { -koʔtiʔ } 'be a lot' [344] →

Ch. / ŭ:kò̠:tí̠: / 'a lot'). Note that low rising tone, rather than low falling tone, has

typically appeared if another syllable has been added by CH-12 (cf. PI * { -nõʔt- }

'milk' [388] → Ch. / ùn̠ǎ̠:tí̠: /).

By CH-9, glottal consonants have been lost word-finally and a preceding vowel has

been lengthened (e.g. PI * { ku:ɹeh } 'acorn' [348] > Ch. / kù:lế: /; PI * { aɹeʔ } 'about' [158]

> Ch. / àlế: / 'and'; PI * { -hsnu:ɹiʔ } 'be fast' [258] → Ch. / ùh̠sìnű̠:lî̠: / 'it is fast').

By CH-10, the sequence * / a(:)wẽ(:) / has become * / a(:)ma(:) /

(e.g. PI * { awẽʔ } 'water' [196] > Ch. / àmấ: /; PI * { kahna:wẽ:h } 'butterfly' [317] >

Ch. / khàmà:mấ: /, the first / m / arising by regressive assimilation). This change

seems to have been confined to the final two syllables of nouns and has not taken place

in verbs; it must precede CH-11 and CH-27.

By CH-11, nasal vowels have become * / a: / in final syllables (e.g. PI * { i:nõh }

'far' [281] > { í̠:nâ: }; PI * { kanõ:nowẽʔ } 'pipe' [323] > Ch. / kànλ̃:nòwấ: /;

PI * { kih.ɹjuʔkẽh } 'chipmunk' [340] > Ch. / khìjû:kấ: /). This change must follow CH-9

and CH-10 and precede CH-12 and CH-27. (cf. also Rudes 1995:20).

By CH-12, a long vowel with high rising tone has been added to the end of words

ending in a consonant; typically this vowel is / ấ: /, / í̠: / or / λ̃: /, but with variation by

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dialect (e.g. PI * { tsi:ɹ } 'fire' [458] → Ch. / àtsǐ:lǽ: / [also: / àtsǐ:lǽ̃: /]; PI * { tiʔɹ } 'skunk' [443] > Ch. / tíʔlǐ: / [also: / tiʔlǽ: /]). As in the examples given, a previously accented vowel has typically acquired low rising tone after this change has applied. This change must follow CH-11.

By CH-13, * / iji / has become * / i: / (e.g. PI * { kiji- } '1SG:3A' [020] > Ch. { tsì:- }; PI * { hsiji- } '2SG:3A' [023] > Ch. { hì:- }).

By CH-14, * / tsn / has become * / hst / (e.g. PI * { tsni:- } '2DU&3' [031] > Ch. { stì:- }). This change must precede CH-22.

By CH-15, * / n / has become * / h / before * / st / (e.g. PI * { -nste:ɹ- } 'get involved' [391] → Ch. / hìhstě:lǽ: / 'help!').

By CH-16, the resonant consonant * / n / has been lost before * / j / (e.g. PI * { -oʔnj- } 'hand' [400] > Ch. / àkʷò̠:jě̃:nî: / 'my hand'; PI * { -ʔnjõ:hs- } 'nose' [494] → Ch. / tsì:jɭ̀̃:hső:lî: / 'my nose'), and similarly, by CH-17, the resonant consonant * / ɹ / has been lost before * / j / (e.g. PI * / kihɹjuʔkẽh / 'chipmunk' [340] > Ch. / khìjû:kǽ: /). Both changes must precede CH-22.

By CH-18, * / t / has been lost before * / k / (e.g. PI * { -atkahthw- } 'look at' [179] → Ch. / hàkhthǒ:hstǽ: / 'look at it!'; PI * / wakʷata:tkẽ:h / 'I have seen myself' [076] [332] > Ch. / à̠:kʷàtà:kò:hɭ̌:ʔĩ́: /).

By CH-19, * / t / has been lost before * / n / (e.g. PI * { tni:- } '1 + 2DU:3' [036] >

Ch. { ǐ:tì:- }). This change must precede CH-22.

By CH-20, * / t / has been lost after * / n / (e.g. PI * { wanti:- } '3NS:3' [058] >

Ch. { ã:nì:- }; PI * { ju:nti:- } '3:3NS' [061] > Ch. { ǔ:nì:- } '3:3NS').

By CH-21, * / j / has been lost after * / ts / (e.g. PI * { -tsjo:ɹ- } 'tobacco' [465] →

Ch. / <u>tsò:lã́</u>: /; PI * { -tsjõʔt- } 'fish' [467] → Ch. / <u>àtsàʔtí</u>́ /). This change must precede

CH-22.

By CH-22, * / i / has been inserted between clusters of a consonant and a resonant

consonant (e.g. PI * { -khju:hs- } 'elbow' [338] → Ch. / à<u>khìjù:hs</u>kě: /; PI * { -hsnu:ɹiʔ }

'be fast' [258] → Ch. / ù<u>hsìnű</u>:lî / 'it is fast'; PI * { -nakɹ- } 'dwell' [354] → Ch. / ù<u>nàkìlʌ̃</u>:tí̋ /

'for it to dwell'; PI * { -atawẽ:hɹat- } 'climb over' [162] → Ch. / hà<u>tàwò:hìlàt</u>ã́ /

'climb over!'). Contrasting with the last example is onomatopoeic PI * { waʔkuhɹi:ʔ }

'whippoorwill' [474] > Ch. / wàʔkù:lí̋ /, which is apparently unaffected. The Common

Cherokee cluster / hsl /, which has different dialectal outcomes, seems also to have

been an exception to epenthesis. This change must follow CH-1, CH-3, CH-4, CH-7,

CH-14, CH-16, CH-17, CH-19, and CH-21, and precede CH-26.

By CH-23, * / s / has been lost after * / h / at the beginning of a word when a

vowel followed, as illustrated by the development of prefixes involving the second

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person singular (PI * { hsi- } '2SG:3' [022] > Ch. { hì- }; PI * { hsiji- } '2SG:3A' [023] >

Ch. { hì:- }).

By CH-24, * / ts / has become * / s / after * / h / (e.g. PI * { -ahtsõ:h- } 'night' [149]

→ Ch. / ùhsfalling:ʔî: /; PI * { -htsu:hw- } 'colour' [268] → Ch. / hìhsǔ:hwfalling: / 'paint!').

By CH-25, * / ks / has become * / ts / before a vowel. There are no definitive PI

cognates illustrating this sound change except perhaps for * { -ksin- } 'cedar, stump'

(Rudes 1995:39); Cherokee / àtsìnfalling: / 'cedar' is more likely a borrowing from

Muskogean, however, as noted by Mooney (1900:511). The change is nonetheless

posited on the basis of internal reconstruction; cf. Ch. / hìhné:kfalling: / 'you're speaking',

/ hìhné:kó:ʔí: / 'you speak', and / hìhnè:kí: / 'speak!' as against / hìhné:tsfalling:ʔí: / 'you

spoke'. In this and other Cherokee verb roots ending in / k /, alternation to / t /

regularly occurs where a perfect verb base ends in / s /.

By CH-26, * / nh / has metathesized to * / hn / (e.g. PI * { -õ:nh- } 'be alive' [406] →

Ch. / kfalling:hnfalling: / 'he is alive'). This change must follow CH-22.

By CH-27, * / ẽ(:) / has become * / o(:) / (e.g. PI * { -atawẽ- } 'swim' [161] >

Ch. / hàtàwǒ:tsfalling: / 'swim!'; PI * { -ate:hẽ:h- } 'be embarrassed' [163] > / hàtè:hǒ:hí: /

'be embarrassed!'; PI * { -nawẽ:h- } 'be melted' [358] > Ch. / hfalling:nàwǒ:hí: / 'melt!';

PI * { -nẽ:hskʷ- } 'steal' [368] > Ch. / hìnǒ:hskí: / 'steal it!'). This change must follow

CH-10 and CH-11. (cf. also Rudes 1995:20).

By CH-28, * / õ(:) / has become * / ə̃(:) / (e.g. PI * { kanõ:nowẽʔ } 'pipe' [323] >

Ch. / kànʌ̃:nòwắ: /; PI * { õ:tariʔ } 'lake' [412] > Ch. / ʌ̃:tàlíː /; PI * { -ʔnjõ:hs- } 'nose' [494]

→ Ch. / tsìːjʌ̃:hsőːlî / 'my nose'). (cf. also Rudes 1995:20).

By CH-29, * / ɹ / has become * / l / (e.g. PI * { -hsnu:ɹiʔ } 'be fast' [258] →

Ch. / ùhsìnűːlî / 'fast'; PI * { ku:ɹeh } 'acorn' [348] > / kù:lếː /; PI * { -ɹhok }

'be paternal aunt' [425] → Ch. / ùlhòkíː / 'her paternal aunt').

Phonological changes that have occurred during the transition from PI to Cherokee

are recapitulated in (2).

(2)   Phonological Changes in the Transition from PI to Cherokee

CH-1	k > ts / _i
CH-2	k^w > k / _i
CH-3	w > Ø / h_i
CH-4	w > Ø / t, th_
CH-5	wV^1 > $\grave{\tilde{V}}^1$: / #_
CH-6	jV^1 > $\grave{\tilde{V}}^1$: / #_
CH-7	V > Ø / C_hC
CH-8	$V^1ʔC^2$ > $\grave{\tilde{V}}^1$:C^2
CH-9	V^1H > V^1: / _#
CH-10	a(:)wẽ(:) > a(:)ma(:)
CH-11	$\tilde{V}$ > a: / _#
CH-12	Ø > $\acute{\tilde{V}}$: / C_#
CH-13	iji > i:
CH-14	tsn > hst
CH-15	n > h / _st

CH-16	n > Ø / _j
CH-17	ɹ > Ø / _j
CH-18	t > Ø / _k
CH-19	t > Ø / _n
CH-20	t > Ø / n_
CH-21	j > Ø / ts_
CH-22	Ø > i / C_R
CH-23	s > Ø / #h_V
CH-24	ts > s / h_
CH-25	ks > ts / _V
CH-26	nh > hn
CH-27	ẽ(:) > o(:)
CH-28	õ(:) > ə̃(:)
CH-29	ɹ > l

In addition to the sound changes in (2), additional sound changes seem to have

taken place in one or more Cherokee dialects affecting various consonant clusters,

whose reconstructed identity in Common Cherokee can often only be guessed at, and

whose identity in PI is in most cases uncertain. Some cognate examples from the

dialects recorded by King (1975), Feeling & Pulte (1975), and Holmes & Smith (1977),

are presented in (3) as Dialect 1, Dialect 2, and Dialect 3, respectively, with variant

segments underlined.

(3)   Some Dialectal Developments in Cherokee

Common Cherokee	Dialect 1	Dialect 2	Dialect 3
Ch. / kànì**hsl**íː / 'bed'	/ kànì**hs**íː /	/ kànìː**lh**íː /	/ kànìː**thl**ǽː /
Ch. / àkì**lh**òkíː / 'my aunt'	/ àkì**lh**òkíː /	/ àkì**lh**òkíː /	/ àkì**thl**òkíː /
Ch. / [ʔ]àːnúːhsíː / 'leech'	/ **ts**àːnúːhsíː /	/ **tl**àːnúːhsíː /	/ **thl**àːnúːhsíː /
Ch. / [ʔ]ᾱ̀ːtàtsíː / 'panther'	/ **ts**ᾱ̀ːtàtsíː /	/ **lh**ᾱ̀ːtàtsíː /	/ **thl**ᾱ̀ːtàtsíː /
Ch. / ùjhᾱ̀ː[ʔ]ǽː / 'cold'	/ ùjhᾱ̀ː**ts**ǽː /	/ ùːjhᾱ̀ː**tl**ǽː /	/ ùjhᾱ̀ː**tl**ǽː /

In surveying cluster correspondences among ten dialects of Cherokee, Julian (2008), found at least twelve sets of reflexes like those in (3), and many modern dialects might even be distinguished according to the regular outcome of Common Cherokee cluster correspondence sets. Further study and classification of Cherokee dialects would be necessary in order to assemble an exhaustive inventory of such reflexes and to reconstruct their probable forms in Common Cherokee.

Before moving on it should be noted that the process by which tonogenesis has arisen in Cherokee remains imperfectly understood due to scarcity of cognate forms in Cherokee and PNI. Reflexes of pronominal prefixes suggest that Cherokee low level tone (e.g. * / àː /) is 'neutral', and occurs in reflexes of unaccented PI syllables in the majority of environments. Cherokee high rising tone (e.g. * / ǽː /) probably corresponds to primary word accent in PI, as its occurrence is limited to either the penultimate or final syllable, and it occurs at least once, and only once, in every

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Cherokee word. Cherokee low falling tone (e.g. * / à: /) seems to result diachronically

from pre-vocalic loss of a glide (e.g. PI * / ju / > Ch. * / ù: /) and from post-vocalic

loss of a glottal consonant following a vowel (e.g. PI * / u:ʔ / > Ch. / ù: /). The

origins of Cherokee high level tone (/ á: /), high falling tone (/ â: /), and low rising

tone (/ ǎ: /) are less clear. Some cases of low rising tone appear to correlate with

diachronic addition of syllables to a word, and perhaps reflect earlier primary word

accent that has since moved to another syllable (e.g. PI * { tsi:ɹ } 'fire' [458] >

Pre-Cherokee * / (à)tsǐ:lá: / > Ch. / àtsǐ:lá: / [also: / àtsǐ:lá̰: /]). Level high tone is

often associated with short vowels in the same context, perhaps due to a restriction that

limits contour tones to long vowels (cf. Wright 1996:11).

Of interest from an etymological standpoint is the tonal pattern found in Cherokee

imperative verbs, which appears to represent a continuation of the PI punctual base. In

imperative verbs that do not contain prepronominal prefixes, all vowels except those in

the last two syllables have low level tone (à:) unless a glottal stop follows the vowel, in

which case there is etymologically predictable low falling tone (à̰:) with loss of the

glottal stop (by CH-8). If the vowel of the penultimate syllable is followed by a glottal

stop it also has predictable low falling tone (à̰:) with loss of the glottal stop

(by CH-8); if not, it has neutral low level tone (à) if short, and low rising tone (ǎ:) if

long. The vowel of the final syllable will then have high rising tone (ǎː). The pattern

just described suggests that the language may earlier have had neutral tone (àː) on all

vowels except those in the penultimate and ultimate syllables, one of which

(in independent verb forms, the final syllable) received primary word accent,

represented by high rising tone (cf. / hìnèːhstàlàtǎː / 'freeze! [lit. lay down the ice!]',

containing a reflex of the PI root * { -neːhstwaɹ- } 'ice' [365] with associated neutral tone:

{ -nèːhstàl- }). Subsequently, with the addition of productive modal suffixes to all non-

punctual verbs bases, and with the loss of glottal stops in coda and compensatory low

falling tone (by CH-8), more complex patterns of tone appear to have developed

(cf. / kàněːhstálàtìʔǎː / 'it's freezing [lit. it's putting down the ice]', containing the same

PI root, now with associated high rising and level high tones rather than neutral tone:

{ -něːhstál- }). Understanding patterns of tone development in Cherokee relative to PI

is a promising area for future research.

3.4 MORPHOLOGICAL CHANGES

The morphological structure of Cherokee seems to be essentially unchanged from

that of PI apart from the apparent addition of a new set of modal suffixes to the verb

base, and the probable creation of a formal class of adjectives as a result.

The principal verb bases posited for PI appear no longer to occur in their radical forms in Cherokee active verbs and are always equipped with one of eight regular, fully productive modal suffixes, each with a distinct meaning; the PI punctual verb base appears to continue to occur in its radical form in Cherokee imperative verbs, though typically with addition of an overt word-final vowel / á: / by CH-12, which is also analyzed below as an indicative suffix. For example, the reflex of the PI perfect base * { -kẽ:h } 'have seen', in Cherokee { -kò:h- }, seems no longer to occur word-finally as it may have in PI and must now be followed by a modal suffix, such as the assertive suffix { -ʌ̌:kí: }: Ch. { à:kì + kò:h + ʌ̌:kí: } 'I have seen it [this is a fact]'. The independent and dependent forms of the eight modal suffixes of Cherokee are listed in (4) along with the bases with which each occurs.

(4)   Cherokee Modal Suffixes

Suffix	Independent	Dependent	Bases
INDICATIVE	{ -á: }	{ -â: }	present, perfect
HABITUAL	{ -ó:ʔí: }	{ -ő:ʔî: }	imperfective, perfect
REPORTATIVE	{ -é:ʔí: }	{ -é:ʔî: }	imperfective, perfect
ASSERTIVE	{ -ʌ̌:kí: }	---	imperfective, perfect
POSITIVE GERUND	---	{ -ʌ̃:ʔî: }	imperfective, perfect
NEGATIVE GERUND	---	{ -ʌ̃:nâ: }	imperfective, perfect
FUTURE	{ -é:hstí: }	{ -é:hstî: }	imperfective, perfect
INFINITIVE	{ -í: }	{ -í:jî: }	infinitive

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The approximate meaning of the modal suffixes can be gathered from the following examples, all but the first and last of which employ the perfect base { -kòːh- } 'have seen': { àː-kòwhthíh-ʌ́ː } 'she sees it'; { ùː-kòːh-óːʔíː } 'she has seen it (habitually)'; { ùː-kòːh-éːʔíː } 'she has seen it (apparently)'; { ùː-kòːh-ʌ̌ːkíː } 'she has seen it (I was a witness)'; { ùː-kòːh-ʌ̃ːʔî } '(her) having seen it'; { nùː-kòːh-ʌ̃ːnâː } '(her) not having seen it'; { ùː-kòːh-éːhstíː } 'she will have seen it'; { ùː-kòwhthʌ́ht-íː } '(for her) to see it'. The infinitive suffix, seen in the last example, appears to follow the PI causative-instrumental morpheme * { t } [082] / * { hst } [083], which forms a fifth version of the verb base, unique to Cherokee, here called the infinitive.

The new modal bases in (4) do not appear to have been added to inherently perfect bases designating states rather than actions (e.g. 'be old', 'be good', etc), and this may have led to the creation of a formal class of adjectives in Cherokee. Cherokee adjectives, like Cherokee nouns, use the prefixes associated with dependent verb forms to inflect for person and number (e.g. { h-őːstâː } 'you are good', { àn-őːstâː } 'they are good', etc.), but lack suffixes with which to indicate tense, mood, negation, and other grammatical information. Consequently, a reflex of the PI verb * { -iː- } 'be, be the one, exist' [271] seems to have been adopted as an auxiliary in order to show such distinctions, e.g. / őːstâː / 'it is good'; / tláː őːstâː jìkíː / 'it is not good'; / őːstâː kèːsʌ̌ːkíː /

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'it was good'; / ő:stâ: kɛ̀:sé:hstí́ / 'it will be good'; / ő:stâ: jìkɛ́:sâ: / 'if it were good', etc.

(cf. Feeling & Pulte 1975:305, Cook 1979:125). The auxiliary always bears the 3SG:3

prefix allomorph / k- / and does not otherwise inflect to show person or number.

To the prepronominal prefix inventory Cherokee appears to have added an irrealis

prefix { jì- } (allomorphs: / j / before vowels and before / h /; / jì / before remaining

consonants), which precedes all other prefixes; in dependent verb forms it carries a

meaning 'if' (e.g. { j-ừ:-kő:h-â: } 'if she has seen it'), and when preceded by a negative

particle in independent verb forms it carries a meaning 'not' (e.g. { tlá: j-ừ:-kò:h-ʌ̌:kí́ }

'she has not seen it') (cf. Feeling & Pulte 1975:241). Cherokee appears also to have

added a negative prepronominal prefix / kà / (allomorphs: / kʌ̃: /, / kɛ̀:ʔ /, and

/ kʌ̃:wà / replacing the initial vowel of roots beginning in / ầ: /, / ì: /, and / ừ: /

respectively; / kɛ̀ / before / h /; / kajè: / before / kìn /; / kàj / before remaining

vowels; / kà / before remaining consonants), which carries a meaning 'not since'

(e.g. / kʌ̃:wàkò:hʌ̃:kî / 'she has not seen it since'), among several others

(cf. Cook 1979: 82-87). The Cherokee negative prefix follows the cislocative and

repetitive prefixes (cf. Cook 1979:58), which suggests that the prefix may be archaic,

although no known correlate exists in PNI.

Cherokee has a 1:2.DU pronominal prefix { stʌ̃: } (allomorphs: / hstʌ̃: / before a

consonant and / hstʌ̀:j / before a vowel with loss of / h / word-initially or following a

consonant) and a 1:2.PL pronominal prefix { ì:tsʌ̀: } (allomorphs: / ì:tsʌ̀: / before

consonants; / ì:tsʌ̀:j / before vowels). Cherokee pronominal prefix group 1 is

presented in (5).

(5)   Cherokee Pronominal Prefix Group 1

     1:2.SG   Ch. { kʌ̀: } [013]   (< PI * { kõ: })

     1:2.DU   Ch. { stʌ̀: }

     1:2.PL   Ch. { ì:tsʌ̀: }

     2:1.SG   Ch. { skì } [016]   (< PI * { skʷi })

     2:1.DU   Ch. { skìnì: } [017]   (< PI * { skni: })

     2:1.PL   Ch. { ì:hskì: } [018]   (< PI * { skʷ… })

Cherokee seems to have inherited reflexes of PI pronominal prefix group 2 intact, as

can be seen in (6).

(6)   Cherokee Pronominal Prefix Group 2

     1SG:3   Ch. { tsì } [019]   (< PI * { ki })

     1SG:3A   Ch. { tsì: } [020]   (< PI * { kiji })

     2SG:3   Ch. { hì } [022]   (< PI * { hsi })

     2SG:3A   Ch. { hì: } [023]   (< PI * { hsiji })

     3:1SG   Ch. { à:kì } [025]   (< PI * { wakʷi })

     3A:1SG   Ch. { ʌ̀:kì } [026]   (< PI * { jõ:kʷi })

     3:2SG   Ch. { tsa } [028]   (< PI * { tsa })

     3A:2SG   Ch. { è:tsà } [029]   (< PI * { je:tsa })

To the third pronominal prefix group Cherokee seems to have added a 3A:2DU

prefix { ề:hstì: } and 3A:2PL prefix { ề:tsì: }, evidently formed by affixing { ề: } 'animate'

to the 2DU&3 and 2PL&3 prefixes { stì: } [031] and { ì:tsì: } [033]. There are no equivalent

2DU:3A and 2PL:3A prefixes in group 3 and the animate argument occurs only in a role

of grammatical agent. Cherokee pronominal prefix group 3 is presented in (7).

(7)   Cherokee Pronominal Prefix Group 3

          2DU&3   Ch. { stì: } [031]   (< PI * { tsni: })
          3A:2DU   Ch. { ề:hstì: }
          2PL&3   Ch. { ì:tsì: } [033]   (< PI * { ts... })
          3A:2PL   Ch. { ề:tsì: }

The number of prefixes in pronominal prefix group 4 may have expanded

significantly in Cherokee relative to PI: here Cherokee makes a distinction between

inclusive $(1+2)$ and exclusive $(1+3)$ first person pronominal prefixes in both agent and

patient; inclusive first person prefixes additionally mark the third person argument as

animate or inanimate. The result is the inventory presented in (8).

(8)   Cherokee Pronominal Prefix Group 4

1 + 2DU:3   Ch. { ì:nì } [036]   (< PI * { tni: })
1 + 2DU:3A   Ch. { è:nì: }
1 + 3DU:3(A)   Ch. { ò:hstì: }
1 + 2PL:3   Ch. { ì:tì: } [038]   (< PI * { t... })
1 + 2PL:3A   Ch. { è:tì: }
1 + 3PL:3(A)   Ch. { ò:tsì: }
3:1 + 2DU   Ch. { kìnì: } [044]   (< PI * { kni: } '3:1DU')
3A:1 + 2DU   Ch. { è:kìnì: }
3(A):1 + 3DU   Ch. { ò:kìnì: }
3:1 + 2PL   Ch. { ì:kì: } [046]   (< PI * { kʷ... } '3:1PL')
3A:1 + 2PL   Ch. { è:kì: }
3(A):1 + 3PL   Ch. { ò:kì: }

The prefixes in (8) may be analyzed as consisting of { nì: } 'first person inclusive dual

agent', { tì: } 'first person inclusive plural agent', { hstì: } 'first person exclusive dual

agent' (formally identical to the 2DU&3 prefix), { tsì: } 'first person exclusive plural

agent' (formally identical to the 2PL&3 prefix), { kìnì: } 'first person dual patient',

{ kì: } 'first person plural patient', { ì: } 'inclusive', and { ò: } 'exclusive'. Inclusive

pronominal prefixes replace { ì: } with animate { è: } to signal animate third person,

while exclusive prefixes make no formal change.

   In pronominal prefix group 5, reflexes of the PI 3A:3SG and 3A:3NS prefixes seem

to have shifted in meaning to '3NS:3SG' and '3NS:3NS' respectively, and a 3A:3SG

pronominal prefix { à:tsì } (allomorphs: / à:tsì: / before / à: / with loss of / à: /,

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/ ằ:tsì / before consonants, and / ằ:k / before remaining vowels) appears to have been added. Curiously the initial vowel / ằ: / of this prefix becomes / è: / following the cislocative, negative, and non-singular animate prefix (Cook 1979:75); the origin of the 3A:3SG prefix is unclear. Cherokee seems to have retained reflexes of PI * { ka } and * { wa } as lexically-determined variants of the 3SG:3 prefix. Pronominal prefix group 5 is presented in (9).

(9)   Cherokee Pronominal Prefix Group 5

3SG:3	Ch. { kà } [051]	(< PI * { ka })
	Ch. { ằ: } [052]	(< PI * { wa })
3:3SG	Ch. { ừ: } [054]	(< PI * { ju })
3NS:3	Ch. { ằ:nì } [058]	(< PI * { wanti: })
3:3NS	Ch. { ừ:nì } [061]	(< PI * { ju:nti: })
3NS:3SG	Ch. { kằ̃:wà } [066]	(< PI * { kõ:wa } '3A:3SG')
3NS:3NS	Ch. { kằ̃:wànì: } [068]	(< PI * { kõ:wanti: } '3A:3NS')
3A:3SG	Ch. { ằ:tsì }	

A morphophonological phenomenon of unknown origin that is associated with prepronominal prefixes in Cherokee is glottal alternation, whereby the first underlying glottal consonant of a verb root is realized as / ʔ / when certain pronominal prefixes (e.g. 1SG:3) are present, and as / h / when other pronominal prefixes (e.g. 3SG:3) are present (cf. { k-àlʔìkí:ʔắ: } 'I have a nightmare', but { ằ:-lẖìkí:ʔắ: } 'she has a nightmare'; { k-àtèʔ̱ắhskắ: } 'I am born', but { ằ:-tè:ẖắhskắ: } 'she is born'; { k-àtʔ̱ằ̃hskắ: } 'I grow',

but { ằ:-th$\overset{\grave{}}{\text{à}}$hská: } 'she grows'). About a third of the pronominal prefixes condition / ? / rather than / h / (cf. Cook 1979:40), but no unifying element, diachronic or synchronic, semantic or phonological, has yet been found among the pronominal prefixes in question that explains why they induce this change.

To the causative-instrumental (Ch. { -t- } [082] / { -hst- } [083]), reversive (Ch. { -kì:- } [085]), and dative-benefactive (Ch. { -?sì:- } [087]) derivational suffixes, which have cognates in PNI, Cherokee seems to have added ambulative { -ì:t- }, andative { -ù:k- }, ventive { -hì:k- }, reiterative { -hì?s- }, repetitive { -hìlò:ts- }, completive { -òhn- }, facilitative { -àth- }, future { -ì:- }, and preinceptive { -ì:tì:- } suffixes, the last three of which occur only in punctual and perfect verb bases. The etymological origin of these derivational morphemes is unclear. The forms presented here are punctual base allomorphs; remaining allomorphs can be found in Feeling & Pulte (1975:282-289) and Cook (1979:137-143).

The noun morphology of Cherokee seems to be the same as that posited for PI except that alienable and inalienable possessive prefixes no longer apply to body parts and possessions, respectively; both now apply to body parts, some of which appear to take the historically inalienable possessive prefixes (e.g. 1SG:3), while others take the historically alienable possessive prefixes (e.g. 3:1SG). There is no clear semantic

reason determining which set is associated with which body parts, cf. { tsǐ:-jʌ̀:ső:lî: }

'my nose' and { tsǐ:-nì:kế:nî: } 'my knee', but { àkì-nʌ̃:tsí:tấ: } 'my brain' and

{ àkì-nế:kà?lʌ̃:?î: } 'my skin' (cf. Cook 1979:193). Alienable possession in Cherokee is

expressed by adding reflexes of the set of alienable prefixes to a dependent form of the

verb { -àtsè:lí:?î: } 'be a possession to', which follows the possessed object, e.g.

{ kò:hwè:lí: àkʷ-àtsè:lí:?î: } 'my book', { kò:hwè:lí: ù-tsè:lí:?î: } 'her book', etc.

CHAPTER 4: PROTO-NORTHERN IROQUOIAN

4.1 INTRODUCTION

This chapter describes Proto-Northern Iroquoian, henceforth PNI, the reconstructed

language from which Proto-Tuscarora-Nottoway, Susquehannock, Laurentian, Proto-

Mohawk-Oneida, Onondaga, Cayuga, Seneca, and Huron derive. PNI itself derives from

PI, and is reconstructed on the basis of cognate forms found among its daughter

branches. Because forms among the numerous daughter languages do not always agree

(or sometimes agree due to areal diffusion or borrowing rather than due to genetic

inheritance), I have adopted the following theoretical assumptions and approaches.

First, forms that are common to Cherokee and at least one Northern Iroquoian language

can be projected back to PI, and I thus assume them to have been present in PNI as well

(the habitual suffix { -hsk } [113] of Old Mohawk, which has a cognate in Cherokee

imperfective bases, is an example). Second, in an attempt to control against the effects

of areal diffusion and potential borrowing among the Northern Iroquoian languages, I

have divided the better-attested Northern Iroquoian languages into three geographic

regions: the Coastal Plain (Tuscarora, with supplemental data from Nottoway),

Iroquoia (Mohawk, Oneida, Onondaga, Cayuga, and Seneca), and Huronia

(Huron and Wyandot). If a form is found in any two of these regions I have projected

it back to PNI, but if a form is confined to only one of them I have not. Exceptions to

the latter approach, which I note as they arise, include a handful of pronominal prefixes

and derivational suffixes that are limited to Iroquoia, and have been noted as such in

the appendices; in part I have made an exception in these cases so that the relevant

forms do not have to be cited as independent innovations in four daughter language

chapters.

Finally, note that my theoretical assumption that forms present in at least Iroquoia

and Huronia can be projected back to PNI without a Tuscarora or Nottoway cognate is

contingent upon my proposed subgrouping (which does not recognize Lake Iroquoian

as formally distinct from PNI itself), and that researchers who do consider Lake

Iroquoian to have been formally distinct from PNI will require a cognate in Tuscarora or

Nottoway to be available before a given form can be projected back to PNI

(Marianne Mithun p.c.).

4.2 PHONEMIC INVENTORY AND PHONOLOGY

The reconstructed phonemic inventory of PNI is presented in (1).

(1)　　Phonemic Inventory of PNI

　　　CONSONANTS

	Alveolar	Palatal	Velar	Glottal
Plosive	t		k kʷ	ʔ
Nasal	n			
Fricative	s			h
Affricate	ts			
Approximant	ɹ	j	w	

　　　VOWELS

	Front	Central	Back
Close	iː		
	i		
Mid	eː ẽː		oː õː
	e ẽ		o õ
Open		aː	
		a	

The phonemic inventory of PNI seems to have been essentially the same as that of

PI except that * / u(ː) / shifted to * / o(ː) / following the merger of reflexes of

PI * / o(ː) / with reflexes of PI * / a(ː) /. PNI appears to have had predictable vowel

length in penultimate syllables and unpredictable vowel length in final syllables

(cf. Michelson 1988:52, Rudes 1995:23); underlying short vowels were lengthened in

accented open penultimate syllables before single non-glottal consonants

(e.g. PNI * { tsjatahk } / ˈtsjaːtahk / 'seven' [464], PNI * { õkʷeh } / ˈõːkʷeh / 'person' [405],

PNI * { o-ɹẽn-aʔ } / oˈɹẽːnaʔ / 'incantation' [422]), and contrastive vowel length was

retained in final syllables (e.g. PNI * { wak-kẽh } / ˈwakkẽh / 'it sees me' [332] vs.

PNI * { wak-kẽːh } / ˈwakkẽːh / 'it has seen me' [332] ; cf. also Rudes 1995:22). Note that

henceforth unpredictable vowel length in Northern Iroquoian languages will be

indicated in both phonological forms (e.g. PNI * / ˈwakkẽːh / 'it has seen me' [332],

* / weˈtninjaːk / 'we got married' [372], * / kaˈnõhsoːt / 'a house stands' [382] [397]) and

morphological forms (e.g. PNI * { wak-kẽːh }, * { we-tni-njaːk }, * { ka-nõhs-oːt }),

but predictable vowel length will be indicated only in phonological forms

(e.g. PNI * { tsjatahk } / ˈtsjaːtahk / 'seven' [464]).

No allophonic distinctions appear to be reconstructable with certainty at the PNI

stage, though the affricate * / ts / may have had a unique pronunciation before

consonants and vowels other than * / h /, * / i /, and * / j /, in light of the deaffrication

it underwent in daughter languages (to / θ /, / s /, or / hs /) in this environment.

Lounsbury (1978:338) has conjectured that the change of PNI * / n / to * / t / before

non-nasal vowels in Proto-Tuscarora-Nottoway may have been linked to the

development of [nd] as an allophone of / n / before non-nasal vowels in Huron, and

so conceivably PNI * / n / may also have had an allophone [nd] before non-nasal

vowels.

4.2.1 VOWELS

Vowel reconstructions in this chapter are from Rudes (1995:18, 28), unless

otherwise stated. Reflexes of the 12 vowels reconstructed for PNI are relatively

consistent across the daughter languages, as can be seen in (2).

(2)   The Most Common Reflexes of PNI Vowels in Northern Iroquoian Languages

PNI	Tu.	Mo.	Oe.	Oo.	Ca.	Se.	Hu.	Wy.
* / a /	a	a	a	a	a	a	a	a
* / e /	ɛ	e	e	e	e	e	e	e
* / ẽ /	ə̃	ʌ̃	ʌ̃	ẽ	ẽ	ɛ̃	ẽ	ɛ̃
* / i /	i	i	i	i	i	i	i	i
* / o /	o	o	o	o	o	o	o	u
* / õ /	ə̃	ũ	ũ	ũ	õ	ɔ̃	õ	ɔ̃
* / aː /	aː	a	a	ˈa	aː	aː	aː	ˈa
* / eː /	ɛː	e	e	ˈe	eː	eː	eː	ˈe
* / ẽː /	ə̃ː	ʌ̃	ʌ̃	ˈẽ	ẽː	ɛ̃ː	ẽː	ˈɛ̃
* / iː /	iː	i	i	ˈi	iː	iː	iː	ˈi
* / oː /	oː	o	o	ˈo	oː	oː	oː	ˈu
* / õː /	ə̃ː	ũ	ũ	ˈũ	õː	ɔ̃ː	õː	ˈɔ̃

Exceptions to the correspondence sets presented in (2) are few but, as noted by

Rudes (1995:18), include creation of a vowel phoneme / æ(ː) / from * / a(ː) / in

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Onondaga and Seneca when * / r / preceded, fronting of PNI * / o(:) / and * / õ(:) / to

/ e(:) / and / ẽ(:) / respectively in Onondaga when * / ɹ / preceded, change of

PNI * / a(:) / to / ɔ̃(:) / in Seneca where * / n / preceded, and change of PNI * / a(:) /

to / ɛ̃(:) / in Seneca when * / nɹ / preceded. The PI nasal vowels * / ẽ(:) / and * / õ(:) /

have merged as / ə̃(:) / in Tuscarora, while reflexes of PNI long vowels have merged

with reflexes of short vowels in Mohawk, Oneida, Onondaga and Wyandot, and have

acquired primary word accent in the latter two languages (cf. Rudes 1995:23).

PNI * / e(:) / appears to have undergone a phonetic shift to / ɛ(:) / in Tuscarora, while

PNI * / o(:) / appears to have undergone a phonetic shift to / u(:) / in Wyandot;

PNI * / ẽ(:) / seems to have undergone a phonetic shift to * / ə̃(:) / in Mohawk and

Oneida, and to / ɛ̃(:) / in Seneca and Wyandot; PNI * / õ(:) / appears to have undergone

a phonetic shift to * / ũ(:) / in Mohawk, Oneida and Onondaga, and to / ɔ̃(:) / in Seneca

and Wyandot. In addition Mohawk and Oneida have developed epenthetic instances of

/ e / and / i / which break up certain PNI consonant cluster reflexes involving

resonants.

PNI * / aː / is found in * { -aːt } 'be inside' [159] (cf. Tu. { -aːt }, Ca. { -aːt },

Se. { -aːt }) and PNI * / a / is found in PNI * { tsjatahk } 'seven' [464]

(cf. Tu. { tʃaʔnahk }, Ca. { tsatahk }, Se. { tsatak }). PNI * / eː / is found in * { -akeːh }

'be a number' [152] (cf. Tu. { -akjɛ: }, Ca. { -ake: }, Se. { -ake:h }) and PNI * / e / is found

in * { -õkʷeh } 'be a person' [405] (cf. Tu. { -ə̃kʷɛh }, Ca. { -õkʷeh }, Se. { -ɔ̃kʷeh }).

PNI * / ẽ: / is present in * { -ahnshẽ:h } 'be ten' [135] (cf. Tu. { -ahθhə̃: }, Ca. { -ahshẽ: },

Se. { -ashɛ̃:h }) and PNI * / ẽ / is found in * { ahsẽh } 'three' [140] (cf. Tu. { ahsə̃ },

Ca. { ahsẽh }, Se. { sẽh }). PNI * / i: / is present in * { tekni:h } 'two' [438]

(cf. Tu. { nɛkti: }, Ca. { tekni: }, Se. { tekni:h }) and PNI * / i / is exemplified in

* { hwihsk } 'five' [273] (cf. Tu. { wisk }, Ca. { hwihs }, Se. { wis }). PNI * / o: / is found

in * { -ijo:h } 'be good' [279] (cf. Tu. { -ijo: }, Ca. { -ijo: }, Se. { -ijo:h }) and PNI * / o / is

present in * { -ʔtskoʔ- } 'drown' [497] (cf. Tu. { -ʔθkoʔ- }, Ca. { -ʔskoʔ- }, Se. { -ʔskoʔ- }).

PNI * / õ: / is found in * { -õ:t } 'be attached' [410] (cf. Tu. { -ə̃:t }, Ca. { -õ:t },

Se. { -ɔ̃:t }) and PNI * / õ / is found in * { inõh } 'far' [281] (cf. Tu. { inə̃ }, Ca. { inõh }).

4.2.2 CONSONANTS AND CLUSTERS

PNI * / k / can be reconstructed where Tuscarora / k / and Mohawk / k /

correspond to Huron / x / (cf. Lounsbury 1978:338, Mithun 1979:180, Rudes 1995:56),

as in PNI * { -atekaʔt- } 'burn' [165] (cf. Tu. { -aʔnɛʔkaʔt- }, Mo. { -atekaʔt- },

Hu. { -atexaʔt- }). Huron has retained * / k / when it is preceded by the reflex of

consonant other than * / ʔ / or * / n /, as in PNI * { -ahkaɹ- } 'bark' [134]

(cf. Tu. { -ahkar- }, Mo. { -ahkaɹ- }, Hu. { -ahkaɹ- }), and has lost * / k / where / n /

follows, as seen in PNI * { tekni:h } 'two' [438] (cf. Tu. { nɛkti: }, Mo. { tekeni },

Hu. { teni:h }). * / k / appears to have become / h / in Huron before reflexes of

PNI * / t / and * / s /, as in PNI * { -nõhwakt- } 'be sore' [383] (cf. Tu. { -nə̃hwakn- },

Mo. { -nũhwakt- }, Hu. { -nõhwaht- }) and PNI * { -aksẽ:h } 'be bad' [153]

(cf. Tu. { -aksə̃: }, Mo. { -aksʌ̃ }, Hu. { -ahʃẽ:h }).

PNI * / kʷ / can be reconstructed where Tuscarora / kʷ / and Mohawk / kʷ /

correspond to Huron / xʷ / (cf. Mithun 1979:180, Rudes 1995:56), as in

PNI * { -õkʷeh } 'be a person' [405] (cf. Tu. { -ə̃kʷɛh }, Mo. { -ũkʷe }, Hu. { -õxʷeh }).

Huron has retained original * / kʷ / where it is preceded by the reflex of a consonant

other than * / ʔ / or * / n /, as in PNI * { -itjohkʷ- } 'group' [288] (cf. Tu. { -iʔnjohkʷ- },

Mo. { -itjohkʷ- }, Hu. { -itjohkʷ- }).

PNI * / t / can be reconstructed where there is a correspondence between Mohawk

and Huron / t / and Tuscarora / ʔn / (cf. Lounsbury 1978:338, Mithun 1979:180,

Rudes 1995:56), as in PNI * { atokẽʔ } 'axe' [182] (cf. Tu. { aʔnokə̃ʔ }, Mo. { atokʌ̃ʔ },

Hu. { atoxẽʔ }), although Tuscarora has an outcome / n / word-initially or where

another consonant precedes, as in PNI * { -akanst- } 'be durable' [151] (cf. Tu. { -akaθn- },

Mo. { -akatst- }, Hu. { -axast- }), and an outcome / ʔ / before * / ɹ /, as in

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PNI * { -atɹe- } 'grandchild' [188] (cf. Tu. { -aʔrɛ- }, Mo. { -ateɹe- }, Hu. { -atɹe- }).

PNI * / t / has been lost in Huron before reflexes of * / k / and * / kʷ /, as in

PNI * { -atkahtho- }, { -atkahthw- } 'look at' [179] (cf. Tu. { -atkahtho- },

Mo. { -atkahtho- }, Hu. { -akahkw- }), and has become / k / before reflexes of * / w /

and * / hw /, as in PNI * { twa- } '1 + 2PL:3' [038] (cf. Tu. { ʔnwa- }, Mo. { tewa- },

Hu. { kwa- }).

   PNI * / s / can be reconstructed where Tuscarora / s / and Mohawk / s /

correspond to Huron / ʃ / (cf. Mithun 1979:180, Rudes 1995:56), as in PNI * { -nõhs- }

'house' [382] (cf. Tu. { -nə̃hs- }, Mo. { -nũhs- }, Hu. { -nõhʃ- }). Huron has also retained

* / s / when a non-glottal plosive follows, as in PNI * { -nẽhskʷ- } 'steal' [368]

(cf. Tu. { -nə̃hskʷ- }, Mo. { -nʌ̃hskʷ- }, Hu. { -nẽhskʷ- }, while Tuscarora has inserted

/ t / between reflexes of * / s / and * / ɹ /, as in PNI * { -ohsɹ- } 'winter, year' [394]

(cf. Tu. { -ohstr- }, Mo. { -ohseɹ- }, Hu. { -ohʃɹ- }). Reflexes of PNI * / s / and * / ts /

have merged to a considerable extent in Northern Iroquoian languages, and the

distinction remains clearest in Tuscarora and Archaic Onondaga: Tuscarora / s / and

Archaic Onondaga / ʃ / reflect PNI * / s /, whereas Tuscarora / θ / and / tʃ /, and

Archaic Onondaga / s / and / ts /, reflect PNI * / ts /; apparent exceptions to this

generalization involve reflexes of a cluster * / ns /, discussed below. For comparison,

intervocalic reflexes of PNI * / hs /, * / hts / and * / ts / before high and non-high

vowels are presented in (3).

(3)   Reflexes of PNI * / hs /, * / hts / and * / ts / Before High and Non-High Vowels

	PNI	Tu.	Mo.	Oe.	Oo.	Ca.	Se.	Hu.	
* / hs /		hs	hs	hs	hs	hs	hs	hʃ	e.g. * { -ahsiʔt- } 'foot' [139]
* / hts /		htʃ	hts	hts	hts	hts	hts	hts	e.g. * { -htsiʔ } 'older sibling' [267]
* / ts /		tʃ	ts	ts	ts	ts	ts	ts	e.g. * { -tsihkʷ- } 'club' [453]
* / hs /		hs	hs	hs	hs	hs	hs	hʃ	e.g. * { ahsẽh } 'three' [140]
* / hts /		hθ	hs	hs	hs	hs	hs	hs	e.g. * { -ahtseht- } 'hide' [146]
* / ts /		θ	s	s	hs	s	s	s	e.g. * { -atse:ʔ } 'be new' [189]

PNI * / ts / can be reconstructed where Tuscarora / tʃ / corresponds to Mohawk

/ ts / and Huron / ts / before reflexes of * / i(:) / or * / j /, as in PNI * { -hwatsiɹ- }

'family' [269] (cf. Tu. { -hwatʃir- }, Mo. { -hwatsiɹ- }, Hu. { -hwatsiɹ- }), and where

Tuscarora / θ / corresponds to Mohawk / s / and Huron / s / before reflexes of

remaining vowels, as in PNI * { -atse:ʔ } 'be new' [189] (cf. Tu. { -aθɛ:ʔ }, Mo. { -aseʔ },

Hu. { -ase:ʔ }) (cf. Mithun 1979:180, Rudes 1995:56). Correspondence of Tuscarora

/ tʃ / to Mohawk / ts / and Huron / s / where a reflex of * / h / follows can also be

reconstructed as * / ts /, as in PNI * { -nẽtsh- } 'arm' [370] (cf. Tu. { -nə̃tʃh- },

Mo. { -nʌ̃tsh- }, Hu. { -nẽsh- }), as can a correspondence of Tuscarora / θ / to Mohawk

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/ hs / (where a vowel precedes) or / s / (where a consonant precedes) and Huron

/ s / before reflexes of remaining consonants, as in PNI * { -ʔtskoʔ- } 'drown' [497]

(cf. Tu. { -ʔθkoʔ- }, Mo. { -ʔskoʔ- }, Hu. { -ʔskoʔ- }).

PNI * / n / can be reconstructed where there is a correspondence between Mohawk

and Huron / n / and Tuscarora / t / (cf. Lounsbury 1978:338, Mithun 1979:180,

Rudes 1995:56), as in PNI * { -nat- } 'town' [356] (cf. Tu. { -taʔn- }, Mo. { -nat- },

Hu. { -nat- }), although Tuscarora has retained * / n / before reflexes of nasal vowels

and before * / h /, as in PNI * { -ʔnhõhs- } 'egg' [490] (cf. Tu. { -nhə̃hs- },

Mo. { -ʔnhũhs- }, Hu. { -ʔnhõhʃ- }). PNI * / n / has become / t / in Huron following

reflexes of * / s / or * / ts /, as in PNI * { -hsnoɹeʔ } 'be fast' [258] (cf. Tu. { -hstorɛʔ },

Mo. { -hsnoɹeʔ }, Hu. { -hstoɹeʔ }), and is absent in both Tuscarora and Huron

following reflexes of * / t /, as in PNI * { tni- } '1 + 2DU:3' [036] (cf. Tu. { ti- },

Mo. { teni- }, Hu. { ti- }). I have reconstructed a cluster * / ns / where Tuscarora / θ /

corresponds to Mohawk / s / and Huron / s / before reflexes of * / h /, as in

PNI * { -ʔnonsh- } 'be envious' [495] (cf. Tu. { -ʔtoθh- }, Mo. { -ʔnosh- }, Hu. { -ʔnosh- }),

and where Tuscarora / θ / corresponds to Mohawk / ts / and Huron / s / before

reflexes

of remaining consonants, as in PNI * { -ʔnshanst- } 'be powerful' [496]

(cf. Tu. { -ʔθhaθn- }, Mo. { -ʔshatst- }, Hu. { -ʔshast- }). Reflexes of PNI clusters beginning in * / ns / have merged with reflexes of PNI clusters beginning in * / ts / in many of the Northern Iroquoian languages, including Tuscarora, where in most cases the former seem to be differentiated from the latter only by penultimate lengthening of a preceding vowel; for clarity, intervocalic reflexes of some PNI clusters beginning in * / ts / and * / ns / are presented in (4).

(4)   Reflexes of Some PNI Consonant Clusters Beginning in * / ts / and * / ns /

PNI	Tu.	Mo.	Oe.	Oo.	Ca.	Se.	Hu.	
* / tsh /	tʃh	tsh	tsh	tsh	tsh	sh	sh	e.g. * { -nẽtsh- } 'arm' [370]
* / tsk /	θk	hsk	sk	sk	hsk	sk	sk	e.g. * { -ʔnitsko- } 'be late' [492]
* / tskʷ /	θkʷ	hskʷ	skʷ	skʷ	hskʷ	skʷ	skʷ	e.g. * { -ʔnitskʷ- } 'delay' [492]
* / tst /	θn	hst	st	st	hst	st	st	e.g. * { -atst- } 'dry up' [191]
* / nsh /	(:)θh	sh	sh	sh	sh	sh	sh	e.g. * { -ʔnonsh- } 'be jealous' [495]
* / nsk /	(:)θk	tsk	tsk	tsk	tsk	sk	sk	e.g. * { -inskaɹ- } 'mattress' [282]
* / nskʷ /	(:)θkʷ	tskʷ	tskʷ	tskʷ	tskʷ	skʷ	skʷ	e.g. * { -kenskʷ- } 'lift' [331]
* / nst /	(:)θn	tst	tst	st	hst	st	st	e.g. * { -inst- } 'fish scale' [285]

PNI * / ɹ / is reconstructed where Tuscarora has / r / and Mohawk and Huron have / ɹ / (cf. Lounsbury 1978:341, Mithun 1979:180, Rudes 1995:56), as in PNI * { -ɹẽn- } 'incantation' [422] (cf. Tu. { -rə̃t- }, Mo. { -ɹʌ̃n- }, Hu. { -ɹẽn- }). Reflexes of PNI * / ɹ / have been lost before * / j / in Huron, as in PNI * { -ɹjoːʔ } 'animal' [429]

(cf. Tu. { -rjoːʔ }, Mo. { -ɹjoʔ }, Hu. { -joːʔ }).

   PNI * / w / is reconstructed where Tuscarora, Mohawk, and Huron all show / w /

(cf. Mithun 1979:180, Rudes 1995:56), as in PNI * { -wẽn- } 'word' [476] (cf. Tu. { -wə̃t- },

Mo. { -wʌ̃n- }, Hu. { -wẽn- }). Huron has inserted / k / before reflexes of * / w / when

a fricative or affricate precedes, as in PNI * { tswa- } '2PL&3' [033] (cf. Tu. { θwa- },

Mo. { sewa- }, Hu. { skwa- }), and has lost * / w / before reflexes of * / ɹ / or * / j /, as

in PNI * { -wɹ- } 'wind' [487] (cf. Tu. { -wr- }, Mo. { -weɹ- }, Hu. { -ɹ- }) and

PNI * { -wj- } 'arm, wing' [480] (cf. Tu. { -wj- }, Mo. { -wej- }, Hu. { -j- }). A cluster

* / wjh / can be reconstructed where Tuscarora shows / jh /, Mohawk shows / hj /, and

Oneida shows / wjh /, as in PNI * { -wjhõh- } 'river' [278] (cf. Tu. { -jhə̃h- },

Mo. { -hjũh- }, and Oe. { -wjhũh- }), and a cluster * / whj / can be reconstructed where

Mohawk shows / wej /, Oneida shows / whj /, and Seneca shows / j /, as in

PI * { -whjõhkaɹ- } 'thumb' [477] (cf. Mo. { -wejũhkaɹ- }, Oe. { -whjũhkal- }, and

Se. { -jõ̃hkaR- }).

   PNI * / j / can be reconstructed where there is a correspondence between Tuscarora

and Mohawk / j / and Huron / Ø / (cf. Mithun 1979:180, Rudes 1995:56), as in

PNI * { -ihej- } 'be dead' [276] (cf. Tu. { -ihɛj- }, Mo. { -ihej- }, Hu. { -ihe- }). Huron has

retained * / j / when the reflex of another consonant precedes, as in PNI * { -ɹõhj- }

'sky' [430] (cf. Tu. { -rə̃hj- }, Mo. { -ɹũhj- }, Hu. { -ɹõhj- }). Both Tuscarora and Huron

have lost * / j / when a reflex of * / ts / precedes, as in PNI * { -itsj- } 'fish' [467]

(cf. Tu. { -itʃ- }, Mo. { -itsj- }, Hu. { -its- }).

PNI * / h / can be reconstructed where Tuscarora, Mohawk, and Huron all show

/ h / (cf. Mithun 1979:180, Rudes 1995:56), as in PNI * { -aʔtaɹihẽ:h } 'be hot' [204]

(cf. Tu. { -aʔnarihə̃: }, Mo. { -aʔtaɹihʌ̃ }, Hu. { -aʔtaɹihẽ:h }). As in the example just

given, * / h / has been lost word-finally in Mohawk and word-finally after long vowels

in Tuscarora, but remains in Onondaga and Seneca (cf. Oo. { -aʔtaihẽh },

Se. { -aʔtaiẽ:h }). Tuscarora and Mohawk preserve virtually all reflexes of non-final

* / h /, though a handful of exceptions exist. PNI * / ths / can be reconstructed where

Tuscarora / tʃ / corresponds to Mohawk / ths /, as in PNI * { -athsʔaht- }

'be used up' [173] (cf. Tu. { -atʃʔahn- }, Mo. { -athsaʔaht- }), and PNI * / hnh / can be

reconstructed where Tuscarora / nh / corresponds to Mohawk / hnh /, as in

PNI * { -hnhaʔ- } 'command' [232] (cf. Tu. { -nhaʔ- }, Mo. { -hnhaʔ- }). PNI * / h / has

been lost word-initially before * / w / in Tuscarora and Mohawk but can be

reconstructed where Onondaga and Cayuga show / h /, as in PNI * / ˈhwihsk / 'five' [273]

(cf. Mo. / ˈwihsk /, Oo. / ˈhwíks /, Ca. / hwihs /).

PNI * / ʔ / can be reconstructed where Tuscarora, Mohawk, and Huron all show

/ ʔ / (cf. Mithun 1979:180, Rudes 1995:56), as in PNI * { -aʔawj- } 'dew' [199]

(cf. Tu. { -aʔawj- }, Mo. { -aʔawej- }, Hu. { -aʔaj- }). Reflexes of PNI * / ʔ / are among

the most stable and remain unchanged in most of the languages.

The precise phonotactic constraints of PNI are difficult to determine due to the large

number of consonant clusters that occur and limitation of certain clusters to single

vocabulary items that lack cognates outside of the Coastal Plain, Iroquoia, or Huronia.

Clusters with the following shapes are attested in the six living Northern Iroquoian

languages, where G is / w / or / j /, H is / h / or / ʔ /, K is / k / or / kʷ / or / t /, R is

/ n / or / r / or / l /, and S is / s / or / ts / or / θ / or / tʃ /: G, GG, GH, GHG, GHR,

GK, GKH, GKG, GR, GRG, GS, GSK, GSKH, GSR, H, K, KG, KH, KHG, KHGG, KHK, KHR,

KHRG, KHS, KHSG, KHSK, KK, KKG, KKH, KKHG, KKHR, KKK, KKR, KR, KRG, KS, KSG,

KSH, KSK, KSKG, KSKH, KSKR, KSR, KSRG, R, RG, RGH, RH, RHG, RHR, RK, RKG, RR,

RSR, S, SG, SH, SHG, SHR, SHRG, SK, SKG, SKH, SKHG, SKHRG, SKK, SKR, SKRG, SR,

SRG, SS, SSH, SSR; these shapes can normally also be preceded by H. (cf. also clusters

presented in Michelson 1988:11-23).

4.3 PHONOLOGICAL CHANGES

PNI appears to have undergone fewer sound changes relative to PI than Cherokee,

and most of the changes seem to involve vowels rather than consonants; note that if

further changes to consonants did occur in PNI, they are unlikely to be recoverable from

data in Cherokee, which in turn already shows significant changes to consonants and

clusters relative to forms in PI. Phonological changes that have occurred during the

transition from PI to PNI are described below as PNI-1 through PNI-12. Where

morphological disparity between PNI and Cherokee makes comparison of entire

reconstructed words impossible, only roots have been given with cognate segments

underlined. Where ordering of two or more changes seems to be necessary in order to

produce a correct output in PNI, this has been noted.

By PNI-1, * / o(ː) / has become * / a(ː) / (e.g. PI * { kanõːnowẽʔ } 'pipe' [323] >

PNI * / kaˈnõnawẽʔ /; PI * { jukoʔtiʔ } 'there is a lot' [344] > PNI * / joˈkaʔteʔ /;

PI * { -oʔnj- } 'hand' [400] → PNI * / ˈ<u>aʔnj</u>aʔ /; PI * { -tsjoːɹ- } 'tobacco' [465] →

PNI * / kaˈ<u>tsjaːɹ</u>aʔ /). This change, which has merged all reflexes of PI * / a(ː) / and

* / o(ː) / in PNI, must precede PNI-2 and PNI-6. (cf. also Rudes 1995:35)

By PNI-2, * / u(ː) / has become * / o(ː) / (e.g. PI * { juhsnuːɹiʔ } 'it is fast' [258] >

PNI * / johˈsnoːɹeʔ /; PI * { kihɹjuʔkẽh } 'chipmunk' [340] > PNI * / tsihˈɹjoʔkẽh /;

PI * { kuːɹeh } 'oak' [348] > PNI * / ˈkoːɹeh /; PI * { -nuːɹ- } 'corn husk' [392] →

PNI * / oˈ<u>noːɹ</u>aʔ /), and this change must follow PNI-1. Marianne Mithun (p.c.) notes

that change of PI * / u / to * / o / might instead distinguish languages of the traditional

Five Nations or Iroquois Proper subgrouping from other Northern Iroquoian languages,

and may thus potentially constitute a phonological innovation sufficient to group the

languages as a separate branch, rather than a change that should be projected back to

PNI. However, occurrence of a reflex * / o(:) / in all three traditional branches of

Northern Iroquoian, including Tuscarora-Nottoway (cf. <o> rather than <oo> or

<u> in e.g. No. <Otkum> 'Devil' [181], <Coree> 'A red oak' [348], and <Goshera>

'Winter' [394], as well as retention of a pronunciation [o] for the reflex of this vowel in

Western Tuscarora when short and unaccented, cf. Rudes 1999:xxxvii) suggests the

change was already present in PNI. (cf. also Mithun 1979:180, Rudes 1995:35).

By PNI-3, * / iji(:) / has become * / hi(:) / after at least * / k / and * / s /, and

perhaps after all non-glottal, non-resonant consonants (e.g. PI * { kiji- } '1SG:3A' [020] >

PNI * { khe- } '1SG:3I'; PI * { hsiji- } '2SG:3A' [023] > PNI * { hshe- } '2SG:3I').

Interaction between PNI-3 and PNI-4 may be responsible for the discrepancy in form

between Proto-Mohawk-Oneida { ɹi- } '1SG:3M' [021] and the form { he- } '1SG:3M', found

in other Northern Iroquoian languages, with both deriving from a hypothetical

antecedent * { hɹiji- } or * { hɹeje- }. This change must precede PNI-4, PNI-7, and

PNI-9.

By PNI-4, short * / i / has become * / e / (e.g. PI * { ki- } '1SG:3' [019] >

PNI * { ke- }; PI * { hsi- } '2SG:3' [022] > PNI * { hse- }; PI * { juhsnuːɹiʔ } 'it is fast' [258] >

PNI * / johˈsnoːɹeʔ /; PI * { jukoʔtiʔ } 'there is a lot' [344] > PNI * / joˈkaʔteʔ /;

PI * { õːtaɹiʔ } '(there is a) lake' [412] > PNI * / ˈõtaɹeʔ /). Rudes (1995:32) notes some

exceptions in which this change appears not to have occurred before the cluster

* / hst /; the clusters * / hɹj / in * { kihɹjuʔkẽh } 'chipmunk' [340] and * / hsk / in

* { hwihsk } 'five' [273] likewise seem not to have been subject to the change, which must

follow PNI-3, and precede PNI-5 and PNI-8. (cf. also Rudes 1995:35).

By PNI-5, initial * / i / (or perhaps * / iː /) has been added to non-imperative

verbs containing only one syllable (e.g. PI * { ki-k- } 'I eat' [316] → PNI * / ˈiːkeks /;

monosyllabic verb stems demonstrably deriving from PI are limited, but other examples

from PNI include * / ˈiːkeʔts / 'I go' [209], * / ˈikhsʔahs / 'I finish it' [266], and * / ˈiːwaːt /

'it is inside' [159]). As rendered here, this change must follow PNI-4 and precede PNI-7.

(cf. also Chafe 1977a:170).

By PNI-6, antepenultimate accent has been applied to words in which the vowel of

the penultimate syllable was short * / a / followed by a single non-glottal consonant

(e.g. PI * { kanõːnowẽʔ } 'pipe' [323] > PNI * / kaˈnõnawẽʔ /; PI * { õːtaɹiʔ } '(there is a)

lake' [412] > PNI * / ˈõtaɹeʔ /; PI * { tawiːhskaɹaʔ } 'flint' [437] > PNI * / taˈwihskaɹaʔ /).

This development has created the PNI antepenultimate accent as described in Michelson (1988:52) and Rudes (1995:31); it must follow PNI-1 and PNI-3, and precede PNI-7 and PNI-8. (cf. also Chafe 1977a:170). Subsequently, by PNI-7, penultimate accent has been applied to all words that did not receive antepenultimate accent by PNI-6 (e.g. PI * { iːnõh } 'far' [281] > PNI * / ˈiːnõh /; PI * { kihɹjuʔkẽh } 'chipmunk' [340] > PNI * / tsihˈɹjoʔkẽh /; PI * { jukoʔtiʔ } 'there is a lot' [344] > PNI * / joˈkaʔteʔ /), and this change must follow PNI-6 and precede PNI-9. Marianne Mithun (p.c.) suggests an alternative scenario for the development of PNI accent: "Pre-Proto-Northern Iroquoian had penultimate stress, and when a noun stem was incorporated into a verb before a stem beginning in a consonant, a short epenthetic -a- was added to break the consonant cluster. This epenthetic vowel did not affect the already well-established stress pattern. As the vowel became stronger and took on the status of a regular vowel, in just these situations, stress actually occurred on the antepenultimate syllable. The developments outlined by Julian above will not actually yield the correct modern forms. A regular, inherited, penultimate short a (not the linking vowel) did receive stress, and such vowels continue to do so in the languages that have preserved the original pattern." However, as illustrated by examples under PNI-6 (PI * { kanõːnowẽʔ } 'pipe' [323] > PNI * / kaˈnõnawẽʔ /; PI * { õːtaɹiʔ } '(there is a) lake' [412] > PNI * / ˈõtaɹeʔ /;

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PI * { tawi:hskaɹaʔ } 'flint' [437] > PNI * / taˈwihskaɹaʔ /), penultimate short * / a /,

even in cases like these where it is not a reflex of the joiner vowel, does not appear to

have received accent when a single non-glottal consonant followed, and nor does it

appear to have received accent in this environment in languages such as Mohawk and

Oneida, which preserve the original pattern (Michelson 1988:52),

cf. Mo. / shaˈwihskaɹaʔ / 'flint', Oe. / taˈwiskalaʔ / 'devil or the Evil twin' [437]

(Rudes 1995:45); short penultimate * / a / does appear to have received accent,

regardless of its etymological origin, when a consonant cluster followed, however

(cf. e.g. Oe. / kajaʔˈtalhaʔ / { ka-jaʔt-(a)-l-haʔ } 'it is pictured' [413], where the joiner

vowel * / a / has received accent in a penultimate syllable before a consonant cluster).

By PNI-8, inherited vowel length has been lost in all non-final syllables

(e.g. PI * { wakʷata:tkẽ:h } 'I saw myself' [076] [332] > PNI * / wakʷaˈtatkẽ:h /;

PI * { õ:taɹiʔ } '(there is a) lake' [412] > PNI * / ˈõtaɹeʔ /; PI * { tawi:hskaɹaʔ } 'flint' [437] >

PNI * / taˈwihskaɹaʔ /). This change must follow PNI-4 and PNI-6.

(cf. also Rudes 1995:29).

By PNI-9, accented vowels in open penultimate syllables have been lengthened

when they preceded a single non-glottal consonant (e.g. PI * { atse:ʔ } 'new' [189] >

PNI * / ˈa:tseʔ /; PI * { kijikẽ:h } 'I saw someone' [020] [332] > PNI * / ˈkhe:kẽ:h /;

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PI * { kahna:wẽ:h } 'butterfly' [317] > PNI * / kahˈna:wẽ:h /). This change must follow

PNI-3 and PNI-7. (cf. also Chafe 1977a:171).

By PNI-10, * / h / has been lost before * / s / word-initially (e.g. PI * { hsi- }

'2SG:3' [022] > PNI * / se- / word-initially; PI * { hsiji- } '2SG:3A' [023] > PNI * / she- /

'2SG:3I' word-initially). Though reflexes cannot be projected back to PI, the same loss

of word-initial * / h /may have applied to masculine pronominal prefixes containing the

sequence * / hr /.

By PNI-11, * / n / has been lost before * / t / when the vowel / i / followed

(e.g. PI * { wanti:- } '3NS:3' [058] > PNI * { wati- }; PI * { ju:nti:- } '3:3NS' [061] >

PNI * { joti- }). This change must precede PNI-12.

By PNI-12, * / t / has been lost after * / n / (e.g. PI * { want- } '3NS:3' [058] >

PNI * { wan- } '3NS:3' [058]; PI * { ju:nt- } '3:3NS' [061] > PNI * { jon- }). This change must

follow PNI-11.

Phonological changes that have occurred during the transition from PI to PNI are

recapitulated in (5).

(5)   Phonological Changes in the Transition from PI to PNI

PNI-1   o(:) > a(:)
PNI-2   u(:) > o(:)
PNI-3   iji(:) > hi(:) / k, s_
PNI-4   i > e (except before hCC)
PNI-5   Ø > i / #_(C)(C)CVC(C)(C)#
PNI-6 V^1 > $'V^1$ (in certain antepenultimate syllables; see description)
PNI-7 V^1 > $'V^1$ (in penults not preceded by an accented antepenult)
PNI-8 V^1: > V^1 (in all non-final syllables)
PNI-9 $'V^1$ > $'V^1$: / _kV, k^{w}V, tV, sV, tsV, nV, ɹV, wV, jV (open penults)
PNI-10   h > Ø / #_s
PNI-11   n > Ø / _ti
PNI-12   t > Ø / n_V

In addition to the phonological changes in (5), prevocalic allomorphs of PNI

pronominal prefixes suggest that additional sound changes may have occurred relative

to PI, although conceivably such patterns may actually have been inherited from PI,

having been replaced in Cherokee by generic prevocalic allomorphs. Regular

morphophonemic alternations that occur at the end of prevocalic allomorphs of PNI

pronominal prefixes are presented in (6); the initial vowel of a following base is lost

where the final vowel of an alternant is underlined.

(6)   Morphophonemic Alternations in Allomorphs of PNI Pronominal Prefixes

	_C	_a	_e, ẽ	_i	_o, õ
i.	* ...ati-	* ...ẽn-	* ...ẽn-	* ...at-	* ...ẽn-
	* ...oti-	* ...on-	* ...on-	* ...ot-	* ...on-
ii.	* ...e-	* ...Ø	* ...Ø	* ...Ø	* ...Ø
	* ...ke-	* ...kʷ-	* ...k-	* ...k-	* ...k-
iii.	* ...e-	* ...ej-	* ...ej-	* ...e̲-	* ...ej-
	* ...i-	* ...ij-	* ...ij-	* ...i̲-	* ...ij-
	* ...õ-	* ...õj-	* ...õj-	* ...õ̲-	* ...õj-
iv.	* ...o-	* ...o̲-	* ...aw-/-o̲-	* ...o̲-	* ...a-
v.	* ...a-	* ...Ø	* ...Ø	* ...ẽ̲-	* ...Ø
	* ...wa-	* ...w-	* ...w-	* ...wẽ̲-	* ...j-
	* ...wa-	* ...w-	* ...w-	* ...wẽ̲-	* ...waj-
vi.	* ...ni-	* ...j-	* ...n-	* ...n-	* ...n-
vii.	* ...e-	* ...õ̲-	* ...ẽ̲-/-ak-	* ...e̲-/-a-	* ...ak-

Pronominal prefixes belonging to the first group in (6), such as PNI * { wati- } '3PL:3' [058] and * { joti- } '3:3NS' [061], have alternants that show only the effects of regular sound change, albeit with a shift of * / a / to * / ẽ / before * / n /. Prefixes belonging to the second group, which include PNI * { ke- } '1SG:3' [019] and { jõke- } '3I:1SG' [026], descend from PI prefixes that appear to have had a preconsonantal allomorph ending in

* / i /, and have alternants that likewise show the effects of regular sound change; however, prefixes having a final element * { kʷ(i) } 'first person patient' seem to have lost the rounding of * / k /, both in their preconsonantal allomorph and before all vowels except * / a / (possibly rounding was retained also before * / e / and * / ẽ /, as allomorphy in Mohawk and Oneida suggests). Loss of rounding in this case was probably due to analogy with prefixes containing reflexes of PI * { k(i) } 'first person agent', and perhaps also to the presence of PNI final * / w / in allomorphs of plural number pronominal prefixes (cf. forms in group v).

Prefixes belonging to the third group of alternants in (6), such as * { kõ- } '1:2.SG' [013], * { khe- } '1SG:3A' [020], and * { jetshi- } '2NS&3I' [035], have alternants that essentially replace initial * / i / of a following base. The latter pattern suggests a possible sound change whereby reflexes of PI * / ji: / were lost in PNI following certain vowels (although apparently not all vowels – cf. alternants occurring before * / i / in group v).

Pronominal prefixes belonging to the fourth group in (6), such as PNI * { jo- } '3:3SG' [054], are cognate with PI forms that ended in * / u: /, after which bases in * / a: / appear to have lost their initial vowel, and this pattern seems also to have occurred in

PNI. Certain PNI bases in * / ẽ /, and all following bases in * / i /, likewise seem to have lost their vowel after these prefixes in PNI, which suggests possible sound changes whereby reflexes of PI * / uwi: / and * / uwẽ / were reduced to * / o / in PNI. Reflexes of PI allomorphs ending in * / uw / appear to have been retained in PNI as * / aw / before certain bases in * / ẽ /, and before all following bases in * / e /, * / o / and * / õ /, with loss of * / w / before bases beginning in the rounded vowels (i.e. pre-PNI * / awo / and * / awõ / > PNI * / ao / and * / aõ /).

Pronominal prefixes belonging to the fifth group in (6), which include * { tsa- } '3:2SG' [028], * { tswa- } '2PL&3' [033], and * { kõwa- } '3I:3SG' [066], regularly lost their final vowel * / a / before bases beginning in vowels, except before * / i /, where a final vowel * / ẽ / appears to have occurred instead and the * / i / of the following base is lost. The latter pattern suggests a possible sound change whereby PI * / aji: / became PNI * / ẽ /. Alternants in * / j / that occur before bases beginning in * / o / and * / õ / suggest a possible sound change whereby PI * / aj / and * / iw / became * / j / in PNI before rounded vowels. The exceptional alternant * / waj / that occurs before bases beginning in * / o / and * / õ / has perhaps been preserved so that the PNI prefix

* { kõwa- } '3I:3SG' [066] does not have an allomorph * / kõj / before rounded vowels,

since PNI * { kõ- } '1:2.SG' [013] appears to have had an allomorph * / kõj / in the same

environment.

Pronominal prefixes belonging to the sixth group in (6), such as * { tsni- }

'2DU&3' [031], end in reflexes of the PI dual number morpheme * { ni: }, which seems to

have had a prevocalic allomorph * / n / in PI. The alternant * / j / that occurs in PNI

before bases beginning in * / a / may be linked to an allomorphic pattern in Cherokee

where cognate prefixes end in / ni: / before bases beginning in long / a: / and the

vowel of the base is subsequently lost. PI may have had * / ni:j / before bases in * / a:

/, with loss of the resulting syllable * / ja: / in Cherokee and loss of the syllable * / ni /

in PNI, though this is not certain.

The seventh set of alternants in (6) pertains only to the pronominal prefix * { je- }

'3I:3' [063], which appears to be cognate with the element * { ji } that appears to have

marked animate third person in some PI pronominal prefixes. The alternants in * / õ /,

* / ẽ /, and * / e / that seem to have occurred before PNI bases in * / a /, * / e / and

* / i / suggest possible sound changes whereby reflexes of PI sequences * / ija(:) /,

* / ije(ː) /, and * / ijiː / became * / õ /, * / ẽ /, and * / e / respectively in PNI, the third

of which changes bears resemblance to sound change PNI-3. Alternants in * / ak / have

no obvious parallels in PI but may have been influenced formally by the related prefix

* / jako / '3:3I' [064]. The alternant in * / a / that occurs before some bases beginning in

* / i / is unexplained, though the unusual diphthong probably represents an earlier

alternant * / aj / with loss of * / j / before * / i / in PNI (cf. loss of * / w / before

rounded vowels in alternant group iv).

A final morphophonemic alternation in PNI prefix morphology that may reflect an

additional sound change is occurrence of the PNI vowel * / õ / whenever a

prepronominal prefix ending in * / (w)a(ʔ) / precedes a pronominal prefix

(or a pronominal prefix plus base) beginning in * / wa /; for example, PNI * { waʔ }

'factual' [006] + { wak } '3:1SG' [025] + { kẽʔ } 'see (punctual base)' [332] = PNI * / ˈõkkẽʔ /

'it saw me' (cf. Chafe 1996:557 for discussion of this pattern in Seneca). If indeed the

PI pronominal prefixes * { kõːwa- } '3A:3SGA' [066] and PI * { kõːwantiː- } '3A:3NSA' [068]

have an initial underlying composition { ka + wa + wa } then a similar

morphophonemic rule may already have been present in PI (but cf. Michelson 1988:40

for exceptions to this alternation in Northern Iroquoian languages).

4.4 MORPHOLOGICAL CHANGES

The morphological structures of the PNI noun and verb seem to have been essentially the same as those posited for PI, although no phonological distinction was retained between independent and dependent forms (assuming, as I have here, that such a distinction was present in PI). Whereas Cherokee and PI seem to have had a strictly linear order in which prepronominal prefixes occurred, PNI and all of its daughter languages seem to have position classes, which likewise occur in a set order, but can include more than one prefix, only one of which may occur in the same verb; for example, the PNI negative, coincident, contrastive, and partitive prefixes all seem to have belonged to position class 1, and only one of them seems to have been able to occur in a given word. The reconstructed position class template for PNI prepronominal prefixes is presented in (7).

(7)   Position Class Template for PNI Prepronominal Prefixes

          negative * / teʔ / [001]
          coincident * / tshi / [002]
          contrastive * / thi / [003]
          partitive * / ni / [004]
          | translocative * / j(a)hwe / [005]
          | | factual * / waʔ / [006]
          | | | duplicative * / te / [007]
          | | | | future * / ẽ / [008]
          | | | | optative * / aɹa / [009]

					cislocative * / t / ^{010}
					repetitive * / ts / ^{011}
1	2	3	4	5	6

To the putative prepronominal prefixes of PI have been added the negative, contrastive, factual, and optative prefixes. The negative prefix appears simply to have negated a verb (e.g. PNI * / ˈkheːkẽh / 'I see someone' [332] → * / teʔˈkheːkẽh / 'I don't see someone'). The contrastive prefix seems to have implied that the verb reflects something that is unusual or not to be expected (e.g. PNI * / ˈkheːkẽh / 'I see someone' → * / thiˈkheːkẽh / 'I see someone, unexpectedly or unusually'). Like the future prefix, the factual and optative prefixes seem to have indicated grammatical moods, and because they always occur with a punctual verb base, are often referred to as modal prefixes (among other accounts, cf. Chafe 1967:15); their approximate respective meanings may be gathered from the following examples: PNI * / ẽˈkheːkẽʔ / 'I will see someone (in the future)'; * / waʔˈkheːkẽʔ / 'I saw someone (at a single point in time, and that is a fact)'; * / aɹaˈkheːkẽʔ / 'I would, should, could, might or may see someone (at some point, now or in the future, but I am not entirely sure)'. Like the translocative and cislocative prefixes, the factual, future, and optative prefixes seem to have had mutually exclusive meanings and for semantic reasons did not co-occur.

Reflexes of the negative and coincident prefixes have probably been lost in

Tuscarora but are present throughout Iroquoia and Huronia. In all of the remaining

Northern languages except Seneca, Huron, and Wyandot, the negative prefix can co-

occur only with the cislocative and repetitive prefixes; elsewhere the contrastive prefix

must be substituted (which suggests e.g. PNI * / ˈthaʔkkẽʔ / 'I did not see it' and

* / ˈthẽkkẽʔ / 'I will not see it', with the contrastive). Note, however, that Onondaga,

like Seneca, Huron and Wyandot, allows a negative prefix allomorph / taʔ / [001] before

the duplicative prefix (cf. Woodbury 2003:41), and perhaps maintains the pattern that

was originally present in PNI.

The coincident, contrastive, and partitive prefixes of PNI position class 1 appear to

have shared a common allomorphy, with basic forms * / tsh / [002], * / th / [003] and

* / n / [004] respectively before vowels and glides, and basic forms * / tshi /, * / thi / and

* / ni / respectively before remaining consonants; in imperative verbs (except those

containing the cislocative or repetitive prefix and the 1 + 2DU:3 or 1 + 2PL:3

pronominal prefixes), all three prefixes appear to have had allomorphs ending in a

'fossilized' allomorph of the factual prefix: * / tshõ /, * / thõ / and * / nõ / before

* / wa / with loss of * / wa /; * / tshe /, * / the / and * / nwe / before certain

pronominal prefixes involving the second person (enumerated below in connection

with the factual prefix); * / tsha? /, * / tha? / and * / nwa? / before * / j / with loss of

* / j /, and before remaining consonants. Occurrence of the vowel * / i / (rather than

* / e /) in the basic pre-consonantal form of the coincident and partitive prefixes is

unexpected in light of Cherokee cognates, as are initial * / tsh / (rather than * / ts /)

in the coincident and the membership of both prefixes in the same position class.

Possibly the three prefixes are etymologically comprised of a reflex of the dependent

form of the PI partitive (* / iji: / [004]) preceded by coincident * / ts- / [002], partitive

* / n- / [004], and an unknown contrastive element * / t- /; regular sound change from

speculative proto-forms * / tsiji: /, * / tiji: /, and * / niji: / would then have yielded PNI

* / tshi /, * / thi /, and * / ni / (cf. PNI-3), with resulting prefixes sharing both their

position class and their pattern of allomorphy. A reflex of the PNI partitive without

initial * / n / has possibly been preserved in Huron (see 16.4).

The translocative prefix, which appears to have followed the coincident and

preceded the partitive in PI, had the form * / j(a)hwe / [005] in PNI, perhaps through

addition of a free-standing directive particle of the shape * / jah / to the reflex of

PI * / we / in order to better distinguish it from allomorphs of the PNI factual prefix

(PNI * / wa? /, * / we /). The PNI translocative had a basic form * / j(a)hw / before

vowels and a basic form * / j(a)hwe / before consonants. Like the coincident,

contrastive, and partitive prefixes of position class 1, the PNI translocative appears to have had allomorphs containing a 'fossilized' allomorph of the factual prefix in imperative verbs: * / j(a)hõ / before * / wa / with loss of * / wa /; * / j(a)hwe / before certain pronominal prefixes involving the second person (enumerated below in connection with the factual prefix); and * / j(a)hwaʔ / before * / j / with loss of * / j /, and before remaining consonants. In non-imperative verbs the translocative appears also to have had an allomorph * / jah / before the factual prefix and an allomorph * / jaʔ / before the duplicative prefix.

The PNI factual prefix seems to have had a zero allomorph word-initially before the cislocative and repetitive prefixes, while an allomorph * / õ / [006] appears to have occurred both before * / wa /, with loss of * / wa /, and before the cislocative and repetitive prefixes elsewhere. An allomorph * / we / seems to have preceded the second person pronominal prefixes * { tsa } '3:2SG' [028], * { tsni } '2DU&3' [031], * { tswa } '2PL&3' [033], * { tni } '1 + 2DU:3' [036], and * { twa } '1 + 2PL:3' [038], and an allomorph * / waʔ / seems to have preceded the duplicative prefix and all remaining pronominal prefixes, with loss of a following * / j / in prefix allomorphs beginning with * / j /. Why the five pronominal prefixes listed should condition a unique allomorph of the factual relative to other pronominal prefixes is unclear, but they also condition unique

allomorphs of the duplicative, optative, cislocative, repetitive, and non-singular animate

prefixes (see 2.6 for discussion of the forms of these prefixes in PI).

The PNI duplicative prefix seems to have had an allomorph * / tõ / [007] following the

factual before the cislocative or repetitive prefixes, and before the cislocative or

repetitive prefixes in imperative verbs (except those containing the cislocative or

repetitive prefix and the 1 + 2DU:3 or 1 + 2PL:3 pronominal prefixes), and before the

2:1 imperative pronominal prefixes (PNI * / take / '2:1.SG.IMP' [072] etc.), whose initial

element appears etymologically to be derived from the cislocative prefix. An allomorph

* / ti / seems to have occurred following the factual prefix before five second person

pronominal prefixes (see details of the factual prefix above). An allomorph * / t /

appears to have preceded vowels elsewhere and an allomorph * / te / appears to have

preceded consonants elsewhere.

The PNI future prefix was * / ẽ / [008] in all environments. The PNI optative prefix

appears to have had an allomorph * / aɹe / [009] before five second person pronominal

prefixes (enumerated above in connection with the factual prefix), an allomorph

* / aɹõ / before * / wa / with loss of * / wa /, an allomorph * / aɹ / before glides, and

an allomorph * / aɹa / before remaining consonants. The * / ɹ / of the optative seems to

have been lost entirely in most of the daughter languages, and has been preserved only

in certain environments in Old Mohawk and Tuscarora; its earlier presence in Huron can be inferred from preservation of the initial * / j / of a following pronominal prefix in intervocalic position (PNI * / V^1ɹjV^2 / > Hu. / V^1jV^2 /; cf. HU-19 in 16.3).

The PNI cislocative prefix seems to have had an allomorph * / ka / [010] in at least some imperative verbs (cf. PNI * / ˈkaːtsih / 'come here!' [329]), and an allomorph * / ti / that regularly preceded the pronominal prefixes * { tni } '1 + 2DU:3' [036] and * { twa } '1 + 2PL:3' [038] in imperative verbs. An allomorph * / te / appears to have occurred following the factual or optative prefix before five second person pronominal prefixes (enumerated above in connection with the factual prefix), an allomorph * / tõ / seems to have occurred following the factual or optative prefix before * / wa / with loss of * / wa /, and an allomorph * / ta / seems to have occurred in imperative verbs elsewhere, as well as following the factual or optative prefixes elsewhere. Elsewhere, before the five second person pronominal prefixes, an allomorph * / ti / seems to have occurred, and an allomorph * / t / seems to have occurred in all remaining environments.

The allomorphy of the PNI repetitive prefix appears to have mirrored that of the repetitive prefix: an allomorph * / tsi / [011] seems to have preceded the pronominal prefixes * { tni } '1 + 2DU:3' [036] and * { twa } '1 + 2PL:3' [038] in imperative verbs, an

allomorph * / tse / seems to have occurred following the factual or optative prefix

before five second person pronominal prefixes (enumerated above in connection with

the factual prefix), an allomorph * / tsõ / seems to have occurred following the factual

or optative prefix before * / wa / with loss of * / wa /, and an allomorph * / tsa /

seems to have occurred in imperative verbs elsewhere, as well as following the factual

or optative prefixes elsewhere. Elsewhere, before the five second person pronominal

prefixes, the allomorph * / tsi / seems to have occurred, and an allomorph * / ts /

seems to have occurred in all remaining environments.

The non-singular animate prefix of PNI appears to have had a single allomorph

* / ka / [012], as in Tuscarora and Cayuga. Allomorphs that reflect antecedents * / kae /

and * / kõ / have developed in Huron before five second person pronominal prefixes

(see details of the factual prefix above) and before * / wa / with loss of * / wa /,

respectively, perhaps as a consequence of reassigning non-singular animate marking to

pronominal prefixes with an argument '3' rather than '3I' (see 16.4).

PNI seems to have had a 1:2.DU pronominal prefix * { kni } [014] and a 1:2.PL

pronominal prefix * { kwa } [015] in pronominal prefix group 1, which mirror the dual

and plural number 2:1 forms * { hskni } [017] and * { hskwa } [018]. PNI pronominal prefix

group 1 is presented in (8).

(8)   PNI Pronominal Prefix Group 1

      1:2.SG   PNI * { kõ } [013]   (< PI * { kõː })

      1:2.DU   PNI * { kni } [014]

      1:2.PL   PNI * { kwa } [015]

      2:1.SG   PNI * { hske } [016]   (< PI * { hsk^{w}i })

      2:1.DU   PNI * { hskni } [017]   (< PI * { hskniː })

      2:1.PL   PNI * { hskwa } [018] (< PI * { hsk^w… })

In other pronominal prefix groups, PNI appears to have expanded considerably the number of prefixes, in part through introduction of the category masculine ('M'), which signals that a third person was male, or that a group of third persons ('they') contains at least one male. The meaning of the third person animate ('3A') argument in prefixes also appears to have shifted to third person feminine-indefinite ('3I'), which refers collectively to human females ('she'), people in general ('one, they'), or unknown individuals ('someone'). The meaning of the third person inanimate appears to have become in PNI a neuter-zoic ('3'), which equally refers to animals, inanimate objects, and null third person.

To pronominal prefix group 2, PNI appears to have added a third person masculine gender ('3M') prefix variant to all four pre-existing pairs of 3/3I prefixes, as seen in (9).

(9)   PNI Pronominal Prefix Group 2

1SG:3	PNI * { ke } [019]	(< PI * { ki })
1SG:3I	PNI * { khe } [020]	(< PI * { kiji } '2SG:3A')
1SG:3M	PNI * { he } or { hɹi } [021]	
2SG:3	PNI * { hse } [022]	(< PI * { hsi })
2SG:3I	PNI * { she } [023]	(< PI * { hsiji } '2SG:3A')
2SG:3M	PNI * { hehse } [024]	
3:1SG	PNI * { wake } [025]	(< PI * { wakʷi })
3I:1SG	PNI * { jõke } [026]	(< PI * { jõːkʷi } '3A:1SG')
3M:1SG	PNI * { hɹake } [027]	
3:2SG	PNI * { tsa } [028]	(< PI * { tsa })
3I:2SG	PNI * { jetsa } [029]	(< PI * { jeːtsa } '3A:2SG')
3M:2SG	PNI * { hja } [030]	

The composition of the 1SG:3M and 3M:2SG prefixes of group 2 is unclear, although

they share patterns of allomorphy with their 3I counterparts. The 2SG:3M prefix

appears to have been comprised of a masculine gender element * / he / prefixed to the

2SG:3 prefix, while the 3M:1SG prefix has replaced initial * / w / of the 3:1SG prefix

with masculine gender * / hɹ /, the * / h / of which was probably lost in word-initial

position, much like the * / h / of second person * / hs /.

To pronominal prefix group 3 PNI again seems to have added third person

masculine gender (3M) variants, as well as a third person indefinite (3I) variant, as can

seen in (10).

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(10)   PNI Pronominal Prefix Group 3

        2DU&3   PNI * { tsni } [031]   (< PI * { tsni: })
        2DU&3M   PNI * { shetsni } [032]
        2PL&3   PNI * { tswa } [033]   (< PI * { ts... })
        2PL&3M   PNI * { shetswa } [034]
        2NS&3I   PNI * { jetshi } [035]

The 2NS&3I prefix * { jetshi } appears to contain a reflex of * { je }

(PI animate / PNI indefinite) and an element * { tshi }, which carries a meaning '2NS'

(cf. Tu. / tʃhi / '2NS:3.IMP'). The masculine gender prefixes seem to have had an

initial masculine gender element * { sh- } which occurred in the fourth and fifth

pronominal prefix groups as well; the vowel * { -e- } that followed appears to result

from the fact that * { tsni } and * { tswa } were among five second person pronominal

prefixes that seem to have taken a preceding vowel * { -e- } where other prefixes took

variants in * { -a(ʔ)- } (see discussion of the factual prefix above), as also were

* { tni } and * { twa } of PNI pronominal prefix group 4, which had third person

masculine gender variants * { shetni } and * { shetwa } (rather than ˣ { shatni } and

ˣ { shatwa }).

    In pronominal prefix group 4 PNI appears to have begun making a distinction

between inclusive and exclusive first person agents (if such a distinction was not

already present in PI), as well as adding a third person masculine gender equivalent for

each existent prefix and a set of three indefinite third person prefix variants in which

inclusive and exclusive agents were not distinguished, as can be seen in (11).

(11)   PNI Pronominal Prefix Group 4

       1+2DU:3   PNI * { tni } [036]   (< PI * { tni: })
       1+2DU:3M   PNI * { shetni } [037]
       1+2PL:3   PNI * { twa } [038]   (< PI * { t... })
       1+2PL:3M   PNI * { shetwa } [039]
       1+3DU:3   PNI * { jakni } [040]
       1+3DU:3M   PNI * { shakni } [041]
       1+3PL:3   PNI * { jakwa } [042]
       1+3PL:3M   PNI * { shakwa } [043]
       3:1DU   PNI * { jõkni } [044]   (< PI * { kni: })
       3M:1DU   PNI * { shõkni } [045]
       3:1PL   PNI * { jõkwa } [046]   (< PI * { kʷ... })
       3M:1PL   PNI * { shõkwa } [047]
       1+2NS:3I   PNI * { jethi } [048]   (limited to Iroquoia)
       1+3NS:3I   PNI * { jakhi } [049]
       3I:1NS   PNI * { jõkhi } [050]

The 1+2NS:3I prefix * { jethi } again appears to contain a reflex of * { je }

(PI animate / PNI indefinite), but its remaining composition is unclear, as are those of

the other indefinite prefix variants. Remaining novel morphemes may be analyzed as

* { ja } 'exclusive first person agent', * { jõ } 'first person patient', and * { sh } 'third

person masculine', the latter of which replaced initial * / j / of the former elements

when it preceded them. Note that reflexes of * { jethi } are limited to Iroquoia; the

function of the latter prefix is subsumed under * { jakhi } in Huron, and the function of

all three indefinite prefixes is subsumed under the reflex of * { jõkhi } in Tuscarora.

Pronominal prefix group 5 may have expanded considerably in PNI through

additional distinctions of dual and plural number, masculine and feminine gender, and

indefinite third person, as can be seen in (12).

(12)   PNI Pronominal Prefix Group 5

3SG:3	PNI * { ka } [051]	(< PI * { ka } [051], * { wa } [052])
3SGM:3	PNI * { hɹa } [053]	
3:3SG	PNI * { jo } [054]	(< PI * { ju: })
3:3SGM	PNI * { hɹo } [055]	
3DU:3	PNI * { kni } [056]	
3DUM:3	PNI * { hni } [057]	
3PL:3	PNI * { wati } [058]	(< PI * { wanti: } '3NS:3')
3PL:3	PNI * { kõti } [059]	
3PLM:3	PNI * { hɹati } [060]	
3:3NS	PNI * { joti } [061]	(< PI * { ju:nti: })
3:3NSM	PNI * { hɹoti } [062]	
3I:3	PNI * { je } [063]	
3:3I	PNI * { jako } [064]	
3SGM:3I	PNI * { shako } [065]	
3I:3SG	PNI * { kõwa } [066]	(< PI * { kõ:wa } '3A:3SG')
3I:3SGM	PNI * { hɹõwa } [067]	
3I:3NS	PNI * { kõwati } [068]	(< PI * { kõ:wanti: } '3A:3NS')
3I:3NSM	PNI * { hɹõwati } [069]	
3NS:3I	PNI * { jakoti } [070]	(limited to Iroquoia)
3NSM:3I	PNI * { shakoti } [071]	(limited to Iroquoia)

The 3SG:3 prefixes * { wa } and * { ka } of PI appear to have merged in PNI as

allomorphs of a single prefix * { ka }, and although only one prefix * { wati } or

* { kõti } is found in any Northern Iroquoian language with a meaning '3NS:3', the two

forms appear to have been in competition or at some point to have been independent

prefixes, perhaps signifying feminine versus neuter-zoic gender (Huron has merged

allomorphs of the two prefix as a single 3NS:3 prefix * { wati }). The elements * { ni }

'dual number', * { je } 'third person indefinite' (the third person animate morpheme in

PI), * { hɹ } and * { sh } 'third person masculine', also occur in other pronominal prefix

groups. The elements * { k } and * { h } preceding the dual number forms appear to be

reductions of third person singular * { ka } and masculine * { hɹ }, and the element

* { jak } that appears in indefinite forms appears to be an allomorph of * { je } 'third

person indefinite' occurring before bases beginning in * { o }. Note that reflexes of

* { jakoti } '3NS:3I' and * { shakoti } '3NSM:3I' are limited to Iroquoia, and that Huron

and Tuscarora express the same agent-patient interaction with constructions employing

the non-singular animate prefix.

Marianne Mithun (p.c.) notes that Tuscarora's lack of distinct masculine gender

forms in non-singular pronominal prefixes involving the third person, its lack of reflexes

for the third person dual number prefixes * { kni } '2DU:3' and * { hni } '2DUM:3', and

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its lack of reflexes of third person plural number prefixes containing a plural marker * { ti } (e.g. * { wati } '3PL:3', * { hroti } '3:3NSM', etc) suggest that these elements may constitute an innovation shared by Huron and the languages of the Iroquois Proper, and that a Lake Iroquoian subgrouping might thus be established on morphological grounds. While such an analysis is certainly possible, I nonetheless contend, prompted in part by lack of any apparent joint phonological innovations having taken place among the Lake Iroquoian languages during their hypothetical period of common development to the exclusion of Tuscarora, that the morphological distinctions in question may equally have been present in PNI only to be levelled in Tuscarora. Evidence that may support such a hypothesis in fact includes absence in Tuscarora of non-singular third person pronominal prefixes in * { ti }, which have cognates in Cherokee and in other Northern languages (e.g. PI * { wanti: } '3NS:3' [058] and * { ju:nti: } '3:3NS' [061]), as well as absence in Tuscarora of reflexes of PI * { kõ:wa } '3A:3SG' [066] and PI * { kõ:wanti: } '3A:3NS' [068], which have cognates in Cherokee and all of the other Northern Iroquoian languages except Cayuga, as well as the consideration that pronominal relationships that traditionally appear to have been expressed using the absent pronominal prefixes are in Tuscarora expressed by means of a system that is strikingly simpler than that found in any other Northern Iroquoian language; Tuscarora

equivalents for pronominal prefix forms whose reflexes occur in other Northern

Iroquoian languages (here reconstructed as PNI on the basis of cognates in Iroquoia

and Huronia, though this is debatable) are presented in (13).

(13)   A Comparison of Non-Singular Third Person Pronominal Prefixes

PNI * / kni- / '3DU:3'   Tu. / nɛ-jɛ- / 'DUPL + 3I:3'
PNI * / hni- / '3DUM:3'   Tu. / nɛ-jɛ- / 'DUPL + 3I:3'
PNI * / wati- / '3PL:3'   Tu. / ka-jɛ- / '3NSA + 3I:3'
PNI * / hrati- / '3PLM:3'   Tu. / ka-jɛ- / '3NSA + 3I:3'
PNI * / joti- / '3:3NS'   Tu. / nɛ-jako- / 'DUPL + 3:3I' (when dual),
                                 Tu. / ka-ko- / '3NSA + 3:3I' (when plural)
PNI * / hroti- / '3:3NSM'   Tu. / nɛ-jako- / 'DUPL + 3:3I' (when dual),
                                 Tu. / ka-ko- / '3NSA + 3:3I' (when plural)
PNI * / kõwa- / '3I:3SG'   Tu. / nɛ-jə̃-ʔnaʔn- / 'DUPL + 3I:3 + REFLEXIVE'
PNI * / kõwati- / '3I:3NS'   Tu. / ka-jə̃-ʔnaʔn- / '3NSA + 3I:3 + REFLEXIVE'

The Tuscarora pronominal forms in (13) are uniformly composed of a third person

indefinite pronominal prefix (PNI * { je- } '3I:3' [063] or * { jako- } '3:3I' [064]) combined

with either the duplicative prefix / nɛ- / (PNI * { te- } [007]) to mark dual number or the

non-singular animate prefix / ka- / (PNI * { ka- } [012]) to mark plural number, and/or

the reflexive morpheme / -aʔnaʔn- / (PNI * { -atat- } [076]) to signal interaction between

at least two animate/indefinite third persons. While the Tuscarora system is certainly

simpler, its lack of four out of six Group 5 pronominal prefixes that can be

reconstructed for PI (* { wanti: } [058], * { juːnti: } [061], * { kõːwa } [066], and

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* { kõ:wani: } [068]) raises questions about whether it is necessarily archaic, or whether Tuscarora has simply replaced all non-singular third person gender distinctions (both masculine and feminine-neuter-zoic forms, the latter forms having cognates in Cherokee) with forms involving the third person indefinite ('someone, people'). The case for the simpler system of Tuscarora being archaic would be more compelling if a similar system were employed in Southern Iroquoian, but in fact the non-singular third person pronominal prefixes of Cherokee are cognate with forms found in other Northern Iroquoian languages rather than with forms found in Tuscarora. Although this consideration does not in itself prove that other Northern Iroquoian languages have maintained the archaic PNI pronominal prefix system while Tuscarora has innovated a system employing gender third person indefinite forms throughout the non-singular, this seems to me the best morphological interpretation in light of a corresponding lack of apparent joint phonological innovations among the traditional Lake Iroquoian languages that would formally set them apart from Tuscarora-Nottoway.

In addition to the five groups of pronominal prefixes just discussed, PNI also seems to have had a sixth group of prefixes consisting of imperative forms that differed from their non-imperative counterparts; these are presented in (14).

(14)   PNI Pronominal Prefix Group 6

      2:1.SG.IMP   PNI * { take } [072]
      2:1.DU.IMP   PNI * { takni } [073]
      2:1.PL.IMP   PNI * { takwa } [074]
      2SG:3.IMP   PNI * { tse } [075]

The 2:1 prefixes in (14) appear to be modelled on their indicative counterparts

(PNI * { hske } [016], * { hskni } [017], * { hskwa } [018]); initial * / ta / had its etymological

origin in the cislocative prefix, judging from the duplicative prefix allomorph * / tõ / [007]

that preceded it (cf. OMo. / tũtaˈkekhaʔs / 'join these for me', / tũtakʷahshaˈɹũthaʔs /

'put the handle back on for me'). The prefix * { tse } '2SG:3.IMP' seems to have had the

same final allomorphy as non-imperative * { hse } '2SG:3' [022] ; etymologically it may

also have consisted of the non-imperative form preceded by a cislocative prefix

allomorph * / t /.

A number of PNI pronominal prefixes seem to have had an allomorph ending in

'epenthetic' * / e / before certain consonants and clusters (a continuation of PI short

* / i /), and the consonants and clusters before which a reflex of * / e / occurs vary in

each of the daughter languages. The consonants and clusters before which the 1SG:3

pronominal prefix allomorphs * / k / and * / ke / [019] are predicted to have occurred in

PNI are presented in (15).

(15)   Distribution of Prefix Allomorphs with Epenthetic / e / in PNI (1SG:3)

/ k /   _hV, hjV, hnV, hnjV, hɹV, hɹjV, hsV, hsCV, htsV, hwV, jV, kV, kʷV,
          nV, ɹV, tV, tsV, wV, ʔV, ʔnV¹ (→ nV¹), ʔrV¹ (→ rV¹),
          ʔtV¹ (ʔ → tV¹), ʔwV¹ (→ wV¹).

/ ke /   before all remaining consonants and clusters.

Note that the environments in (15), and those presented in subsequent chapters, reflect

distribution of allomorphs of the 1SG:3 pronominal prefix; the conditioning

environments associated with other prefixes that have allomorphs in * / e /, such as the

2SG:3 prefix (PNI * / hs / and * / hse / [022]), may differ slightly from those associated

with the 1SG:3 prefix, but conclusions about these differences are difficult to draw

owing to attestation of these prefixes before far fewer bases than the 1SG:3 prefix.

Noun incorporation was continued in PNI, and the language seems additionally to

have had a pair of lexically-determined nominalizer affixes * { -hsɹ- } [080] and

* { -ʔtshɹ- } [081] that were used to from abstract nouns from verbs, and to incorporate

nominalized verbs into other verbs (cf. Mo. / joʔtaˈɹihʌ̃ / 'it is hot', / joʔtaɹiˈhʌ̃hseɹaʔ /

'it-is-hot-ness; heat', / wakaʔtaɹihʌ̃hseɹaˈnohsthaʔ / 'I have a cold', lit. 'my heat is made

cold', from Maracle 1990).

The derivational morphemes of PNI seem frequently to have been connected to their

base by lexically determined (and morphologically unanalyzable) elements such as

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* { -h- }, * { -ah }, * { -ʔ- }, * { -aʔ- }, or * { -a- }, and consequently only the uniform or radical element of each derivational morpheme is presented and underlined in examples that follow. The lexically-determined causative-instrumental morphemes * { t } [082] and * { hst } [083] were continued in PNI, and an instrumental morpheme * { hkw } [084] appears to have been added (cf. PNI * / jõteˈkaʔthaʔ / 'one makes it burn' [165], * / jõtekaʔˈta<u>hkhw</u>aʔ / 'one uses it to make it burn' [166] ; as in this example, the instrumental seems mainly to have served to form causatives or instrumentals from roots already ending in a causative-instrumental morpheme). The PI reversive morpheme * { kʷ } [085] was continued in PNI as * { ko }, with an allomorph * / kw / before vowels, and a second, lexically determined reversive morpheme * { hsi } [086], with an allomorph * / hsj / before vowels, has been added (cf. PNI * / waʔˈehnɹẽːʔ / 'someone tied it' [240], * / waʔehˈnɹẽ<u>hsi</u>ʔ / 'someone untied it'). PNI seems to have had an inchoative morpheme with the form * { ʔ } [087] (cf. PNI * / waˈtjeːtsẽh / 'it is easy' [178], * / waˈtjeːtsa<u>ʔ</u>ts / 'it becomes easy'), and to have continued the PI dative-benefactive morpheme * { ts } [088] (cf. PNI * / katũnˈhoʔkthaʔ / 'I end my life' [398] [406], * / õkatõˈnhoʔkthah<u>ts</u> / 'my life ends on me'). A second, lexically-determined dative-benefactive morpheme * { ẽ } [089] seems to have been introduced in punctual and imperative verbs (cf. PNI * / waʔˈkõːniʔ / 'I made it' [260], PNI * / kheˈjõnj<u>ẽ</u>ʔ / 'I made it

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for someone'), and a third, lexically-determined dative-benefactive morpheme

* { ni } [090] appears to have been introduced in non-punctual, non-imperative verbs

(cf. * / ˈkõːnihsk / 'I make it' [260], PNI * / khejõˈnjẽːnihsk / 'I make it for someone').

　　PNI appears to have had a number of lexically-determined dislocative morphemes

which carried the meaning 'go, go in order to' (cf. Mo. / kaˈtoːɹaths / 'I hunt',

/ katoˈɹathẹʔs / 'I go to hunt, I go hunting'). Dislocative morpheme variants that can be

projected back to PNI are * { -n- } [091], * { -h- } [092], * { -ts- } [093], and * { -tsɹ- } [094];

reflexes of a fifth variant, * { -ɹ- } [095], seems to be limited to Iroquoia. PNI seems also to

have had a number of lexically-determined distributive allomorphs which bore a

meaning 'several', 'on several occasions', or 'all over the place' (cf. Mo. / kaˈtoːɹaths /

'I hunt', / katoˈɹathῦhs / 'I hunt several animals' or 'I hunt on several occasions' or 'I hunt

all over the place'). Distributive morpheme variants that can probably be projected

back to PNI are * { -njõː- } [096], * { -nõː- } [097], * { -hõː- } [098], * { -õː- } [099], * { -ɹõː- } [100],

* { -ɹjõː- } [101], * { -tsõː- } [102], and * { -tsɹõː- } [103]. Finally, PNI seems to have had a

progressive morpheme * { -tjeʔ } [104], which carried the meaning 'along' or 'go along

doing' (cf. Mo. / kaˈtoːɹaths / 'I hunt', / wakatoɹatῦˈhatjeʔ / 'I go along hunting').

　　The four principal bases of the PI verb (present, punctual, imperfective, and

perfect) appear to have been continued in PNI; because verb bases show only a handful

of endings in Northern Iroquoian languages, however, they are more often analyzed as

consisting of a verb base plus a lexically-determined aspect suffix (among other works

cf. Michelson & Doxtator 2002:15, Woodbury 2003:23), and such an analysis here will

permit useful generalizations to be made regarding the most common endings of PNI

verb bases.

Lexically-determined endings of the present base ('present suffix') which can

probably be projected back to PNI include * { -hs } [105], * { -ts } [106], * { -haʔ } [107], and

* { -h } [108], while reflexes of the imperfective base appear mainly to have ended in

* { -hsk } [109] ('imperfective suffix') in PNI. Reflexes of the present and imperfective

bases have since fallen together as a generic habitual base ('habitual suffix' or

'serial suffix') in all of the Northern Iroquoian languages except Mohawk and Cayuga,

however, and even these preserve a present vs. imperfective distinction in only a

handful of verbs (e.g. Mo. / ˈkũːni / 'I am making it right now' vs. / ˈkũːnihs / 'I make it

habitually'). Reflexes of both the present and imperfective bases could evidently be

followed by a past habitual suffix that had the form * { -kʷ } or * { -kʷVʔ } [110] and

carried the meaning 'used to' (cf. Mo. / kaˈtoːɹaths / 'I hunt', / kaˈtoɹathsk̲ʷe̲ʔ /

'I used to hunt').

The PNI punctual base seems to have occurred in both modal and imperative verbs,

and to have had the same ending in both except that word-final * / ʔ / of a modal

punctual base ('punctual suffix') automatically alternated with * / h / in the

corresponding imperative (cf. Oo. / waʔkéˈktũʔ / 'I examined it', but / séˈktũh /

'examine it!'; Oo. / ẽhahsoˈtsjoːtẽʔ / 'he will pile it up', but / soːˈtsjoːtẽh / 'pile it up!').

Etymologically imperative forms ending in * / h / probably reflect the original punctual

base, with * / ʔ / having been added consequently to mark modal verbs. Lexically-

determined endings of the punctual base ('punctual suffix') which can be projected

back to PNI include * { -ʔ } [111], * { -ẽʔ } [112], * { -Ø } [113], and * { -n } [114].

Lexically-determined endings of the perfect base ('perfect suffix' or 'stative suffix')

that can probably be projected back to PNI include * { -õh } [115], * { -ẽh } [116],

* { -Ø } [117], * { -eʔ } [118], and * { -ih } [119]. To the perfect base PNI could apparently add

a past perfect suffix, which had the form * { -n } or * { -nVʔ } [120] and carried the

meaning 'had' rather than 'have' (cf. Mo. / wakatoˈɹaːtũ / 'I have hunted',

/ wakatoɹaˈtũhneʔ / 'I had hunted'). PNI also seems to have had a facilitative suffix

* { -nskõːh } [121] that was typically added to the perfect base and carried the meaning

'often', 'easily' or 'frequently' (cf. Se. / oˈnɔ̃ʔnɔ̃wẽːh / 'it has melted', / onɔ̃ʔnɔ̃ˈwẽskɔ̃ːh /

'it melts easily'); etymologically the facilitative suffix appears to consist of past perfect

* { -n }, habitual * { -hsk }, and perfect * { -õːh }. PNI also seems to have had a

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modalizer suffix * { -k } [122] that allowed perfect bases to occur with modal prefixes such

as the future and factual (cf. OMo. / joh'snoːɹeʔ / 'it is fast', / ʌ̃joh'snoːɹe<u>k</u> /

'it will be fast').

    Unincorporated PNI nouns seem most often to have ended in a noun suffix

* { -aʔ } [123] (e.g. PNI * / ka'nõhsaʔ / 'house' [382]), although some nouns seem to have

been exceptions in having freestanding forms that were shorter than their incorporating

forms (e.g. PNI * / 'kẽtsjõh / 'fish' [467], incorporating form * { -itsjõʔt- };

PNI * / 'õːkʷeh / 'person' [405], incorporating form * { -õkʷeʔt- } or * { -õkʷehsɹ- }).

Several suffixes could evidently follow the noun suffix; those that can probably be

projected back to PNI include an authenticative suffix * { -õweh } [124] meaning 'real,

genuine, original'; a characterizer suffix * { -haːʔ } [125], meaning 'that which is associated

with'; a decessive suffix of the form * { -kẽh } [126] or perhaps * { -kẽhVH }, meaning 'the

late, the former, the deceased' (perhaps derived from the PNI verb * / kẽ'heːjõh / 'it is

dead' [276]); an intensifier suffix * { -tsih } [127], meaning 'very much, really'; a locative

suffix * { -keh } [128], meaning 'at, in, on'; a populative suffix * { -ɹonõʔ } [129], meaning

'person of, people of, nation of', and a second, lexically-determined populative suffix

* { -kaːʔ } [130], with the same meaning.

    Where semantically compatible the noun suffixes of PNI could apparently be

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compounded, e.g. * { X-kehaːʔ } 'that which is associated with (what is done) at

place X', representing a combination of the locative and characterizer suffixes.

Additional noun suffixes whose reflexes are confined to Iroquoia include an

augmentative suffix * { -konah } or * { -kowaʔ } (from the PNI verb * / koˈwaːnẽh /

'it is big, large, great' [349]); a second, lexically-determined locative suffix of the shape

* { -neh }, also with a meaning 'at, in, on'; and a pluralizer suffix, generally of the shape

* { -shõʔ }, with a meaning 'many, several, more than one'.

CHAPTER 5: PROTO-TUSCARORA NOTTOWAY

5.1 INTRODUCTION

This chapter describes Proto-Tuscarora-Nottoway, henceforth PTN, the

reconstructed language from which Tuscarora and Nottoway derive. PTN itself derives

from PNI, and is reconstructed on the basis of cognate forms shared by Tuscarora and

Nottoway. Where forms in the two languages disagree, but cognate forms in other

Iroquoian languages agree with one of the languages, the form that agrees has been

interpreted as archaic, and is projected back to PTN. Where forms in the two languages

disagree, and where cognate forms in no other Iroquoian language agree with either

Tuscarora or Nottoway, the forms in question have been interpreted as subsequent

independent developments in Tuscarora and in Nottoway, and are not projected back to

PTN.

PTN as an independent subgrouping within Northern Iroquoian has been posited by

Rudes (1976, 1981a) on the basis of shared phonological changes and the large number

of Tuscarora cognates for vocabulary items in surviving Nottoway wordlists. My

comparison of the Nottoway vocabulary items against vocabulary in seven well-attested

Northern Iroquoian languages, independent from an earlier tally in Rudes (1976:57),

suggests that Nottoway shared the greatest number of cognates with Tuscarora (138),

followed, at considerable distance, by Onondaga (75), Mohawk (70), Cayuga (68),

Seneca (67), Oneida (65), and Huron (60). The lexical similarity, in conjunction with a

significant number of shared sound changes (see 5.3), supports the status of PTN as a

subgrouping within Northern Iroquoian.

5.2 PHONEMIC INVENTORY

The reconstructed phonemic inventory of PTN is presented in (1).

(1)   Reconstructed Phonemic Inventory of PTN

CONSONANTS

	Alveolar	Palato-Alveolar	Palatal	Velar	Glottal
Plosive	t ʔt			k kʷ	ʔ
Nasal	n				
Fricative	s				h
Affricate	ts	tʃ			
Approximant	ɹ		j	w	

VOWELS

	Front	Central	Back
Close	iː		
	i		
Mid	eː ẽː		oː õː
	e ẽ		o õ
Open		aː	
		a	

The preglottalized alveolar plosive * / ˀt / (cf. Rudes 1981a:33-34) has developed

from PNI * / t /, and contrasted phonemically with PTN * / t /, which in turn appears

to have had both PNI * / t / and certain instances of PNI * / n / as antecedents

(see 5.3). The palato-alveolar affricate * / tʃ / has originated as an allophone of

PNI * / ts / in certain environments that underwent phonemic split as a result of

subsequent sound changes, including loss of * / j / after * / tʃ / and change of the

cluster * / ths / to * / tʃ /. Note that although Rudes (1976:73, 1981a:32) has argued

that the PNI nasal vowels * / ẽ(ː) / and * / õ(ː) / had already merged as a mid-central

nasal vowel * / ə̃(ː) / in PTN, the vowels appear still to be distinct in Nottoway

vocabulary, where reflexes of the former are most often rendered using orthographic

<e>, <en>, <ain> or <a>, and reflexes of the latter are most often rendered using

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orthographic <um>, <un>, <oon> or <oo> (Marianne Mithun, p.c.).

5.3 PHONOLOGICAL CHANGES

Phonological changes that appear to have occurred during the transition from PNI to PTN are described below as PTN-1 through PTN-6. Where ordering of two changes appears to be necessary to produce a correct output in PTN, this has been noted.

By PTN-1, * / ts / has become * / tʃ / before * / h /, * / i /, and * / j / (e.g. PNI * / ohˈnitshaʔ / 'thigh' [238] > PTN * / ohˈtitʃhaʔ /; PNI * / ˈtsiʔtẽʔ / 'bird' [462] > PTN * / ˈtʃiʔˀtẽʔ /; PNI * / ˈtsjaːtahk / 'seven' [464] > PTN * / ˈtʃaːˀtahk /). This change must precede PTN-3 and PTN-6. (cf. Rudes 1976:32).

By PTN-2, * / ths / has become * / tʃ / (e.g. PNI * / ˈjõːnoːths / 'it is raining' [407] > PTN * / ˈjõːtoːtʃ /; PNI * / wathsʔˈahtõh / 'it is used up' [173] > PTN * / watʃˈʔahˀtõh /). This change must precede PTN-3.

By PTN-3, * / j / has been lost after * / tʃ / (e.g. PNI * / ˈtsjaːtahk / 'seven' [464] > PTN * / ˈtʃaːˀtahk /; PNI * / ˈkẽtsjõh / 'fish' [467] > PTN * / ˈkẽtʃõh /). This change must follow PTN-1 and PTN-2.

By PTN-4, * / t / (except in the unit affricates * / ts / and * / tʃ /) has become * / ʔt / (e.g. PNI * / ˈtsiʔtẽʔ / 'bird' [462] > PTN * / ˈtʃiʔˀtẽʔ /; PNI * / ahˈtsõːtaʔ /

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'night' [149] > PTN * / ahˈtsõːˀtaʔ /; PNI * / ˈkõːteh / 'eel' [346] > PTN * / ˈkõːˀteh /;

cf. 'bird' and 'night' for non-application of the change to * / t / in a unit affricate). This

change must precede PTN-6.

    By PTN-5, accented vowels in penultimate syllables have been lengthened before

* / n / (e.g. PNI * / ˈkankõʔ / 'blood' [376] > PTN * / ˈkaːtkõʔ /; PNI * / waʔˈkkenskoʔ /

'I raised it' [331] > PTN * / waʔˈkkeːtskoʔ /; PNI * / rawẽˈninkẽʔts / 'he speaks up' [280] [476]

> PTN * / rawẽˈtiːtkẽʔts /). PTN may have lengthened penultimate vowels before

certain other clusters, as in Tuscarora, but the latter cannot be inferred implicationally

from Nottoway data. This change must precede PTN-6.

    By PTN-6, * / n / has become * / t / except before nasal vowels, before * / kʷ /,

and before * / h / (e.g. PNI * / oˈnaːtaʔ / 'village' [356] > PTN * / oˈtaːˀtaʔ /;

PNI * / kaˈnaʔtaɹaʔ / 'bread' [361] > PTN * / kaˈtaˀtaɹaʔ /; PNI * / oʔˈnjõhsaʔ / 'nose' [494]

> PTN * / oʔˈtjõhsaʔ /; PNI * / ˈkankõʔ / 'blood' [376] > PTN * / ˈkaːtkõʔ /; but

PNI * / oˈnõhsaʔ / 'house' [382] > PTN * / oˈnõhsaʔ /; PNI * / waʔˈkankʷẽʔn /

'it began to snow' [378] > PTN * / waʔˈkaːnkʷẽʔt /; PNI * / kẽˈnhaʔkeh / 'summer' [334] >

PTN * / kẽˈnhaʔkeh /; cf. also Rudes 1981a:33). As a result of this change, the PI

cluster * / ns / has become the unit affricate * / ts / (e.g. PNI * / ˈwahnshẽːh / 'ten' [135]

> PTN * / ˈwahtshẽːh /; PNI * / waˈkansteʔ / 'it is hard' [151] > PTN * / waˈkaːtsˀteʔ /;

PNI * / keʔ'nonshahs / 'I envy it' [495] > PTN * / keʔ'toːtshahs /). PTN-6 must follow

PTN-4, and PTN-5.

However, note that in at least two cases in Nottoway, PNI * / n / has failed to

change to * / t / before * / i(ː) / (PNI * / 'tekniːh / 'two' [438] > No. / 'ʔtekniːh /

<Dekanee>; PNI * / ni'wahnshẽːh / 'that many tens' [004] > No. / ni'wahshə̃ːh /

<neewarsa>). The change does take place in other Nottoway vocabulary items,

however (cf. PNI * { -hweʔnõniːh } 'be round' [270] → No. <Tatowenente> 'round';

PNI * { -tshẽnõniːh } 'be happy' [190] → No. <Thatchanunte> 'happy';

PNI * / oh'nitshaʔ / 'thigh' [238] > No. / oh'titʃhaʔ / <Otitchag>). Rudes (1981a:34)

notes several instances where PNI * / n / has failed to become / t / before * / o(ː) / in

Tuscarora (e.g. PNI * / te'tsnoːɹẽh / 'you split it' [396] > Tu. / nɛ'θnoːrə̃h /), but the

change is attested in other vocabulary items (e.g. PNI * / o'noʔtsaʔ / 'tooth' [380] >

Tu. / o'toʔθɛh /; PNI * / keʔ'nonshahs / 'I envy it' [495] > Tu. * / kjɛʔ'toːθahs /).

Phonological changes that have occurred during the transition from PNI to PTN are

recapitulated in (2).

(2)   Phonological Changes in the Transition from PNI to PTN

   PTN-1   ts > tʃ / _h, i, j

   PTN-2   ths > tʃ

   PTN-3   j > Ø / tʃ_

   PTN-4   t > ˀt

   PTN-5 $'V^1 > 'V^1{:}$ / _n (penultimate syllables only)

   PTN-6   n > t (except before nasal vowels, k^w, and h)

5.4 MORPHOLOGICAL CHANGES

Little can be discerned of morphological changes in PTN owing to scarcity of

morphological data in surviving Nottoway word lists; what can be discerned from these

(see 7.4) suggests that Nottoway was somewhat more conservative than Tuscarora, so

that PTN must have been as well. Nottoway morphology does not demonstrably share

any innovative traits with Tuscarora to the exclusion of other Northern Iroquoian

languages, and so no morphological innovations (of which there are several in

Tuscarora) can be projected back to PTN with certainty.

CHAPTER 6: TUSCARORA

6.1 INTRODUCTION

This chapter describes the language of the Tuscarora (/ kajə̃tʃkaˈroːrə̃ʔ /, a name of

uncertain etymology), whose territory in the early seventeenth century appears to have

ranged from the Blue Ridge Mountains in the west, bordering on the territory of the

Catawba, to the mouth of the Tar River in the east, bordering on the territory of three

Carolina Algonquian tribes (Chowan, Pamlico, and Neuse), north to the Roanoke

River, bordering on the territory of the Meherrin, and south to the Neuse River Basin,

bordering on the territory of the Woccon (cf. Binford 1967:116, Boyce 1978:282;

see Map 3). Today Tuscarora speakers are located on the Six Nations of the Grand River

Reserve in southwestern Ontario and on the Tuscarora Indian Nation Reservation in

western New York State.

The earliest record of the Tuscarora language appears to be a vocabulary recorded

by John Lawson (1674-1711) during a 1701 exploration of the Carolinas and published

in London a few years later (Lawson 1709). This earliest record of the language differs

little from modern Tuscarora, but appears to lack sound changes TU-15 and TU-16,

which are related in 6.3. Tuscarora has developed an eastern dialect, spoken at Six

Nations of the Grand River Reserve, and a western dialect, spoken on the Tuscarora

Indian Nation Reservation (Rudes 1999: xix-xxi). Phonological developments that

differentiate the two dialects are presented in 6.3. Unless otherwise stated, forms

presented in the current chapter represent Common Tuscarora, a reconstructed form of

the modern language that existed prior to the separation of the two dialects.

Treatment of the developmental phonology of Tuscarora is in Rudes (1976), while

texts are in Crouse & Rudes (1987) and a grammar is in Williams (1976). Dictionaries

are in Rudes (1987) and Rudes (1999). Tuscarora forms in this chapter are based on

data from Rudes (1999) unless otherwise stated.

6.2 PHONEMIC INVENTORY

The phonemic inventory of Tuscarora is presented in (1).

(1)   Phonemic Inventory of Tuscarora

        CONSONANTS

	Interdental	Alveolar	Palato-Alveolar	Palatal	Velar	Glottal
Plosive		t			k kʷ	ʔ
Nasal		n				
Trill		r				
Fricative	θ	s				h
Affricate			tʃ			
Approximant				j	w	

VOWELS

	Front	Central	Back
Close	iː		
	i		
Mid	ɛː	ə̃ː	oː
	ɛ	ə̃	o
Open		aː	
		a	

Reflexes of PTN * / ˀt / have merged with / t /, / n /, / ʔ /, and the clusters / tʔ /

and / ʔn / in various environments. PTN * / ɹ / has shifted to / r /, PTN * / ts / has

shifted to / θ /, and PTN * / e(ː) / has shifted to / ɛ(ː) /. Reflexes of PTN * / ẽ(ː) / and

* / õ(ː) / have merged as / ə̃(ː) / in Tuscarora, which is realized as [ɨ̃(ː)] except where

the short variant occurs in stressed syllables; the vowels * / a(ː) / and * / o(ː) / have

shifted phonetically to [ɔ(ː)] and [u(ː)], respectively, except where the short variants

occur in unstressed syllables, and in this case the pronunciations [a] and [o] have

been retained (cf. Rudes 1995:xxxvii); for the sake of etymological continuity I continue

to use / a(ː) / and / o(ː) / to render these respective phonemes in Common Tuscarora,

though the latter is most often rendered / u(ː) / in synchronic descriptions

(cf. Mithun 1979:164, Rudes 1999:xxxvii). The plosives / t /, / k / and / kʷ / have

voiced allophones [d], [g] and [gʷ] in Tuscarora before vowels and resonants, and

for at least some speakers are preglottalized in all environments (cf. Rudes 1976:84);

the resonants / n /, / r /, / w / and / j / have voiceless allophones [n̥], [r̥], [w̥] and

[j̥] that occur word-finally and before non-resonant consonants. Accented long vowels

have developed falling tone when they occur before a resonant consonant

(e.g. Tu. / waʔkaʔˈriːjoʔ / 'I fought' → [waʔgaʔˈrîːjoʔ]).

6.3 PHONOLOGICAL CHANGES

Phonological changes that have occurred during the transition from PTN to

Tuscarora are described below as TU-1 through TU-19. Where ordering of two changes

appears necessary in order to produce a correct output in Tuscarora, this has been

noted.

By TU-1, an accented vowel in a penultimate syllable has been lengthened before a

cluster having the shape Ks, KR, KH, or RR, where H is a glottal consonant, R is a

resonant consonant, and K is * / k /, * / kʷ /, * / t /, or * / ʔt / (e.g. PTN * / ˈwaksẽːh /

'it is bad' [153] > Tu. / ˈwaːksə̃ː /; PTN * / jeˈtakɹeʔ / 'one resides' [354] > Tu. / jɛˈtaːkrɛʔ /;

PTN * / ɹaˈjẽthohs / 'he plants it' [311] > Tu. / raˈjə̃ːthohs /; PTN * / ˈowjaʔ / 'wing' [480] >

Tu. / ˈoːwjɛh /). This change must precede TU-6 and TU-7.

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By TU-2, the nasal vowels * / ẽ(:) / and * / õ(:) / have merged as * / ə̃(:) /

(e.g. PTN * / oˈnẽtʃhaʔ / 'arm' [370] > Tu. / oˈnə̃tʃhɛh /; PTN * / joʔˀtaˈɹihẽ:h /

'it is hot' [204] > Tu. / joʔnaˈrihə̃: /; PTN * / oˈnõhsaʔ / 'house' [382] > Tu. / oˈnə̃hsɛh /;

PTN * / ˈõ:kʷeh / 'person' [405] > Tu. * / ˈə̃:kʷɛh /). (cf. also Mithun 1979:164).

By TU-3, * / ts / has become * / θ / (e.g. PTN * / ˈi:ts / [289] > Tu. / ˈi:θ /;

PTN * / waˈka:tsˀteʔ / 'it is hard' [151] > Tu. / waˈka:θnɛʔ /; PTN * / ˈwahtshẽ:h / 'ten' [135]

> Tu. / ˈwahθhə̃: /). (cf. also Mithun 1979:163).

By TU-4, * / ˀt / has become * / tʔ / before * / ˀt / (e.g. PTN * / ˀtejoˀtˈˀtihẽh /

'the two of them differ' [442] > Tu. / nɛjotʔˈnihə̃ /), and by TU-5, * / ˀt / has been lost

before * / t / (e.g. PTN * / ˈˀtti:kẽh / 'we see it' [036] > Tu. / ˈti:kə̃h /). TU-5 may have

already been present in PTN following the change of * / n / to * / t / (by PTN-7), but

Nottoway data relating to reflexes of this cluster are lacking. TU-4 and TU-5 must

precede TU-8 and TU-9.

By TU-6, * / ˀt / has become * / ʔ / before * / ɹ / (e.g. PTN * / ˈkʷaˀtɹeʔ /

'my grandchild' [188] > Tu. / ˈkʷa:ʔrɛh /; PTN * / ˈɹẽʔˀtɹõʔ / 'he dwells' [282] >

Tu. / ˈrə̃ʔrə̃ʔ /; PTN * / waʔkaˈˀtɹi:joʔ / 'I fought' [077] [428] > Tu. / waʔkaʔˈri:joʔ /), and as

with the first example, accented vowels in penultimate syllables have remained long in

Tuscarora where the cluster / ʔr / derives from PTN * / ˀtɹ / (< PNI * / tɹ /). This

change must follow TU-1 and precede TU-9. (cf. also Mithun 1979:164).

By TU-7, * / ˀt / has become * / ʔn / when preceded by a vowel and followed by a

vowel or a glide (e.g. PTN * / ˈtʃaːˀtahk / 'seven' [464] > Tu. / ˈtʃaːʔnahk /;

PTN * / ˈkõːˀteh / 'eel' [346] > Tu. / ˈkə̃ːʔnɛh /; PTN * / ahˈtsõːˀtaʔ / 'night' [149] >

Tu. / ohˈθə̃ːʔnɛh /; PTN * / ə̃hˈɹaˀtjẽʔ / 'he will sit' [077] [306] > Tu. / ə̃hˈraːʔnjə̃ʔ /).

As in all of the examples, accented vowels in penultimate syllables have remained long

in Tuscarora where etymologically the cluster / ʔn /, / ʔnj / or / ʔnw / derives from

PTN * / ˀt /, * / ˀtj / or * / ˀtw / (< PNI * / t /, * / tj /, * / tw /); this change must

follow TU-1 and precede TU-9. Similarly, by TU-8, * / ˀt / has become * / n / when

preceded by a consonant or word boundary and followed by a vowel or glide

(e.g. PTN * / ˈˀtekɹõʔ / 'eight' [439] > Tu. / ˈnɛːkrə̃ʔ /; PTN * / ohˈˀtahkʷaʔ / 'shoe' [142] >

Tu. / ohˈnahkʷaʔ /; PTN * / oˈtaʔˀtaɹaʔ / 'bread' [361] > Tu. / oˈtaʔnarɛh /;

PTN * / waˈkaːtsˀteʔ / 'it is hard' [151] > Tu. / waˈkaːθnɛʔ /). TU-8 must follow TU-4 and

TU-5 and precede TU-9. (cf. also Mithun 1979:164).

By TU-9, * / ˀt / became * / t / (e.g. PTN * / ˈoˀtkõʔ / 'inherent power' [181] >

Tu. / ˈotkə̃ʔ /; PTN * / ˈaˀthoʔ / 'cold' [170] > Tu. / ˈaːthoʔ /). TU-9 must follow TU-4,

TU-5, TU-6, TU-7, and TU-8. (cf. also Mithun 1979:164).

By TU-10, * / h / has been lost before * / nh / (e.g. PTN * / ɹahˈnhõˀthohs /

'he feeds it' [236] > Tu. / ra'nhə̃:thohs /; PTN * / waʔ'khehnhaʔn / 'I hired someone' [232] >

Tu. / waʔ'khɛnhaʔ /; PTN * / ɹah'tskehnhaʔ / 'he is competing for it' [147] >

Tu. / rah'θkjɛnhaʔ /), and by TU-11, * / h / has been lost before * / w / at the

beginning of a word (e.g. PTN * / 'hwihsk / 'five' [273] > Tu. / 'wisk /). By TU-12,

* / h / has been lost when preceded by * / k / and followed by * / s /, * / ts / or

* / tʃ / (e.g. PTN * / 'akhso:t / 'my female ancestor' [259] > Tu. / 'akso:t /;

PTN * / 'akhtʃiʔ / 'my older maternal female cousin' [267] > Tu. / 'aktʃiʔ /;

PTN * / ko'ɹokhsjõhs / 'I uncover it' [086] [472] > Tu. / ko'roksjə̃hs /). By TU-13, * / h / has

been lost word-finally after long vowels (e.g. PTN * / joʔˀta'ɹihẽ:h / 'it is hot' [204] >

Tu. / juʔna'rihə̃: /; PTN * / 'wahtshẽ:h / 'ten' [135] > Tu. / 'wahθhə̃: /;

PTN * / waknõh'sõ:ti:h / 'I have built the house' [260] [382] > Tu. / waknə̃h'sə̃:ti: /), but has

been retained after short vowels (cf. PTN * / knõh'sõ:tih / 'I build the house' [260] [382] >

Tu. / knə̃h'sə̃:tih /).

By TU-14, * / w / has been lost before * / jh / (e.g. PTN * / o'wjhõhaʔ / 'creek,

river' [278] > Tu. / o'jhə̃hɛh /).

By TU-15, * / n / has become * / t / before * / kʷ / (e.g. PTN * / waʔ'ka:nkʷẽʔt /

'it began to snow' [378] > Tu. / waʔ'ka:tkwə̃ʔ /). Rudes (2002:191) notes that this change

had not yet occurred in Lawson's (1709) vocabulary of Tuscarora.

By TU-16, * / t / has been inserted between * / s / and * / ɹ / in the cluster

* / hsɹ / (e.g. PTN * / ˈohsɹaʔ / 'year' [394] > Tu. / aˈwohstrɛh /; PTN * / oˈhohsɹaʔ /

'basswood' [241] > Tu. / oˈhohstrɛh /; PTN * / oʔˀtaɹiˈhẽhsɹaʔ / 'heat' [205] >

Tu. / oʔnariˈhə̃hstrɛh /). Rudes (2002:191) notes that this change also had not yet

occurred in Lawson's (1709) vocabulary of Tuscarora.

By TU-17, * / j / has been inserted between * / k / and a following * / e(ː) /

(e.g. PTN * / ˈiːkeʔ / 'I am walking' [209] > Tu. / ˈiːkjɛʔ /; PTN * / ˈkeɹhiʔ / 'tree' [328] >

Tu. / ˈkjɛrhiʔ /). This change must precede TU-18. (cf. also Mithun 1979:164).

By TU-18, * / e(ː) / has shifted to * / ɛ(ː) / (e.g. PTN * / ˈkeɹhiʔ / 'tree' [328] >

Tu. / ˈkjɛrhiʔ /; PTN * / ˈkõːˀteh / 'eel' [346] > Tu. / ˈkə̃ːʔnɛh /; PTN * / ˈˀtekɹõʔ /

'eight' [439] > Tu. / ˈnɛːkrə̃ʔ /). This change must follow TU-17.

By TU-19, * / ɹ / has shifted to / r / (e.g. PTN * / ˈˀtekɹõʔ / 'eight' [439] >

Tu. / ˈnɛːkrə̃ʔ /; PTN * / ˈtʃiɹ / 'dog' [341] > Tu. / ˈtʃir /; PTN * / ˈkoːɹeh / 'red oak' [348] >

Tu. / ˈkoːrɛh /).

Phonological changes that have occurred during the transition from PTN to

Tuscarora are recapitulated in (2).

(2)   Phonological Changes in the Transition from PTN to Tuscarora

> TU-1   'V¹ > 'V¹: / _Ks, KR, KH, RR (penultimate syllables only)
> TU-2   Ṽ(ː) > ə̃(ː)
> TU-3   ts > θ
> TU-4   ʔt > tʔ / _ʔt
> TU-5   ʔt > Ø / _t
> TU-6   ʔt > ʔ / _ɹ
> TU-7   ʔt > ʔn / V_V, w, j
> TU-8   ʔt > n / #, C_V, w, j
> TU-9   ʔt > t
> TU-10   h > Ø / _nh
> TU-11   h > Ø / #_w
> TU-12   h > Ø / k_s, ts, tʃ
> TU-13   h > Ø / Vː_#
> TU-14   w > Ø / _jh
> TU-15   n > t / _kʷ
> TU-16   Ø > t / hs_ɹ
> TU-17   Ø > j / k_e(ː)
> TU-18   e(ː) > ɛ(ː)
> TU-19   ɹ > r

In addition to the sound changes in (2), additional sound changes have taken place

in the modern dialects of Tuscarora (Rudes 1999: xix-xxi). Seven such changes are

described below as TU-D1 through TU-D7.

By TU-D1, * / θ / has merged with * / s / (e.g. Tu. / 'oʔθrɛh / 'axe' →

Western Tu. / 'oʔsrɛh /; Tu. / 'θahɛʔ / 'beans' → Western Tu. / 'sahɛʔ /; Tu. / 'θriht /

'boil it!' → Western Tu. / 'sriht /). This change occurred in the western dialect.

By TU-D2, * / w / has been lost before * / j / (e.g. Tu. / 'oːwjɛh / 'wing' →

Western Tu. / ˈoːjɛh /; Tu. / oˈwjahsɛh / 'cross' → Western Tu. / oˈjahsɛh /;

Tu. / oˈwjə̃ːnɛh / 'manner, skill' → Western Tu. / oˈjə̃ːnɛh /). This change occurred in

the western dialect.

By TU-D3, word-final * / jʔ / has metathesized to * / ʔj / (e.g. Tu. / onə̃hsɛˈhojʔ /

'big house' → Western Tu. / onə̃hsɛˈhoʔj /; Tu. / wahˈrə̃hɛjʔ / 'he died' →

Western Tu. [wahˈrə̃hɛʔʃ]). This change occurred in the western dialect, although it is

also attested among some speakers of the eastern dialect (cf. Rudes 1999:xxii).

By TU-D4, * / r / has been lost after * / st / (e.g. Tu. / aˈwohstrɛh / 'year' →

Eastern Tu. / ɔˈwuhstɛh /; Tu. / oʔnariˈhə̃hstrɛh / 'heat' →

Eastern Tu. / uʔnɔriˈhĩhstɛh /; Tu. / oˈhohstrɛh / 'basswood' →

Eastern Tu. / uˈhuhstɛh / 'basswood'). This change has occurred in the eastern dialect.

By TU-D5, * / ə̃(ː) / has become * / ĩ(ː) / (e.g. Tu. / oˈnə̃hsɛh / 'house' →

Eastern Tu. / uˈnĩhsɛh /; Tu. / oˈrə̃ːtɛh / 'magic' → Eastern Tu. / uˈrĩːtɛh /;

Tu. / ˈə̃ːkʷɛh / 'person' → Eastern Tu. / ˈĩːkʷɛh /). This change has occurred in the

eastern dialect (cf. Rudes 1999:xxxvi-xxxvii).

By TU-D6, * / a(ː) / has become * / ɔ(ː) / (e.g. Tu. / ˈaːthoʔ / 'cold' →

Eastern Tu. / ˈɔːthuʔ /; Tu. / ˈahsə̃ / 'three' → Eastern Tu. / ˈɔhsĩ /; Tu. / ˈwahθhə̃ː / 'ten'

→ Eastern Tu. / ˈwɔhθhĩː /). This change has occurred in the eastern dialect

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(cf. Rudes 1999:xxxvi-xxxvii).

By TU-D7, * / o(ː) / has become * / u(ː) / (e.g. Tu. / aˈwohstrɛh / 'year' →

Eastern Tu. / ɔˈwuhstɛh /; Tu. / oˈtoːrɛh / 'corn husk' → Eastern Tu. / uˈtuːrɛh /;

Tu. / kaˈnoːrə̃ʔ / 'it is dear' → Eastern Tu. / kɔˈnuːrɨ̃ʔ /). This change has occurred in

the eastern dialect (cf. Rudes 1999:xxxvi-xxxvii).

Sound changes that have occurred in Tuscarora dialects are recapitulated in (3).

(3)   Phonological Changes in Tuscarora Dialects

TU-D1	θ > s	Western Tuscarora
TU-D2	w > Ø / _j	Western Tuscarora
TU-D3	jʔ > ʔj	Western Tuscarora
TU-D4	r > Ø / st_	Eastern Tuscarora
TU-D5	ə̃(ː) > ɨ̃(ː)	Eastern Tuscarora
TU-D6	a(ː) > ɔ(ː)	Eastern Tuscarora
TU-D7	o(ː) > u(ː)	Eastern Tuscarora

In addition to the phonemic changes in (3), the western dialect of Tuscarora has

undergone a phonetic change whereby short accented / ɛ / is realized as [æ], and

short unaccented / i / is realized as [ɪ]. Other phonetic shifts have also occurred, many

of which appear to be associated with individuals and idiolects rather than the two

main dialects (Rudes 1999: xxxvii-xxxix). Three changes that appear in the speech of all

speakers of the western dialect, along with some speakers of the eastern dialect, can be

noted here. First, word-final / r / is realized phonetically as long [s:] (e.g. Tu. / ˈtʃir / 'dog' → Western Tu. [ˈtʃis:]). Second, / j / is realized phonetically as [ʃ] when it occurs in syllable coda (e.g. Tu. / oˈjhə̃haːkt / 'Lewiston, New York' → Western Tu. [oʃˈhə̃hɔːkt]). Third, / w / is realized as [f] when it occurs in syllable coda (e.g. Tu. / ˈwaʔkhaʔw / 'I brought it' → Western Tu. [ˈwɔʔkhaʔf]).

6.4 MORPHOLOGICAL CHANGES

Tuscarora appears to have lost the negative and coincident prepronominal prefixes of PNI but has added a 'generic' prefix / tʃwɛ / which carries the meaning 'all kinds' (e.g. / tʃwɛkatʃiʔnə̃ʔˈtʃraːkɛː / 'all kinds of birds'); it does not occur with other prepronominal prefixes. Outside of imperatives the translocative prefix * / j(a)hw / [005] has become / j / in Tuscarora before vowels and / wɛ / before consonants, with the full form / jah / being preserved only before the factual prefix. The Tuscarora duplicative prefix * { nɛ } [007] is used to make the '3I' argument of a pronominal prefix dual (e.g. Tu. { shɛ- } 'you act on her'; { nɛ-hshɛ- } 'you act on them two'; { jɛθa- } 'she acts on you'; { nɛ-jɛθa- } 'they two act on you'). The optative prepronominal prefix (PNI * { aɹa } [009]) has lost * / ɹ / in Tuscarora except when it occurred before a glide or in the onset of a stressed syllable.

To the 1:2.DU and 1:2.PL pronominal prefixes Tuscarora appears to have added an element { kjɛ } to yield { kjɛkti } [014] and { kjɛkwa } [015]. The language lacks reflexes of the PNI third person masculine prefixes * { ri } '1SG:3M', * { hehse } '2SG:3M', and * { hja }, in place of which prefixes with the third person indefinite occur instead (e.g. Tu. ⁄ ˈkhɛːkə̃h ⁄ 'I see him, her, someone'), and all non-singular prefixes involving masculine or feminine-zoic gender appear to have been replaced by combinations of third person indefinite prefixes with the duaplicative (Tu. { nɛ- }), non-singular animate (Tu. { ka- }), and reflexive (Tu. { -aʔnaʔn- }) prefixes (see 4.4 for discussion). The PNI prefix * { jetshi } '2NS&3I' [035] has become { jə̃tʃhi } in Tuscarora, while the prefix * { jakhi } '1 + 3NS:3I' [049] has merged with the reflex of PNI * { jõkhi } '3I:1NS' [050] to yield Tuscarora { jə̃khi } '1NS:3I'. In the imperative Tuscarora has a 2NS:3 pronominal prefix { tʃhi } (with an allomorph { tʃhij } before vowels) which is perhaps archaic (cf. PNI * { jetshi } '2NS&3I' [000], in which * { tshi } carries the meaning '2NS'). Pronominal prefixes with allomorphs in ⁄ w ⁄ before certain vowels seem in all cases to have extended this allomorph to include bases beginning in ⁄ ə̃ ⁄ and ⁄ o ⁄ (e.g. PNI * { j-õnoːths } 'it is raining' [407] > PTN * { j-õtoːtʃ } → Tu. { w-ə̃toːtʃ }).

The consonants and clusters before which a reflex of epenthetic * ⁄ e ⁄ appears in Tuscarora seem to be unaltered relative to PNI except for the effects of regular sound

change. Consonants and clusters before which the 1SG:3 pronominal prefix allomorphs

/ k / and / kjɛ / occur in Tuscarora are presented in (4).

(4)   Distribution of Prefix Allomorphs with Epenthetic / ɛ / in Tuscarora (1SG:3)

/ k /   _hV, hjV, hrV, hnV, hrjV, hsV^1 (→ sV^1), hsC^{1}V^1 (→ sC^{1}V^1),
          hθV^1 (→ θV^1), htʃV^1 (→ tʃV^1), hwV, hwjV, jV, kV, kʷV,
          nV, rV, θV, tV, tjV^1, tʃV, wV, ʔV, ʔnV^1 (→ nV^1), ʔrV,
          ʔtV^1 (→ tV^1), ʔtjV^1 (→ tjV^1), ʔwV.

/ kjɛ / before all remaining consonants and clusters.

The aspectual and derivational morphology of Tuscarora seems to be relatively

conservative, though the language no longer makes a distinction between present and

imperfective forms and instead has habitual forms. Tuscarora seems to have replaced

the PNI punctual suffix * { -n } [114] with * { -Ø } [113], probably because the former

became indistinguishable from causative * { -t } [082] in PTN

(e.g. PTN * / waʔˈkhehnhaʔt / 'I hired someone' [232] > Tu. / waʔˈkhɛnhaʔ /;

PTN * / waʔˈkaːnkʷẽʔt / 'it began to snow' [378] > Tu. / waʔˈkaːtkwə̃ʔ /), and likewise

seems to have replaced the PNI past perfect suffix * { -n } [120] with { -k }

(cf. Tu. / raˈhə̃stʃi / 'he is black', / raˈhə̃stʃihk / 'he was black'), probably for the same

reason. Etymologically the past perfect is identical in form to the modalizer { -k } [122],

which continues to be found in Tuscarora modal verbs (cf. Tu. / aˈrjoːrihk /

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'that it be cooked', / naʔkahˈsʔahnahk / 'it used it up').

The morphology of the Tuscarora noun seems to be the same as that of PNI and PTN except that inalienably possessed body parts no longer require a locative suffix, and the noun suffix { -aʔ } [123] has been replaced by an innovative form { -ɛh } (e.g. PTN * / oˈnõhsaʔ / 'house' [000] > Tu. / oˈnə̄hsɛh /), a change which may still have been underway in the twentieth century (cf. Williams 1976:202, Rudes 1976:87). Tuscarora has maintained the noun suffixes of PNI and has added an augmentative suffix { -ojʔ }.

CHAPTER 7: NOTTOWAY

7.1 INTRODUCTION

This chapter describes the language of the Nottoway (Tu. / tʃiroʔə̃ˈhaːkaːʔ /,

No. <Cherohakah>, a name of uncertain etymology), whose territory in the early

seventeenth century appears to have ranged from the Blue Ridge Mountains in the west,

bordering on the territory of the Catawba, to the Blackwater River in the east, bordering

on the territory of the Nansemond, north to the Appomattox River, bordering on the

territory of the Powhatan Confederacy, and south to the Nottoway River, bordering on

the territory of the Meherrin (cf. Binford 1967:116, Boyce 1978:282; see Map 3). The

Nottoway language is extinct, but is known from a list of over 200 items of vocabulary

recorded by John Wood in 1820 from Edie Turner. A small amount of additional

vocabulary occurs in the notes of ethnologist J. N. B. Hewitt (n.d) along with the

contents of Wood's (1820) original list. These additional items have probably been

collated from a list of vocabulary gathered by James Tresevant, who was mentioned by

Gallatin (1836:82) as having collected a second vocabulary of Nottoway. All attested

Nottoway vocabulary is reproduced in Rudes (1981a), which is the source of Nottoway

forms in this chapter unless otherwise stated.

7.2 PHONEMIC INVENTORY

The reconstituted phonemic inventory of Nottoway is presented in (1).

(1)   Reconstituted Phonemic Inventory of Nottoway

CONSONANTS

	Alveolar	Palato-Alveolar	Palatal	Velar	Glottal
Plosive	t ʔt			k kʷ	ʔ
Nasal	n				
Fricative	s				h
Affricate		tʃ			
Approximant	ɹ		j	w	

VOWELS

	Front	Central	Back
Close	iː		
	i		
Mid	eː ẽː		oː õː
	e ẽ		o õ
Open		aː	
		a	

Contrastive vowel length was probably preserved in final syllables, as it is in

Tuscarora, but this cannot be determined from orthography; in accordance with the

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principle of conservative reconstruction I have assumed that vowel lengths did not

change. In accordance with the same principle, reflexes of PTN * / ˀt / are assumed to

be preserved, though conceivably these may have merged with reflexes of * / t /.

PTN * / ts / merged with * / s / in Nottoway.

Wood's orthography suggests that Nottoway had a phonetic system of voicing

similar to that of other Northern Iroquoian languages (except Huron and Wyandot),

whereby voiceless non-glottal plosives were phonetically voiced when followed by

vowels or resonants (cf. No. <Geree> 'tree' from PTN * / ˈkeɹhiˀ / [328];

No. <Gotatera> 'bread' from PTN * / kaˈtaˀˀtaɹaˀ / [361]; No. <Gatkum> 'blood' from

PTN * / ˈkaːtkõˀ / [376]; No. <Dekra> 'eight' from PTN * / ˈˀteːkɹõˀ / [439]). Virtually all

examples of such voicing occur in word-initial position, however, and even here there

are some exceptions (cf. No. <Kunte> 'eel' from PTN * / ˈkõːˀteh / [346]; No. <Coree>

'red oak' from PTN * / ˈkoːɹih / [348]; and No. <Tawrettig> 'chicken', which has a

cognate in Tu. / tahoˈrɛːtik /).

7.3 PHONOLOGICAL CHANGES

The only clearly phonological change that Nottoway has undergone (NO-1) is

merger of the PTN phoneme * / ts / with * / s / (e.g. PTN * / waˈkaːtsˀteˀ /

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'it is hard' [151] > No. / waˈkaːsˀteʔ / <Wokoste> and <Wakaste>; PTN * / oˈtoʔtsaʔ / 'tooth' [380] > No. / oˈtoʔsaʔ / <Otosag>; PTN * / ahˈtsõːˀtaʔ / 'night time' [149] > No. / ahˈsõːˀtaʔ / <Asunta>). Additional phonological changes cannot be discerned from Wood's orthography.

7.4 MORPHOLOGICAL CHANGES

From what little can be discerned from surviving vocabulary, Nottoway appears to have inherited the morphology of PTN and PNI intact, and differed from its sister language Tuscarora mainly in exhibiting greater retention of archaic traits from PNI and PTN, such as continued use of the noun suffix * { -aʔ } [123]. Another archaic trait that Nottoway appears to share with other Northern Iroquoian languages except Tuscarora, is obligatory use of the locative suffix * { -keh } [128] with inalienably possessed body parts, cf. No. / shõhˈˀtaʔkeh / <Suntunke> 'your ear' (cf. Tu. / ˈshə̃hnɛh /); No. / sahˈsiʔkeh / <Saseeke> 'your foot' (cf. Tu. / ˈsahsɛh /); No. / s(e)taʔˈɹaʔkeh / <Setarakē> 'your head' (cf. Tu. / ˈstaʔrɛh /). (cf. Rudes 1981a). Nottoway also exhibits a 3SG:3 pronominal prefix allomorph / j / that occurs before bases beginning in etymological * / õ / (e.g. No. / ˈjõːtoːtʃ / <Yountouch> 'rain', Tu. / ˈwə̃ːtoːtʃ /, both from PNI * / ˈjõːtoːths / 'it is raining' [407]), whereas Tuscarora appears to have levelled

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this allomorph to / w /.

CHAPTER 8: SUSQUEHANNOCK

8.1 INTRODUCTION

This chapter describes the language of the Susquehannock

(Hu. / xanahstoʔxehˈɹoːnõʔ / 'People at the post in the water'), whose territory in the

early seventeenth century may have ranged south to the mouth of the Susquehanna

River, bordering on the territory of the Piscataway, east to the Schuylkill and Lehigh

Rivers, bordering on the territory of the Delaware, north to the Wyoming Flats, at that

time uninhabited, and west to the Appalachian Plateau, bordering on the territory of

lesser-known nations of the interior (cf. Jennings 1968:17, Pendergast 1991:44-45;

see Map 4). The Susquehannock language is extinct, but is known from a list of 80

vocabulary items recorded in the 1640s by the Swedish missionary Johann Campanius

as an appendix to his Delaware translation of Martin Luther's catechism (Campanius

1696). The list was reprinted by his grandson Thomas Campanius Holm (1702) with 9

additional vocabulary items, which presumably were in the original notes of Campanius

but not included in the previous publication. To these items of vocabulary one can also

add <Connadago> 'city', which occurs in the narrative of George Alsop (1666).

Laurentian forms in this chapter are based on data from these three sources.

Mithun (1981a:23) finds that Susquehannock cannot be subgrouped with any of the

Five Nations Iroquoian languages since it does not share joint innovations with any of them, and her comparison of Susquehannock vocabulary against the vocabulary of other Iroquoian languages (Mithun 1981a:5) suggests that the language shared the greatest number of cognates with its closest geographic neighbours: Onondaga (59), Mohawk (57), Oneida (57), Cayuga (50), Seneca (49), Tuscarora (48), Huron-Wyandot (44), and Cherokee (18). My own comparison of Susquehannock vocabulary against vocabulary from seven well-attested Northern languages yields lower numbers, but the order of languages is broadly similar: Mohawk (48), Oneida (45), Onondaga (43), Seneca (38), Cayuga (37), Tuscarora (36), and Huron (34). In general, Susquehannock phonology and morphology appear to have been fairly conservative, and only a few changes relative to PNI can be discerned (see 8.3).

8.2 PHONEMIC INVENTORY

The reconstituted phonemic inventory of Susquehannock is presented in (1).

(1)   Reconstituted Phonemic Inventory of Susquehannock

CONSONANTS

	Alveolar	Palatal	Velar	Glottal
Plosive	t		k kʷ	ʔ
Nasal	n			
Fricative	s			h
Affricate	ts			
Approximant	ɹ	j	w	

VOWELS

	Front	Central	Back
Close	iː		
	i		
Mid	eː ẽː		oː õː
	e ẽ		o õ
Open		aː	
		a	

Contrastive vowel length may have been preserved in final syllables, but this cannot

be determined from the Swedish orthography; Campanius' writing of <Hiss>

(rather than <Hijs>) for the reflex of PNI * / iːts / 'you' [289] suggests that it may have

been lost, but in accordance with the principle of conservative reconstruction I have left

contrastive vowel length intact.

As Mithun (1981a:2) notes, orthographic trends suggest that Susquehannock had a system of phonetic voicing similar to those found in other Northern Iroquoian languages (except Huron and Wyandot), whereby non-glottal plosives were phonetically voiced when preceded and followed by vowels or resonants, cf. Su. <Adwgen> 'axe' (PNI * / aˈtoːkẽʔ / [182]), Su. <Oneegha> 'water' (cf. PNI * / ohˈneːkaʔ / 'water' [364]), Su. <Cannadago> (cf. PNI * / kaˈnatakõːh / 'in the village' [356]); the appearance of orthographic <l> in a few words containing * / r / suggests that the realization of this phoneme was closer to [l], as is also the case in Akwesasne Mohawk and Oneida (cf. Su. <Khaalis> from PNI * / ˈkaːɹihs / 'stocking, leggings' [426]).

8.3 PHONOLOGICAL CHANGES

Few phonological changes seem to be demonstrable in Susquehannock relative to PNI. Like Old Mohawk and Old Onondaga, Susquehannock shows an epenthetic vowel, orthographic <e>, separating clusters of a consonant plus resonant, as seen in <Tiggene> 'two (PNI * / ˈtekniːh / [438]), <Tickerom> 'eight' (PNI * / ˈtekɹõʔ / [439]), and <Wáderom> 'nine' (PNI * / ˈwaʔtɹõh / [222]), but as in Old Onondaga, Old Mohawk, and Proto-Mohawk-Oneida, this vowel was likely phonetic rather than

phonemic (see 10.2 and 13.2).

By SU-1, * / h / has been lost word-initially before * / w / (e.g. PNI * / ˈhwihsk /

'five' [273] > Su. <Wisck>). This development is also found in Tuscarora, Mohawk,

Oneida, Seneca, Huron, and Wyandot.

By SU-2, * / ts / has become * / s / word-finally (e.g. PNI * / iːts / 'you' [289] >

Su. <Hiss>) as well as before * / k /, if Su. <Skajaano> 'fisher' and <Skáirwha>

'turkey' begin with the same characterizer construction involving the repetitive prefix

(PNI * / tska- /) found in Oo. / skáːˈjanis / 'fisher (lit. the long-tracked one)' and

Mo. / skaweˈɹowaneʔ / 'turkey (lit. the big-winded one)'. PNI * / ts / has failed to

become * / s / in Susquehannock before at least * / h /, * / i / and * / j /

(cf. PNI * / ˈtsjaːtahk / 'seven' [464] > Su. <Tzadack>; PNI * / ˈkatsheʔ / 'gourd, jar' [452]

> Su. <Kaatzie>; PNI * / ˈkaːtsih / 'come here!' [329] > Su. <Kaatzie>;

PNI * / ˈtsitshoʔ / 'fox, lynx' [460] > Su. <Tzídtze> 'cat'; PNI * / ˈɹaːtsin / 'he is male' [457]

> Su. <Ræætsin>; cf. also Su. <Katzha gaijeʔ> 'what do you have?' and

Oe. / ˈkatshaʔ kaːˈjʌ̃ː / 'which place?' from Michelson & Doxtator 2002:463).

By SU-3, * / n / has been lost before * / sh / in Susquehannock, as in all the other

Northern Iroquoian languages except Tuscarora (e.g. PNI * / ˈwahnshẽːh / 'ten' [135] >

Su. <Wásha>).

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The partial description of deaffrication presented by SU-2 and SU-3 is true also of

Mohawk, Oneida, Onondaga, and Cayuga, but not of Tuscarora, Seneca, Huron, or

Wyandot, which again suggests that Susquehannock most resembled its closest

geographic neighbours.

8.4 MORPHOLOGICAL CHANGES

What little can be discerned of Susquehannock morphology seems to be unchanged

from PNI except perhaps, as noted by Mithun (1981a:19), for a single perfect verb form

in * / -ih / in the Susquehannock verb <Serwquácksi> 'you are bad'

(cf. OMo. / saɹihˈwaksʌ̃ / 'you are malicious'). While this example might suggest the

language was closer to Onondaga or Huron, which also tend to show perfect bases in

* { -ih } [119], it is worth noting that both Onondaga and Huron in this case show reflexes

of * / -aksẽh / 'be bad' [153], rather than ˣ / -aksih / (attested in no language); the

Susquehannock form may simply be anomalous, or final <i> may represent

<e>, [ẽ].

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9.1 INTRODUCTION

This chapter describes the language of the Laurentians, the Iroquoian-speaking

peoples whom Jacques Cartier found inhabiting a number of villages along the north

shore of the Saint Lawrence River between Ajoaste (perhaps near modern Saint-Tite-

des-Caps, Quebec) and Hochelaga (now the Island of Montreal) during three voyages

in the years 1534, 1535, and 1541 (see Map 5). These villages and their inhabitants had

vanished by the time Samuel de Champlain reached the Saint Lawrence River in 1603,

and their fate remains unknown.

Cartier, or perhaps his contemporaries, recorded two vocabularies of Laurentian,

most probably from speakers from the village of Stadacona (now part of Quebec City)

during his first and second voyages. In all over 200 items of vocabulary are represented

in the two lists, both of which are presented in Biggar (1924) and analyzed in Barbeau

(1961), though only about a third of the items have identifiable cognates in other

Northern Iroquoian languages. My own comparison of Laurentian vocabulary against

vocabulary in seven well-attested Northern Iroquoian languages suggests that Huron,

Mohawk, and Onondaga shared the greatest number of cognates with Laurentian

(all three having 47), followed by Oneida (41), Seneca (36), Tuscarora (34), and

Cayuga (32). Impressionistically, Laurentian phonology does not seem to have been nearly as conservative as that of, for example, Susquehannock, though only a handful of changes relative to PNI can be discerned from the forms that are recorded. Note that Lounsbury (1978:335) and Mithun (1981b:241) posit that the Cartier vocabularies contain words taken from several Iroquoian languages, owing to variant phonological features like loss or retention of PNI * / ɹ /, but I regard the vocabularies as capable of reflecting a single language exhibiting regular sound changes. Unless otherwise stated, Laurentian forms in this chapter are based on data from the vocabulary lists in Biggar (1924).

9.2 PHONEMIC INVENTORY

The presumed phonemic inventory of Laurentian is presented in (1).

(1)   Phonemic Inventory of Laurentian

CONSONANTS

	Alveolar	Palato-Alveolar	Palatal	Velar	Glottal
Plosive	t			k kʷ	ʔ
Nasal	n				
Fricative	s	ʃ			h
Affricate	ts				
Approximant	ɹ		j	w	

VOWELS

	Front	Central	Back
Close	i: i		
Mid	e: ẽ: e ẽ		o: õ: o õ
Open		a: a	

Contrastive vowel length may have been preserved in final syllables, but this cannot be determined from the French orthography; in accordance with the principle of conservative reconstruction I have left contrastive vowel length intact. A segment / ʃ / (orthographic <ch>) appears to have developed from PNI * / s / and likely became phonemic following deaffrication of PNI * / ts / (LA-2 in 9.3).

Like other Northern Iroquoian languages (apart from Huron and Wyandot) Laurentian / t / and / k / appear to have had voiced allophones [d] and [g] when they occurred between vowels or between a vowel and resonant consonant (cf. La. <Addogué> 'hatchet' from PNI * / aˈto:kẽʔ / 'axe' [182]; La. <Asquenondo> 'doe' from PNI * / ohskẽˈnõ:tõʔ / 'deer' [254]; La. <Canada> 'village' from PNI * / kaˈna:taʔ / [356]). Laurentian / ts / appears to have represented by <z> or <j>

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and may have had a pronunciation [dz] or [dʒ] before voiced segments

(cf. La. <Azista> 'fire', from PNI * / oˈtsistaʔ / [459]; La. <Quejon> 'fish', from

PNI * / ˈkẽtsjõh / [467]). As in some dialects of Huron, Laurentian / w / appears to have

been realized as [m] when followed by a nasal vowel, cf. La. <Ame> 'water'

(PNI * / ˈaːwẽʔ / [196]). Pronunciation of Laurentian / ɹ / seems to have approached [l̩]

or [l] in some cases, cf. La. <Aiagla> 'night' (PNI * { -aʔkɹaʔ- } 'become night' [201]).

Like Susquehannock, Proto-Mohawk-Oneida, and Old Onondaga, Laurentian seems to

have had an epenthetic phonetic vowel, orthographic <e>, that was in some instances

used to break up clusters involving a consonant and resonant (cf. La. <Tigueny> 'two',

from PNI * / ˈtekniːh / [438] ; La. <Wadellon> 'nine', from PNI * / ˈwaʔtɹõh / [222] ;

La. <Agochinegodascon> 'knee, thigh', remade from PNI * / (a)kohsinkoʔˈtaʔkeh /

'[on] somebody's ankle, knee' [251]).

9.3 PHONOLOGICAL CHANGES

A list of seven phonological changes that separate Laurentian from PNI are

described below as LA-1 through LA-7.

By LA-1, * / s / has become * / ʃ / at least after * / h / and before a vowel

(e.g. PNI * / ˈahsẽh / [140] 'three' > La. / ˈahʃẽh / <Asche>; PNI * / kaˈnõhsaʔ /

'house' [382] > La. / kaˈnõhʃaʔ / <Canocha>; PNI * / ohˈsiʔtaʔ / 'foot' [139] →

La. / ohʃiʔˈtahkõ / <Ochedasco> '[on the] foot'). This change has not applied to the

unit affricate * / ts /.

By LA-2, * / ts / has become * / s / at least before * / a / and perhaps before other

non-high vowels as well (cf. PNI * / ˈtsaheʔ / 'beans' [451] > La. / ˈsaheʔ / <Sahé>).

Note that, as in other Northern Iroquoian languages, reflexes of the unit affricate * / ts /

appear to remain before * / i / and * / j / in Laurentian (e.g. PNI * / oˈtsistaʔ / 'fire' [459]

> La. / aˈtsistaʔ / <Azista>; PNI * / ˈkẽtsjõh / 'fish' [467] > La. / ˈkẽtsjõh /

<Quejon>).

By LA-3, * / n / has been lost before * / s / (e.g. PNI * / ˈwahnshẽːh / 'ten' [135] >

La. / ˈahshẽːh / <Assem>; PNI * / aõˈnonskõːh / 'it rains often' [121] [407]

(cf. Huron / aõˈnoskõːh / 'il pleut toujours') > La. / (a)õˈnoskõːh / <Onnoscon>).

By LA-4, * / ɹ / has been lost between vowels (e.g. PNI * / joʔtaˈɹihẽːh /

'it is hot' [204] > La. / oʔtaˈihẽːh / <Odaian>; PNI * / tsjoˈtaːɹeʔ / 'six, seven' [466] >

La. / tsjoʔˈtaːeʔ / <Judayé> 'six'; PNI * / kaˈɹõhjaʔ / 'sky' [430] > La. / kaˈõhjaʔ /

<Quemhya> and <Quenhia>; PNI * / kaˈɹõːtaʔ / 'log, tree' [431] > La. / kaˈõːtaʔ /

<Conda> 'wood'). Note that in other environments (except before * / j /, cf. LA-5)

the phoneme has apparently been retained (cf. e.g. La. <Carraconny> 'bread', from

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PNI * / kahɹah'kõːniːh / 'the bread has been made' [242] [260], La. <Aiagla> 'night', from

the PNI root * { -aʔkɹaʔ- } 'become night' [201]).

By LA-5, the approximant * / ɹ / has been lost before * / j /

(e.g. PNI * / kah'ɹjoʔkẽh / 'chipmunk' [340] > La. / kah'joʔkẽh / <Caioguen> 'squirrel';

PNI * / (aʔ)'kaɹjoːʔ / 'animal' [429] > La. / aʔ'kajoːʔ / <Aggayo> 'dog'), and similarly,

by LA-6, the approximant * / w / has been lost before * / j / (e.g. PNI * / a'kewjaʔ /

'my arm, my wing' [480] → La. / ake'jahkõ / <Agaiascon> '[on] my arm').

By LA-7, * / j / has been lost word-initially (e.g. PNI * / joʔta'ɹihẽːh / 'it is hot' [204]

> La. / oʔta'ihẽːh / <Odaian>).

Like Mithun (1981b:239), I interpret sporadic lack of * / h / in Laurentian

vocabulary items as being potentially the result of the influence of French orthography

and not an actual sound change (e.g. PNI * / joʔta'ɹihẽːh / 'it is hot' [204] >

La. / oʔta'ihẽːh / <Odaian>, but PNI * / 'tsaheʔ / 'beans' [451] > La. / 'saheʔ /

<Sahé>), though I do not interpret Laurentian <Quahetan> 'arrow' as necessarily

being cognate with PNI * { -hɹaʔt- } 'feather' [243] (cf. Mithun 1981b:240); the Laurentian

word <Angau> 'evening' may be cognate with PNI * / ẽ'kaːɹaːk / 'the moon will be

out' [414] rather than with PNI * / ẽ'joʔkɹaʔn / 'it will become night' [201]

(cf. La. <Aiagla>), and as such the form may reflect loss of * / ɹ / intervocalically, or

perhaps word-finally, rather than post-consonantally (cf. Mithun 1981b:241). Several

other changes may potentially have occurred in Laurentian, such as loss of * / j / after

* / ts /, but these cannot be determined definitively from the French orthography.

Secure phonological changes that occurred during the transition from PNI to Laurentian

are recapitulated in (2).

(2)   Some Phonological Changes in the Transition from PNI to Laurentian

      LA-1   s > ʃ / h_V
      LA-2   ts > s / _a
      LA-3   n > Ø / _s
      LA-4   ɹ > Ø / V_V
      LA-5   ɹ > Ø / _j
      LA-6   w > Ø / _j
      LA-7   j > Ø / #_

All of the sound changes in (2) except LA-4 are reflected in Huron, though all

except LA-5 and LA-6 apply to other Northern Iroquoian languages as well. Sound

changes LA-5 and LA-6 (which reduce PNI * / wj / and * / ɹj / to / j /) are the most

suggestive evidence of a Huron-Laurentian subgroup within Northern Iroquoian, but

diffusion of these changes from one language into the other cannot be ruled out. Other

considerations speak against a Huron-Laurentian subgroup, including numerous

linguistic hallmarks of Huron that are not found in Laurentian, such as apparent

maintenance of PNI * / k / in all environments in Laurentian (without a shift to / x /), and lack of [nd] as an allophone of / n / before non-nasal vowels. Factors suggesting that Laurentian is as closely related to the languages of the Five Nations as it is to Huron include loss of intervocalic * / ɹ / by LA-4 (common to Modern Onondaga, Cayuga, and Seneca, but absent from Huron), presence of voiced allophones of non-glottal plosives in Laurentian between vowels and resonants (present also in all of the Northern Iroquoian languages except for Huron and Wyandot), and presence of an epenthetic vowel, orthographic <e>, in Laurentian, used to break up certain clusters consisting of a stop plus resonant (present also in Susquehannock, Old Mohawk and Old Onondaga as orthographic <e>, but not in Huron or Wyandot). Due to these considerations, and to the equal amount of cognate vocabulary shared by each of Huron, Mohawk, and Onondaga with Laurentian, the language is here considered to constitute an independent subgroup within Northern Iroquoian (cf. a similar assessment in Lounsbury 1961).

9.4 MORPHOLOGICAL CHANGES

What little can be discerned of the morphology of Laurentian from Cartier's vocabulary lists appears to be unchanged from Proto-Northern Iroquoian. At least one

novel development involves a locative suffix with the form <sco> or <scon>,

reconstituted by Lounsbury (1978:340) as / -hkõ /, that occurs with body parts:

<Agaiascon> 'arm', <Ahontascon> 'ear', <Hogouascon> 'face', <Ochedasco> 'foot',

<Hochosco> 'hair', <Aignoascon> 'hand', <Anoudasco> 'leg', etc.

CHAPTER 10: PROTO-MOHAWK-ONEIDA

10.1 INTRODUCTION

This chapter describes Proto-Mohawk-Oneida, henceforth PMO, the reconstructed

language from which Mohawk and Oneida derive. PMO itself derives from PNI, and is

reconstructed on the basis of cognate forms shared by Mohawk and Oneida. Where

forms in the two languages disagree, but cognate forms in other Iroquoian languages

agree with one of the languages, to the exclusion of the other, the form that agrees has

been interpreted as archaic, and is projected back to PMO. Where forms in the two

languages disagree, and where cognate forms in no other Iroquoian language agree with

either Mohawk or Oneida, the forms in question have been interpreted as subsequent

independent developments in Mohawk and in Oneida, and are not projected back to

PMO.

10.2 PHONEMIC INVENTORY

The phonemic inventory of PMO is presented in (1).

(1)   Phonemic Inventory of Proto-Mohawk-Oneida

CONSONANTS

	Alveolar	Palatal	Velar	Glottal
Plosive	t		k kʷ	ʔ
Nasal	n			
Fricative	s			h
Affricate	ts			
Approximant	ɹ	j	w	

VOWELS

	Front	Central	Back
Close	iː		ũː
	i		ũ
Mid	eː	ʌ̃ː	oː
	e	ʌ̃	o
Open		aː	
		a	

PNI * / ẽ(ː) / and * / õ(ː) / have undergone a shift to PMO * / ʌ̃(ː) / and * / ũ(ː) /

respectively. Although vowel length seems to have been almost entirely predictable in

PMO, as it is in Mohawk and Oneida, unpredictable instances of vowel length

nonetheless appear to have been present (e.g. PMO * { aː- } 'optative prefix' [009],

* { toːh } 'how many?' [447]), and consequently distinctive long and short vowels have

been retained in the phonemic inventory.

As in Mohawk and Oneida, PMO * / t /, * / k /, and * / kʷ / may have had voiced

allophones [d], [g], and [gʷ] before vowels and resonants (e.g. PMO * / kaˈnaːtaʔ /

'village' → [gɐˈnaːdɐʔ]; PMO * / twaˈnakɹeʔ / 'we reside' → [dwɐˈnagɹɛʔ];

PMO * / ˈkʷatɹe / 'grandchild!' → [ˈgʷadɹɛ]; PMO * / ˈũːkʷe / 'person' → [ˈũːgʷɛ]),

and PMO * / s / may have had an allophone [z] that occurred word-initially before

vowels and resonants, as well as word-internally between vowels and resonants

(e.g. PMO * / swaˈnũhsaʔ / 'your house' → [zwɐˈnũhsɐʔ]; PMO * / ˈisiʔ / 'over there'

→ [ˈiziʔ]; PMO * / ˈsêːsɹeʔ / 'you drag it' → [ˈzêːzɹɛʔ]). The affricate * / ts / may

have been realized as [dʒ] before * / i / and * / j / and as [tʃ] before * / hi / and

* / hj /; the fricative * / s / may have been realized as [ʃ] before * / hj / and * / j /.

Phonetically, the short vowels * / a /, * / e /, and * / o / may have been realized as

[ɐ], [ɛ], and [ʊ] in unaccented syllables (e.g. PMO * / tehseˈkhahsjũhs /

'you separate it' → [dɛhsɛˈkhahʃjũhs]; PMO * / oˈtsîːtsjaʔ / 'flower' → [ʊˈdʒîːdʒjɐʔ]).

PMO appears to have had an epenthetic phonetic vowel * [ɪ] that was used to

separate non-glottal consonants from a following * / n / or * / ɹ /, e.g. PMO * / ˈtekni /

→ [ˈdegɪni] 'two'; PMO * / ˈknakɹeʔ / 'I dwell' → [gɪˈnagɹɛʔ]; this vowel later seems

to have phonemicized as / e / in Mohawk and in the penultimate syllables of pre-pausal

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word forms in Oneida. Epenthetic * [ɪ] likewise appears to have been used to separate

* / n / from * / k / and * / kʷ / (e.g. PMO * / oˈtsîːnkʷaɹ / 'bile' → [ʊˈdzîːnɪgʷɐɹ];

PMO * / oˈnkʷʌ̃hsaʔ / 'blood' → [ʊnɪˈgʷʌ̃hsɐʔ] 'blood'; PMO * / oˈnkôːɹhaʔ / 'wampum'

→ [ʊnɪˈgôːɹhɐʔ] 'wampum'); in this environment the vowel seems to have

phonemicized as / e / in Mohawk, and as / i / in select environments in Oneida. PMO

also appears to have developed falling tone on penultimate vowels that were lengthened

when they preceded a glottal consonant (e.g. PNI * / kaˈnaʔtsjaʔ / 'pot, kettle' [363] >

PMO * / kaˈnâːtsjaʔ /; PNI * / oˈkahɹaʔ / 'eye' [319] > PMO / oˈkâːɹaʔ /).

10.3 PHONOLOGICAL CHANGES

Phonological changes that have occurred during the transition from PNI to PMO are

described below as PMO-1 through PMO-13. Where ordering of two changes seems to

be necessary in order to produce a correct output in PMO, this has been noted.

By PMO-1, the nasal vowel * / ẽ(ː) / has shifted to * / ʌ̃(ː) / (e.g. PNI * / oˈɹẽːnaʔ /

'song' [422] > PMO * / oˈɹʌ̃ːnaʔ /; PNI * / aˈkʷaːwẽh / 'my possession' [194] >

PMO * / aˈkʷaːwʌ̃ /; PNI * / jeˈjẽthohs / 'someone plants it' [311] > PMO * / jeˈjʌ̃thohs /),

and similarly, by PMO-2, the nasal vowel * / õ(ː) / has shifted to * / ũ(ː) /

(e.g. PNI * / kaˈɹõːtaʔ / 'log, tree' [431] > PMO * / kaˈɹũːtaʔ /; PNI * / ˈkiʔtɹõʔ /

'I reside' [292] > PMO * / ˈkîːtɹũʔ /; PNI * / kaˈnõhsaʔ / 'house' [382] >

PMO * / kaˈnũhsaʔ /).

By PMO-3, * / ts / has become * / hs / when preceded by a vowel and followed by

* / t /, * / k /, or * / kʷ / (e.g. PNI * / ˈwatstẽhs / 'it dries out' [191] >

PMO * / ˈwahstʌ̃hs /; PNI * / ɹoʔˈnitskʷahs / 'he is late' [492] > PMO * / ɹoʔˈnihskʷahs /).

This change must precede PMO-4 and PMO-5.

By PMO-4, * / ts / has become * / s / except before * / h /, * / i /, or * / j /

(e.g. PNI * / oˈtsɹẽhtaʔ / 'dream, sleep' [469] > PMO * / oˈsɹʌ̃htaʔ /;

PNI * / tswaʔˈtswahthaʔ / 'you extinguish it' [208] > PMO * / swaʔˈswahthaʔ /;

PNI * / ˈɹaʔtskoʔts / 'he drowns' [497] > PMO * / ˈɹaʔskoʔs /; but PNI * / ohˈnitshaʔ /

'thigh' [238] > PMO * / ohˈnitshaʔ /; PNI * / oˈtsiʔnkʷaɹ / 'yellow, bile' [461] >

PMO * / oˈtsîːnkʷaɹ /; PNI * / ˈtsjaːtahk / 'seven' [464] > PMO * / ˈtsjaːtahk /). This

change must follow PMO-3.

By PMO-5, * / ns / has become * / ts / before * / t /, * / k /, or * / kʷ /

(e.g. PNI * / joʔˈnshansteʔ / 'it is strong' [496] > PMO * / joʔˈshatsteʔ /; PNI * / ˈansteh /

'outside' [155] > PMO * / ˈatste /; PNI * / ɹaˈkenskʷahs / 'he lifts it' [331] >

PMO * / ɹaˈketskʷahs /). This change must follow PMO-3 and precede PMO-6.

By PMO-6, * / n / has been lost before * / s / (e.g. PNI * / keʔˈnonshahs /

'I am envious' [495] > PMO * / keʔˈnoshahs /; PNI * / joʔˈnshansteʔ / 'it is strong' [496] >

PMO * / joʔˈshatsteʔ /; PNI * / teˈwahnshẽːh / 'twenty' [135] > PMO * / teˈwahshʌ̃ /).

This change must follow PMO-5.

By PMO-7, an accented vowel has been lengthened and acquired falling tone when

followed by a glottal stop or by * / h / plus a resonant consonant

(e.g. PNI * / niˈwaʔah / 'it is small' [197] > PMO * / niˈwâːʔa /; PNI * / ohˈnjaʔsaʔ /

'neck' [239] > PMO * / ohˈnjâːsaʔ /; PNI * / oˈkahɹaʔ / 'eye' [319] > PMO * / oˈkâːɹaʔ /).

For some lexical exceptions to lengthening in this environment, see Michelson

(1988:61-66). This change must precede PMO-8 and PMO-9.

(cf. also Chafe 1977a:171-172, Michelson 1988:58,63).

By PMO-8, * / ʔ / has been lost after an accented long vowel whenever a consonant

followed (e.g. PNI * / oˈjẽʔkʷaʔ / 'tobacco' [314] > PMO * / oˈjʌ̃̂ːkʷaʔ /; PNI * / oˈjaʔtaʔ /

'body' [298] > PMO * / oˈjâːtaʔ /; PNI * / kaˈnaʔtsjaʔ / 'pot, kettle' [363] >

PMO * / kaˈnâːtsjaʔ /), and similarly, by PMO-9, * / h / has been lost after an accented

long vowel when a resonant consonant followed (e.g. PNI * / oˈkahɹaʔ / 'eye' [319] >

PMO * / oˈkâːɹaʔ /; PNI * / kaˈɹõhjaʔ / 'sky' [430] > PMO * / kaˈɹũ̂ːjaʔ /;

PNI * / oˈɹihwaʔ / 'matter' [427] > PMO * / oˈɹîːwaʔ /). Both changes must follow PMO-7.

By PMO-10, long vowels have been shortened in final syllables

(e.g. PNI * / ˈɹahɹaːths / 'he counts it' [137] > PMO * / ˈɹâːɹaths /; PNI * / ˈtekniːh /

'two' [438] > PMO * / ˈtekni /; PNI * / teˈwahnshẽːh / 'twenty' [135] >

PMO * / teˈwahshɃ̃ /). Some exceptions to this change include the particle * / toː /

'how much' and the imperative verb * / ˈkaːts / 'come here!' (< PNI * / ˈkaːtsih / [329]).

By PMO-11, clusters consisting of a consonant plus a glottal stop have been

separated by inserting an epenthetic copy of the vowel that followed the cluster

(e.g. PNI * / ˈɹaɹʔokhs / 'he chops' [432] > PMO * / ˈɹaɹoʔokhs /; PNI * / atˈʔẽhraʔ /

'palisade' [193] > PMO * / atɃ̃ˈʔɃ̂ːɹaʔ /; PNI * / knõhˈsihsʔahs / 'I finish the house' [266] [382]

> PMO * / knũhˈsihsaʔahs /).

By PMO-12, * / h / has been lost word-finally (e.g. PNI * / aˈkʷaːwẽh / 'my

possession' [194] > PMO * / aˈkʷaːwɃ̃ /; PNI * / joʔtaˈrihẽːh / 'it is hot' [204] >

PMO * / joʔtaˈɹihɃ̃ /; PNI * / knõhˈsõːnih / 'I am building a house' [260] [382] >

PMO * / knũhˈsũːni /), and by PMO-13, * / h / has been lost before * / w / at the

beginning of a word (e.g. PNI * / ˈhwihsk / 'five' [273] > PMO * / ˈwihsk /).

By PMO-13, * / e / has been inserted between * / w / and * / ɹ /

(e.g. PNI * / ˈowɹaʔ / 'air, wind' [487] > PMO * / ˈoweɹaʔ /).

Phonological changes that have occurred during the transition from PNI to PMO are

recapitulated in (2).

(2)   Phonological Changes in the Transition from PNI to PMO

PMO-1   ẽ(:) > ᴧ̃(:)

PMO-2   õ(:) > ũ(:)

PMO-3   ts > hs / V_t, k, kʷ

PMO-4   ts > s (except before h, i, j)

PMO-5   ns > ts / _t, k, kʷ

PMO-6   n > Ø / _s

PMO-7   'V¹ > 'V̂:¹ / _ʔV, ʔC, hR

PMO-8   ʔ > Ø / 'V̂:_C

PMO-9   h > Ø / 'V̂:_R

PMO-10   V¹: > V¹ / _(C)(C)(C)#

PMO-11   C¹ʔV¹ > C¹V¹ʔV¹

PMO-12   h > Ø / _#

PMO-13   Ø > e / w_ɹ

10.4 MORPHOLOGICAL CHANGES

PMO has lost the non-singular animate prefix of PNI, and pronominal prefixes with

a feminine-indefinite argument '3I' have taken on the scope of earlier non-singular

forms (e.g. PMO * { khe } '1SG:3I, I act on someone *or* them'), as has occurred also in

Onondaga and Seneca. As in Cayuga and Onondaga, the negative prefix could not occur

with modal prefixes in PMO and the contrastive prefix was substituted. The initial

sequence * / j(a)h / of the PNI translocative prefix * / j(a)hwe / [005] appears to have

been simplified to * / j / in a majority of environments in PMO, but a series of extended

allomorphs (with epenthetic vowels copied from a following syllable) also seems to

have developed, and occurred in environments where the prefix would originally have occupied the onset of a stressed syllable (e.g. PNI * / j(a)hˈwâːkeʔ / 'I went' > PMO * / jaˈhâːkeʔ /; PNI * / j(a)ˈhwẽːkeʔ / 'I will go' > PMO * / jãˈhãːkeʔ /); Old Mohawk had a translocative allomorph / he / that occurs before pronominal prefixes beginning in / j /, and which perhaps was also present in PMO with subsequent levelling to / je / in Mohawk and Oneida (cf. OMo. / hejakaˈweːnũ / <heïaga8ennon> 'one has gone there' and / hejothaˈhiːnũ / <heioθahinnon> 'the road leads there', both from MS58:22). The PNI factual prefix allomorph * / waʔ / [006] has become * / aʔ / in all but word-initial position in PMO, and the glottal stop has been lost before * / h /, as is also the case in Tuscarora, Seneca, and Cayuga. The distinction between the PNI duplicative allomorphs * / ti / [007] and * / t /, both of which seem to have occurred following the factual prefix, was lost in PMO and appears to have been replaced by a distinction between allomorphs * / t / and * / te /, the former occurring before * / hV /, * / jV /, and the 1SG:3 pronominal prefix allomorph * / k / [019], the latter occurring elsewhere. The * / ɹ / of the optative prefix (PNI * { aɹa } [009]) has been lost in PMO, leaving lexicalized long * / aː /.

The inventory of pronominal prefixes in PMO seems to have been essentially the same as that of PNI except that the prefix * { wati } '3PL:3' [058] was apparently absent,

having been replaced by reflexes of PNI * { kũti } '3PL:3' [059]. The PNI 2SG:3M prefix

* { hehse } [024] has become PMO * { hetshe }, and compound PNI pronominal prefixes

beginning in the element * { she } have also added an element * { het } to the

beginning to yield PMO * { hetshesni } '2DU&3M' [032], * { hetshetwa } '1+2PL:3M' [039],

and so forth, which appear to have become Mo. { hetshiseni }, { hetshitewa } and

Oe. { hetsni }, { hethwa }. PNI pronominal prefixes have lost * / r / in non-word-initial

position before bases beginning in vowels other than * / a / or * / i / (cf. Woodbury

1981:109). The PNI prefix * { hni } '3DUM:3' [057] has lost * / h / word-initially in PMO,

and the '3:3I' and '3NS:3I' pronominal prefixes * { jako } [064] and * { jakoti } [070] have

generalized initial * / ja / in all environments. PMO has extended the allomorphs of

pronominal prefixes in * / kʷ / before bases beginning in * / a / to bases beginning in

* / e / and * / ə̃ /, although the reflex of 3:1SG prefix allomorph * / wakʷ / [025] was

apparently replaced by * / wak / in PMO before bases beginning in all vowels unless

preceded by the factual prefix.

The consonants and clusters before which 'epenthetic' * / e / appeared in

pronominal prefix allomorphs in PMO were apparently unchanged relative to PNI apart

from the effects of PMO-11. Consonants and clusters before which the 1SG:3

pronominal prefix allomorphs * / k / and * / ke / [019] likely occurred in PMO are

presented in (3).

(3)   Distribution of Prefix Allomorphs with Epenthetic * / e / in PMO (1SG:3)

/ k /   _hV, hjV, hnV, hnjV, hɹV, hɹjV, hsV, hsCV, htsV, hwV, jV (< PNI * jV),
          kV, kʷV, nV, ɹV (< PNI * ɹV), tV (< PNI * tV), tsV, wV.

/ ke /   _jVʔ (< PNI * jʔ), ɹVʔ (< PNI * ɹʔ), tVʔ (< PNI * tʔ),
          and all remaining consonants and clusters.

The aspectual and derivational morphology of PMO seems to have been relatively

conservative. The present and imperfective appear to have remained distinct in a

handful of verbs (cf. PMO * / ˈkũːnihsk / 'I make it' vs. * / ˈkũːni / 'I'm making it' [260],

PMO * / ˈkheːkɑ̃hsk / 'I see someone (habitually)' vs. * / ˈkheːkɑ̃ / 'I see someone

(right now)' [332]), but generally these bases appear to have merged as general habitual

bases. A punctual suffix * / eʔ / appears to have been added to verbs ending in a

resonant consonant (e.g. PNI * / õˈkiːtaʔw / 'I fell asleep' [287] > PMO * / ũˈkiːtaʔweʔ /).

Note that while this suffix was later extended to all punctual verbs formerly ending in a

consonant in both Mohawk and Oneida, forms in Old Mohawk lack the suffix after non-

resonant consonants, cf. OMo. / waʔˈtehshɹiht / <8atesrit> 'you broke it'

(Bruyas 1863:93).

Unique to PMO are pronominal prefixes designating alienable possession that

differed formally from their verbal counterparts, both in their apparent lack of initial

glides and in having * / ao / in place of * / o /: PMO * / ao / '3SG.ALPOSS', * / aoti /

'3NS.ALPOSS', * / ɹao / '3SGM.ALPOSS', * / ɹaoti / '3NSM.ALPOSS', * / akao /

'3I.ALPOSS' (e.g. PNI / ɹoˈnũhsaʔ / 'his house' [382] → PMO * / ɹaoˈnũhsaʔ / >

Mo. / ɹaoˈnũhsaʔ /, Oe. / laoˈnũhsaʔ /). PMO seems to have retained the noun suffixes

of PNI and, like other Five Nations languages, added an augmentative

(PMO * { -kowaʔ } or * { -koʔ }), a second locative (PMO * { -ne(h) }), and a

pluralizer (PMO * { -shũʔ }), as well as a second pluralizer (PMO * { -okũʔ }, typically

but not always used in reference to people) and a second populative

(PMO * { -ɹoɹũʔ }, apparently a lexically-determined variant of the original populative

suffix * { -ɹonũʔ } [129]).

CHAPTER 11: MOHAWK

11.1 INTRODUCTION

This chapter describes the language of the Mohawk (/ kanjʌ̃ʔkeˈhaːkaʔ / 'People

of the flint'), whose territory in the early seventeenth century seems to have ranged

roughly from Trenton Falls in the west, bordering on the territory of the Oneida, to the

Hudson River Valley in the east, bordering on the territory of the Mahican, north to the

Adirondack Mountains, bordering on the territory of the Algonquin, and south to the

Catskill Mountains, bordering on the territory of the Delaware (cf. Engelbrecht

2003:124, village locations in Swanton 1968:34; see Map 6). Today speakers of

Mohawk reside at Tyendinaga Mohawk Territory and on Six Nations of the Grand River

Reserve in southwestern Ontario, at Wahta Mohawk Territory in central Ontario, at

Kahnawake Mohawk Territory and Kanesatake Mohawk Territory in southwestern

Quebec, and on the Akwesasne Reserve or Saint Regis Mohawk Reservation, located on

the Saint Lawrence River at the juncture of Quebec, Ontario, and New York State.

Records of the Mohawk language date back to the early seventeenth century. The

earliest such record appears to be a short list of numbers and months recorded by

Nicolaes Janszoon Van Wassenaer (1571-1630) and published in the February 1624

edition of his newspaper (Van Wassenaer 1624). The earliest work of any length in the

language is the late seventeenth century grammar and dictionary of Jesuit father

Jacques Bruyas (1635-1712), entitled *Radices Verborum Iroquaeorum*, later published by

John Gilmary Shea (Bruyas 1863).

Three stages of Mohawk can be recognized. The first stage, Old Mohawk, represents

the earliest attested form of the language and is preserved, for example, in the

dictionary by Bruyas and MS 58. Old Mohawk differs from later forms of the language

in that it exhibits only six of the thirteen sound changes that lead from PMO to

Common Mohawk (e.g. the consonant clusters / kn / and / tn / are still present in Old

Mohawk, but become / ken / and / ten / respectively in Common Mohawk), and it

retains a handful of archaic reflexes that are not present in Common or Modern

Mohawk (e.g. imperfective aspect forms ending in / hsk /).

Common Mohawk is an internally-reconstructed stage of the language from which

all modern Mohawk dialects can be derived. Phonological and morphological changes

which are present in all modern dialects of Mohawk (e.g. the shift of the consonant

clusters / kn / and / tn / to / ken / and / ten /) are assumed to have been present in

Common Mohawk, while phonological changes which are evident in some modern

dialects of Mohawk but not others (e.g. the shift of the consonant cluster / tj / to / kj /

in Akwesasne Mohawk) are assumed not to have been present in Common Mohawk,

and are interpreted as dialectal developments which have occurred at some point after the six Modern Mohawk speech communities separated. Note that, unless otherwise stated, Mohawk words presented in this chapter represent Common Mohawk.

Modern Mohawk refers to the six modern dialects of the Mohawk language: Akwesasne Mohawk (abbreviated AkMo.), spoken at the Saint Regis Mohawk Reservation; Caughnawaga Mohawk (CaMo.), spoken at Kahnawake Mohawk Territory; Oka Mohawk (OkMo.), spoken at Kanesatake Mohawk Territory; Wahta Mohawk (WaMo.), spoken at Wahta Mohawk Territory; Tyendinaga Mohawk (TyMo.), spoken at Tyendinaga Mohawk Territory; and Six Nations Mohawk (SNMo.), spoken at the Six Nations of the Grand River Reserve. The six dialects differ only slightly on points of phonology and vocabulary; all are mutually intelligible. Sound changes that separate the six modern dialects from Common Mohawk will be presented in 11.3.

Modern Mohawk texts are in Mithun (1976). Discussion of dialects is in Bonvillain (1984), while discussion of morphology is in Beatty (1972), and discussion of syntax is in Postal (1979). A grammar of Akwesasne Mohawk is in Bonvillain (1973) and a teaching Grammar of Caughnawaga Mohawk is in Deering and Delisle (1976). Dictionaries of Old Mohawk are in Bruyas (1863) and MS 58, and dictionaries of Modern Mohawk are in Cuoq (1882), Michelson (1973), and Maracle (1990). Common

Mohawk forms in this chapter are based on data from Michelson (1973), Deering &

Delisle (1976), and Maracle (1990).

11.2 PHONEMIC INVENTORY

The phonemic inventory of Common Mohawk is presented in (1).

(1)   Phonemic Inventory of Common Mohawk

CONSONANTS

	Alveolar	Palatal	Velar	Glottal
Plosive	t		k kʷ	ʔ
Nasal	n			
Fricative	s			h
Affricate	ts			
Approximant	ɹ	j	w	

VOWELS

	Front	Central	Back
Close	iː		ũː
	i		ũ
Mid	eː	ʌ̃ː	oː
	e	ʌ̃	o
Open		aː	
		a	

The phonemes / t /, / k /, and / kʷ / have voiced allophones [d], [g], and [gʷ] respectively before vowels and resonants. The phoneme / s / has an allophone [z] word-initially before vowels and resonants other than / j /, as well as word-internally between vowels and resonants other than / j /. In Common Mohawk the affricate / ts / was realized as [dʒ] before / i / and / j / and as [tʃ] before / hi / and / hj /. The fricative / s / was realized as [ʃ] before / hj / and / j /. Phonetically, the short vowels / a /, / e /, and / o / are realized as [ɐ], [ɛ], and [ʊ] in unstressed syllables. Penultimate vowel lengthening does not occur in a handful of Mohawk forms due to etymological origin, e.g. / ˈkeɹoʔkhs / 'I chop' [432], from PMO * / ˈkeɹoʔokhs / (bearing antepenultimate accent), from PNI * / ˈikɹʔokhs / (with closed penult). (cf. also Michelson 1988:56).

11.3 PHONOLOGICAL CHANGES

Phonological changes that have occurred during the transition from PMO to Mohawk are described below as MO-1 through MO-13. Where ordering of two or more changes appears to be necessary in order to produce a correct output in Mohawk, this is noted.

By MO-1, the vowel in a final syllable has been lost if the vowel of the penultimate

syllable was identical, the two vowels were separated by a glottal stop, and the word

had antepenultimate stress (e.g. PMO * / ˈkeɹoʔokhs / 'I chop it' [432] >

Mo. / ˈkeɹoʔkhs /; PMO * / ˈikhsaʔas / 'I finish it' [266] > Mo. / ˈikhsaʔs /;

PMO * / jaʔteˈkojaʔakhs / 'I throw it' [395] > Mo. / jaʔteˈkojaʔkhs /). This change was

already present in Old Mohawk, cf. < Garógon >, < roks, rok, roχe > 'bûcher, faire du

bois' (Bruyas 1863:93).

By MO-2, epenthetic * / e / has been inserted between * / h / and * / ɹ / in the

cluster * / tshɹ / (e.g. PMO * / atə̃ˈnâːtshɹaʔ / 'provisions' [168] > Mo. / atʌ̃ˈnâːtsheɹaʔ /;

PMO * / swatoˈkwâːtshɹat / 'one spoon' [159] [183] > Mo. / sewatoˈkwâːtsheɹat /;

PMO * / kanũhkʷaʔˈtshɹiːjo / 'good medicine' [279] [381] > Mo. / kanũhkʷaʔtsheˈɹiːjo /).

This change was already present in Old Mohawk, cf. < Atennatsera > 'provision'

(Bruyas 1863:33). Similarly, by MO-3, epenthetic * / e / has been inserted between

* / s / and * / ɹ / (e.g. PMO * / ʌ̃hˈnisɹaʔ / 'day' [216] > Mo. / ʌ̃hˈniseɹaʔ /;

PMO * / ˈohsɹaʔ / 'winter, year' [394] > Mo. / ˈohseɹaʔ /; PMO * / ahˈsɹiːjeʔ / 'string' [141] >

Mo. / ahseˈɹiːjeʔ /), and this change was also already present in Old Mohawk,

cf. < Ennisera > 'jour' (Bruyas 1863:109). (cf. also Michelson 1981a:99). By MO-4,

epenthetic * / e / has been inserted between * / n / and * / ɹ /

(e.g. PMO * / oˈnɹahsaʔ / 'mushroom' [389] > Mo. / oneˈɹahsaʔ /; PMO * / teˈkkâːnɹeʔ /

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'I look at it' [318] > Mo. / teˈkkâːneɹeʔ /; PMO * / kajaˈnɹʌ̃hsɹaʔ / 'law' [296] >

Mo. / kajaneˈɹʌ̃hseɹaʔ /), and this change was likewise already present in Old Mohawk,

cf. <Onnerasa> 'champignons' (Bruyas 1863:72). (cf. also Michelson 1981a:99).

By MO-5, * / w / has been lost before * / jh / (e.g. PMO * / kaˈwjhũhaʔ / 'river' [278]

> OMo. / kaˈjhũhaʔ /). This change seems already to have been present in Old

Mohawk, cf. <Gaihonha> 'rivière, ruisseau' (Bruyas 1863:63), and must precede MO-7.

By MO-6, * / h / has been lost from the cluster * / whj /

(e.g. PMO * / oˈwhjũhkaɹ / 'thumb' [477] > Mo. / oweˈjũhkaɹaʔ /). This change appears

to have been present in Old Mohawk (cf. <oionkara> 'Pouce' from MS 58:968) and

must precede MO-8.

By MO-7, * / jh / has become * / hj / (e.g. PMO * / kaˈwjhũhaʔ / 'river' [278] >

Mo. / kahˈjũhaʔ /). This change was not present in Old Mohawk, cf. <Gaihonha>

'rivière, ruisseau' (Bruyas 1863:63). It must follow MO-5.

By MO-8, epenthetic * / e / has been inserted between * / w / and * / j /

(e.g. PMO * / owjaˈhũtshaʔ / 'wing' [481] > Mo. / owejaˈhũtshaʔ /;

PMO * / katwjʌ̃ˈtehtaʔs / 'I learn how' [485] > Mo. / katewejʌ̃ˈtehtaʔs /;

PMO * / wakewjʌ̃nʌ̃ˈtâːʔũ / 'I am ready' [220] [484] > Mo. / wakewejʌ̃nʌ̃ˈtâːʔũ /). This

change was not present in Old Mohawk, cf. <Ga8iahontsa> 'Aisle' (MS 58:21). It must

follow MO-5 and MO-6.

By MO-9, epenthetic * / e / has been inserted between * / n / and * / k / or

* / kʷ / (e.g. PMO * / oˈtsî:nkʷaɹ / 'bile, green, yellow' [461] > Mo. / oˈtsî:nekʷaɹ /;

PMO * / oˈnkô:ɹha? / 'wampum' [375] > Mo. / oneˈkô:ɹha? /; PMO * / ohsiˈnkô:ta? /

'ankle' [251] > Mo. / ohsineˈkô:ta? /). This change phonemicized the phonetic vowel

* [ɪ] that was used to break up the clusters * / nk / and * / nkʷ / in PMO. The change

does not appear to have been present in Old Mohawk, since the vowel between * / n /

and * / k / or * / kʷ / was still being rendered variously as < i > or < e > in vocabulary

items, cf. < Otsinnig8ar > 'couleur verte, bile' (Bruyas 1863:106), < otsinnig8are >

'Jaune, idē qd Verd' (MS 58:568), < Onnegorha > 'porcelaine' (Bruyas 1863:70),

< onnegorha > 'Porcelaine' (MS 58:952), < Osinnigota > 'cheville du pied'

(Bruyas 1863:97).

By MO-10, epenthetic * / e / has been inserted between a non-glottal plosive and

* / r / (e.g. PMO * / ˈknakɹe? / 'I dwell' [354] > Mo. / keˈnakeɹe? /; PMO * / ˈô:kɹa? /

'snowflake' [202] > Mo. / ˈô:keɹa? /; PMO * / ˈkʷatɹe / 'grandchild!' [188] > Mo. / ˈkʷateɹe /;

PMO * / ˈtɹî:tɹi? / 'bluejay' [450] > Mo. / teˈɹî:teɹi? /). This change was not present in Old

Mohawk, cf. < Gannagre > 'demeurer, y avoir, etre' (Bruyas 1863:66), < K8atre >

'mon petit fils ou p. fille' (Bruyas 1863:88). Similarly, by MO-11, epenthetic * / e / has

been inserted between a non-glottal plosive and * / n / (e.g. PMO * / ˈtekni / 'two' [438]

> Mo. / ˈtekeni /; PMO * / aˈknũhsaʔ / 'my house' [382] > Mo. / akeˈnũhsaʔ /;

PMO * / tshaʔˈtetnaʔ / 'we are the same size' [197] > Mo. / shaʔˈtetenaʔ /;

PMO * / ˈwetneʔ / 'we went, we are going' [209] > Mo. / ˈweteneʔ /), and this change

was not present in Old Mohawk, cf. <Tegni> 'deux' (Bruyas 1863:39), <satetna>

'[we two are the same size]' (Bruyas 1863:21).

By MO-12, epenthetic * / e / has been inserted between * / t / and * / w /

(e.g. PMO * / twaˈɹâːseʔ / 'we are cousins' [157] > Mo. / tewaˈɹâːseʔ /; PMO * / ˈwetweʔ /

'we went, we are going' [209] > Mo. / ˈweteweʔ /; PMO * / katwʌ̃ˈtehthaʔ /

'I abandon it' [192] > Mo. / katewʌ̃ˈtehthaʔ /). This change was not present in Old

Mohawk, cf. <t8arase> '[we are cousins]' (Bruyas 1863:25).

By MO-13, epenthetic * / e / has been inserted between * / s / and * / n / or

* / w / when a word boundary or vowel preceded (e.g. PMO * / tshaʔˈtesnaʔ / 'you are

the same size' [197] > Mo. / shaʔˈtesenaʔ /; PMO * / ˈsnakɹeʔ / 'you reside' [354] >

Mo. / seˈnakeɹeʔ /; PMO * / swatɹakeˈwâːthaʔ / 'that which is used to erase it' [416] >

Mo. / sewateɹakeˈwâːthaʔ /; PMO * / ˈwesweʔ / 'you went, you are going' [209] >

Mo. / ˈweseweʔ /). This change was not present in Old Mohawk, cf. <satesna>

'[you are the same size]' (Bruyas 1863:21), <S8atrage8aθa> 'Ce qui fait effacer'

(Bruyas 1863:33).

Phonological changes that have occurred during the transition from PMO to

Mohawk are recapitulated in (2).

(2)   Phonological Changes in the Transition from PMO to Mohawk

MO-1 $V^1 > \emptyset$ / $'VC(C)(C)V^1\text{ʔ}\_C$
MO-2 $\emptyset > e$ / tsh_ɹ
MO-3 $\emptyset > e$ / s_ɹ
MO-4 $\emptyset > e$ / n_ɹ
MO-5 $w > \emptyset$ / _jh
MO-6 $h > \emptyset$ / w_j
MO-7   jh $>$ hj
MO-8 $\emptyset > e$ / w_j
MO-9 $\emptyset > e$ / n_k, kʷ
MO-10 $\emptyset > e$ / t, k_ɹ
MO-11 $\emptyset > e$ / t, k_n
MO-12 $\emptyset > e$ / t_w
MO-13 $\emptyset > e$ / #s, Vs_n, w

Several changes additional to those in (2) have since taken place in various Modern

Mohawk dialects. Seven such changes are described below as MO-D1 through MO-D7,

with hierarchical ordering of changes noted where necessary.

By MO-D1, * / ɹ / has shifted to * / l / (e.g. Mo. / ɹaˈtoːɹaths / 'he hunts' >

AkMo. / laˈtoːlaths /; Mo. / tjaweˈɹũːko / 'eel' > AkMo. / kjaweˈlũːko /;

Mo. / tjotjeˈɹɹ̃htũ / 'first' > AkMo. / kjokjeˈlɹ̃htũ /). This change occurs in the

Akwesasne dialect (cf. Mithun 1979:178, Bonvillain 1984:315).

By MO-D2, * / t / has become * / k / before * / j / (e.g. Mo. / ˈtjohtũ / 'nine' >

AkMo. / ˈkjohtũ /; Mo. / ˈohstjʌ̃ʔ / 'bone' > AkMo. / ˈoskjʌ̃ʔ /; Mo. / wakahˈtʌ̃tjũ /

'I've left' > AkMo. / wakahˈtʌ̃kjũ /). This change occurs in the Akwesasne dialect

(cf. Mithun 1979:178, Bonvillain 1984:315, Mithun 1985:505).

By MO-D3, * / ɹ / has shifted to * / l̥ / (e.g. Mo. / ɹaˈtoːɹaths / 'he hunts' >

CaMo. / l̥aˈtoːl̥aths /; Mo. / kaˈɹʌ̃ːnaʔ / 'song' > AkMo. / kaˈl̥ʌ̃ːnaʔ /;

Mo. / oˈɹîːwaʔ / 'business' > AkMo. / oˈl̥îːwaʔ /). This change occurs in the

Caughnawaga, Oka, and Wahta dialects.

By MO-D4, * / k / has become * / t / before * / j / (e.g. Mo. / ˈkjʌ̃thohs / 'I plant'

> CaMo. / ˈtjʌ̃thohs /; Mo. / aˈnôːkjʌ̃ / 'muskrat' > CaMo. / aˈnôːtjʌ̃ /;

Mo. / waˈkjoʔteʔ / 'I work' > CaMo. / waˈtjoʔteʔ /). This change occurs in the

Caughnawaga, Oka, and Wahta dialects (cf. Mithun 1979:178, Bonvillain 1984:315).

By MO-D5, the sequence * / wʌ̃ / has become * / ũ / when * / h / or * / s /

precedes (e.g. Mo. / ˈikhswʌ̃hs / 'I hate it' > CaMo. / ˈikhsũhs /; Mo. / ũhˈwʌ̃tsjaʔ /

'earth' > CaMo. / oˈhũtsaʔ /; Mo. / ohˈswʌ̂̃ːkaɹeʔ / 'board' > CaMo. / ohˈsũ̂ːkal̥eʔ /).

This change occurs in the Akwesasne, Caughnawaga, Oka, and Wahta dialects.

By MO-D6, * / j / has been lost after * / ts / (e.g. Mo. / ˈkʌ̃tsjũʔ / 'fish' >

CaMo. / ˈkʌ̃tsũʔ /; Mo. / oˈtsî:tsjaʔ / 'flower' > CaMo. / oˈtsî:tsaʔ /; Mo. / kaˈnâ:tsjũʔ /

'kettle' > CaMo. / kaˈnâ:tsũʔ /). This change occurs in the Akwesasne, Caughnawaga,

Oka, and Wahta dialects (cf. Mithun 1979:178, Bonvillain 1984:316, Mithun 1985:506).

By MO-D7, accented vowels in antepenultimate syllables have been lengthened

before the sequences * / keɹ /, * / seɹ /, * / teɹ /, * / neɹ / and * / nek /

(e.g. Mo / kajaʔˈtakeɹaʔs / 'goat' > TyMo. / kajaʔˈta:keɹaʔs /; Mo. / oˈtsiseɹaʔ / 'glass'

> TyMo. / oˈtsi:seɹaʔ /; Mo. / ˈkʷateɹe / 'grandchild!' > / ˈkʷa:teɹe /; Mo. / joˈjaneɹeʔ /

'it is good' > TyMo. / joˈja:neɹeʔ /; Mo. / kewʌ̃ˈninekʌ̃ʔs / 'I speak out' >

TyMo. / kewʌ̃ˈni:nekʌ̃ʔs /). This change occurs in the Tyendinaga dialect of Mohawk,

and may reflect the retention of an older, dialectal sound change whereby vowels in

penultimate syllables were lengthened when they preceded / Cɹ / clusters and / nk /

(i.e. before / e / was inserted into these clusters by MO-3, MO-4, MO-9, and MO-10).

Phonological changes that have occurred in Mohawk dialects are recapitulated in

(3).

(3)   Phonological Changes in Mohawk Dialects

MO-D1	ɹ > l	AkMo
MO-D2	t > k / _j	AkMo
MO-D3	ɹ > ɭ	CaMo, OkMo, WaMo
MO-D4	k > t / _j	CaMo, OkMo, WaMo
MO-D5	wə̃ > ũ / h, s_	AkMo, CaMo, OkMo, WaMo
MO-D6	j > Ø / ts_	AkMo, CaMo, OkMo, WaMo
MO-D7	'V^1 > 'Vː^1 / _CeɹV, nekV	TyMo

In addition to the phonemic changes in (3), certain phonetic changes have occurred in Mohawk dialects as well. In the Akwesasne dialect, / ts / is realized as [dʒ] before vowels (e.g. Mo. / oˈtsîːtsjaʔ / 'flower → AkMo. / oˈtsîːtsaʔ / [ʊˈdʒîːdʒɐʔ]). In the Caughnawaga, Oka, and Wahta dialects, / ts / is realized as [dz] before vowels (e.g. Mo. / oˈtsîːtsjaʔ / 'flower → CaMo. / oˈtsîːtsaʔ / [ʊˈdzîːdzɐʔ]), while / t / is realized as [dʒ] before / j / and as [tʃ] before / hj / (e.g. Mo. / ˈsatjʌ̃ / 'sit!' → CaMo. [ˈzadʒjʌ̃]; Mo. / ˈthjʌ̃̂ːʔa / 'your son' → CaMo. [tʃhjʌ̃̂ːʔɐ]). In the Six Nations and Tyendinaga dialects, / hs / is realized as [hʃ] before / i / (e.g. Mo. / ohˈsîːtaʔ / 'foot' → SNMo [ʊhˈʃîːdɐʔ] 'foot'). In the Akwesasne, Caughnawaga, Oka, and Wahta dialects, the cluster / wh / is realized as [f] (e.g. Mo. / oʔˈwhahsaʔ / 'skirt' → AkMo. [ʊʔˈfahsɐʔ]).

11.4 MORPHOLOGICAL CHANGES

The position class template of Mohawk prepronominal prefixes appears to be the same as that of PMO, though the partitive and coincident prefixes (both belonging to position class 1) are attested together in Old Mohawk in at least one instance as / naʔshaʔ /: OMo. / ˈtekni waʔthaˈɹiːjoʔ ohˈkʷaːɹiʔ kə̃ʔ naʔshaʔˈteːwaʔ / < Tegni 8atario ok8ari kennasate8a > 'il a tué deux ours d'égale grandeur' (Bruyas 1863:21). The initial cluster * / tsh / of the PMO coincident prefix has unexpectedly become / sh / in Mohawk, a change that was evidently already present in Old Mohawk (cf. OMo. < Sate8a > 'aussi grand l'un que l'autre' (Bruyas 1863:21), modern Mo. / shaʔˈteːwaʔ / 'they are the same size'). An overt factual prefix allomorph / ũ / occurred word-initially before the cislocative and repetitive prefixes in at least some dialects of Old Mohawk, cf. / ũtahaˈjâːtʌ̃ʔneʔ / < Ontahajatenne > 'il est tombé d'en haut' (Bruyas 1863:110); / ũsahaʔˈnjaːkʌ̃ʔneʔ / < Onsahanniagenne > 'il s'est enfuy, il est guéri' (Bruyas 1863:75); curiously most dialects of Huron had an allomorph / õ / that occurred in the same environment, while Modern Mohawk has an allomorph / Ø /, in keeping with PNI and PMO. Also in common with dialectal Huron, at least some dialects of Old Mohawk had a cislocative allomorph / et / that occurred word-initially before a following consonant, cf. / ethojaʔˈtʌ̂ːʔũ / < Eθojateñon > 'il est tombé

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d'en haut' (Bruyas 1863:110); / eˈtjôːkaɹaʔs / <Etiogaras> 'il fait nuit'

(Bruyas 1863:21). Modern Mohawk has / t / in this environment, again in keeping with

PNI and PMO.

Several changes have occurred in the pronominal prefix inventory of Common

Mohawk relative to PMO. The first of these is the change of the 3PLM:3 allomorphs

* / ɹ$\tilde{\text{a}}$n / and * / h$\tilde{\text{a}}$n / [060] to / ɹ$\tilde{\text{u}}$n / and / h$\tilde{\text{u}}$n / respectively, likely by analogy with

the 3PL:3 allomorph / k$\tilde{\text{u}}$n /, which occurs in the same environment. Second is the

apparent change of the PMO sequence * / hetshe / to / hetshi / in four pronominal

prefixes, yielding Mohawk { hetshiseni } '2DU&3M' [032], { hetshisewa } '2PL&3M' [034],

{ hetshiteni } '1 + 2DU:3M' [037], and { hetshitewa } '1 + 2PL:3M' [039]. Change of the vowel

/ e / to / i / in these forms may be linked to allomorphy associated with the basic

prefixes { seni } '2DU&3', { sewa } '2PL&3', { teni } '1 + 2DU:3', and { tewa } '1 + 2PL:3',

which constitute four of the five pronominal prefixes normally preceded by cislocative

and repetitive prefix allomorphs / ti / [010] and / tsi / [011] rather than / te / and / se /.

In the Caughnawaga dialect of Mohawk the initial element / he / has been lost in

pronominal prefixes, e.g. Mo. / hetsheˈn$\hat{\tilde{\text{u}}}$ːweʔs / 'you (singular) like him' →

CaMo. / tsheˈn$\hat{\tilde{\text{u}}}$ːweʔs /; Mo. / hetshiseniˈn$\hat{\tilde{\text{u}}}$ːweʔs / 'you (dual) like him' →

CaMo. / tshiseniˈn$\hat{\tilde{\text{u}}}$ːweʔs / (Deering & Delisle 1976:384). In the Caughnawaga, Oka,

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and Wahta dialects, imperative pronominal prefix allomorphs are now regularly used

even in non-imperative verbs, e.g. Mo. / skwaˈjʌ̂:ʔa / 'you are our father' →

OkMo. / takwaˈjʌ̂:ʔa / (Cuoq 1873:15); Mo. / ˈsiːtʌ̃hɹeʔ / 'you (singular) feel pity' →

CaMo. / ˈtsiːtʌ̃hḽeʔ / (Deering & Delisle 1976:25).

   The consonants and clusters before which a reflex of epenthetic * / e / appears in

Old Mohawk prefix allomorphs appear to have been unchanged relative to PMO

(see 10.4). Consonants and clusters before which the 1SG:3 pronominal prefix

allomorphs / k / and / ke / occur in modern Mohawk are presented in (4).

(4)   Distribution of Prefix Allomorphs with Epenthetic / e / in Mohawk (1SG:3)

         / k /   _hV, hjV (< PMO * hjV), hnV, hnjV, hɹV, hɹjV, hsV, hsCV, htsV, hwV,
                  jV (< PNI * jV), kV, kʷV, ɹV, tV (< PNI * tV), tsV.

         / ke /   _hj (< PMO * wjh), jVʔ (< PNI * jʔ), tVʔ (< PNI * tʔ),
                  and all remaining consonants and clusters.

   The imperfective suffix / hsk / [109], still present in Old Mohawk (cf. Bruyas 1863),

has been reduced to / hs / in Common Mohawk (e.g. PMO * / ˈkũːnihsk / 'I make it' [260]

→ Mo. / ˈkũːnihs /; PMO / kkaˈɹhathohsk / 'I turn it over' [327] → Mo. / kkaˈɹhathohs /).

An aspectual suffix / eʔ / has been added to virtually all perfect and punctual verb

forms that still end in a non-glottal consonant (e.g. PMO / aːjũˈteːkaʔt /

'she would light a fire' [165] → Mo. / aːjṹˈteːkaʔteʔ /; PMO * / ʌ̃ˈjoːtek /

'it will be burning' [164] → Mo. / ʌ̃ˈjoːtekeʔ /; PMO * / kaˈnṹhsot / 'there is a house' [382] [397]

→ Mo. / kaˈnṹhsoteʔ /).

CHAPTER 12: ONEIDA

12.1 INTRODUCTION

This chapter describes the language of the Oneida (/ onʌ̃jotaʔaːˈkâː / 'People of

the standing stone'), whose territory in the early seventeenth century appears to have

ranged from Oneida Lake in the west, bordering on the territory of the Onondaga, to

Trenton Falls in the east, bordering on the territory of the Mohawk, north to the Black

River, and south into what is now northern Pennsylvania (cf. Engelbrecht 2003:122,

village locations in Swanton 1968:35; see Map 6). Today speakers of Oneida are located

primarily on the Oneida Nation of the Thames Reserve in southwestern Ontario and on

the Oneida Nation of Wisconsin Reservation in eastern Wisconsin.

The Oneida were in contact with the Jesuits and other Europeans beginning in the

mid-seventeenth century, but the names of Oneida chiefs and settlements are invariably

given in Huron or Mohawk in early sources; the earliest missionary publications written

for the Oneida, which date from 1810, are actually written in Mohawk, owing to the

fact that the Anglican missionary who wrote them, Eleazar Williams (1787-1858), was a

Mohawk from Caughnawaga. The first publication in authentic Oneida seems to be

A Collection of Hymns in the Oneida Language (Sickles 1855), written by the Wesleyan

missionary Abraham W. Sickles (1810-1884), an Oneida from New York State who had

relocated to the Thames community in Upper Canada in 1840.

Because virtually all of the 28 sound changes that separate Oneida from PMO

involve accent, glottal consonants, or devoiced vowels (which are not rendered

systematically in older orthographies, if at all), it is difficult to determine how many of

these changes were already present in nineteenth-century Oneida; the shift of

PMO * / ɹ / to Oneida / l / does not appear to have been complete until relatively

recently, as documents from Ontario and Wisconsin continue to show both <r> and

<l> into the late nineteenth century. The modern Ontario and Wisconsin dialects of

Oneida are differentiated to some extent by vocabulary, and by a single sound change

involving accent, which will be described in 12.3.

Oneida texts are in Michelson (1981b), and grammars are in Lounsbury (1953) and

Abbott (2000). Dictionaries are in Abbott (1996) and Michelson and Doxtator (2002).

Unless otherwise stated, Oneida Forms in this chapter are based on data from Michelson

& Doxtator (2002).

12.2 PHONEMIC INVENTORY

The phonemic inventory of Oneida is presented in (1).

(1)   Phonemic Inventory of Oneida

CONSONANTS

	Alveolar	Palatal	Velar	Glottal
Plosive	t		k kʷ	ʔ
Nasal	n			
Fricative	s			h
Affricate	ts			
Approximant		j	w	
Lateral Approximant	l			

VOWELS

	Front	Central	Back
Close	iː		ũː
	i		ũ
Mid	eː	ʌ̃ː	oː
	e	ʌ̃	o
Open		aː	
		a	

The PMO phoneme * / ɹ / has shifted to / l / in Oneida. The plosives / t /, / k /,

and / kʷ / have voiced allophones [d], [g], and [gʷ] respectively before vowels and

resonants. The phoneme / s / has an allophone [z] word-initially before vowels and

resonants other than / j /, as well as word-internally between vowels and resonants

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other than / j /. The affricate / ts / is realized as [dʒ] before / i / and / j / and as

[tʃ] before / hi / and / hj /. The fricative / s / is realized as [ʃ] before / hj / and

/ j /. The short vowels / a /, / e /, and / o / are realized as [ɐ], [ɛ], and [ʊ] in

unstressed syllables.

12.3 PHONOLOGICAL CHANGES

Phonological changes that have occurred during the transition from PMO to

Common Oneida are described below as OE-1 through OE-28. Unique to Oneida are

twelve phonological changes that have applied to words only in pre-pausal position,

and which are characterized primarily by the devoicing of one or more segments at the

end of a word. Pre-pausal phonological changes have been described in considerable

detail by Michelson (1988:80-89), and at least some of the changes are lexically

conditioned; twelve pre-pausal (PP) sound changes which can account for remaining

forms in Michelson & Doxtator (2002) are presented as OE-17 through OE-28 below.

Where ordering of any two changes appears to be necessary in order to produce a

correct output in Oneida, this has been noted.

By OE-1, accent has shifted from a long vowel without falling tone to the vowel of

the following syllable (e.g. PMO * / othahˈjũːni / ˈwolf [169] > Oe. / othahjũːˈni /;

PMO * / aʔˈnoːwaɹ / 'turtle' [203] > Oe. / aʔnoˈwal /; PMO * / ohˈneːkaʔ /

'water, liquid' [364] > Oe. / ohneːˈkâ: /). This change must precede OE-2, OE-3, OE-12,

OE-13, OE-14, and OE-16. (cf. also Chafe 1977a:172, Michelson 1988:68).

By OE-2, accented vowels immediately followed by a glottal stop have been

lengthened and acquired falling tone (e.g. PMO * / oˈkaːɹaʔ / 'story' [325] >

Oe. / okaːˈlâ: /; PMO * / oˈɹaːtaʔ / 'heel' [419] > Oe. / olaːˈtâ: /; PMO * / ohˈneːkaʔ /

'water, liquid' [364] > Oe. / ohneːˈkâ: /). This change must follow OE-1, and precede

OE-3 and OE-16. (cf. also Michelson 1988:72).

By OE-3, * / ʔ / has been lost after an accented long vowel (e.g. PMO * / ˈôːʔaɹeʔ /

'net' [198] > Oe. / ˈôːaleʔ /; PMO * / johˈtũ̂ːʔũ / 'it has vanished' [145] > Oe. / johˈtũ̂ːũ /;

PMO * / waˈknî:ʔũ / 'I am stingy' [371] > Oe. / waˈknî:ũ /). This change must follow OE-1

and OE-2, and precede OE-16. (cf. also Michelson 1988:75).

By OE-4, * / i / has been inserted between * / n / and * / k / or * / kʷ / when the

cluster occurred intervocalically, was preceded by a vowel, or was preceded by * / t /

and followed by a vowel (e.g. PMO * / oˈnkôːɹhaʔ / 'wampum' [375] >

Oe. / oniˈkôːlhaʔ /; PMO * / oˈnkʷã̃hsaʔ / 'blood' [376] > Oe. / oniˈkʷã̃hsaʔ /;

PMO * / jũtnkʷã̃htaˈɹaɹhohs / 'she coats herself with red' [377] [424] >

Oe. / jũtnikʷã̃htaˈlalhos /). This change represents phonemicization in select

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environments of the phonetic vowel * [ɪ] that was apparently used to break up

instances of the cluster * / nk / in PMO and which has become / e / throughout in

Mohawk (cf. Mo. / oneˈkôːɹhaʔ / 'wampum', / oneˈkʷʌ̃hsaʔ / 'blood').

By OE-5, * / ths / has become * / tsh / (e.g. PMO * / aˈthsinhaʔ / 'garter' [172] >

Oe. / aˈtshinhaʔ /; PMO * / kathsaˈʔahthaʔ / 'I burn it' [173] > Oe. / katshaˈʔathaʔ /).

This change must precede OE-11.

By OE-6, the cluster * / hs / has metathesized to * / sh / before * / n / or * / w /

(e.g. PMO * / johˈsnoːɹeʔ / 'it is fast' [258] > Oe. / joshnoːˈlê: /; PMO * / ohˈsnũhsaʔ /

'hand' [257] > Oe. / oˈshnũhsaʔ /; PMO * / ˈohswaʔ / 'back' [264] > Oe. / ˈoshwaʔ /).

By OE-7, * / h / has been lost when it occurred before another consonant plus

* / h / (e.g. PMO * / kahˈsehthaʔ / 'I hide it' [146] > Oe. / kahˈsethaʔ /;

PMO * / jũtekaʔˈtahkhwaʔ / 'battefeu' [166] > Oe. / jũtekaʔˈtakhwaʔ / 'lighter';

PMO * / teˈwahshʌ / 'twenty' [135] > Oe. / teˈwashʌ /) (cf. also Michelson 1988:18), and

by OE-8, * / h / has been lost when it occurred after * / k / and before * / s / or

* / ts / (e.g. PMO * / ˈikhsaʔas / 'I finish it' [266] > Oe. / ˈiksaʔas /; PMO * / aˈkhtsîːʔa /

or / aˈkhtsiha / 'my older sister' [267] > Oe. / aˈktsiha /). (cf. also Michelson 1988:19).

By OE-9, * / h / has been lost when it occurred before the clusters * / sk / and

* / st / (e.g. PMO * / ˈwihsk / 'five' [273] > Oe. / ˈwisk /; PMO * / teˈkjehsthaʔ /

'I mix it' [300] > Oe. / teˈkjestaʔ /; PMO * / ˈknʌ̃hskʷahs / 'I steal it' [368] >

Oe. / ˈknʌ̃skʷas /), and by OE-10, * / h / has been lost when it occurred after * / st / or

* / tst / (e.g. PMO * / katjenaˈwahsthaʔ / 'I keep it' [177] > Oe. / katjenaˈwastaʔ /;

PMO * / teˈkjehsthaʔ / 'I mix it' [300] > Oe. / teˈkjestaʔ /).

(cf. also Michelson 1988:18-19).

By OE-11, * / h / has been lost between * / ts / and * / ɹ /

(e.g. PMO * / atʌ̃ˈnâːtshɹaʔ / 'provisions' [168] > Oe. / atʌ̃ˈnâːtslaʔ /;

PMO * / swatoˈkwâːtshɹat / 'one spoon' [159] [183] > Oe. / swatoˈkwâːtslat /;

PMO * / kanũhkʷaʔˈtshɹiːjo / 'good medicine' [279] [381] > Oe. / kanũhkʷaʔtsliːˈjo /),

though note that this change has not occurred in pre-pausal forms of words.

By OE-12, * / h / has been lost in post-tonic syllables when it occurred before a

resonant consonant (e.g. PMO * / ˈkêːjahɹeʔ / 'I remember' [210] > Oe. / ˈkêːjaleʔ /;

PMO * / waʔˈkahsohweʔ / 'I painted it' [268] > Oe. / waˈkahsoweʔ /). Similarly, by

OE-13, * / ʔ / has been lost in post-tonic syllables when it occurred before a resonant

consonant (e.g. PMO * / waˈkêːskoʔneʔ / 'I'm drowning' [497] > Oe. / waˈkêːskoneʔ /;

PMO * / waʔˈkêːskoʔweʔ / 'I fell in' [497] > Oe. / waʔˈkêːskoweʔ /). Both changes must

follow OE-1, and OE-13 must precede OE-14. (cf. also Michelson 1988:76).

By OE-14, * / ʔ / has become * / h / in post-tonic syllables when it occurred before

a consonant (e.g. PMO * / ˈwâːsʌ̃ʔs / 'it fell' [221] > Oe. / ˈwâːsʌ̃hseʔ /; PMO * / ˈʌ̃kjaʔk /

'I will cut it' [297] > Oe / ˈʌ̃kjahkeʔ /; PMO * / waʔkhejaˈtetsjʌ̃ʔt / 'I healed her' [167] >

Oe. / waʔkhejaˈtetsjʌ̃hteʔ /). This change must follow OE-1 and OE-13.

(cf. also Chafe 1977a:173, Michelson 1988:76).

By OE-15, * / ɹ / has become * / l / (e.g. PMO * / aʔˈnoːwaɹ / 'turtle' [203] >

Oe. / aʔnoːˈwal /; PMO * / oˈkaːɹaʔ / 'story' [325] > Oe. / okaːˈlâː /; PMO * / oˈɹaːtaʔ /

'heel' [419] > Oe. / olaːˈtâː /). (cf. also Mithun 1979:176).

By OE-16, accented long vowels with falling tone have been shortened and have lost

falling tone when they occurred before * / n / or * / w /

(e.g. PMO * / waʔˈkjaːkʌ̃ʔneʔ / 'I went out' [000] > / waʔkjaːˈk̂ʌ̃ːneʔ / >

Oe. / waʔkjaːˈkʌ̃neʔ /; PMO * / ũˈkiːtaʔw / 'I fell asleep' [000] > / ũkiːˈtâːweʔ / >

Oe. / ũkiːˈtaweʔ /). This change must follow OE-1, OE-2, and OE-3. (cf. also Michelson

1988:79-80).

By OE-17, pre-pausal word forms ending in a sequence * / CnV(H) / have inserted

* / e / before * / n / (e.g. / ˈtekni / 'two' → PP / ˈtekeni̥ /; / ˈisneʔ / 'you are going' →

PP / ˈiseni̥ẹʔ /), and by OE-18, pre-pausal word forms ending in a sequence * / ClV(H) /

have inserted * / e / before * / l / (e.g. / ohˈtsîːklaʔ / 'cloud' → PP / ohˈtsîːkel̥ạʔ /;

/ oˈnekliʔ / 'grass, straw, hay' → PP / oˈnekel̥ị̥ʔ /; / tehũtaˈtkâːnleʔ / 'they look at each

other' → PP / tehũtaˈtkâ:nel̥e̥ʔ /; / tehsahˈsũtlə̃ / 'plug it in!' → PP / tehsahˈsutelə̃ /).

Both changes must precede OE-21, OE-23, and OE-24. (cf. also Michelson 1988:85).

By OE-19, pre-pausal word forms ending in a sequence * / CwV(H) / have inserted * / o / before * / w / (e.g. / ˈitweʔ / 'we are going' → PP / ˈitow̥e̥ʔ /), and by OE-20, pre-pausal word forms ending in a sequence * / CjV(H) / have inserted * / i / before * / j / (e.g. / ˈkatjeʔ / 'it's flying' → PP / ˈkatij̥e̥ʔ /, subsequently / ˈkatiʔ / by OE-26; / tajohtsiʔˈklatjeʔ / 'it's getting cloudy' → PP / tajohtsiʔˈklatij̥e̥ʔ /, subsequently / tajohtsiʔˈklatiʔ / by OE-26; / waˈtaljũʔ / 'there are many inside' → PP / waˈtalij̥ũ̥ʔ /, subsequently / waˈtaliʔ / by OE-26). Both changes must precede OE-21, OE-23, and OE-24, and OE-20 must also precede OE-26.

By OE-21, pre-pausal word forms ending in a sequence * / $\hat{V}$:C(C)V(H) / have devoiced all segments from the falling tone of the long vowel to the end of the word (e.g. / skô:na / 'go get it!' → PP / skô̥:n̥ḁ /; / shneˈkî:la / 'drink!' → PP / shneˈkî̥:lḁ /; / keˈshnû̃:ke / 'my hand' → PP / keˈshnû̥̃:k̥e̥ /; / ˈô:swãʔ / 'coal' → PP / ˈô̥:s̥w̥ḁ̃ʔ /; / aˈtshô:ktaʔ / 'hoe' → PP / aˈtshô̥:k̥tḁʔ /; / ʎwakiˈtâ:whaʔ / 'I will go to bed' → PP / ʎwakiˈtḁ̂:w̥hḁʔ /). This change must follow OE-17, OE-18, OE-19, and OE-20, and precede OE-23, OE-24, and OE-25.

By OE-22, pre-pausal word forms ending in a sequence * / C$\hat{V}$: / have devoiced all

segments from the consonant to the end of the word (e.g. / johjoʔthiːˈjê: / 'it is sharp'

→ PP / johjoʔthiːˈj ê̥: /; / wahatekhũːˈnî: / 'he would eat' → PP / wahatekhuːˈn̥î̥: /;

/ ãjewãnahnoːˈt ᷉ː / 'she will read' → PP / ãjewãnahnoːˈt̥ ᷉ː /).

By OE-23, pre-pausal word forms ending in a sequence * / CVʔ / have devoiced all

segments from the consonant to the end of the word (e.g. / joˈtekhaʔ / 'it burns' →

PP / joˈtekh ḁʔ̥ /; / jũknaʔˈtũkhwaʔ / 'she called me' → PP / jũknaʔˈtũkhw ḁʔ̥ /;

/ tahanhoˈtũkʷahteʔ / 'he threw the door open' → PP / tahanhoˈtũkʷaht e̥ʔ̥ /). Lexically

conditioned exceptions to OE-23 include the particles / ˈkiʔ / 'though' and / ˈjahtãʔ /

'not'. This change must follow OE-17, OE-18, OE-19, OE-20, and OE-21.

(cf. also Michelson 1988:82).

By OE-24, pre-pausal word forms ending in a resonant consonant plus a short vowel

have devoiced the final vowel (e.g. / akaːˈjũ / 'it is old' → PP / akaːˈj ṵ̃ /; / jothahiːˈnũ /

'the road goes' → PP / jothahiːˈn ṵ̃ /; / jũkjatatãːˈlã / 'we have some left over' →

PP / jũkjatatãːˈl ᷉ /). This change must follow OE-17, OE-18, OE-19, OE-20, and OE-21,

and precede OE-25.

By OE-25, pre-pausal word forms ending in a non-resonant consonant plus a short

vowel have devoiced both the consonant and the vowel (e.g. / saˈtketsko / 'get up!' →

PP / saˈtkets k̥o̥ /; / nijoʔtaˈrihã / 'it is that hot' → PP / nijoʔtaˈrih ᷉ /; / satnaʔtalũːˈtã /

'put the bread in the oven!' → PP / satnaʔtalũ:ˈt̻ʌ̃ /). This change must follow OE-21

and OE-24, and precede OE-26. (cf. also Michelson 1988:82).

By OE-26, pre-pausal word forms ending in a sequence * / CijV(H) / have dropped

* / jV / (e.g. PP / ˈkatijḛ̥ʔ / 'it's flying' → / ˈkatiʔ̥ /; PP / tajohtsiʔˈklatijḛ̥ʔ /

'it's getting cloudy' → / tajohtsiʔˈklatiʔ̥ /; PP / waˈtalijṵ̃ʔ / 'there are many inside' →

/ waˈtaliʔ̥ /). This change must follow OE-20, OE-21, OE-23, OE-24, and OE-25.

(cf. also Michelson 1988:86).

By OE-27, pre-pausal word forms ending in a sequence * / ʔC / have changed

* / ʔ / to * / h / (e.g. / joˈtetshaʔt / 'it is scary' → PP / joˈtetshaht /; / tasaˈtawjaʔt /

'come in!' → PP / tasaˈtawjaht /; / ahˈsʌ̃hatũ̃ʔt / → PP / ahˈsʌ̃hatũ̃ht / 'Wednesday').

(cf. also Michelson 1988:89).

By OE-28, pre-pausal word-forms ending in a resonant consonant have devoiced it

(e.g. / ˈsahsow / 'colour it!' → PP / ˈsahsow̥ /).

Phonological changes that have occurred during the transition from PMO to Oneida

are recapitulated in (2).

(2)   Phonological Changes in the Transition from PMO to Oneida

OE-1 $'V^1{:}C^2V^3 > V^1{:}'C^2V^3$

OE-2 $'V^1 > '\hat{V}^1{:} / \_\text{ʔ}$

OE-3 $'\hat{V}^1{:}\text{ʔ} > '\hat{V}^1{:}$

OE-4 $\emptyset > i / Vn\_kV, Vn\_k^w, tn\_kV$

OE-5 $ths > tsh$

OE-6 $hs > sh / \_n, w$

OE-7 $h > \emptyset / \_Ch$

OE-8 $h > \emptyset / k\_s, ts$

OE-9 $h > \emptyset / \_sk, st$

OE-10 $h > \emptyset / st, tst\_$

OE-11 $h > \emptyset / ts\_\text{ɹ}$ (except in pre-pausal forms)

OE-12 $h > \emptyset / \_R$ (in post-tonic syllables)

OE-13 $\text{ʔ} > \emptyset / \_R$ (in post-tonic syllables)

OE-14 $\text{ʔ} > h / \_C$ (in post-tonic syllables)

OE-15 $\text{ɹ} > l$

OE-16 $'\hat{V}^1{:} > 'V^1 / \_n, w$

OE-17 $\emptyset > e / C\_nV(H)\#$ (pre-pausal forms only)

OE-18 $\emptyset > e / C\_lV(H)\#$ (pre-pausal forms only)

OE-19 $\emptyset > o / C\_wV(H)\#$ (pre-pausal forms only)

OE-20 $\emptyset > i / C\_jV(H)\#$ (pre-pausal forms only)

OE-21 $\hat{V}{:}^1C^2(C^3)V^4(H^5) > \mathring{\hat{V}}{:}^1\mathring{C}^2(\mathring{C}^3)\mathring{V}^4(\mathring{H}^5) / \_\#$ (pre-pausal forms only)

OE-22 $C^1\hat{V}{:}^2 > \mathring{C}^1\mathring{\hat{V}}{:}^2 / \_\#$ (pre-pausal forms only)

OE-23 $C^1V^2\text{ʔ} > \mathring{C}^1\mathring{V}^2\mathring{\text{ʔ}} / \_\#$ (pre-pausal forms only)

OE-24 $V^1 > \mathring{V}^1 / R\_\#$ (pre-pausal forms only)

OE-25 $C^1V^2 > \mathring{C}^1\mathring{V}^2 / \_\#$ (non-resonant C only, pre-pausal forms only)

OE-26 $jV > \emptyset / Ci\_(H)\#$ (pre-pausal forms only)

OE-27 $\text{ʔ} > h / \_C\#$ (pre-pausal forms only)

OE-28 $R^1 > \mathring{R}^1 / \_\#$ (pre-pausal forms only)

An additional phonological change, OE-D1, appears to have taken place in the

Ontario dialect of Oneida whereby an unaccented penultimate long vowel has

automatically been shortened before a syllable containing an accented short vowel

(e.g. Oe. / akʷeːˈkũ / > Ontario Oe. / akʷeˈkũ / 'all'; Oe. / kwaːˈnʌ̃ / >

Ontario Oe. / kwaˈnʌ̃ / 'it is big'; Oe. / wakatolaːˈtũ / > Ontario Oe. / wakatolaˈtũ /

'I have hunted'). The effect of OE-D1 has been that it eliminates the occurrence of long

vowels in words whenever the accented vowel itself is not long. OE-D1 does not apply

to pre-pausal forms.

12.4 MORPHOLOGICAL CHANGES

A number of unpredictable changes have occurred in the pronominal prefix

inventory of Oneida relative to PMO. First, the 2:1PL prefix allomorph * / kwʌ̃ / [015] has

added a syllable / ja / to yield / jakwʌ̃ / in Oneida; the analogical source of the added

syllable is unclear and it does not appear in other allomorphs of the prefix. The PMO

pronominal prefixes * { hetshesni } '2DU&3M' [032], * { hetsheswa } '2PL&3M' [034],

* { hetshetni } '1＋2DU:3M' [037], and * { hetshetwa } '1＋2PL:3M' [039] have been

shortened in Oneida to { hetsni }, { hetswa }, { hethni } and { hethwa }, respectively.

The PMO pronominal prefixes * { jo } '3:3SG' [054], * { ho } '3:3SGM' [055], * { jako }

'3:3I' [064], and * { shako } '3SGM:3I' [065] appear to have developed allomorphs / joj /,

/ hoj /, / jakoj /, and / shakoj /, which occur before bases in / o / and / ũ / when both

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the agent and the patient of a verb are animate (e.g. / waʔoː'jṹː / 'she gave it to her',

/ waʔshako'jũːni / 'he made it for them').

Reflexes of PMO pronominal prefixes that begin with * / h / or * / j / have lost this

consonant word-initially in Oneida (cf. PMO * / jesa / '3I:2SG' [029] → Oe. / esa /

word-initially; PMO * / hetshe / '2SG:3SGM' [024] → Oe. / etshe / word-initially).

Word-initial loss of * / j / in cognates of the pertinent prefixes has also occurred in

Onondaga, Cayuga, Seneca, Huron, and Wyandot, and has likely spread from one or

several of these into Oneida; word-initial loss of * / h / seems to be unique to Oneida.

The PMO reflexive prefix allomorph * / atʌn / [076] and semireflexive prefix allomorph

* / ʌn / [077] have become / atan / and / an / in Oneida.

The consonants and clusters before which a reflex of epenthetic * / e / appears in

Oneida prefix allomorphs seem to be essentially unchanged from PMO apart from the

effects of regular sound change, although bases beginning in / sC / (< PMO * / hsC /)

have apparently been added (cf. Michelson 1988:144). Consonants and clusters before

which the 1SG:3 pronominal prefix allomorphs / k / and / ke / occur in Oneida are

depicted in (3).

(3)   Distribution of Prefix Allomorphs with Epenthetic / e / in Oneida (1SG:3)

/ k /   _hV, hjV, hlV, hljV, hnV, hnjV, hsV¹ (→ sV¹), htsV¹ (→ tsV¹),
              hwV, jV (< PNI * jV), kV, kʷV, lV (< PNI * ɹV), nV,
              tV (< PNI * tV), tsV, wV.

/ ke /   _jVʔ (< PNI * jʔ), lVʔ (< PNI * ɹʔ), tVʔ (< PNI * tʔ),
              and all remaining consonants and clusters.

No distinction is made in Oneida between present and imperfective bases and the

language instead has habitual bases. The PMO present suffix * / hs / ¹⁰⁵ and

imperfective suffix * / hsk / ¹⁰⁹ have become / s / in Oneida following / a /, / o / or a

consonant and have become * / heʔ / elsewhere (e.g. PMO * / ˈkhɹeːnahs / 'I cut it' ²⁹⁷

→ Oe. / khleˈnas /; PMO * / kkaˈɹhathohsk / 'I turn it over' ³²⁷ → Oe. / kkaˈlhathos /

'I'm plowing'; PMO * / kaˈtoːɹaths / 'I'm hunting' ¹⁸⁴ → Oe. / katoːˈlats /;

PMO * / kaˈtaːtihsk / 'I speak' ¹⁶⁰ → Oe. / kataːˈtiheʔ /; PMO * / ˈkatjʌ̃hsk / 'I sit' ³⁰⁶ →

Oe. / ˈkatjʌ̃heʔ /). An aspectual suffix / eʔ / has been added to virtually all

non-imperative verb forms ending in a non-glottal consonant, including forms with final

/ ʔs / and / hs /, but excluding other forms ending in / s / (e.g. PMO. * / aːjũ̃ˈteːkaʔt /

'she would light a fire' ¹⁶⁵ → Oe. / ajũ̃teːˈkâːteʔ /; PMO * / ʌ̃ˈjoːtek / 'it will be

burning' ¹⁶⁴ → Oe. / ʌ̃joːˈtekeʔ /; PMO * / waˈkjʌ̃ːtaʔs / 'I obtain it' ³⁰⁹ →

Oe. / wakjʌ̃ːˈtâːseʔ /; PMO * / tejaˈkjatɹaʔs / 'we meet' ¹⁸⁷ → Oe. / tejaˈkjatlahseʔ /).

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The augmentative suffix of Oneida has the form { -kô: } rather than { -ko:waʔ }, the

decessive suffix has the form { -kʌ̃ }, and the intensifier suffix has a form { -tsiʔ } rather

than { -tsi }.

CHAPTER 13: ONONDAGA

13.1 INTRODUCTION

This chapter describes the language of the Onondaga (/ onũtaʔkéˈhaʔ / 'People

of the hill'), whose territory in the early seventeenth century appears to have ranged

from Skaneateles Lake in the west, bordering on the territory of the Cayuga, to Oneida

Lake in the east, bordering on the territory of the Oneida, north to Lake Ontario, and

perhaps south to the Chenango Forks (cf. Engelbrecht 2003:121, village locations in

Swanton 1968:35; see Map 6). Today speakers of Onondaga are located on the Six

Nations of the Grand River Reserve in southwestern Ontario and on the Onondaga

Nation Reservation in central New York State.

Following Mohawk, Onondaga is the earliest of the Five Nations languages to be

attested. The earliest surviving vocabulary of Onondaga is an anonymous seventeenth-

century Jesuit dictionary, reproduced in Shea (1860). The Shea dictionary contains an

extremely conservative stage of the language, here referred to as Archaic Onondaga,

which is characterized both by the presence of a phoneme / ɹ / and by the presence of a

contrast between / ʃ /, the reflex of PNI * / s /, and / s /, the reflex of PNI * / ts /, in

most environments. The next sources available are a mid-eighteenth-century manuscript

dictionary, written by the Moravian missionary David Zeisberger (1721-1808) and

published in 1887, and a grammar by Zeisberger, published in 1888. The Zeisberger

material contains a stage of the language here referred to as Old Onondaga, in which

the phoneme / ɹ / is still present, but the earlier contrast between / ʃ / and / s / has

been lost, both reflexes having merged as a single phoneme / s /. Modern Onondaga,

which dates from the late eighteenth or early nineteenth century, is in turn

characterized by loss of the phoneme / ɹ /.

Two dialects of Modern Onondaga exist, one at Six Nations of the Grand River

Reserve in Ontario and the other at Onondaga Nation Reservation in New York State.

The Ontario and New York dialects differ mainly with regard to vocabulary

(cf. Woodbury 2003:1) rather than general phonology; forms presented in this chapter

reflect Common Modern Onondaga, a reconstructed form of the language that predates

separation of the two dialects.

A text in Modern Onondaga is in Woodbury (1992), and a grammatical sketch of

the modern language is in Chafe (1970a). A dictionary of Archaic Onondaga is in Shea

(1860), a dictionary of Old Onondaga in Zeisberger (1887), and a dictionary of Modern

Onondaga in Woodbury (2003). Unless otherwise stated, Modern Onondaga forms in

this chapter are based on data in Woodbury (2003).

13.2 PHONEMIC INVENTORY

The phonemic inventory of Modern Onondaga is presented in (1).

(1)   Phonemic Inventory of Modern Onondaga

CONSONANTS

	Alveolar	Palatal	Velar	Glottal
Plosive	t		k kʷ	ʔ
Nasal	n			
Fricative	s			h
Affricate	ts			
Approximant		j	w	

VOWELS

	Front	Central	Back
Close	iː		ũː
	i		ũ
Mid	eː ẽː		oː
	e ẽ		o
Open	æː	aː	
	æ	a	

The phonemic inventory of Archaic Onondaga appears to have differed from that of

Modern Onondaga in having the additional phonemes / ʃ / and / ɹ /, and lacking the

phonemes / æ: / and / æ /. Jesuit orthography suggests that the phoneme / ts /

(orthographic <tz>, <dz> or <tg> before / i / and / j /; <tch> elsewhere) was

realized as [tʃ] in most environments. Old Onondaga seems to have lost the / ʃ / : / s /

contrast of Archaic Onondaga but retained the phoneme / ɹ /; Modern Onondaga has

lost / ɹ /, and the phonemes / æ: / and / æ / have developed from other vowels as a

result of r-loss.

The phonemes / t /, / k / and / kʷ / have voiced allophones [d], [g], and [gʷ]

respectively in Modern Onondaga before vowels and resonant consonants. The affricate

/ ts / is realized as [dʒ] before / i / and / j / and as [tʃ] before / hi / and / hj /; the

fricative / s / is realized as [ʃ] before / hi / and / hj / (cf. Woodbury 2003:7).

The short vowels / a / and / e / have allophones [ɐ] and [ɛ] in unaccented syllables

(cf. Woodbury 2003:7).

Forms in Archaic and Old Onondaga suggest that the language formerly employed

an epenthetic phonetic vowel, represented orthographically by <e> or <i>, to break

up / Cr / clusters, cf. PNI * / ˈtekɹõʔ / ˈeightˈ [439], AOo. <tegueron> (Shea 1860:6),

OOo. <Tèkiro> (Zeisberger 1888:8), modern Oo. / ˈté:kẽ:ʔ /; PNI * / ˈwaʔtɹõh /

ˈnineˈ [222], AOo. <8aderon> (Shea 1860:6), OOo. <Watiro> (Zeisberger 1888:8),

modern Oo. / ˈwáʔtẽ:h /. As noted by Woodbury (1981:112) and Michelson (1988:180),

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the presence of the epenthetic vowel likely accounts for phonemic vowel length in resultant reflexes, via a developmental sequence of the type * [dɹẽ] > [dɪɹẽ] > [dɪẽ] > [dẽː], * [sɹi] > [sɪɹi] > [sɹi] > [siː], (cf. OO-26 below). The former presence of an epenthetic phonetic vowel between consonants and resonants may also account for the fact that a sequence / CRV / at the beginning of a word counts as two syllables in determining odd-numbered versus even-numbered syllables in modern Onondaga (cf. Michelson 1988:96 and OO-19 below).

13.3 PHONOLOGICAL CHANGES

Phonological changes that have occurred during the transition from PNI to Modern Onondaga are described below as OO-1 through OO-32. Where ordering of any two changes appears necessary in order to produce a correct output in Onondaga, this has been noted.

By OO-1, * / s / appears to have become * / ʃ / except after * / n / or when it was part of the unit affricate * / ts /. This change cannot be illustrated in the modern language due to subsequent merger of the phoneme / ʃ / with / s /, but was present in Archaic Onondaga (cf. PNI * / ˈahsẽh / 'three' [140] > AOo. / ˈahʃẽh / <achen> (Shea 1860:7); PNI * / ˈsɹõtjaʔks / 'you fell a tree' [297] [431] > AOo. / ˈʃɹõtjaʔkʃ /

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<chrontiakch> (Shea 1860:10); PNI * / ˈsnẽhskʷahs / ˈyou steal itˈ [368] >

AOo. / ˈʃnẽhʃkʷahʃ / <chnenchk8ach> (Shea 1860:58); but PNI * / ɹaˈkenskʷahs /

ˈhe lifts itˈ [331] > Oo. / háˈketskʷas /, rather than [x] / haˈkeʃkʷahʃ / and eventually

[x] / háˈkeskʷas / by OO-21; PNI * / otsaˈheʔtaʔ / ˈbeansˈ [451] > Oo. / ohsáˈheʔtaʔ /, rather

than [x] / otʃaˈheʔtaʔ / and eventually [x] / otsáˈheʔtaʔ / by OO-21). This change must

precede OO-2, OO-3, OO-4, OO-5, OO-11, and OO-12.

By OO-2, * / ts / has become * / hs / intervocallically except before * / i /

(cf. PNI * / ˈatsõh / ˈnot yet, stillˈ [148] > Oo. / ˈáhsũh /; PNI * / ˈatseːʔ / ˈnewˈ [189] >

Oo. / áhˈseʔ /; PNI * / otsaˈheʔtaʔ / ˈbeansˈ [451] > Oo. / ohsáˈheʔtaʔ /; but cf.

PNI * / otsiˈkheʔtaʔ / ˈsaltˈ [456] > Oo. / otsíˈkheʔtaʔ /). This change was already present

in Archaic Onondaga, cf. <àson> ˈpas encoreˈ (Shea 1860:8); it must follow OO-1 and

precede OO-3, OO-17, OO-18, and OO-30.

By OO-3, * / ts / has become * / s / except when followed by * / h /, * / i /, or

* / j / (e.g. PNI * / oʔˈnitskʷẽh / ˈit is lateˈ [492] > Oo. / óʔˈniskʷẽh /;

PNI * / ɹaˈjẽtsɹõhs / ˈhe skins itˈ [312] > Oo. / háˈjẽshæːs /; PNI * / ɹoʔˈtskoʔõh /

ˈhe has drownedˈ [497] > Oo. / hóʔˈskoʔih /; but cf. PNI / ohˈnitshaʔ / ˈthighˈ [238] >

Oo. / óhˈnitshaʔ /; PNI * / otsiˈkheʔtaʔ / ˈsaltˈ [456] > Oo. / otsíˈkheʔtaʔ /;

PNI * / ˈtsjaːtahk / ˈsevenˈ [464] > Oo. / ˈtsjáːtak /). This change seems already to have

been present in Archaic Onondaga, cf. / skeʔˈnja:kẽʔs / <skeniaguens> 'je me sauve'

(Shea 1860:93), from PNI * / tskeʔˈnja:kẽʔts / [493] ; it must follow OO-1 and OO-2.

By OO-4, * / ns / has become * / ts / before * / k / or * / kʷ /

(e.g. PNI * / ɹẽniˈnskɹõtjeʔts / 'he spits' [174] [284] > Oo. / hẽníˈtskẽ:tjeʔs /;

PNI * / ɹaˈkenskʷahs / 'he lifts it' [331] > Oo. / háˈketskʷas /; PNI * / -nskõ:h /

'facilitative' [121] > Oo. / -tskũh /). This change seems already to have been present in

Archaic Onondaga, cf. / hẽniˈtskɹõtjeʔs / <hanitchkrondies> 'il crache' (Shea 1860:37);

/ haˈketskʷahʃ / <haguetchk8ach> 'il eleve en l'air' (Shea 1860:59). It must follow

OO-2 and OO-3, and precede OO-5.

By OO-5, * / n / has been lost before * / s / (e.g. PNI * / ˈansteh / 'outside' [155] >

Oo. / ˈásteh /; PNI * / ˈwahnshẽ:h / 'ten' [135] > Oo. / wáˈshẽh /; PNI * / joʔˈnshansteʔ /

'it is strong' [496] > Oo. / jóʔˈshatsteʔ /). This change was already present in Archaic

Onondaga, cf. <asté> 'Dehors' (Shea 1860:41). It must follow OO-1 and OO-4.

By OO-6, word accent has shifted from the penult to a long vowel in the final

syllable and subsequently vowels in both syllables have been shortened

(e.g. PNI * / ˈwahnshẽ:h / 'ten' [135] > Oo. / wáˈshẽh /; PNI * / ohaˈhi:joh /

'good road' [131] [279] > Oo. / ohahíˈjoh /; PNI * / jõˈkjõ:ni:h / 'we have made it' [260] >

Oo. / ũkjǘˈnih /). There are some exceptions to this change that remain unexplained

(e.g. PNI * / ɹaˈtoːɹaːths / 'he hunts' [184] > Oo. / háˈtoːwæts /; PNI * / ˈkaɹjoːʔ /

'animal' [000] > Oo. / ˈkáːjoʔ /). This change must precede OO-7 and OO-19, and would

thus appear already to have been present in Archaic Onondaga; its presence in Old

Onondaga is suggested by Zeisberger's diacritics, cf. <Wasshè> 'ten'

(Zeisberger 1888:8). (cf. also Chafe 1977a:175).

By OO-7, * / aɹa / has become * / aː / when neither vowel was accented

(e.g. PNI * / oˈnõtaɹaʔ / 'corn soup' [386] > Oo. / óˈnũːtaːʔ /; PNI * / oˈtsiʔnkʷaɹaʔ /

'green, yellow, bile' [461] > Oo. / óˈtsiʔtkʷaːʔ /; PNI * / oˈnaʔkaɹaʔ / 'horn, antler' [359] >

Oo. / óˈnaʔkaːʔ /; but cf. PNI * / ohˈkaːɹaʔ / 'wood chips' [134] > Oo. / óhˈkaːæʔ /). This

change was already present in Archaic Onondaga, cf. <onontaa> 'Soupe'

(Shea 1860:95). It must follow OO-6, and precede OO-11 and OO-29.

(cf. also Woodbury 1981:107).

By OO-8, * / jh / has become * / hj / (e.g. PNI * / kẽˈjhõhwaʔ / 'river' [278] >

Oo. / kḗhˈjũhwaʔ /). This change appears already to have been present in Archaic

Onondaga, cf. / skẽhˈjũhwateʔ / <skenhion8ate> 'Rivierre' (Shea 1860:91).

By OO-9, * / n / became * / t / before * / k / or * / kʷ / except when * / ʔ /

preceded (e.g. PNI * / oˈnkʷẽhtsaʔ / 'blood' [376] > Oo. / óˈtkʷẽhsaʔ /;

PNI * / oˈnkoʔɹhaʔ / 'wampum' [375] > Oo. / óˈtkoʔæʔ /; PNI * / khejaʔˈtinkẽʔts /

'I put someone out' [280] [298] > Oo. / kheja?'titkẽk /; but cf. PNI * / 'he?nkẽh / 'above' [214] > AOo. / 'he?nkẽh / <henkuen> (Shea 1860:8)); this change was already present in Archaic Onondaga, cf. / o'tkʷẽhsa? / <hotk8ensa> 'Sang' (Shea 1860:92), and must precede OO-10. By OO-10, * / n / has become * / t / before * / k / or * / kʷ / even when * / ? / preceded (e.g. PNI * / 'he?nkẽh / 'above' [214] > Oo. / hé?tkẽh /; PNI * / o'tsi?nkʷaɹa? / 'green, yellow, bile' [461] > Oo. / ó'tsitkʷa:? /). This change was not present in Archaic Onondaga, cf. / 'he?nkẽh / <henkuen> 'Dessus, en haut' (Shea 1860:8) and / o'tsi?nkʷa:? / <hotging8aa> 'Verd' (Shea 1860:101), but it was present in Old Onondaga, cf. <hĕtke> 'Above' (Zeisberger 1887:2) and <ozitquarócu> 'Yellow' (Zeisberger 1887:236). OO-10 must follow OO-9.

By OO-11, antepenultimate accent has shifted to * / a / in the penultimate syllable (e.g. PNI * / 'wẽtate? / 'there is a day' [219] [433] > Oo. / wẽ́'ta:te? / 'day'; PNI * / ka'ɹõhjate? / 'there is a sky' [430] [433] > Oo. / kaẽ́h'ja:te? / 'sky'; PNI * / ɹo'nahskʷajẽ? / 'he has a slave' [306] [353] > Oo. / honá'skʷa:jẽ? /). This change may or may not have been present in Archaic Onondaga, but is clearly present in Old Onondaga, cf. PNI * / ka'njataɹe? / 'there is a lake' [374] [413] > OOo. / kanja'ta:ɹe? / <Ganiatáre> 'the Sea' (Zeisberger 1888:4); PNI * / 'johate? / 'there is a path' [131] [433] > OOo. / jo'ha:te? / <Joháte> 'the Way' (Zeisberger 1888:4); PNI * / ka'natajẽ? / 'there

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is a village' [306] [356] → OOo. / kanaˈtaːjẽʔ / <ganatáje> 'a Town' (Zeisberger 1888:4). It

must follow OO-7, and precede OO-16 and OO-21.

By OO-12, the Archaic Onondaga phoneme * / ʃ / has merged with * / s /

(cf. AOo. / ˈahʃẽh / 'three' [140] > Oo. / ˈahsẽh /; AOo. / ˈʃɹõtjaʔkʃ / 'you fell a tree' [297] [431]

> Oo. / ˈsế:tjaʔks /; AOo. / ˈʃnẽhʃkʷahʃ / 'you steal it' [368] > Oo. / ˈsnẽskʷas /). This

change appears to have been present in Old Onondaga, cf. <àchso> 'three'

(Zeisberger 1887:198), <enúsquas> 'To Steal' (Zeisberger 1887:183), modern

Onondaga / éˈnẽskʷas / 'someone steals it'. It must follow OO-1.

By OO-13, * / n / has been lost between * / h / and * / ɹ / (e.g. PNI * / ˈɹohnɹẽːh /

'he has tied it' [240] > Oo. / hóˈhẽːh /; PNI * / ˈtshnɹĕk / 'tie it!' [240] > Oo. / ˈshế:kah /).

This change does not appear to have been present in Archaic Onondaga,

cf. / ehˈnɹẽhʃthaʔ / <henerinchta> 'Lien' (Shea 1860:67), but was present in Old

Onondaga, cf. / ˈshɹẽːkah / <srœ̃nge> 'tie it' (Zeisberger 1887:198). OO-13 must

precede OO-26.

By OO-14, * / h / has been lost between * / w / and * / j /

(e.g. PNI * / oˈwhjõhkaɹaʔ / 'thumb' [477] > Oo. / óːˈjũhkaːʔ /). This change does not

seem to have been present in Archaic Onondaga, cf. <ohionkaha> 'Pouce'

(Shea 1860:82), but does appear to have been present in Old Onondaga,

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cf. <ojúnchkara> 'Thumb' with <oj-> rather than <ochj-> (Zeisberger 1887:198).

It must precede OO-15.

By OO-15, vowels preceding the cluster * / wj / have been lengthened and * / w / lost (e.g. PNI * / ka'wjẽ:na? / 'manner' [484] > Oo. / ká:'jẽ:na? /; PNI * / ho'wjẽhõh / 'he has learned how' [483] → Oo. / hó:'jẽ?ih /). This change must follow OO-14.

By OO-16, accented vowels have been lengthened when they preceded either a single non-glottal consonant or a non-glottal consonant plus a resonant consonant (e.g. PNI * / 'knakɹe? / 'I reside' [354] > Oo. / 'kná:ke:? /; PNI * / khe'jatɹe? / 'my granddaughter' [188] > Oo. / khé'ja:te:? /; PNI * / wa'katjõh / 'I've thrown it out' [174] > Oo. / á'ka:tjũh /). This change may or may not have been present in Archaic and Old Onondaga; it must follow OO-11 and precede OO-26. (cf. also Michelson 1988:93).

By OO-17, * / hs / has become * / sh / after a consonant (e.g. PNI * / a'khsẽ:na? / 'my name' [247] > Oo. / á'kshẽ:na? /; PNI * / oh'swẽ?kaɹa? / 'board' [265] > Oo. / ó'shwẽ?ka:? /), and similarly, by OO-18, * / hts / has become * / tsh / after a consonant and before a vowel (e.g. PNI * / a'khtsi?a:h / 'my older sibling' [267] > Oo. / aktshí'?ah /). Both changes, which must follow OO-2, may or may not have been present in Archaic or Old Onondaga; if OO-17 was present in Archaic Onondaga then it has also applied to the cluster * / hʃ /.

By OO-19, vowels in even-numbered syllables have been lengthened before a single non-glottal consonant or a single non-glottal consonant plus resonant if the vowel of the following syllable was accented and long or accented and followed by a glottal consonant (e.g. PNI * / onõˈtaʔkeh / 'on the hill' [385] > Oo. / onṹːˈtaʔkeh /; PNI * / jekoˈwaːnẽh / 'she is big' [349] > Oo. / ekóːˈwaːnẽh /; PNI * / kaˈnatajẽʔ / 'there is a town' [306] [356] > Oo. / kanáːˈtaːjẽʔ / 'it is a town'). The examples Oo. / ũnṹːˈnjaːjẽh / 'it is frozen' vs. / ẽkanṹˈnjaːjẽʔ / 'it will freeze', and / akjṹːˈtjahaʔ / 'I'm laughing' vs. / ũkwajṹˈtjahaʔ / 'we are laughing' from Michelson (1988:94) illustrate application and non-application of pre-tonic lengthening in even-numbered versus odd-numbered syllables. Note that the joiner vowel * / a / does not appear to have been subject to this pre-tonic lengthening (Chafe 1977a:174, Michelson 1988:95), and that a sequence * / CRV / at the beginning of a word seems to have counted as two syllables in determining odd-numbered versus even-numbered syllables (Michelson 1988:96). This change may or may not have been present in Archaic and Old Onondaga; it must follow OO-6 and precede OO-26.

By OO-20, the vowel in the second syllable of a word of five or more syllables has been lengthened if it preceded a cluster consisting of a non-glottal consonant plus resonant (e.g. PNI * / tewakɹihˈwahkʷẽh / 'I have sung' [350] [427] >

Oo. / tewaːkíːhˈwahkʷẽh /; cf. Mithun 1979:175, Michelson 1988:97, Woodbury

2003:62). This change, which may or may not have been present in Archaic and Old

Onondaga, must precede OO-26.

By OO-21, high pitch has separated from accent and moved to the vowel of the

preceding syllable; if the vowel of the preceding syllable was the joiner vowel * / a /,

high pitch instead occurred on the vowel of the syllable preceding the joiner vowel

(e.g. PNI * / knoʔˈtsjaʔkeh / ˈ(on) my tooth' [380] > Oo. / knóʔˈtsjaʔkeh /;

PNI * / kaˈtsistajẽʔ / 'there is a fire' [306] [459] > Oo. / katsíˈstaːjẽʔ / 'there is a fireplace';

PNI * / waˈhetkẽʔ / 'it is bad' [132] > Oo. / wáˈhetkẽʔ /; cf. also Michelson 1988:92 and

Woodbury 2003:60). This change may or may not have been present in Archaic and

Old Onondaga; it must follow OO-11. (cf. also Mithun 1979:174).

By OO-22, * / a(ː) / has been fronted to * / æ(ː) / after * / r /

(e.g. PNI * / ˈkɹakwahs / 'I choose' [417] > Oo. / ˈkǽːkwas /; PNI * / ɹaˈɹaʔthẽhs /

'he climbs' [420] > Oo. / haǽʔˈthẽs /; PNI * / ˈjowɹateʔ / 'there is a wind' [433] [487] >

Oo. / óˈwæːteʔ / 'it is windy'). This change had not yet occurred in Old Onondaga,

where [æ(ː)], if present, was still an allophone of / a(ː) / after / ɹ /, and did not apply

to reflexes of pronominal prefixes containing a syllable * / ɹa / since, as noted by

Woodbury (1981:107), these sequences had already been levelled to / ha / in Archaic

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Onondaga, cf. AOo. <haratinha> '[il monte dans un chambre]' (Shea 1860:71). In a similar fashion, by OO-23, * / o(ː) / has been fronted to * / e(ː) / after * / ɹ / (e.g. PNI * / kawɹoˈwaːnẽh / 'a big wind' [349] [487] > Oo. / kaːéˈwaːnẽh /; PNI * / nikakaˈɹoʔtẽːh / 'that kind of story' [325] [401] > Oo. / nikakaéʔˈtẽh /). OO-23 had likewise not yet occurred in Old Onondaga and did not apply to reflexes of pronominal prefixes containing a syllable * / ɹo / since these sequences had already been levelled to / ho / in Archaic Onondaga, cf. AOo. / ˈhoːjẽʔ / <hoyen> '[il a]' [306] (Shea 1860:25).

Similarly, by OO-24, * / õ(ː) / has been fronted to * / ẽ(ː) / after * / ɹ / (e.g. PNI * / kaˈɹõːtaʔ / 'log, tree' [431] > Oo. / káˈẽːtaʔ /; PNI * / oˈɹõhjaʔ / 'sky, blue' [430] > Oo. / óˈwẽhjaʔ /; PNI * / ɹahˈɹõkhaʔ / 'he hears, he understands' [138] > Oo. / háˈhẽːkhaʔ /). This change was likewise not present in Old Onondaga, cf. <garõnta> 'Log' (Zeisberger 1887:115). OO-22, OO-23, and OO-24 must precede OO-26, OO-27, OO-28 and OO-29. (cf. also Mithun 1979:174, Woodbury 1981:116).

By OO-25, * / ɹ / has been lost before a consonant and a preceding vowel has been compensatorily lengthened (e.g. PNI * / ˈkaɹjoːʔ / 'animal' [429] > Oo. / ˈkáːjoʔ /; PNI * / tẽkkaɹhaˈteːniʔ / 'I will turn it' [326] > Oo. / tẽhkaːháˈteːniʔ /; PNI * / kajaʔˈtaɹhaʔ / 'there are beings on it' [298] [413] > Oo. / kajáʔˈtaːhaʔ / 'screen, television'). This change was not present in Old Onondaga, cf. <gárrio>

'Animal' (Zeisberger 1887:11); it must precede OO-29. (cf. also Woodbury 1981:112).

By OO-26, * / ɾ / has been lost after a consonant and before a vowel, with compensatory lengthening of the following vowel (e.g. PNI * / ˈtekɹõʔ / 'eight' [439] > Oo. / ˈté:kẽ:ʔ /; PNI * / ˈwaʔtɹõh / 'nine' [222] > Oo. / ˈwáʔtẽ:h /; PNI * / joˈjanɹeʔ / 'it is good' [295] > Oo. / óˈja:ne:ʔ /; PNI * / tẽkahˈsõtɹẽʔ / 'I will join it' [150] > Oo. / tẽkáhˈsũ:tẽ:ʔ /; PNI * / kaʔˈtsɹehtaʔ / 'it is used to pull, drag' [498] > Oo. / káʔˈse:htaʔ / 'car, vehicle'). An occasional exception to vowel lengthening involves the sequence * { -hɹæʔ- }, which sometimes yields the expected outcome { -hæ:ʔ- } (e.g. PNI * / kaʔniˈkõhɹaʔ / 'mind' [491] > Oo. / kaʔníˈkũhæ:ʔ /), and sometimes yields short { -hæʔ- } (e.g. PNI * / ohˈɹaʔtaʔ / 'feather' [243] > Oo. / óˈhæʔtaʔ /; PNI * / oˈkahɹaʔ / 'eye' [319] > Oo. / óˈkahæʔ /). OO-26 must follow OO-13, OO-16, OO-19, OO-20, OO-22, OO-23, and OO-24, and precede OO-29 and OO-30. (cf. also Woodbury 1981:113).

By OO-27, * / ɹ / has become * / j / intervocalically after * / e(:) /, * / ẽ(:) /, or * / i(:) / (e.g. PNI * / oˈwi:ɹaʔ / 'baby' [479] > Oo. / óˈwi:jæʔ /; PNI * / oˈhe:ɹaʔ / 'corn stalk' [224] > Oo. / óˈhe:jæʔ /; PNI * / akhwaˈtsi:ɹaʔ / 'my family' [269] > Oo. / akhwáˈtsi:jæʔ /), and this change was not present in Old Onondaga, cf. < gawìra > 'Baby' (Zeisberger 1887:17). Similarly, by OO-28, * / ɹ / has become

* / w / intervocalically after * / o / or * / õ / (e.g. PNI * / kaˈnoːɹõʔ / 'it is valuable' [393]

> Oo. / káˈnoːwẽʔ /; PNI * / johˈsnoːɹeʔ / 'it is fast' [258] > Oo. / óˈsnoːweʔ /;

PNI * / jakoˈthɹoːɹih / 'someone is telling it' [246] > Oo. / kóˈthoːwih /). This change was

likewise not present in Old Onondaga, cf. < gannorum > 'Valuable'

(Zeisberger 1887:215). OO-27 and OO-28 must follow OO-22, OO-23, and OO-24, and

precede OO-29. (cf. also Mithun 1979:174, Woodbury 1981:111, Michelson 1988:171).

By OO-29, * / ɹ / has been lost (e.g. PNI * / kaˈɹõːtaʔ / 'log, tree' [431] >

Oo. / káˈẽːtaʔ /; PNI * / kaˈɹẽːnaʔ / 'song' [422] > Oo. / káˈẽːnaʔ /; PNI * / kaˈjeːɹih /

'four' [320] > Oo. / kaˈjeːih /; PNI * / kaɹõhˈjaʔkeh / 'in the sky' [430] >

Oo. / kaẽ́hˈjaʔkeh /). This change, which must follow OO-7, OO-22, OO-23, OO-24,

OO-25, OO-26, OO-27 and OO-28, was not present in Old Onondaga, cf. < garõnta >

'Log' (Zeisberger 1887:115), < Gajeri > 'four' (Zeisberger 1888:7).

(cf. also Mithun 1979:174, Woodbury 1981, Chafe & Foster 1981:139).

By OO-30, * / h / has been lost before a consonant cluster containing two

non-resonant consonants, and before a non-resonant consonant at the end of a word,

and before the cluster * / sn / (e.g. PNI * / wathsˈʔahthaʔ / 'it gets used up' [173] >

Oo. / watsˈʔathaʔ /; PNI * / ˈknẽhskʷahs / 'I steal it' [368] > Oo. / ˈknẽ́skʷas /;

PNI * / ẽkehˈsɹõːniːhk / 'I will be making it' [260] > Oo. / ẽkehsẽ́ˈnik /;

PNI * / joh'sno:ɹeʔ / 'it is fast' [258] > Oo. / óˈsno:weʔ /). This change must follow OO-2,

OO-11, and OO-26, and by implication appears not to have been present in Archaic or

Old Onondaga.

By OO-31, * / k / has become * / h / before * / k / (e.g. PNI * / ˈwakkẽ:h /

'I have seen it' [332] > Oo. / áhˈkẽh /; PNI * / ˈwaʔkkẽʔ / 'I saw it' [332] >

Oo. / ˈwáʔhkẽʔ /). This change was not present in Old Onondaga, cf. <wakgéhha>

'I have seen' (Zeisberger 1888:30). (cf. also Mithun 1979:174).

By OO-32, * / õ(:) / has shifted to * / ũ(:) / (e.g. PNI * / õhˈwẽtsjaʔ / 'earth' [402] >

Oo. / ű́hˈwẽ:tsjaʔ /; PNI * / ˈõ:kʷeh / 'person' [405] > Oo. / ˈű́:kʷeh /; PNI * / ˈkõnheʔ /

'I am alive' [406] > Oo. / ˈkű́nheʔ /). It is not clear at what stage of the language this shift

took place.

Phonological changes that have occurred during the transition from PNI to Modern

Onondaga are recapitulated in (2).

(2)   Phonological Changes in the Transition from PNI to Modern Onondaga

OO-1	s > ʃ (except after n or when part of the unit affricate)
OO-2	ts > hs / V_V (except before i)
OO-3	ts > s (except before h, i, j)
OO-4	ns > ts / _k, kʷ
OO-5	n > Ø / _s
OO-6	ˈV^1(:)(C^2)(C^3)C^{4}V^5: > V^1(C^2)ˈ(C^3)C^{4}V^5
OO-7	aɹa > a: (unaccented syllables only)

OO-8	jh > hj
OO-9	n > t / _k, kʷ (except when a glottal stop precedes)
OO-10	n > t / _k, kʷ
OO-11	'V¹(C²)(C³)C⁴aC⁵V⁶ > V¹(C²)'(C³)C⁴aC⁵V⁶
OO-12	∫ > s
OO-13	n > Ø / h_ɹ
OO-14	h > Ø / w_j
OO-15	V¹w > V¹: / _ɹ, j
OO-16	'V¹ > 'V¹: / _C(R)V
OO-17	hs > sh / C_
OO-18	hts > tsh / C_V
OO-19	pre-tonic lengthening (see description)
OO-20	second syllable lengthening (see description)
OO-21	high pitch separating from accent (see description)
OO-22	a(:) > æ(:) / ɹ_
OO-23	o(:) > e(:) / ɹ_
OO-24	õ(:) > ẽ(:) / ɹ_
OO-25	V¹ɹ > V¹: / _C
OO-26	ɹV¹ > V¹: / C_
OO-27	ɹ > j / e(:), ẽ(:), i(:)_V
OO-28	ɹ > w / o(:), õ(:)_V
OO-29	ɹ > Ø
OO-30	h > Ø / _CC, _C# (where C is k, t, ts, or s, or where CC is sn)
OO-31	k > h / _k
OO-32	õ(:) > ũ(:)

Note that the changes in (2) that involve accent are realized only in Onondaga utterance-final forms; in contrast, Onondaga utterance-medial forms bear high pitch and accent on the final syllable, and instances of final / h / have been dropped except when a word already has final accent (e.g. Oo. / ˈáhsẽ̄h / 'three', / ahˈsế niwáˈshẽ̄h / 'thirty', / ahˈsế niwaˈshẽ́h ˈáhsẽ̄h / 'thirty three'). (cf. also Woodbury 2003:59). This pattern of

accenting the final syllable in utterance-medial forms is also found in Cayuga, albeit

without loss of word-final / h /.

13.4 MORPHOLOGICAL CHANGES

Initial * / j(a)h / of the translocative prepronominal prefix seems to have been

levelled to / h / in Onondaga, as also in Cayuga, Seneca, Huron, and Wyandot. As in

Cayuga and Proto-Mohawk-Oneida, the negative prefix cannot occur with modal

prefixes in Onondaga, and the contrastive prefix is substituted; the glottal stop of the

negative prefix induces loss of a following glide, as in Cayuga. The non-singular animate

prefix has been lost, with '3I' pronominal prefixes subsuming the scope of earlier non-

singular forms (e.g. Oo. { khe- } '1SG:3I, I act on someone *or* them'), as is also the case

in Proto-Mohawk-Oneida and Seneca.

Archaic and Old Onondaga retained * / ɹ / in allomorphs of the 3SGM:3 prefix that

occurred before bases beginning in vowels other than / a(ː) / or / i(ː) /, but all reflexes

of PNI masculine gender pronominal prefixes with allomorphs in * / ɹ / have been

levelled to / h / in the modern language (cf. Woodbury 1981:109). As in Oneida,

Cayuga, Seneca, Huron, and Wyandot, the initial * / j / of Onondaga pronominal

prefixes appears to have been lost in word-initial position (e.g. PNI * / jetshi- /

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'2NS&3I' [035] → Oo. / etshi- /). As in Proto-Mohawk-Oneida, the reflex of the Proto-Northern Iroquoian 3PL:3 prefix * { kõti } [059] has replaced * { wati } [058]. Onondaga has a prefix { hũk } 'they (masculine) act on me' (3NSM:1SG) that appears to have been created by analogy with the prefix { jũk } '3I:1SG' [026], which has a meaning 'they (feminine) act on me' in Onondaga owing to discontinuation of the non-singular animate prefix. As in Cayuga, Seneca, Huron, and Wyandot, the Onondaga prefixes / sk / '2:1.SG' [016], / wak / '3:1SG' [025], / jũk / '3I:1SG' [026], / hak / '3M:1SG' [027], / tak / '2:1.SG.IMP' [072] and / hũk / '3NSM:1SG' lack allomorphs ending in / kʷ / before bases beginning in / a /. Reflexes of PNI prefixes ending in dual number * / ni / appear to have extended allomorph ending in * / j / to bases beginning in / ẽ / as well as / a /, a trait shared by Seneca. The modern New York dialect of Onondaga, like Cayuga, has 2:1 imperative pronominal prefixes of the form { taske } '2:1.SG.IMP' [072], { taskni } '2:1.DU.IMP' [073], and { taskwa } '2:1.PL.IMP' [074], which have apparently been created by analogy with their indicative counterparts.

Onondaga pronominal prefixes seem to have added / hnjV / and / hsCV / to the consonants and clusters before which a reflex of epenthetic * / e / appears, but these seem otherwise to be unaltered apart from the effects of regular sound change. Consonants and clusters before which the 1SG:3 pronominal prefix allomorphs / h /

(< PNI * k), / k /, / ke: / (< PNI * ke), and / ke / occur in Onondaga are presented

in (3).

(3)   Distribution of Prefix Allomorphs with Epenthetic / e / in Onondaga (1SG:3)

/ h /   _kV, kʷV

/ k /   _hV, hjV, hnV, hsV[1] (→ shV[1]), htsV[1] (→ tshV[1]), hwV, jV (< PNI * jV),
                nV, tV, tsV, wV, ʔnV, ʔwV.

/ ke: /   _jV (< PNI * ɹjV, wjV), V (< PNI * wɹV)

/ ke /   before all remaining consonants and clusters.

As in Huron and Wyandot, the vast majority of perfect verbs in Onondaga end in a

suffix / -ih / rather than in / -ũh / or / -ẽh / (cf. Oo. / áˈkjẽthwih / 'I have

planted it' [311]). Imperfective verbs ending in / -was / regularly have punctual

counterparts in / -waʔ / rather than in / -oʔ / (cf. Oo. / ɛ́ˈkjẽthwaʔ /

'I will plant it' [311]), and reflexes of PNI punctual bases that seem to have ended in

* / -ʔn / [114] show / -ʔnhaʔ / in Onondaga (e.g. PNI * / waʔˈkhehnhaʔn / 'I hired

someone' [232] → Oo. / waʔkhéhˈnhaʔnhaʔ /). No distinction is made between present

and imperfective forms in Onondaga, and, as in Huron, the PNI present suffix

* / -h / [108] appears to have become habitual / -k / in Onondaga, perhaps to better

differentiate habitual forms from perfect forms ending in * / -õh / [115], * / -ẽh / [116],

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and * / -ih / [119].

Like the other Five Nations languages Onondaga has a second locative suffix,

{ -neh }, a pluralizer suffix, { -shũʔ }, and an augmentative suffix, which has the shape

{ -koːnah } rather than the more usual shape { -koːwaʔ }. The intensifier suffix has the

form { -tsihwẽh } in Onondaga, and the decessive suffix has the form { -kẽhæʔ }.

CHAPTER 14: CAYUGA

14.1 INTRODUCTION

This chapter describes the language of the Cayuga (/ kajokoˈhoːnõʔ /, a name of

uncertain etymology), whose territory in the early seventeenth century appears to have

ranged from Cayuga Lake in the west, bordering on the territory of the Seneca, to

Skaneateles Lake in the east, bordering on the territory of the Onondaga, north to Lake

Ontario, and perhaps south into what is now Pennsylvania (cf. Engelbrecht 2003:121,

village locations in Swanton 1968:34; see Map 6). Today Cayuga speakers are located

primarily on the Six Nations of the Grand River Reserve in southwestern Ontario.

The Cayuga were in contact with the Jesuits and other Europeans beginning in the

mid-seventeenth century, but the names of Cayuga chiefs and settlements are invariably

given in Huron or Mohawk in early sources, so that the language itself is of relatively

late attestation. A list of 23 vocabulary items collected by Benjamin Smith Barton

(1766-1815) in the late eighteenth century is reproduced in Gallatin (1836:376); from

what can be discerned from this vocabulary the language seems at this point to have

already been in its modern stage. The earliest considerable record of the Cayuga

language seems to be a 269-page biography of Seneca chief John Arthur Gibson

(1850-1912), as dictated by his widow Mary Anne Skye Gibson in 1914, and transcribed

by ethnologist Alexander Goldenweiser (Canadian Museum of Civilization, Ethnological

Documents, MCC107756-2).

Cayuga has both an Upper dialect, spoken in the southwestern part of Six Nations,

and a Lower dialect, spoken in the eastern part of Six Nations (Froman et al. 2002: xii);

a third dialect, whose youngest speaker was born in 1918 (Sturtevant 1978:543), was

spoken in Oklahoma in the late 1980s, at which point it was moribund

(cf. Mithun 1989:243). The language described in this chapter, unless otherwise stated,

is Common Cayuga, a pre-dialectal form of the language that predates the breakup of

Upper and Lower Cayuga. Dialectal innovations that have subsequently given rise to

different varieties of Cayuga are discussed in 14.3.

Notes on Oklahoma Cayuga are in Mithun (1989) and a teaching grammar based on

the Lower Cayuga dialect is in Mithun and Henry (1984). A dictionary is in Froman et

al. (2002). Cayuga forms in this chapter are based on data in Froman et al. (2002)

unless otherwise stated.

14.2 PHONEMIC INVENTORY

The phonemic inventory of Cayuga is presented in (1).

(1)   Phonemic Inventory of Cayuga

CONSONANTS

	Alveolar	Palatal	Velar	Glottal
Plosive	t		k kʷ	ʔ
Nasal	n			
Fricative	s			h
Affricate	ts			
Approximant	ɹ	j	w	

VOWELS

	Front	Central	Back
Close	iː		uː
	i		u
Mid	eː ẽː		oː õː
	e ẽ		o õ
Open		aː	
		a	

The plosives / t /, / k /, and / kʷ / are realized as [d], [g], and [gʷ] respectively

before vowels and resonants. The fricative / s / is realized as [ʃ] before / ɹ / or / j /.

Mithun (1985:505) notes that / ts / is realized as [tʃ] by some speakers. The vowels

/ uː / and / u / are rare, semantically-determined reflexes of / oː / and / o / that

possibly add diminutive meaning to lexical roots (e.g. 'small', 'narrow', 'dull',

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'cold', etc). They occur obligatorily in the verb / niˈwuːʔuh / 'it is small' for all speakers

(cf. forms in Mithun & Henry 1984 and Froman et al. 2002) and optionally elsewhere

according to idiolect (e.g. Lower Ca. / oˈnaʔnoːʔ / or / oˈnaʔnuːʔ / 'it is cold';

Lower Ca. / ohˈstoʔtɹaʔ / or / ohˈstuʔtɹaʔ / 'feather'; Lower Ca. / oˈnoʔtsaʔ / or

/ oˈnuʔtsaʔ / 'tooth'; cf. also notes in Mithun 1985:506).

14.3 PHONOLOGICAL CHANGES

Phonological changes that have occurred during the transition from PNI to Common

Cayuga are described below as CA-1 through CA-35. Where ordering of any two

changes seems to be necessary in order to produce a correct output in Cayuga, this is

noted.

By CA-1, * / a / has been inserted between * / w / and * / j / (e.g. PNI * / ˈowjaʔ /

'wing, fin' [480] > Ca. / oˈwaːjaʔ /; PNI * / joˈʔawjeʔ / 'there is dew' [199] >

Ca. / oʔˈawajeʔ /; PNI * / ẽhsaˈtewjẽhst / 'you will learn' [482] > Ca. / ẽhsateˈwaːjẽːs /).

This change must precede CA-2, CA-10, and CA-11.

By CA-2, antepenultimate accent has shifted to the vowel * / a / when it occurred

in a penultimate syllable (e.g. PNI * / nikaˈnaʔtsjakeːh / 'that many pails, kettles' [152] [363]

> Ca. / nikanaʔˈtsaːkeː /; PNI * / jotõhˈwẽtsjateʔ / 'land exists' [402] [433] >

Ca. / otõhwẽˈtsaːteʔ / 'country'; PNI * / ˈjowɹanoːh / 'it is a cold wind' [379] [487] >

Ca. / oˈwaːnoː /). This change must follow CA-1 and precede CA-10 and CA-11.

(cf. also Michelson 1988:103).

By CA-3, * / h / has been lost before * / nh / (e.g. PNI * / kahˈnhohaʔ / 'door' [233]

> Ca. / kaˈnhohaʔ /; PNI * / tjohˈnhohskʷaɹõːt / 'it has jowls protruding' [235] >

Ca. / tjoˈnhohskʷaõːt / 'cow'; PNI * / ẽhˈshehnhaʔn / 'you will hire someone' [232] >

Ca. / ẽhˈsheːnhaʔ /). This change must precede CA-10.

By CA-4, * / ʔ / has been lost before * / nk / or * / nkʷ /

(e.g. PNI * / oˈtsiʔnkʷaɹaʔ / 'bile, green, yellow' [461] > Ca. / oˈtsiːtkʷaːʔ /;

PNI * / ˈheʔnkẽh / 'above' [214] > Ca. / heːtkẽh /). This change must precede CA-5 and

CA-10.

By CA-5, * / n / has become * / t / before * / k / or * / kʷ /

(e.g. PNI * / oˈnkʷẽhsaʔ / 'blood' [376] > Ca. / oˈtkʷẽhsaʔ /; PNI * / ɹawẽˈninkẽʔs /

'he speaks up' [280] [476] > Ca. / haˈwẽnitkẽʔs /; PNI * / ˈheʔnkẽh / 'above' [214] >

Ca. / heːtkẽh /). This change must follow CA-4.

By CA-6, * / ns / has become * / ts / except before * / k / or * / kʷ /

(e.g. PNI * / ˈansteh / 'outside' [155] > Ca. / ahsteh /; PNI * / kaˈnstaɹhaʔ /

'I am crying' [154] > Ca. / kahˈstaːhaʔ /; PNI * / ohˈwẽʔnstaʔ / 'foam' [271] >

Ca. / ohˈwẽʔstaʔ /; PNI * / teˈwahnshẽːh / 'twenty' [135] > Ca. / teˈwahshẽː /;

PNI * / nikaʔˈnshansteʔ / 'it is that strong' [496] > Ca. / niˈkaʔshahsteʔ /; but cf.

PNI * / ˈkinskoːt / 'I am sitting' [283] > Ca. / kitskoːt / rather than ˣ / kihskoːt / by CA-7;

PNI * / ˈskenskʷahs / 'you lift it' [331] > Ca. / seˈkeːtskʷahs / rather than

ˣ / seˈkehskʷahs / by CA-7). This change must precede CA-7 and CA-8.

By CA-7, * / ts / has become * / hs / when preceded by a vowel, except when

followed by * / h /, * / i /, * / j /, or * / ɹ / (e.g. PNI * / ẽwaˈknitskoʔ / 'I will

be late' [492] > Ca. / ẽˈwakhnihskoʔ /; PNI * / ẽˈtsniːkẽʔ / 'you will see it' [332] >

Ca. / ẽhˈsniːkẽʔ /; PNI * / ẽtswaˈnẽhskoʔ / 'you will steal it' [368] >

Ca. / ẽhˈswanẽhskoʔ /; but cf. PNI * / oˈnẽtshaʔ / 'arm' [370] > Ca. / oˈnẽːtshaʔ /;

PNI * / otsiˈkheʔtaʔ / 'salt' [456] > Ca. / oˈtsikheʔtaʔ /; PNI * / ˈtsjaːtahk / 'seven' [464] >

Ca. / ˈtsaːtahk /; PNI * / oˈhotsɹaʔ / 'basswood' [241] > Ca. / oˈhoːtsɹaʔ /).

This change must follow CA-6 and precede CA-8, CA-14, and CA-15.

By CA-8, * / ts / has become * / s / elsewhere except when followed by * / h /,

* / i /, * / j / or * / r / (e.g. PNI * / ˈiːkeʔts / 'I go' [209] > Ca. / ˈiːkeʔs /;

PNI * / ˈaːtseːʔ / 'it is new' [189] > Ca. / ˈaːseːʔ /; PNI * / kahˈtsehthaʔ / 'I hide it' [146] >

Ca. / kahˈsehthaʔ /; but cf. PNI * / atẽˈnaʔtshɹaʔ / 'food, provisions' [168] >

Ca. / aˈtẽnʔatshɹaʔ /; PNI * / jeˈkẽhtsih / 'she is old' [333] > Ca. / eˈkẽhtsih /;

PNI * / kaˈnaʔtsjaʔ / 'pail' [363] > Ca. / kaˈnaʔtsaʔ /; PNI * / waʔˈkeʔtsɹeːʔ /

'I dragged it' [498] > Ca. / ʔaˈkeʔtsɹeːʔ /). This change must follow CA-6 and CA-7, and

precede CA-9 and CA-15.

By CA-9, * / ns / has become * / ts / before * / k / or * / kʷ /

(e.g. PNI * / seˈkenskʷahs / 'you lift it' [331] > Ca. / seˈkeːtskʷahs /;

PNI * / tsẽniˈnskɹõːtih / 'spit!' [174] [284] > Ca. / sẽniːˈtskɹõːtih /; PNI * / ˈkinskoːt /

'I am sitting' [283] > Ca. / kitskoːt /). This change must follow CA-8.

By CA-10, an accented vowel has been lengthened in an even-numbered syllable if

it occurred before a non-glottal consonant (e.g. PNI * / kaˈnaktaʔ / 'bed' [355] >

Ca. / kaˈnaːktaʔ /; PNI * / oˈnẽntshaʔ / 'arm' [370] > Ca. / oˈnẽːtshaʔ /;

PNI * / seʔˈnonshahs / 'you are envious' [495] > Ca. / seʔˈnoːshahs /). This change must

follow CA-1, CA-2, CA-3, and CA-4, and precede CA-14, CA-21 and CA-23.

(cf. also Chafe 1977a:176, Chafe & Foster 1981:131, Michelson 1988:99).

By CA-11, a vowel has been lengthened in an even-numbered syllable before a non-

glottal consonant if the following syllable was accented (e.g. PNI * / kahwaˈtsiːɹaʔ /

'family' [269] > Ca. / kahwaːˈtsiːjaʔ /; PNI * / ohneˈkiːjoːh / 'good water' [279] [364] >

Ca. / ohneːˈkiːjoː /; PNI * / ẽhaˈkʷeːniʔ / 'he will be able' [351] > Ca. / ẽhaːˈkʷeːniʔ /).

This change must follow CA-1 and CA-2, and precede CA-14, CA-21 and CA-23.

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(cf. also Chafe 1977a:176, Michelson 1988:100).

By CA-12, accented short vowels in odd-numbered penults have lost their accent (e.g. PNI * / ˈtekɹõʔ / 'eight' [439] > Ca. / tekɹõʔ /; PNI * / ẽkaˈtahseht / 'I will hide' [146] > Ca. / ẽˈkatahseht /; PNI * / ẽhseˈkenskoʔ / 'you will lift it' [331] > Ca. / ẽhˈseketskoʔ /). Two-syllable words that have lost accent by this change remain without accent in Cayuga, while words of three or more syllables have acquired new accent by CA-13. This change must precede CA-13 and CA-14.
(cf. also Chafe 1977a:176, Michelson 1988:99).

By CA-13, words with no accent have accented the vowel of the last non-final even syllable of the word (e.g. PNI * / ẽkaˈtahseht / 'I will hide' [146] > Ca. / ẽˈkatahseht /;

PNI * / ẽhseˈkenskoʔ / 'you will lift it' [331] > Ca. / ẽhˈseketskoʔ /;

PNI * / tewakeˈkhahsjõːh / 'I have separated it' [337] > Ca. / tewakeˈkhahsõː /). This change must follow CA-12 and precede CA-14. (cf. also Chafe 1977a:176, Michelson 1988:99).

By CA-14, * / V^1ʔ / has become * / ʔV^1 / in odd-numbered, unaccented, non-final syllables except when a glottal consonant preceded (e.g. PNI * / kaʔniˈkõhɹaʔ / 'mind' [491] > Ca. / kʔaˈnikõhaʔ /; PNI * / ẽhsatjaʔˈtaːwiʔt / 'you will get dressed' [176] > Ca. / ẽhsatjʔaˈtaːwiʔt /; PNI * / kahwihˈstaʔeks / 'it strikes metal' [200] [274] >

Ca. / kahˈwihstʔaehs / 'clock'; cf. also Michelson 1988:104). Although this change was

present in the Oklahoma dialect of Cayuga, it appeared to be optional for speakers

(cf. Mithun 1989:253), perhaps owing to analogy of metathesized forms with non-

metathesized forms occurring in accented and even-numbered syllables. This change

must follow CA-7, CA-12, and CA-13. (cf. Chafe 1977a:177, Chafe & Foster 1981:137,

Michelson 1988:104).

By CA-15, * / j / has been lost after * / ts / (e.g. PNI * / kaˈnaʔtsjaʔ / 'pail' [363] >

Ca. / kaˈnaʔtsaʔ /; PNI * / ˈtsjaːtahk / 'seven' [464] > Ca. / ˈtsaːtahk /;

PNI * / ohwẽˈtsjaʔke / 'on the land' [402] > Ca. / ohˈwẽtsʔakeh /). This change must

follow CA-7 and CA-8.

By CA-16, * / h / has been lost between * / s / and * / w /

(e.g. PNI * / kõhˈshwahẽhs / 'I hate you' [250] > Ca. / kõhˈswahẽhs /).

By CA-17, * / ɹ / has become * / n / before * / hj / or * / j /

(e.g. PNI * / tekaˈwẽɹjeh / 'I stir it' [195] > Ca. / teˈkawẽnjeh /; PNI * / saˈtõɹjeʔts /

'you breathe' [185] > Ca. / saˈtõːnjeʔs /; PNI * / waʔˈhɹaɹjoʔ / 'he killed it' [428] >

Ca. / ʔaˈhaːnjoʔ /). (cf. also Chafe & Foster 1981:136).

By CA-18, * / ɹ / has become * / w / when it occurred intervocalically after

* / o(ː) / or * / õ(ː) / and before a non-back vowel (e.g. PNI * / joˈthoːɹeʔ /

'it is cold' [170] > Ca. / oˈthoːweʔ /; PNI * / shehˈɹoːɹi / 'tell her!' [246] > Ca. / sheˈhoːwih /;

PNI * / johˈsnoːɹeʔ / 'it is fast' [258] > Ca. / ohˈsnoːweʔ /). Similarly, by CA-19, * / ɹ /

has become * / j / when it occurred intervocalically after * / e(ː) /, * / ẽ(ː) / or * / i(ː) /

and before a non-front vowel (e.g. PNI * / oˈheːɹaʔ / 'cornstalk' [224] > Ca. / oˈheːjaʔ /;

PNI * / johˈniːɹõh / 'it is hard' [237] > Ca. / ohˈniːjõh /; PNI * / tewatiˈɹõthaʔ /

'it stretches' [175] > Ca. / tewatiˈjõːthaʔ /). Both changes must precede CA-23.

(cf. also Chafe & Foster 1981:131, Michelson 1988:171).

By CA-20, * / ɹ / has been lost when preceded by a vowel and a glottal consonant

(e.g. PNI * / oˈkahɹaʔ / 'eye' [319] > Ca. / oˈkahaʔ /; PNI * / ohˈsheʔɹaʔ / 'dough' [248] >

Ca. / ohˈsheʔaʔ /; PNI * / kaʔniˈkõhɹaʔ / 'mind' [491] > Ca. / kʔaˈnikõhaʔ /).

(cf. also Chafe & Foster 1981:131). By CA-21, * / ɹ / has been lost when followed by a

glottal consonant (e.g. PNI * / ˈkeɹʔoks / 'I chop' [432] > Ca. / keʔohs /;

PNI * / aˈkeɹhak / 'my aunt' [425] > Ca. / aˈkeːhak /; PNI * / kaˈɹhaːtaʔ / 'bush, forest' [423]

> Ca. / kaˈhaːtaʔ /), and this change must follow CA-10 and CA-11.

(cf. also Chafe & Foster 1981:135). By CA-22, * / ɹ / has been lost after * / w /

(e.g. PNI * / ˈjowɹateʔ / 'there is a wind' [433] [487] > Ca. / oˈwaːteʔ / 'it is windy';

PNI * / ˈjowɹanoːh / 'it is a cold wind' [379] [487] > Ca. / oˈwaːnoː /), and by CA-23, * / r /

has been lost between vowels (e.g. PNI * / kaˈɹõːtaʔ / 'log' [431] > Ca. / ˈkaõːtaʔ /;

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PNI * / joʔtaˈɹihẽːh / 'it is hot' [204] > Ca. / oʔˈtaihẽː /; PNI * / ẽtsaˈkaːɹiːʔ /

'it will bite you' [324] > Ca. / ẽsaːˈkaiːʔ / 'it will bite you'). CA-23 must follow CA-10,

CA-11, CA-18 and CA-19, and precede CA-24, CA-25, CA-26, CA-27 and CA-28.

(cf. also Chafe & Foster 1981:131).

   By CA-24, when accent occurred on the second of two adjacent vowels, it has

shifted to the first vowel (e.g. PNI * / kaˈɹẽːnaʔ / 'song, incantation' [422] >

Ca. / ˈkaẽːnaʔ /; PNI * / kaˈɹõːtaʔ / 'log' [431] > Ca. / ˈkaõːtaʔ /; PNI * / kaɹõhˈjaʔke /

'in the sky' [430] > Ca. / ˈkaõhjʔakeh / 'sky'). Similarly, by CA-25, accented long vowels

have been shortened when followed by a vowel (e.g. PNI * / tkaˈjeːɹiːh / 'it is right' [303]

> Ca. / tkaːˈjei / 'it is right'; PNI * / tejonaʔˈkaːɹõːt / 'it has horns' [359] [410] >

Ca. / tejonʔaˈkaõːt / 'sheep'). Both changes must follow CA-23, and precede CA-26,

CA-27 and CA-28.

   By CA-26, * / e(ː) / has nasalized before * / ẽ(ː) / (e.g. PNI * / nijoˈjeːɹẽh / '(what)

it is doing' [302] > Ca. / niˈjoːjẽː /; PNI * / ẽtitsanaʔˈkeːɹẽʔ / 'it will imitate you' [360] >

Ca. / ẽtisaˈnaʔkjẽːʔ /) (cf. Chafe & Foster 1981:137), and similarly, by CA-27, * / o(ː) /

has nasalized before * / õ(ː) / (e.g. PNI * / kaˈnoːɹõʔ / 'it is expensive' [393] >

Ca. / kanõːʔ /). Both changes must follow CA-23, CA-24, and CA-25, and precede

CA-28. (cf. also Mithun 1979:172).

By CA-28, an accented vowel followed by an identical vowel has become a single

unaccented long vowel (e.g. PNI * / oʔˈtaːɹaʔ / 'clay' [291] > Ca. / oʔtaːʔ /;

PNI * / ˈkẽnskaɹaʔ / 'mattress' [282] > Ca. / kẽtskaːʔ / 'mattress'). This change must

follow CA-23, CA-24, CA-25, CA-26, and CA-27.

By CA-29, a resonant consonant has been lost word-finally after a glottal stop

(e.g. PNI * / tsõˈkiːtaʔw / 'I went back to sleep' [287] > Ca. / sõˈkiːtaʔ /;

PNI * / ˈtetstaʔn / 'stand up!' [449] > Ca. / tehstaʔ /; PNI * / ẽˈkõnhaʔn /

'you will hire me' [232] > Ca. / ẽˈkõːnhaʔ /). (cf. also Chafe & Foster 1981:135).

By CA-30, a consonant has been lost word-finally after * / s / or * / k /

(e.g. PNI * / j(a)hejoˈthahoʔkt / 'end of the trail' [131] [398] > Ca. / heˈjothahoʔk /;

PNI * / ˈhwihsk / 'five' [273] > Ca. / hwihs /; PNI * / ˈtẽhsjehst / 'you will mix' [300] >

Ca. / tẽhsjehs /). (cf. also Chafe & Foster 1981:137).

By CA-31, a consonant plus * / h / has been lost before * / s / at the end of a word

(e.g. PNI * / kaˈthõːtaːths / 'I listen' [171] > Ca. / kaˈthõːtaːs /; PNI * / ˈjoʔkʷaːths /

'it digs' [399] > Ca. / oʔkʷaːs /; PNI * / ɹaˈtoːɹaːths / 'he hunts' [184] > Ca. / haˈtoːwaːs /;

PNI * / ˈiːkeːkhs / 'I eat' [316] > Ca. / ˈiːkeːs /; PNI * / joɹaʔˈnẽːtaːkhs / 'it sticks' [421] >

Ca. / owaʔˈnẽːtaːs /; PNI * / ɹaˈtijʔaːkhs / 'they shoot' [290] > Ca. / haˈtijʔaːs /).

This change must precede CA-34. (cf. also Chafe & Foster 1981:137).

By CA-32, * / h / has been lost word-finally after long vowels

(e.g. PNI * / kahẽˈtiːjoːh / 'good field' [226] [279] > Ca. / kahẽːˈtiːjoː /; PNI * / ˈwakkẽːh / or

* / waˈkeːkẽːh / 'I have seen it' [332] > Ca. / aˈkeːkẽː /; PNI * / ˈtshoːjõːh /

'he has returned' [315] > Ca. / ˈshoːjõː /).

By CA-33, * / t / has become * / h / before * / t / (e.g. PNI * / tewatˈtihẽh /

'it is different' [442] > Ca. / teˈwahtihẽh /).

By CA-34, * / ths / has become * / tsh / (e.g. PNI * / ˈithseʔts / 'you come here' [209]

> Ca. / ˈitsheʔs /; PNI * / athsiˈnhahsɹaʔ / 'garters' [172] → Ca. / oˈtshinhahsthaʔ /). This

change must follow CA-31.

By CA-35, * / h / has been inserted between * / t / or * / k / and * / n /

(e.g. PNI * / waʔsheˈtniːkẽʔ / 'we saw him' [332] > Ca. / ʔasheːˈthniːkẽʔ /;

PNI * / ˈtekniːh / 'two' [438] > Ca. / teˈkhniː /; PNI * / ẽwaˈknitskoʔ / 'I will be late' [492] >

Ca. / ẽˈwaknihskoʔ /). (cf. also Chafe & Foster 1981:136, Michelson 1988:24).

Phonological changes that have occurred during the transition from PNI to Common

Cayuga are recapitulated in (2).

(2)   Phonological Changes in the Transition from PNI to Common Cayuga

CA-1 $\emptyset > a$ / w_j
CA-2 $ˈV^1(C^2)(C^3)C^4aC^5V^6 > V^1(C^2)ˈ(C^3)C^4aC^5V^6$
CA-3 $h > \emptyset$ / _nh

CA-4	ʔ > Ø / _nk, nkʷ
CA-5	n > t / _k, kʷ
CA-6	ns > ts (except before k or kʷ)
CA-7	ts > hs / V_ (except before h, i, j, ɹ)
CA-8	ts > s (except before h, i, j, ɹ)
CA-9	ns > ts / _k, kʷ
CA-10	lengthening in accented penults (see description)
CA-11	pre-tonic lengthening (see description)
CA-12	loss of accent on short odd penults (see description)
CA-13	new accent rule for words without accent (see description)
CA-14	glottal metathesis (see description)
CA-15	j > Ø / ts_
CA-16	h > Ø / s_w
CA-17	ɹ > n / _(h)j
CA-18	ɹ > w / o(ː), õ(ː)_a(ː), e(ː), ẽ(ː), i(ː)
CA-19	ɹ > j / e(ː), ẽ(ː), i(ː)_a(ː), o(ː), õ(ː), u(ː)
CA-20	ɹ > Ø / VH_
CA-21	ɹ > Ø / _H
CA-22	ɹ > Ø / w_
CA-23	ɹ > Ø / V_V
CA-24	$V^1{}'V^2 > {}'V^1V^2$
CA-25	${}'V^1{:}V^2 > {}'V^1V^2$
CA-26	e(ː) > ẽ / _ẽ(ː)
CA-27	o(ː) > õ / _õ(ː)
CA-28	${}'V^1V^1 > V^1{:}$
CA-29	R > Ø / ʔ_#
CA-30	C > Ø / s, k_#
CA-31	Ch > Ø / _s#
CA-32	h > Ø / Vː_#
CA-33	t > h / _t
CA-34	ths > tsh
CA-35	Ø > h / t, k_n

The forms and examples above consist of Cayuga utterance-final forms; in contrast,

Cayuga utterance-medial forms are accented on the final syllable, overriding all other

phonological changes involving accent given above (e.g. Ca. / ˈtsaːtahk / 'seven',

/ tsaːˈtahk niˈwahshẽː / 'seventy', / tsaːˈtahk niwahˈshẽː ˈtsaːtahk / 'seventy-seven').

(cf. Froman et al. 2002:xxxiii). This pattern of automatically accenting the final

syllable of utterance-medial forms is also found in Onondaga.

In addition to the phonological changes listed above, several dialectal phonemic

sound changes exist at Six Nations of the Grand River which differentiate Upper Cayuga

from Lower Cayuga (cf. forms in Mithun & Henry 1984:13 and notes in Froman et al.

2002: xii). These phonemic changes are described below as CA-D1 through CA-D4,

with ordering of changes noted where necessary.

By CA-D1, * / s / has become * / f / when preceded by * / h / and followed by

* / r / (e.g. Ca. / tsohsɹaːt / 'one winter' > Upper Ca. / tsohfɹaːt /;

Ca. / kaˈnõhkʷahsɹaʔ / > Upper Ca. / kaˈnõhkʷahfɹaʔ / 'love'; Ca. / wẽhnihˈsɹiːjo: /

'nice day' > Upper Ca. / wẽhnihˈfɹiːjo: /). This change occurs in the Upper Cayuga

dialect and must precede CA-D2. (cf. also Mithun 1979:171).

By CA-D2, * / ts / has become * / s / before * / ɹ / and * / hɹ / (e.g. Ca. / itshɹeː /

'cut it!' > Upper Ca. / ishɹeː /; Ca. / oˈwiːtsɹaʔ / 'ice' > Upper Ca. / oˈwiːsɹaʔ /;

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Ca. / oˈhoːtsɹaʔ / 'basswood' > Upper Ca. / oˈhoːsɹaʔ /). This change occurs in the

Upper Cayuga dialect and must follow CA-D1.

By CA-D3, * / ts / has become * / t / before * / ɹ / and * / hɹ / (e.g. Ca. / itshɹeː /

'cut it!' > Lower Ca. / ithɹeː /; Ca. / oˈwiːtsɹaʔ / 'ice' > Lower Ca. / oˈwiːtɹaʔ / 'ice';

Ca. / oˈhoːtsɹaʔ / 'basswood' > Lower Ca. / oˈhoːtɹaʔ /). This change occurs in the

Lower Cayuga dialect and was also present in the Oklahoma dialect; cf.

Oklahoma Ca. / saˈthɹõnʔitaʔ / 'your clothes' (Mithun 1989:252), from

Ca. / saˈtshɹõnʔitaʔ /.

By CA-D4, * / t / has become * / k / before * / j / (e.g. Ca. / ohˈstjẽʔtaʔ / 'bone' >

Lower Ca. / ohˈskjẽʔtaʔ /; Ca. / waˈtjeːsẽh / 'it is easy' > Lower Ca. / waˈkjeːsẽh /;

Ca. / ˈiːtjeːt / 'she is standing there' > Lower Ca. / ˈiːkjeːt /). This change occurs in the

Lower Cayuga dialect. (cf. also Mithun 1985:505).

Phonological changes that have occurred in Cayuga dialects are recapitulated in (3).

(3)   Phonological Changes in Cayuga Dialects

CA-D1	s > f / h_ɹ	Upper Cayuga
CA-D2	ts > s / _ɹ, hɹ	Upper Cayuga
CA-D3	ts > t / _ɹ, hɹ	Lower Cayuga, Oklahoma Cayuga
CA-D4	t > k / _j	Lower Cayuga

In addition to the phonemic sound changes in (3) some phonetic shifts have occurred as well. In the Lower Cayuga dialect, vowels in odd syllables are phonetically devoiced if followed by * / h / (e.g. Ca. / saˈtjẽnihtõh / 'you have enough' → Lower Ca. [saˈgjẽni̥hdõh]), and pronounced with creaky voice if preceded by a post-consonantal glottal stop, which in turn may manifest itself as an ejective feature on the preceding consonant (e.g. Ca. / kʔaˈnikõhaʔ / 'mind' > Lower Ca. [kʼa̰ˈnikõ̰haʔ]), or be dropped altogether (e.g. Ca. / kahˈnawʔakeh / 'at the rapids' > Lower Ca. [ka̰hˈnawa̰geh]) (cf. Froman et al. 2002:xii), and devoiced vowels fail to trigger phonetic voicing of a preceding plosive in Lower Cayuga. The affricate / ts / is phonetically voiced to [dz] or [dʒ] before voiced vowels in most, but not all, varieties of Lower Cayuga (see Mithun & Henry 1984:13 for an exception).

14.4 MORPHOLOGICAL CHANGES

As in Onondaga and Proto-Mohawk-Oneida, the negative prefix cannot occur with modal prefixes in Cayuga, and the contrastive prefix is substituted; the glottal stop of the negative prefix (PNI * / teʔ / [001]) induces loss of a following glide, as in Onondaga. As in Onondaga, Seneca, Huron and Wyandot, all allomorphs of the translocative in Cayuga appear to have levelled initial * / jah / to / h /. Allomorphs of the factual prefix

(PNI * / waʔ /, * / we / [006]) seem to have lost * / w / in all environments and the glottal stop of factual prefix allomorphs is lost before / h /, as in Tuscarora, Proto-Mohawk-Oneida, and Seneca. The non-singular animate prefix of PNI has been preserved in Cayuga and can be added to any pronominal prefix with the argument 3I to make that argument non-singular and animate, but only if the other argument is singular or unmarked; pronominal prefixes beginning in * / j / have lost this segment in combination with the prefix (cf. PNI * / waʔeˈtsaːkẽʔ / 'someone saw you' [332] → Ca. / ʔaeˈsaːkẽʔ /; PNI * / waʔkajeˈtsaːkẽʔ / 'they saw you' → Ca. / ʔakaeˈsaːkẽʔ /).

As in Oneida, Onondaga, Seneca, Huron, and Wyandot, the initial * / j / of Cayuga pronominal prefixes has been lost in word initial position (e.g. PNI * / jetshi / '2NS&3I' [035] → Ca. / etshi /). All reflexes of PNI masculine gender pronominal prefixes with allomorphs in * / hɹ / and * / ɹ / have levelled these sequences to / h / in Cayuga (e.g. PNI * / ɹa / '3SGM:3' [053] → Ca. / ha /). The third person dual number pronominal prefixes * { kni } '3DU:3' and * { hni } '3DUM:3' seem to have been lost in Cayuga, as does the reflex of the prefix * { kõwa } '3I:3SG', which is replaced in Cayuga by a reflex of PNI * { jõtate- } 'one acts on oneself or another' [063] [076], as in Tuscarora. Reflexes of the 3PL:3 prefixes * { wati } [058] and * { kõti } [059] appear to have merged in Cayuga as a neuter-zoic prefix { kati }, while two additional prefixes, { kae } '3NS:3'

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(< PNI * { kaje } '3NSA + 3I:3') and { koti } '3:3NS', function as non-singular feminine

indefinite forms. As in Onondaga, Seneca, Huron, and Wyandot, the Cayuga prefixes

/ hsk / '2:1.SG' [016], / wak / '3:1SG' [025], / jõk / '3I:1SG' [026], / hak / '3M:1SG' [027], and

/ tahsk / '2:1.SG.IMP' [072] appear to have levelled out allomorphs ending in / kʷ / before

bases beginning in / a /. Like the modern New York dialect of Onondaga, Cayuga has

2:1 imperative pronominal prefixes of the form { tahske } '2:1.SG.IMP', { tahskhni }

'2:1.DU.IMP', and { tahskʷa } '2:1.PL.IMP', presumably created by analogy with their

indicative counterparts. The 2SG:3.IMP prefix (PNI * { tse } [075]) seems to have been

replaced by its non-imperative counterpart (PNI * { hse } [022]), so that there is no

longer a formal distinction between imperative and non-imperative 2SG:3 prefixes in

Cayuga.

To the consonants and clusters before which a reflex of epenthetic * / e / appears in

Cayuga have apparently been added / hnjV /, / hsV /, / hsCV /, / htsV /, / kV / and

/ kʷV /, along with others added owing to regular sound change. Consonants and

clusters before which the 1SG:3 pronominal prefix allomorphs / kh / (< PNI * / k /),

/ k / and / ke / occur in Cayuga are presented in (4).

(4)   Distribution of Prefix Allomorphs with Epenthetic / e / in Cayuga (1SG:3)

/ kh /   _n, ʔnV¹ (→ nV¹).

/ k /   _hV, hjV, hnV, hrV, hwV, jV, ɹV, tV, wV.

/ ke /   before all remaining consonants and clusters.

The aspectual and derivational morphology of Cayuga is essentially the same as that

of PNI, although the past habitual suffix * { -kʷ } [110] appears to have been replaced by

{ -kẽhe:ʔ }, a derivative of the decessive suffix. Like Seneca, Cayuga has an eventuative

suffix { -hsʔõh }, which is added to perfective forms to signify that an event is finally

complete (e.g. Ca. / satehsɹõˈnihsʔõh / 'you are ready'). Like the other Five Nations

languages, Cayuga has a second locative suffix, { -neh }, a pluralizer suffix, { -shõʔ },

and an augmentative suffix, { -ko:wah }.

CHAPTER 15: SENECA

15.1 INTRODUCTION

This chapter describes the language of the Seneca (/ nɔ̃taˈwaʔkaːʔ / 'People

of the great hill'), whose territory in the early seventeenth century appears to have

ranged from the Genesee River in the west, bordering on the territory of the Wenro and

the Erie, to Cayuga Lake in the east, bordering on the territory of the Cayuga, north to

Lake Ontario, and south into what is now northwestern Pennsylvania

(cf. Engelbrecht 2003:114, village locations in Swanton 1968:35-37; see Map 6). Today

speakers of Seneca are located primarily on the Cattaraugus, Alleghany, and Tonawanda

Seneca Reservations in western New York State.

Although the Seneca were in contact with Europeans beginning in the mid-

seventeenth century, the names of Seneca chiefs and Seneca settlements are invariably

given in Huron or Mohawk in early sources and the Seneca language itself is of

relatively late attestation. The first publication of vocabulary in the language appears to

be an early nineteenth century pamphlet (Kilham 1818) published in London following

the visit of seven Senecas to England accompanied by members of the Religious Society

of Friends; it was followed in the same year by a book of hymns in the language,

written and translated by the Presbyterian school teacher Jabez Backus Hyde (1818).

The language of these texts, and of numerous other early missionary publications that

followed in the 1820s and 1830s, appears to be the same as Modern Seneca.

Internal Reconstruction in Seneca is discussed in Chafe (1959), morphology in

Chafe (1964b), and phonology in Dudley (1974). Texts of the language are in Chafe

(1961), and a sketch of the language in Chafe (1996). A dictionary is in Chafe (1967).

Unless otherwise stated, Seneca forms in this chapter are based on data from Chafe

(1967).

15.2 PHONEMIC INVENTORY

The phonemic inventory of Seneca is presented in (1).

(1)   Phonemic Inventory of Seneca

CONSONANTS

	Alveolar	Palatal	Velar	Glottal
Plosive	t		k kʷ	ʔ
Nasal	n			
Fricative	s			h
Affricate	ts			
Approximant		j	w	

VOWELS

	Front	Central	Back
Close	iː		
	i		
Mid	eː ɛ̃ː		oː ɔ̃ː
	e ɛ̃		o ɔ̃
Open	æː	aː	
	æ	a	

PNI * / ɹ / has been lost in Seneca and the vowels / æː / and / æ / have arisen in

certain environments as a result of r-loss. PNI * / ẽ(ː) / and * / õ(ː) / have shifted to

/ ɛ̃(ː) / and / ɔ̃(ː) /. Phonetically, / t /, / k /, and / kʷ / are realized as [d], [g], and

[gʷ] respectively before vowels and resonants. Seneca / s / is realized as [ʃ] before

/ j / (Chafe 1967:5). The affricate / ts / is realized consistently as [dz] or [dʒ] by

different speakers (Mithun 1985:505), and some speakers realize / o(ː) / as [u(ː)] in

certain words (Mithun 1985:506). The short vowels / a /, / e /, and / o / have

allophones [ə], [ɪ], and [ʊ] in Seneca when preceded by a consonant and followed

by a consonant or by / i / (cf. Chafe 1967:5).

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15.3 PHONOLOGICAL CHANGES

Phonological changes that have occurred during the transition from PNI to Seneca are described below as SE-1 through SE-46. Where ordering of two changes appears to be necessary in order to produce a correct output in Seneca, this is noted.

By SE-1, * / ts / has become * / s / except before * / i / or * / j / (e.g. PNI * / ˈaːtseːʔ / 'new' [189] > Se. / ˈwaːseːʔ / 'it is new'; PNI * / ɹaʔˈtswahthaʔ / 'he extinguishes it' [208] > Se. / haʔˈswathaʔ /; PNI * / oˈnẽtshaʔ / 'arm' [370] > Se. / onẽ̀ːshaʔ /; but cf. PNI * / ˈkaːtsih / 'come here!' [329] > Se. / kaːtsih /; PNI * / ˈtsjaːtahk / 'seven' [464] > Se. / tsaːtak /). This change must precede SE-2, SE-20, SE-21, SE-24, SE-39, SE-40, and SE-41. (cf. also Rudes 1976:32, Mithun 1985:506).

By SE-2, * / j / has been lost after * / ts / (e.g. PNI * / ˈkẽtsjõh / 'fish' [467] > Se. / kẽtsɔ̃h /; PNI * / ˈtsjaːtahk / 'seven' [464] > Se. / tsaːtak /; PNI * / oˈnatsjaʔ / 'wheat' [357] > Se. / onɔ̃ːtsaʔ /; PNI * / kaˈnaʔtsjaʔ / 'pot, kettle' [363] > Se. / kaˈnɔ̃ʔtsaʔ /). This change must follow SE-1 and precede SE-6.

By SE-3, * / n / has been lost before * / s / (e.g. PNI * / keʔˈnonshahs / 'I am envious' [495] > Se. / keʔnoːshas /; PNI * / teˈwahnshẽːh / 'twenty' [135] > Se. / teˈwashẽ̀ːh /; PNI * / ɹaˈkenskʷahs / 'he raises it' [331] > Se. / hakeːskʷas /). This change must precede SE-11.

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By SE-4, vowels have been lengthened in even-numbered penultimate syllables

when they occurred before a non-glottal consonant (e.g. PNI * / waˈktenjõ:h /

'I have changed it' [440] > Se. / akte:njõ̃:h /; PNI * / ɹoˈnatkõ? / 'they are sorcerors' [181] >

Se. / honõ̃:tkõ̃? /; PNI * / tekattsiˈstokwas / 'I scatter sparks' [459] [471] >

Se. / teˈkatshisto:kwas /). This change must precede SE-5, SE-6, SE-11, SE-13, SE-18,

and SE-24. (cf. also Chafe 1977a:179, Michelson 1988:106).

By SE-5, the original accent of PNI has been lost (e.g. PNI * / o?ˈnẽ:ja? / 'bone' [255]

> Se. / o?nẽ:ja? /; PNI * / ˈõ:kʷeh / 'person' [405] > Se. / õ̃:kʷeh /; PNI * / kaˈto:kẽ:h / 'it

is true, exact' [448] > Se. / kato:kẽ:h /). This change must follow SE-4 and precede SE-6.

(cf. also Chafe 1977a:178).

By SE-6, a new accentual system has been introduced whereby accent fell on the

vowel in the last nonfinal even short syllable of a word if it was followed directly by a

single glottal consonant, by * / sn / or * / sw /, by any 2-consonant cluster that did not

end in a resonant, or by any 3-consonant cluster (e.g. PNI * / wakiˈhe:jõ:h /

'I am dead' [276] > Se. / aˈki:ejõ̃:h /; PNI * / wa?kɹa?ˈnẽ:ta:k / 'I stuck it on' [421] >

Se. / o?ˈkæ?nẽ:ta:k /; PNI * / ahˈtahkʷa? / 'shoe' [142] > Se. / ahˈtahkʷa? /); failing that,

accent has been assigned to the last non-final even short syllable that was followed by a

non-final syllable such as that just described (e.g. PNI * / tewaˈkehkʷẽh /

'I've lifted it' [350] > Se. / teˈwakehkʷɛ̃h /; PNI * / onõˈtaʔkeh / 'on the hill' [385] >

Se. / oˈnõtaʔkeh / 'on the hill'; PNI * / ẽjeˈtakheʔ / 'someone will run' [435] >

Se. / ɛ̃ˈjetakheʔ /); failing that, a word has no accent (e.g. PNI * / kahˈnhoːtõʔ /

'the door is closed' [234] > Se. / kahoːtõ̃ʔ /; PNI * / wak(e)ˈkaɹjahs / 'it bites me' [324] >

Se. / akekanjas /; PNI * / waʔkaˈtwɛ̃ːteht / 'I lent it' [192] > Se. / oʔkatwɛ̃ːtet /). For

further discussion and illustration of Seneca accent, see Chafe (1977a:178) and

Michelson (1988:110-111). This change must follow SE-2, SE-4 and SE-5, and precede

SE-7, SE-11, SE-18, SE-19, SE-24, and SE-27.

By SE-7, short * / a / has become * / æ / before * / ɹa(ː) /

(e.g. PNI * / oˈnaʔkaɹaʔ / 'horn' [359] > Se. / oˈnõʔkææʔ /; PNI * / oˈnõtaɹaʔ /

'hominy' [386] > Se. / onõ̃tææʔ /; PNI * / jakjaˈɹaʔtseːʔ / 'we are cousins' [157] >

Se. / aˈkjææʔseːʔ /). This change must precede SE-10 and SE-24.

(cf. also Chafe 1959:490).

By SE-8, short * / a / has become * / e / before * / ɹo(ː) /

(e.g. PNI * / ts(e)kaˈɹoːtɛ̃h / 'tell a story!' [325] [397] > Se. / sekeotɛ̃h /;

PNI * / kanaʔkaɹoˈtahsɹaʔ / 'thing with a horn standing up' [359] [397] >

Se. / kanõ̃ʔˈkeotashæʔ / 'horn war club'). Similarly, by SE-9, short * / a / has become

* / ẽ / before * / ɹõ(ː) / (e.g. PNI * / teˈwahkarõ̃t / 'woodchips attached' [134] >

Se. / teˈwahkɛ̃ɔ̃t / 'eaves'). Both changes must precede SE-24. (cf. also Chafe 1959:490).

By SE-10, * / a(ː) / has become * / æ(ː) / after * / ɹ / (e.g. PNI * / kaˈkaːɹaʔ /

'story' [325] > Se. / kakaːæʔ /; PNI * / oˈɹaːnaʔ / 'syrup' [418] > Se. / owæːnɔ̃ʔ /;

PNI * / tjoɹaʔˈnɛ̃ːtaːks / 'it's sticky' [421] > Se. / ˈtjoæʔnɛ̃ːtaːs /). This change must

precede SE-17, SE-21, SE-24, and SE-43. (cf. also Chafe 1959:490).

By SE-11, * / h / has been lost before the cluster * / tk /, before the cluster * / nh /,

before * / s / followed by a consonant, and before a consonant at the end of a word

(e.g. PNI * / akʷahˈtkaʔwɛ̃h / 'I've given it up' [144] → Se. / aˈkatkaʔwɛ̃h /;

PNI * / kahˈnhohaʔ / 'door' [233] > Se. / kaˈhoaʔ /; PNI * / ohˈwihstaʔ / 'money' [274] >

Se. / oːˈwistaʔ /; PNI * / johˈsnoːɹeʔ / 'it is fast' [258] > Se. / osnoːweʔ /;

PNI * / ɹohskɛ̃ʔɹaˈkehteʔ / 'warrior' [255] → Se. / hoskɛ̃ʔɛ̃ˈkehtaʔ / 'warrior';

PNI * / ˈtsjaːtahk / 'seven' [464] > Se. / tsaːtak /; PNI * / ɹaˈtoːɹaːths / 'he hunts' [184] >

Se. / hatoːwæːs /; PNI * / tsaˈtwɛ̃ːteht / 'lend it!' [192] > Se. / satwɛ̃ːtet /;

PNI * / ˈtsaʔswaht / 'put out the fire!' [208] > Se. / saʔswat /). This change must follow

SE-3, SE-4 and SE-6, and precede SE-18, SE-33 and SE-35.

By SE-12, * / h / has been lost before * / w / at the beginning of a word

(e.g. PNI * / ˈhwihsk / 'five' [273] > Se. / wis / 'five').

By SE-13, * / h / has been lost between * / w / and * / j /

(e.g. PNI * / kewhjõhkaˈɹaʔke / 'on my thumb' [477] > Se. / kjɔ̃hˈkæːʔkeh /). This change

must precede SE-15 and SE-18.

By SE-14, * / hw / has been lost after * / õ(ː) / (e.g. PNI * / jõhˈwẽtsjateʔ /

'the earth (is present)' [402] [433] > Se. / jɔ̃ɛ̃tsateʔ /; PNI * / ɹaˈnõhweʔts / 'he likes it' [384] >

Se. / haˈnɔ̃eʔs /; PNI * / jonõhˈwakteʔ / 'it is sore' [383] > Se. / oˈnɔ̃ɔ̃kteʔ /). This change

must follow SE-6 and precede SE-33.

By SE-15, * / w / has been lost before * / ɹ / and * / j / (e.g. PNI * / joˈʔawjeʔ /

'there is dew' [199] > Se. / oʔaːjeʔ /; PNI * / keˈwjẽhõʔts / 'I know how' [483] >

Se. / keˈjẽɔ̃ʔs /; PNI * / tejowɹaˈwẽɹjõːh / 'the wind has stirred' [195] [487] >

Se. / tejoæwɛ̃ːnjɔ̃ːh / 'the breeze is stirring'). This change must follow SE-13, and

precede SE-23 and SE-24.

By SE-16, * / ɹ / has become * / n / before * / hj / or * / j / (e.g. PNI * / ˈkaɹjoːʔ /

'animal' [429] > Se. / kanjoːʔ /; PNI * / wak(e)ˈkaɹjahs / 'it bites me' [324] >

Se. / akekanjas /; PNI * / kwaʔˈkohɹjẽʔ / 'whippoorwill' [474] → Se. / ˈkwɛ̃ʔkoːnjɛ̃ʔ /).

This change must precede SE-17, SE-18, SE-24 and SE-33. (cf. also Chafe 1959:489).

By SE-17, * / ɹ / has been lost when preceded by a vowel plus * / h /

(e.g. PNI * / ohˈɹaʔtaʔ / 'feather' [243] > Se. / ˈoæʔtaʔ /; PNI * / kaˈkahɹaʔ / 'eye' [319] >

Se. / kaˈkaaʔ /; PNI * / roʔniˈkõhɹaʔ / 'his mind' [491] > / hoʔˈnikɔ̃ɛ̃ʔ /). This change

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must follow SE-6, SE-10, and SE-16, and precede SE-19, SE-22, SE-23, and SE-24.

By SE-18, * / h / has been lost when it occurred after a vowel and before * / n /, * / w /, or * / j /, and the preceding vowel was lengthened (e.g. PNI * / oh'neːkaʔ / 'water, liquid' [364] > Se. / oːneːkaʔ / 'whiskey'; PNI * / oh'wihstaʔ / 'metal, money' [274] > Se. / oː'wistaʔ /; PNI * / tejoh'joʔtsihs / 'it is sour' [133] > Se. / te'joːjoʔtsis /). This change must follow SE-4, SE-6, SE-11, SE-13, and SE-16, and precede SE-19, SE-20, SE-26, and SE-37. (cf. also Chafe 1959:487).

By SE-19, * / h / has been lost intervocalically (e.g. PNI * / o'nẽha ʔ / 'corn, grain' [366] > Se. / o'nẽõʔ /; PNI * / waki'heːjõːh / 'I am dead' [276] > Se. / a'kiːejõːh /; PNI * / 'johateʔ / 'there is a path' [131] [433] > Se. / oːateʔ / 'road, trail, path'). This change must follow SE-6, SE-17, and SE-18, and precede SE-25, SE-26, SE-27, SE-28, SE-29, and SE-33. (cf. also Chafe 1959:487).

By SE-20, * / ɹ / has become * / j / when it followed a non-glottal consonant or * / h / preceded by a non-glottal consonant and preceded * / o(ː) / or * / õ(ː) / (e.g. PNI * / 'tekɹõʔ / 'eight' [439] > Se. / tekjõʔ /; PNI * / tewak(e)'kẽtsɹõːh / 'I've scraped it' [336] > Se. / tewakekẽːsjõːh /; PNI * / wakʷa'thɹoːɹiːh / 'I have told of it' [246] > Se. / a'kathjoːwiːh /). This change must follow SE-1 and SE-18, and precede SE-24. (cf. also Chafe 1959:489).

By SE-21, * / ɹ / has become * / h / after * / s / (e.g. PNI * / kaˈhahsɹaʔ /

'flame, council fire, torch' [223] > Se. / ˈkaːshæʔ /; PNI * / ẽhˈnitsɹaʔ / 'day' [216] >

Se. / ɛ̃ːˈnishæʔ /; PNI * / kahjaˈtõhsɹaʔ / 'something written, book' [228] >

Se. / kaːˈjatɔ̃shæʔ /). This change must follow SE-1 and SE-10, and must precede SE-22

and SE-24.

By SE-22, * / ɹ / has become * / j / intervocalically after * / i(ː) /

(e.g. PNI * / waʔtkatiˈɹõːtẽʔ / 'I stretched it' [175] > Se. / oʔtkatijɔ̃ːtɛ̃ʔ /), and this change

must follow SE-17, SE-21 and precede SE-24. Similarly, by SE-23, * / ɹ / has become

* / w / intervocalically after a rounded vowel (e.g. PNI * / johˈsnoːɹeʔ / 'it is fast' [258] >

Se. / osnoːweʔ /; PNI * / tewaˈkoːɹẽʔ / 'I have split it' [396] > Se. / tewakoːwɛ̃ʔ /;

PNI * / wakʷaˈtõːɹiːh / 'I have breathed' [185] > Se. / akathɔ̃ːwiːh /;

PNI * / wakʷaˈthɹoːɹiːh / 'I have told of it' [246] > Se. / aˈkathjoːwiːh /), and this change

must follow SE-15 and SE-17 and precede SE-24. (cf. also Chafe 1959:489).

By SE-24, * / ɹ / has been lost (e.g. PNI * / kaˈɹhaːtaʔ / 'forest' [423] >

Se. / kahaːtaʔ /; * / ohˈkaːɹaʔ / 'wood chip' [134] > Se. / ohkaːaʔ /; PNI * / oˈnjaːɹaʔ /

'neck' [239] > Se. / onjaːaʔ /; PNI * / kaˈɹẽːnaʔ / 'song, incantation' [422] > Se. / kaɛ̃nɔ̃ʔ /;

PNI * / kaˈnoːɹõʔ / 'it is dear' [393] > Se. / kanoːɔ̃ʔ /; PNI * / niwaˈkjeːɹẽh /

'(what) I have done' [302] > Se. / niwakjeːɛ̃h /). This change must follow SE-1, SE-4,

SE-6, SE-8, SE-9, SE-10, SE-15, SE-16, SE-17, SE-20, SE-21, and SE-22, and must

precede SE-25, SE-26, SE-27, SE-28, and SE-29. (cf. Chafe 1959:489).

By SE-25, short * / o / has become * / oː / before long * / aː / or * / æː /

(e.g. PNI * / ˈjohateʔ / 'there is a road' [131] > Se. / oːateʔ /; PNI * / ˈjowɹateʔ / 'there is

a wind' [487] > Se. / oːwæteʔ /). This change must follow SE-19 and SE-24, and precede

SE-26.

By SE-26, long vowels have been shortened if preceded by another vowel

(e.g. PNI * / kaˈɹõːtaʔ / 'log, tree' [431] > Se. / kɛ̃ɔ̃taʔ /; PNI * / kaˈɹẽːnaʔ / 'song' [422] >

Se. / kaɛ̃ɔ̃ʔ /; PNI * / oˈheːɹaʔ / 'cornstalk' [224] > Se. / oeæʔ / 'cornstalk'). This change

must follow SE-18, SE-19, SE-24, and SE-25. (cf. also Chafe 1959:492).

By SE-27, when accent occurred on the second of two adjacent vowels, it has shifted

to the first vowel (e.g. PNI * / oˈhõhtaʔ / 'ear' [136] > Se. / ˈoɔ̃htaʔ /; PNI * / ohˈɹaʔtaʔ /

'feather' [243] > Se. / ˈoæʔtaʔ /; PNI * / joɹaʔnẽˈtaːkõh / 'it is stuck on' [421] >

Se. / ˈoæʔnẽtaːkɔ̃h /). This change must follow SE-6, SE-19 and SE-24.

By SE-28, * / a(ː) / has become * / ẽ(ː) / when it immediately preceded or followed

* / ẽ(ː) / or * / õ(ː) / (e.g. PNI * / kaˈɹõhjateʔ / 'the sky (is present)' [430] [433] >

Se. / ˈkɛ̃ɔ̃jateʔ /; * / kaˈkɛ̃ːɹat / 'it is white' [335] > Se. / kakɛ̃ːɛ̃t /; PNI * / roʔniˈkõhɹaʔ /

'his mind' [491] > Se. / hoʔˈnikɔ̃ɛ̃ʔ /; PNI * / oˈnstẽhɹaʔ / 'cliff, rock bank' [286] >

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Se. / oˈstɛ̃ːɛ̃ʔ /, with anomalous vowel length). This change must follow SE-19 and

SE-24. (cf. also Chafe 1959:490).

By SE-29, * / ɛ̃(ː) / has become * / e(ː) / when it immediately preceded * / e(ː) / or

* / o(ː) / (e.g. PNI * / wahtjaˈwɛ̃ːɹeʔ / 'it is taboo' [143] > Se. / wahtjaweːeʔ /;

PNI * / tewakhɛ̃ˈɹehtɔ̃h / 'I have shouted' [225] > Se. / tewaˈkheehtɔ̃h /;

PNI * / nijawɛ̃ˈhoːtɛ̃ːh / 'that kind of flower' [401] [410] > Se. / nijaˈweoʔtɛ̃ːh /).

This change must follow SE-19 and SE-24.

By SE-30, * / ʔ / has been lost before * / nk / or * / nkʷ / (e.g. PNI * / heʔnkɛ̃h /

'above, high, over' [214] > Se. / hetkɛ̃h /; PNI * / oˈtsiʔnkʷaɹaʔ / 'bile' [461] >

Se. / oˈtsitkʷæːʔ /). This change must precede SE-31.

By SE-31, * / n / has become * / t / before * / k / or * / kʷ /

(e.g. PNI * / ˈkankaʔ / 'somewhere' [322] → Se. / kaˈtkaʔhɔ̃h /; PNI * / oˈnkoʔɹhaʔ /

'wampum' [375] > Se. / oˈtkoʔæʔ /; PNI * / tjorahkʷiˈnkɛ̃ʔɔ̃h / 'the sun has come

out' [280] [415] > Se. / tjoæhkʷiˈtkɛ̃ʔɔ̃h /), and this change must follow SE-30. Similarly, by

SE-32, * / n / has become * / t / word-finally after * / ʔ / (e.g. PNI * / ˈwaʔtktaʔn /

'I stood up' [449] > Se. / ˈoʔtktaʔt /; PNI * / waʔɔ̃ˈkehnhaʔn / 'someone hired me' [232] >

Se. / waˈʔɔ̃kehaʔt /; PNI * / ɔ̃ˈkjɛ̃ːtaʔn / 'I obtained it' [309] > Se. / ɔ̃kjɛ̃ːtaʔt /).

By SE-33, a resonant consonant has been lost before * / h / (e.g. PNI * / ˈkɔ̃nheʔ /

'I am alive' [406] > Se. / kɔ̃heʔ /; PNI * / oʔ'nhõhsaʔ / 'egg' [490] > Se. / oʔ'hɔ̃hsaʔ /;

PNI * / kɛ̃'jhõhateʔ / 'there is a creek' [278] [433] > Se. / kɛ̃hɔ̃:teʔ /). This change must

follow SE-11, SE-13 and SE-19. (cf. also Chafe 1959:487).

By SE-34, a consonant has been lost when preceded by * / s / and followed by a

word boundary (e.g. PNI * / 'hwihsk / 'five' [273] > Se. / wis /; PNI * / 'takjehst /

'I added, I contributed' [300] > Se. / takjes /). (cf. also Chafe & Foster 1981:135).

By SE-35, a non-glottal consonant has been lost before * / s / at the end of a word

(e.g. PNI * / 'ɹaʔja:khs / 'he shoots' [290] > Se. / haʔja:s /; PNI * / ɹa'to:ɹa:ths /

'he hunts' [184] > Se. / hato:wæ:s /; PNI * / 'johska:ths / 'it is good' [253] > Se. / oska:s /).

This change must follow SE-11. (cf. also Chafe 1959:486).

By SE-36, * / k / has been lost before * / hts / (e.g. PNI * / 'ɹakhtsiʔ /

'my older brother' [267] > Se. / hahtsiʔ /; PNI * / 'akhtsiʔ / 'my older sister' [267] >

Se. / ahtsiʔ /).

By SE-37, * / t / has become * / h / before * / n / or * / t / (e.g. PNI * / 'tni:kɛ̃h /

'they see it' [036] > Se. / hni:kɛ̃h /; PNI * / o'ttenjõ:h / 'it has changed' [440] >

Se. / ohte:njɔ̃:h /; PNI * / tewatti'haʔthaʔ / 'it alternates, it differs' [442] >

Se. / tewah'tiaʔthaʔ /). This change must follow SE-18. (cf. also Chafe 1959:484).

By SE-38, * / t / has been lost when it followed * / k / at the end of a word

(e.g. PNI * / ˈjoːtoʔkt / 'it is at the end' [398] > Se. / oːtoʔk /; PNI * / waʔthatõˈtaːɹikt /

'he laughed' [186] > Se. / oʔthatõ̃taːik /). (cf. also Chafe 1959:486).

By SE-39, * / ths / has become * / tsh / (e.g. PNI * / ˈẽthseʔ / 'you will come

here' [209] > Se. / ẽ̃tsheʔ /; PNI * / athsiˈnhahsɹaʔ / 'garters' [172] > Se. / aˈtshihashæʔ /).

This change must follow SE-1.

By SE-40, * / tts / has become * / tsh / (e.g. PNI * / tekattsiˈstokwas /

'I scatter sparks' [459] [471] > Se. / teˈkatshistoːkwas /). This change must follow SE-1.

By SE-41, * / a(ː) / has become * / õ(ː) / if the vowel of the preceding syllable was

nasal and a glottal consonant, * / w /, or a cluster * / ʔw / or * / sw / interceded

(e.g. PNI * / aˈwẽhaʔ / 'flower' [215] > Se. / aˈwẽõ̃ʔ /; PNI * / kaˈkẽnhateʔ / '(it is)

summer' [334] [433] > Se. / kaˈkẽhõ̃teʔ /; PNI * / ohstahˈɹõ̃ːwaʔ / 'marrow' [262] >

Se. / oˈstaːõ̃wõ̃ʔ /; PNI * / kahnaˈwaʔke / 'at the rapids' [230] > Se. / kaːˈnõ̃wõ̃ʔkeh /;

PNI * / ɹõ̃wajẽhˈwaːtẽʔ / 'their nephew' [217] > Se. / hõ̃ˈwõ̃jẽ̃ːwõ̃ːtẽʔ /;

cf. also Chafe 1959:491 and 1967:9). This change must follow SE-1.

By SE-42, * / a(ː) / has become * / õ(ː) / after * / n / (e.g. PNI * / oˈjaːnaʔ /

'footprint' [294] > Se. / oˈjaːnõ̃ʔ /; PNI * / kaˈnatajẽʔ / 'there is a village' [306] [356] >

Se. / kanõ̃tajẽ̃ʔ /; PNI * / kaˈnakɹeʔ / 'there is a lot' [354] > Se. / kanõ̃ːkeʔ /).

(cf. also Chafe 1959:491). Similarly, by SE-43, * / æ(ː) / has become * / ẽ(ː) / after

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* / n / (e.g. PNI * / oˈnɹahsaʔ / 'fungus' [389] > Se. / oˈnɛ̃hsaʔ /; PNI * / oˈnɹahtaʔ / [390]

> Se. / oˈnɛ̃htaʔ / 'leaf'), and this change must follow SE-11.

(cf. also Chafe & Foster 1981:138).

   By SE-44, * / ẽ(ː) / has shifted to / ɛ̃(ː) / (e.g. PNI * / oˈnɛ̃tshaʔ / 'arm' [370] >

Se. / onɛ̃ːshaʔ /; PNI * / ˈkɛ̃tsjõh / 'fish' [467] > Se. / kɛ̃tsɔ̃h /; PNI * / oʔˈnɛ̃ːjaʔ / 'bone' [489]

> Se. / oʔnɛ̃ːjaʔ /), and by SE-45, * / õ(ː) / has shifted to / ɔ̃(ː) /

(e.g. PNI * / ˈõːkʷeh / 'person' [405] > Se. / ɔ̃ːkʷeh /; PNI * / oˈhõhtaʔ / 'ear' [136] >

Se. / ˈoɔ̃htaʔ /; PNI * / wakiˈheːjõːh / 'I am dead' [276] > Se. / aˈkiːejɔ̃ːh /).

   By SE-46, * / h / has been inserted between * / k / and * / n /

(e.g. PNI * / ˈtekniːh / 'two' [438] > Se. / tekhniː /; PNI * / waknõhˈweʔõh / 'I like it' [384]

> / aˈkhnɔ̃eʔɔ̃h /; PNI * / waʔaˈkniːkɛ̃ʔ / 'we saw it' [332] > Se. / waˈʔakhniːkɛ̃ʔ /).

(cf. also Chafe 1959:484, Michelson 1988:24).

   Phonological changes that have occurred during the transition from PNI to Seneca

are recapitulated in (2).

(2)   Phonological Changes in the Transition from PNI to Seneca

        SE-1   ts > s (except before i or j)
        SE-2   n > Ø / _s
        SE-3   j > Ø / ts_
        SE-4   V¹ > V¹ː / _k, kʷ, t, s, n, ɹ, j, w (in even penults)
        SE-5   ˈV¹ > V¹

SE-6	new accentual system (see description)
SE-7	a > æ / _ɹa(:)
SE-8	a > e / _ɹo(:)
SE-9	a > ẽ / _ɹõ(:)
SE-10	a(:) > æ(:) / ɹ_
SE-11	h > Ø / _tk, nh, sC, C#
SE-12	h > Ø / #_w
SE-13	h > Ø / w_j
SE-14	hw > Ø / õ_
SE-15	w > Ø / _ɹ, j
SE-16	ɹ > n / _(h)j
SE-17	ɹ > Ø / Vh_
SE-18	$V^1h > V^1{:} / $ _n, w, j
SE-19	h > Ø / V_V
SE-20	ɹ > j / K(h)_o(:), õ(:)
SE-21	ɹ > h / s_
SE-22	ɹ > j / i(:)_V
SE-23	ɹ > w / o(:), õ(:)_V
SE-24	ɹ > Ø
SE-25	o > oː / _aː, æː
SE-26	$V^1{:} > V^1 / $ V_
SE-27	$V^1{'}V^2 > {'}V^1V^2$
SE-28	a(:) > ẽ(:) / _ẽ(:), õ(:); ẽ(:), õ(:)_
SE-29	ẽ(:) > e(:) / _e(:), o(:)
SE-30	ʔ > Ø / _nk, nkʷ
SE-31	n > t / _k, kʷ
SE-32	n > t / ʔ_#
SE-33	R > Ø / _h
SE-34	C > Ø / s_#
SE-35	K > Ø / _s#
SE-36	k > Ø / _hts
SE-37	t > h / _n, t
SE-38	t > Ø / k_#
SE-39	ths > tsh
SE-40	tts > tsh
SE-41	a(:) > õ(:) / ṼH, Ṽ(ʔ)w, Ṽsw_

SE-42	a(:) > õ(:) / n_
SE-43	æ(:) > ẽ(:) / n_
SE-44	ẽ(:) > ɛ̃(:)
SE-45	õ(:) > ɔ̃(:)
SE-46	Ø > h / k_n

15.4 MORPHOLOGICAL CHANGES

Seneca has lost the non-singular animate prefix and pronominal prefixes with an

argument '3I' take the place of earlier non-singular forms (e.g. Se. { khe } '1SG:3I, I act

on someone *or* them'), as occurs also in Proto-Mohawk-Oneida and Onondaga. The

Seneca coincident prefix may begin with / sh / or / tsh / depending on register

(Chafe 1967:33); variants in / sh / represent the expected phonological outcome. The

Proto-Northern Iroquoian factual morpheme * / waʔ / [006] has become / oʔ / in Seneca

before all pronominal prefixes except for those beginning in * / h / and * / j /, and the

glottal stop is lost before * / h /, as in Tuscarora, Proto-Mohawk-Oneida, and Cayuga.

As in Oneida, Onondaga, Cayuga, Huron, and Wyandot, PNI pronominal prefixes

that begin with * / j / lose this consonant word-initially in Seneca (e.g. PNI * / jetsa /

'3I:2SG' [029] → Se. / esa /), though it is preserved in the prefixes { je } '3I:3' [063] and

{ jako } '3:3I' [064] ; initial * / hj / has been reduced to / j / in the same environment

(e.g. PNI * / hja / '3M:2SG' [030] → Se. / ja /). As in Onondaga and Cayuga, all reflexes

of PNI masculine gender pronominal prefixes with allomorphs in * / hɹ / and * / ɹ /

have levelled these sequences to / h / (e.g. PNI * { hɹa } '3SGM:3' [053] → Se. { ha }).

The language has a reflex of PNI * { wati } '3PL:3' [058] rather than * { kõti } [059], as well

as a unique prefix { hõsa } '3NSM:2SG' and a prefix { hõk } '3NSM:3'

(cf. Onondaga { hũk } '3NSM:3'); the PNI prefix * { jakoti } '3NS:3I' [070] does not have a

reflex in Seneca.

As in Cayuga, Onondaga, Huron, and Wyandot, the Seneca prefixes / hsk /

'2:1.SG' [016], / wak / '3:1SG' [025], / jõk / '3I:1SG' [026], / hak / '3M:1SG' [027], and / tak /

'2:1.SG.IMP' [072] lack allomorphs ending in / kʷ / before bases beginning in / a /.

Reflexes of PNI prefixes ending in dual number * / ni / appear to have developed, by

analogy, an allomorph ending in / nj / rather than / j / before bases beginning in / a /,

as well as before bases beginning in / ɛ̃ /, a distribution also found in Onondaga.

'Southern Seneca' forms in Dudley (1974:49) show that certain varieties of the

languages have not only the predicted allomorph / ts / '2DU&3' [031] in place of / snj /

before bases beginning in / a /, but also an allomorph / tsi / that occurs before

consonants (cf. Huron and Wyandot / tsi / '2DU&3' in the same environment). Other

forms in Dudley (1974:59) show that the same varieties replace allomorphs of

PNI * / hse / '2SG:3' [022] with allomorphs of PNI * / tse / '2SG:3.IMP' [075] and eliminate

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the earlier distinction between imperative and non-imperative second person

pronominal prefixes.

To the consonants and clusters before which a reflex of epenthetic * / e / appears in

Seneca, / hnj / appears to have been added, as do / hs /, / k /, / kʷ /, and / ʔ / and all

clusters beginning with these sequences. Consonants and clusters before which the

1SG:3 pronominal prefix allomorphs / Ø / (< PNI * / k /), / kh / (< PNI * / k /),

/ k /, and / ke / occur in Seneca are presented in (3).

(3)   Distribution of Prefix Allomorphs with Epenthetic / e / in Seneca (1SG:3)

         / Ø /   _htsV

         / kh / _nV

         / k /   _hV (< PNI * hV, hɹV), hjV, hnV, hwV, jV (< PNI * jV), tV, tsV, wV.

         / ke / _hV (< PNI * wjhV), jV (< PNI * jʔV, wjV), and all remaining
                      consonants and clusters.

Seneca, like Cayuga, has an eventuative suffix { -sʔɔ̃h } which is added to perfect

forms to signify that an event is finally complete (e.g. Se. / akahsehˈtasʔɔ̃h / 'I've finally

hidden it'). No distinction is made between present and imperfective verb bases, and

the language instead has general habitual aspect bases. The intensifier suffix has the

form { -tsiːwɛ̃h }. Like the other Five Nations languages, Seneca has a second locative

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suffix, { -neh }, a pluralizer suffix, { -shɔ̃ʔ }, and an augmentative suffix, { -koːwaːh }.

CHAPTER 16: HURON

16.1 INTRODUCTION

This chapter describes the common language of the Huron and Petun Confederacies, both of whom referred to themselves as / wẽnaˈtɹoːnõʔ / meaning 'People of one language'. The territory of the Huron in the early seventeenth century appears to have ranged from the Nottawasaga and Credit Rivers in the west, bordering on the territory of the Petun and the Neutral, to the Saint Lawrence River in the east, bordering on the territory of the Algonquin, north to the Canadian Shield, bordering on the territory of the Nipissing and the Algonquin, and south to Lake Ontario (cf. Trigger 1987:27-30, Warrick 2008:9-11; see Map 7). The territory of the Petun in the early seventeenth century appears to have ranged from Owen Sound in the west, bordering on the territory of the Ottawa, to the Nottawasaga River in the east, bordering on the territory of the Huron, north to Georgian Bay, and south to the Grand River Valley, bordering on the territory of the Neutral (cf. Trigger 1987:91-94, Warrick 2008:11-12; see Map 7).

All dialects and derivatives of Huron (including Wyandot, the subject of the next chapter, which descends from the Petun dialect of Huron) are extinct, but the language is preserved in an abundance of Jesuit records and dictionaries beginning in the early seventeenth century. By comparing these records against their respective geographic

points of origin, Steckley (1997, 2007a) has established the former existence of at least five Huron dialects: Rock Huron (RoHu), associated with Huron Rock villages situated near Lake Couchiching; Cord Huron (CoHu), associated with Huron Cord villages situated near Kempenfelt Bay; Northern Bear Huron (NBeHu), associated with Huron Bear villages situated in the Penetanguishine peninsula; Southern Bear Huron (SBeHu), associated with Huron Bear villages situated directly south of the Penetanguishine Peninsula; and Petun (PeHu), associated with Petun villages near the Blue Mountain. To these five can be added Lorette Huron (LoHu), the dialect spoken by the Huron community at Lorette in Quebec until the late nineteenth century.

Huron forms presented in this chapter reflect Common Huron, a reconstructed form of the language that predates dialect divisions. Subsequent sound changes that separate the six known Huron dialects from Common Huron are presented in 16.3.

Discussion of Huron dialects is in Steckley (1987) and Steckley (2007a), and discussion of prefix allomorphy is in Julian (2009). Huron hymns are in MS 66, religious texts in Steckley (2004), and a grammar based on early sources in Lagarde (1980). An early dictionary is in Sagard (1632), and slightly later and more reliable Jesuit dictionaries are in MS 59, MS 62, MS 65, MS 67, Fraser (1920), and Steckley (2007b). Unless otherwise stated, Huron forms in this chapter are based on data from

MS 59.

16.2 PHONEMIC INVENTORY

The phonemic inventory of Common Huron is presented in (1).

(1)   Phonemic Inventory of Common Huron

CONSONANTS

	Alveolar	Palato-Alveolar	Palatal	Velar	Glottal
Plosive	t			k kʷ	ʔ
Nasal	n				
Fricative	s	ʃ		(x xʷ)	h
Affricate	ts				
Approximant	ɹ		j	w	

VOWELS

	Front	Central	Back
Close	iː		
	i		
Mid	eː ẽː		oː õː
	e ẽ		o õ
Open		aː	
		a	

The phonemes / ʃ /, / x /, and / xʷ / appear to have developed from reflexes of PNI * / s /, * / k /, and * / kʷ / in certain environments. The phonetic identity of the sounds represented by / x / and / xʷ / (<ꞔ> and <ꞔ8> in the Jesuit orthography, with <g> and <g8> used in dictionaries for purposes of alphabetization) is uncertain, and although unrounded and rounded voiceless velar fricatives are used to represent them here (cf. Rudes 1976:23), other possibilities that have been suggested include voiceless palatal fricatives (/ ç / and / çʷ /) and voiced palatal fricatives (/ ʝ / and / ʝʷ /) (cf. Lagarde 1980:34). Whether contrastive vowel length was maintained in final syllables in Huron is uncertain, but it is here assumed to have been retained.

Unlike other Northern Iroquoian languages, Huron does not appear to have had phonetic voicing of the plosives / t /, / k / and / kʷ / in any environment (cf. Rudes 1976:17). The phoneme / n / seems to have been realized as [nd] (<nd> in the Jesuit orthography) before syllables containing non-nasal vowels (e.g. Hu. / xaˈnaːtaʔ / <ꞔandata> 'village' → [xaˈndaːtaʔ]; Hu. / xahˈnhoːaʔ / <ꞔandh8a> 'door' → [xahˈndhoːaʔ]); elsewhere it seems to have been realized as [n] (<nn> in the Jesuit orthography) (e.g. Hu. / oˈnẽhaʔ / <onnenha> 'corn' → [oˈnẽhaʔ]; Hu. / xaˈnõhʃaʔ / <ꞔannonchia> 'house' → [xaˈnõhʃaʔ]). Mithun (1985:506) and Steckley (2007a:40) note that pronunciation of / o(ː) / seems to

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have approached [u(ː)] in certain environments, and Mithun (1985:505) notes that

pronunciation of / ts / appears to have approached [tʃ] for some speakers.

Pronunciation of the vowel / ẽ / may have approached [ã] (<an> in the Jesuit

orthography) when preceded by / w / in final syllables (e.g. Hu. / xaˈnõnawẽʔ /

< ˌannonda8an> 'pipe' → [xaˈnõnawãʔ]).

16.3 PHONOLOGICAL CHANGES

Phonological changes that have occurred during the transition from PNI to Common

Huron are described below as HU-1 through HU-25. Where ordering of any two changes

seems to be necessary in order to produce a correct output in Huron, this is noted.

By HU-1, * / s / has become * / ʃ / except before * / k /, * / kʷ /, * / t /, * / n /, or

* / w /, or when * / s / is part of the unit affricate * / ts / (e.g. PNI * / kahˈwihshaʔ /

'force, strength' [272] > Hu. / xahˈwihʃhaʔ / <gah8icha>; PNI * / ohˈshõːwaʔ /

'depth, hollow' [249] > Hu. / ohˈʃhõːwaʔ / <ochon8a>; PNI * / ˈohsɹaʔ / 'winter, year' [394]

> Hu. / ˈohʃɹaʔ / <Ocha> [change of / ɹ / to / h / after / ʃ / in the Rock dialect];

PNI * / kahˈsẽːnaʔ / 'name' [247] > Hu. / xahˈʃẽːnaʔ / <gachienda>; but cf. e.g.

PNI * / kaˈnahskʷaʔ / 'slave' [353] > Hu. / xaˈnahskʷaʔ / <gandask8a>; PNI * / ˈansteh /

'outside' [155] > Hu. / ˈasteh / <Aste>; PNI * / ˈaːtseːʔ / 'it is new' [189] > Hu. / ˈaːseːʔ /

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<Ase>). This change must precede HU-3 and HU-5. (cf. also Mithun 1979:167).

By HU-2, * / ts / has become * / ʃ / before * / ɹ / (e.g. PNI * / ˈaʔtsɹaʔ / 'axe' [206] >

Hu. / ˈaʔʃɹaʔ / <Acha> [change of / ɹ / to / h / after / ʃ / in the Rock dialect];

PNI * / ˈtsɹaʔtẽh / 'climb!' [420] > Hu. / ˈʃɹaʔtẽh / <chraten>). This change must

precede HU-3.

By HU-3, * / ts / has become * / s / except before * / i / and * / j /

(e.g. PNI * / ˈaːtseːʔ / 'it is new' [189] > Hu. / ˈaːseːʔ / <Ase>; PNI * / kaˈnẽtshaʔ /

'arm' [370] > Hu. / xaˈnẽshaʔ / <gannensa>; but cf. PNI * / oˈtsihkʷaʔ / 'knot, fist,

club' [453] > Hu. / oˈtsihkʷaʔ / <otsik8a>; PNI * / ˈkẽtsjõh / 'fish' [467] > Hu. / ˈxẽtsõh /

<gentson>). This change must follow HU-1 and HU-2 and precede HU-9, HU-10,

HU-11, HU-17, and HU-24. (cf. also Rudes 1976:32).

By HU-4, * / n / has been lost after * / t / and * / th / (e.g. PNI * / tniˈnakɹeʔ /

'we reside' [354] > Hu. / tiˈnaxɹeʔ / <tindaˌre>; PNI * / ˈẽthneʔ / 'they will come' [209] >

Hu. / ˈetheʔ / <eθe>). (cf. also Lagarde 1980:65).

By HU-5, * / n / has been lost before * / s / (e.g. PNI * / ˈwahnshẽːh / 'ten' [135] >

Hu. / ˈahshẽːh / <A'sen>; PNI * / ˈansteh / 'outside' [155] > Hu. / ˈasteh / <Aste>;

PNI * / kaʔˈnshansteʔ / 'it is powerful' [496] > Hu. / xaʔˈshasteʔ / <gasaste>). This

change must follow HU-1.

By HU-6, * / n / has been lost in Huron prefixes before * / i /

(e.g. PNI * / waʔˈhni:kẽʔ / 'they saw it' [332] > Hu. / aʔˈhi:xẽʔ / <ahi‸en>;

PNI * / waʔˈtsni:kẽʔ / 'you saw it' [332] > Hu. / aʔˈtsi:xẽʔ / <atsi‸en>;

PNI * / jakniˈnakɹeʔ / 'we reside' [354] > Hu. / axiˈnaxɹeʔ / <a‸inda‸re>). This change

occurred only when * / n / and * / i / were both part of the prefix, and did not occur

outside of prefixes (cf. PNI * / ˈtekni:h / 'two' [438] > Hu. / ˈteni:h / <tendi>;

PNI * / johˈni:ɹõh / 'it is durable' [237] > Hu. / ohˈni:ɹih / <ondiri>). This change must

precede HU-7, HU-8, HU-9, and HU-13.

By HU-7, * / k / has become * / i / word-initially before * / n /

(e.g. PNI * / ˈknõ:kʷeh / 'they are people' [405] > Hu. / iˈnõ:xʷeh / <innon‸8e>;

PNI * / ˈknaʔtaɹaks / 'I eat bread' [316] [361] > Hu. / iˈnaʔtaɹahʃ / <indatarach>). This

change must follow HU-6 and precede HU-8 and HU-13.

By HU-8, * / k / has been lost before * / n / (e.g. PNI * / waˈʔakneʔ /

'we are going' [209] > Hu. / aˈʔaneʔ / <aande>; PNI * / waʔˈknaʔtaɹak /

'I ate bread' [316] [361] > Hu. / aʔˈnaʔtaɹax / <andatara‸>; PNI * / waʔknõhˈsõ:niʔ /

'I built the house' [260] [382] > Hu. / aʔnõhˈʃõ:niʔ / <annonchiondi>). This change must

follow HU-6 and HU-7 and precede HU-13. (cf. also Lagarde 1980:66).

By HU-9, * / n / has become * / t / after * / s / (e.g. PNI * / johˈsno:ɹeʔ /

'it is fast' [258] > Hu. / oh'stoːɹeʔ / <ostore>; PNI * / tsni'heːjõːh / 'you are dead' [276] >

Hu. / sti'heːõːh / <stiheon>; PNI * / ˈẽtskneʔ / 'they will go back' [209] > Hu. / ˈesteʔ /

<este>). This change must follow HU-3, HU-6, and HU-7. (cf. also Lagarde 1980:62).

By HU-10, * / hn / has become * / th / after * / s / (e.g. PNI * / ˈẽtshneʔ /

'they will go again' [209] > Hu. / ˈestheʔ / <esθe>). This change must follow HU-3.

(cf. also Lagarde 1980:72).

By HU-11, a cluster * / sC^1 / has become * / C^1h / after * / s /

(e.g. PNI * / ˈtsskwaːkẽh / 'you still see us' [332] > Hu. / ˈskhwaːxẽhk / <sχ8a̠enk>).

This change must follow HU-3. (cf. also Lagarde 1980:77).

By HU-12, * / k / has become * / h / before * / t /, * / ts /, * / s / or * / ʃ /

(e.g. PNI * / kaˈnaktaʔ / 'bed' [355] > Hu. / xaˈnahtaʔ / <gandaʿta>; PNI * / ˈkaktsaʔ /

'dish' [347] > Hu. / ˈxahsaʔ / <gasa>; PNI * / ˈwaksẽːh / 'it is bad' [153] > Hu. / ˈahʃẽːh /

<Achen>; PNI * / ˈihɹʔoks / 'he chops' [432] > Hu. / ˈihaʔohʃ / <iharoch>).

By HU-13, * / k / has become * / x / when both preceded and followed by any of

the following: a vowel, a glottal stop, a resonant consonant, or a word boundary

(e.g. PNI * / waʔkaːkẽʔ / 'it saw it' [332] > Hu. / aʔˈxaːxẽʔ / <a̠a̠en>; PNI * / ˈkankõʔ /

'blood' [376] > Hu. / ˈxanxõʔ / <a̠angon>; PNI * / ẽˈkɹõtjaʔk / 'I will cut down

the tree' [297] [431] > Hu. / eˈxɹõtjaʔx / <e̠rontiaj>). This change must follow HU-6, HU-7

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and HU-8, and precede HU-15, and HU-16.

By HU-14, * / kʷ / has become * / xʷ / between vowels (e.g. PNI * / ˈõːkʷeh /

'person' [405] > Hu. / ˈõːxʷeh / < on�జ8e >). This change must precede HU-16.

By HU-15, * / t / has become * / k / before * / w / or * / hw /

(e.g. PNI * / twaˈnakɹeʔ / 'we reside' [354] > Hu. / kwaˈnaxɹeʔ / < k8anda‿re >;

PNI * / wakʷaˈtwiɹajẽʔ / 'I have children' [479] [306] > Hu. / axaˈkwiɹaẽʔ / < a‿ak8iraen >;

PNI * / joˈjẽthwẽh / 'it is planted' [311] > Hu. / oˈẽkhwih / < oenχ8i >;

PNI * / wakʷaˈtkahthwẽh / 'I have looked at it' [179] > Hu. / axaˈkahkhwih /

< a‿akaˈk8i >). This change must follow HU-13 and precede HU-16.

(cf. also Lagarde 1980:75).

By HU-16, * / t / has been lost before * / k / and * / kʷ / (e.g. PNI * / ˈtkaːjẽʔ /

'it is there' [306] > Hu. / ˈkaːẽʔ / < Kaen >; PNI * / oˈtkẽhtsɹaʔ / 'purulence' [180] >

Hu. / oˈkẽhʃɹaʔ / < Okencha > [change of / ɹ / to / h / after / ʃ / in the Rock dialect];

PNI * / kaˈtkahthwahs / 'I look at it' [179] > Hu. / xaˈkahkhwahʃ / < ‿akaˈk8ach >). This

change must follow HU-13, HU-14 and HU-15. (cf. also Lagarde 1980:65).

By HU-17, * / j / has been lost after * / ts / (e.g. PNI * / ˈkẽtsjõh / 'fish' [467] >

Hu. / ˈxẽtsõh / < gentson >; PNI * / kaˈtsjaːɹaʔ / 'tobacco' [465] > Hu. / xaˈtsaːɹaʔ /

< gatsara >; PNI * / kaˈnaʔtsjaʔ / 'pot' [363] > Hu. / xaˈnaʔtsaʔ / < gandatsa >).

(cf. also Mithun 1979:167).

By HU-18, * / j / has been lost word-initially, word-finally, and between vowels

(e.g. PNI * / je'nakɹeʔ / 'one resides' [354] > Hu. / e'naxɹeʔ / < endaˌre > ;

PNI * / waʔ'kẽhej / 'it died' [276] > Hu. / aʔ'xẽhe / < aˌenhe > ; PNI * / ka'jeːɹiːh /

'it is complete' [303] > Hu. / xa'eːɹiːh / < gaeri >), and this change must precede HU-19

and HU-20a. (cf. also Mithun 1979:168, Lagarde 1980:65).

By HU-19, * / ɹ / has been lost before * / j / (e.g. PNI * / 'kaɹjoːʔ / 'animal' [429] >

Hu. / 'xajoːʔ / < gaïo > ; PNI * / e'ɹjahsaʔ / 'heart' [212] > Hu. / e'jahʃaʔ / < Eiachia > ;

PNI * / a'ɹjaːwẽhk / 'it would have happened' [221] > Hu. / a'jaːwẽhk / < aia8enk >),

and similarly, by HU-20, * / w / has been lost before * / j / (e.g. PNI * / 'kawjaʔ /

'wing' [480] > Hu. / 'xajaʔ / < gaïa > ; PNI * / ka'wjẽːnaʔ / 'manner' [484] >

Hu. / xa'jẽːnaʔ / < gaïenda > ; PNI * / ke'wjẽhwẽh / 'I know how' [483] >

Hu. / xe'jẽhwih / < ˌeïenh8i >). Both changes must follow HU-18.

By HU-21, * / w / has been lost before * / ɹ / (e.g. PNI * / 'owɹaʔ /

'air, wind' [487] > Hu. / 'oɹaʔ / < ora >).

By HU-22, * / w / has been lost word-initially and word-finally

(e.g. PNI * / 'wahnshẽːh / 'ten' [135] > Hu. / 'ahshẽːh / < Aʕsen > ; PNI * / waki'heːjõːh /

'I am dead' [276] > Hu. / axi'heːõːh / < aˌiheon > ; PNI * / ẽwa'kiːtaʔw / 'I will sleep' [287] >

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Hu. / ewaˈxiːtaʔ / < e8aˌita >), and this change must precede HU-23.

(cf. also Mithun 1979:168, Lagarde 1980:65).

By HU-23, * / h / has been lost word-initially before * / w / (e.g. PNI * / ˈhwiks /

'five' [273] > Hu. / ˈwihʃ / < 8ich >), and this change must follow HU-22.

By HU-24, * / k / has been inserted between * / s / and * / w / or * / hw /

(e.g. PNI * / ˈtswẽːtaːt / 'one day' [159] [219] > Hu. / ˈskwẽːtaːt / < sk8entat >;

PNI * / ˈjoʔtswẽh / 'it is extinguished' [207] > Hu. / ˈoʔskwẽh / < osk8an >;

* / kehˈshwahẽʔts / 'I hate it' [250] > Hu. / xehˈskhwahẽʔs / < ˌesk8ahens >). This

change must follow HU-3 (cf. Lagarde 1980:69).

By HU-25, * / a / has been inserted between any two-consonant cluster and / ʔ /

(e.g. PNI * / waˈkehsʔõh / 'I have finished it' [266] > Hu. / aˈxehʃaʔih / < aˌechiai >;

PNI * / ˈikɹʔoks / 'I chop' [432] > Hu. / ˈixɹaʔohʃ / < iˌraoch >).

Phonological changes that have occurred during the transition from PNI to Common

Huron are recapitulated in (2).

(2)   Phonological Changes in the Transition from PNI to Common Huron

     HU-1   s > ʃ (except before k, kʷ, t, n, w, or when part of the affricate)

     HU-2   ts > ʃ / _ɹ

     HU-3   ts > s (except before i and j)

     HU-4   n > Ø / t, th_

     HU-5   n > Ø / _s

     HU-6   n > Ø / _i (pronominal prefixes only)

     HU-7   k > i / #_n

     HU-8   k > Ø / _n

     HU-9   n > t / s_

     HU-10   hn > th / s_

     HU-11   sC¹ > C¹h / s_

     HU-12   k > h / _t, ts, s, ʃ

     HU-13   k > x / #, R, ʔ, V_V, ʔ, R, #

     HU-14   kʷ > xʷ / V_V

     HU-15   t > k / _hw, w

     HU-16   t > Ø / _k, kʷ

     HU-17   j > Ø / ts_

     HU-18   j > Ø / #, V_V, #

     HU-19   ɹ > Ø / _j

     HU-20   w > Ø / _j

     HU-21   w > Ø / _ɹ

     HU-22   w > Ø / #_, _#

     HU-23   h > Ø / #_w

     HU-24   Ø > k / s_hw, w

     HU-25   Ø > a / CC_ʔ

Several changes additional to those in (2) have taken place in various Huron

dialects (cf. Steckley 1997 and 2007a:35-45). Six such changes are described below as

HU-D1 through HU-D6.

By HU-D1, * / ɹ / has become * / h / after * / ʃ / (e.g. Hu. / ˈaʔʃɹaʔ / 'axe' >

RoHu. / ˈaʔʃhaʔ / <Acha>; Hu. / ˈohʃɹaʔ / 'winter, year' > RoHu. / ˈohʃhaʔ /

<Ocha>; Hu. / xehˈʃɹõnjahk / 'I prepare it' > RoHu. / xehˈʃhõnjahk /

<ˌechondiak>), except across morpheme boundaries (cf. RoHu. / ˈʃɹaːtẽh /

<chraten> 'climb!'). This change occurred in the Northern Bear, Lorette, and Rock

dialects. (cf. also Steckley 2007a:41).

By HU-D2, * / xʷ / has become * / w / (e.g. Hu. / ˈõːxʷeh / 'person' >

LoHu. / ˈõːweh / <on8e> (MS 66:16)). This change is attested sporadically in

virtually all Huron dialects but appears to have occurred systematically in Northern

Bear and Lorette Huron, effectively removing * / xʷ / from the phonemic inventory of

those dialects.

By HU-D3, * / x / has been lost before resonant consonants (e.g. Hu. / aʔˈtexɹeʔ /

'eight' > LoHu. / aʔˈteɹeʔ / <atere> (MS 66:133); Hu. / taˈxwẽːtẽɹ / 'pity us!' >

LoHu. / taˈwẽːtẽɹ / <ta8entenr> (MS 66:126)). This change is attested sporadically in

virtually all Huron dialects, but seems to have occurred systematically in the Northern

Bear and Lorette dialects.

By HU-D4, * / x / has been lost before vowels and word-finally

(e.g. Hu. / aˈxistẽh / 'my father' > NBeHu. / aˈistẽh / <Aistan>

(Thwaites 1896-1901, 10:265); Hu. / taxeʔˈnjaːxẽʔs / 'heal me!'

> NBeHu. / taeʔˈnjaːẽʔs / <taenguiaens> (Thwaites 1896-1901, 10:265);

Hu. / xaaʔtaˈxẽhtsihk / 'old woman' > NBeHu. / aaʔtaˈẽhtsihk / <Aataentsic>

(Thwaites 1896-1901, 10:125)). This change occurred in the Northern Bear

dialect and appears to have removed / x / from the phonemic inventory of that dialect.

By HU-D5, * / t / has become * / k / before * / ɹ / (e.g. Hu. / saˈtɹihoteh / 'listen!'

> NBeHu. / saˈkɹihoteh / <sakhrihote> (Thwaites 1896-1901, 10:67));

Hu. * / otatɹẽnoˈjaʔxeh / 'medicinal dance' > NBeHu. / otakɹẽnoˈjaʔeh /

<Otakrendoiae> (Thwaites 1896-1901, 10:205)). This change occurred in the

Northern Bear dialect. (cf. also Steckley 2007a:38).

By HU-D6, * / t / has become * / k / before * / j / (e.g. Hu. / tjõˈnhehkʷih / 'life

force' > NBeHu. / kjõˈnhehkʷih / <khiondhecwi> (Thwaites 1896-1901, 10:139);

Hu. / tjaˈɹahskʷaʔ / 'we set out' > NBeHu. / kjaˈɹahskʷaʔ / <kiarascwa>

(Thwaites 1896-1901, 10:119); Hu. / eˈkwatjeɹ / 'what we will do' >

NBeHu. / eˈkwakjeɹ / <Icwakhier> (Thwaites 1896-1901, 10:159)). This change

occurred in the Northern Bear, Cord, Southern Bear, and Petun dialects of Huron, but

not in the Rock and Lorette dialects. (cf. also Mithun 1985:505, Steckley 2007a:39).

Phonological changes that have occurred in Huron dialects are recapitulated in (3).

(3)   Phonological Changes in Huron Dialects

    HU-D1   ɹ > h / ʃ_   NBeHu, LoHu, RoHu
    HU-D2   xʷ > w   NBeHu, LoHu
    HU-D3   x > Ø / _R   NBeHu, LoHu
    HU-D4   x > Ø / _V, #   NBeHu
    HU-D5   t > k / _ɹ   NBeHu
    HU-D6   t > k / _j   NBeHu, CoHu, SBeHu, PeHu

In addition to the phonemic changes presented above, several phonetic shifts have

occurred in Huron dialects (cf. Steckley 1997, 2007a:35-45). In the Southern Bear,

Cord, and Petun dialects of Huron the sequence / nɹ / appears to have been realized as

[ndɹ] (e.g. Hu. / oˈnɹrahtaʔ / 'leaf' → PeHu. [oˈndɹahtaʔ]). In the Southern Bear and

Cord dialects of Huron the phoneme / w / appears to have been realized as [m] when

preceded or followed by a nasal vowel (e.g. Hu. / tjothõwaˈihʃaʔ / 'rabbit' →

SBeHu. [kjothõmaˈihʃaʔ]). In the Northern Bear, Southern Bear, and Petun dialects of

Huron the cluster / nj / seems to have been realized as [ŋj] (rather than [ndj])

when it preceded a non-nasal vowel (e.g. Hu. / ˈnjaːɹeʔ / 'first' → PeHu. [ˈŋjaːɹeʔ]).

(cf. also Mithun 1979:167 and Steckley 2007a:39).

16.4 MORPHOLOGICAL CHANGES

To prepronominal prefix position class 1 Huron has added an intensive prefix / its /,

which is perhaps a reflex of the PNI particle * / ˈitswaʔ / 'much, many, a lot' [213]

(cf. Hu. / itsohˈkẽjeʔ / <itsoˈkënie> 'tres peu' (MS 59:83); / iskatsiˈwaːxẽh /

<iskatsi8aˌen> 'it smells very bad' (Steckley 2004:6)). Initial * / n / of the partitive

prefix appears to have been lost in all allomorphs in Huron (or alternatively,

allomorphs in * / iː / that were associated with independent verb forms in PI were

preserved in Huron; see 2.4), and initial * / tsh / of the contrastive prepronominal

prefix has become / ʃ / in Huron, rather than the expected / sh /. Allomorphs of the

factual prefix (PNI * / waʔ / [006]) have lost / w / in all environments in Huron, and an

allomorph / õ / occurs word-initially before the repetitive and cislocative prefixes in

most dialects, a development also common to at least some dialects of Old Mohawk

(cf. Hu. / õtahaˈtakheʔ / <ontahataχe> 'il vient' and / õsahaˈtakheʔ / <onsahataχe>

'il retourne' from MS 59:155). Also in common with some dialects of Old Mohawk,

Huron had a cislocative allomorph / et / [010] that seems to have occurred word-initially

before a following consonant, e.g. / etjoʔˈsẽʔnih / 'it has fallen from above'. The vowel

of the future prepronominal prefix (PNI * / ẽ / [008]) appears to have lost nasality and

became / e /, while the optative prefix (PNI * / aɹa / [009]) lost * / ɹ / in all allomorphs,

leaving lexicalized long / aː / before consonants other than * / j / as in the Five Nations

languages. From the nominalizer particle / neʔ / [352], the temporal particle / ˈoːnẽh / [367],

and the relativizer particle / stiʔ /, Huron developed clitics / n- /, / on- /, and / st- /

which occurred before verbs beginning in a vowel (cf. Hu. / naxeʔnixõhˈɹaʔxeh /

< d'aˌendiˌonˈraˌe > 'mon Esprit' (MS 59:88); / onaʔxaˈɹatjeʔ / < onn'aˌaratie >

'il ē tard' (MS 59:129); / steohˈʃɹatheʔ / < st'eochaθe > 'l'hyver prochain' (MS 59:181),

with change of / ɹ / to / h / after / ʃ / in the Rock dialect).

The non-singular animate prefix has been preserved in Huron and acquired a gender

distinction whereby the reflex of PNI * { ka } [012] signals neuter or feminine gender

while an innovative prefix { ha } (presumably an innovation based on the 3SGM:3

pronominal prefix) signals masculine gender. Unlike their Proto-Northern Iroquoian

antecedent, the Huron non-singular animate prefixes precede pronominal prefixes with

an argument '3' rather than '3I', so that { xa } 'NSA' was added not to { khe } '1SG:3I'

but to { xe } '1SG:3' (i.e. PNI * / kaˈkheːkẽh / 'I see them' [332] → Hu. * / xaˈxeːxẽh /

'I see them (females)', and * / haˈxeːxẽh / 'I see them (males)', rather than

ˣ / xaˈkheːxẽh /, ˣ / haˈkheːxẽh /). The Huron non-singular animate prefix / xa / had

additional allomorphs / xõ / (before / wa /, with loss of / wa /) and / xe /

(before the group of second person pronominal prefixes described in 4.4). Huron

/ ha / 'NSAM' had allomorphs / hõ / and / he / in the same environments.

All PNI masculine gender pronominal prefixes with allomorphs in * / hɹ / and * / ɹ / seem to have levelled these sequences to / h / in Huron (e.g. PNI * / hɹa / '3SGM:3' [053] → Hu. / ha /) except in allomorphs of the 3SGM:3 prefix that occurred before bases beginning in vowels other than / a(:) / or / i(:) / (cf. Woodbury 1981:108).

Reflexes of the 3PL:3 prefixes * { wati } [058] and * { kõti } [059] have merged in Huron as a 3PL:3 prefix { wati }, which continues allomorphs of both reflexes in certain environments. The role of the 1 + 2NS:3I prefix * { jethi } [048] was subsumed by the reflex of the PNI prefix * { jakhi } '1 + 3NS:3I' [049] in Huron to yield { akhi } '1NS:3I'.

From the agent pronominal prefix { je } '3I:3' [063] Huron appears to have innovated a prefix { she } '3I:3SGM', probably by analogy with the patient pronominal prefix pairing, { jaxo } '3:3I' [064] and { shaxo } '3SGM:3I' [065]. The roles of the prefixes * { jakoti } '3NS:3I' [070] and * { shakoti } '3NSM:3I' [071], confined to Iroquoia, were in Huron covered by the combinations { xaaxo- } 'NSA + 3:3I' and { haaxo- } 'NSAM + 3:3I'.

The consonants and clusters before which a reflex of epenthetic * / e / appears seem to have increased in Huron relative to PNI. Consonants and clusters before which the word-initial 1SG:3 pronominal prefix allomorphs / i / (< PNI * k), / x /, and / xe / occur in Huron are presented in (4).

(4)   Distribution of Prefix Allomorphs with Epenthetic / e / in Huron (1SG:3)

/ i /   _nV.

/ x /   _jV (< PNI * jV), ɹV (< PNI * ɹV).

/ xe /   _jV (< PNI * wjV, ɹjV), ɹV (< PNI * wɹV), and all remaining
                    consonants and clusters.

The only reversive morpheme attested in Huron appears to be / (a)w /, a reflex of

PNI * / (a)kw / [084] with unexplained loss of * / k /. Huron derivational and aspectual

morphology is otherwise strikingly similar to that of Onondaga: the vast majority of

perfect aspect verb bases ended in / -ih / [119] rather than / -õh / [115] or / -ẽh / [116]; no

distinction appears to have been made between habitual and present tense forms and,

as in Onondaga, the PNI present suffix * { -h } [108] seems to have become { -k } in order

to better differentiate habitual forms from perfect forms in * { -õh } [115], * { -ẽh } [116],

and * { -ih } [119]. Likewise, habitual bases in / -was / regularly have punctual

counterparts in / -waʔ / rather than / -oʔ /, and reflexes of PNI punctual bases that

seem to have ended in * { -ʔn } [114] showed { -ʔhaʔ } (or { -haʔ }, judging

from Wyandot) in Huron (e.g. PNI * / tõtsahˈɹaːtaʔn / 'he took his place again' [449] >

Hu. / tõsahaˈtaʔhaʔ / < Tosahataha > (MS 59:154)).

Huron appears to have had a comparative paucity of suffixes relative to other

Northern Iroquoian languages and no attested innovations. Among the few suffixes that

are attested are locative { -xeh } [128] and populative { -ɹoːnõʔ } [129].

CHAPTER 17: WYANDOT

17.1 INTRODUCTION

This chapter describes the language of the Wyandot (/ wẽnaˈtɹuːnɔ̃ʔ / 'People

of one language'), descendants of Huron and Petun refugees who were displaced by war

with the Iroquois after 1650 (cf. Tooker 1978:398). Wyandot most likely descends from

the Petun dialect of Huron (cf. Kopris 2001:361), but has diverged enough from

Common Huron to warrant classification as a separate language; it appears to have

assumed a form distinct from Huron at some point between the mid-eighteenth century,

when a grammar based on the Petun dialect of Huron was composed by the Jesuit

missionary Pierre Potier (1708-1781), and the mid-nineteenth century, when the

informants of ethnographer Charles Marius Barbeau (1883-1969) were born. Like

Huron, the Wyandot language, previously spoken on the Wyandotte Reservation in

Oklahoma and by expatriate communities in Kansas, Ohio, and Essex County, Ontario,

is now extinct, but it is preserved in forty narratives that were recorded in the early

twentieth century and published in Barbeau (1960). Kopris (2001) compiled a grammar

and dictionary based on the Barbeau narratives. Unless otherwise stated, Wyandot

forms in this chapter are based on data from the narratives in Barbeau (1960).

17.2 PHONEMIC INVENTORY

The phonemic inventory of Wyandot is presented in (1).

(1)   Phonemic Inventory of Wyandot

CONSONANTS

	Alveolar	Palato-Alveolar	Palatal	Velar	Glottal
Plosive	t			k kʷ	ʔ
Nasal	n				
Fricative	s	ʃ ʒ			h
Affricate	ts				
Approximant	ɹ		j	w	

VOWELS

	Front	Central	Back
Close	iː		uː
	i		u
Mid	eː ɛ̃ː		ɔ̃ː
	e ɛ̃		ɔ̃
Open		aː	
		a	

Huron intervocalic / j / has shifted to / ʒ / in Wyandot. Huron / x / has shifted to

/ j / or / e / or been lost, and Huron / xʷ / has merged with reflexes of / w /. Huron

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/ o(:) / has shifted to / u(:) /. The nasal vowels / ẽ(:) / and / õ(:) / have shifted to

/ ɛ̃(:) / and / ɔ̃(:) / (cf. Barbeau 1960:57). Contrastive vowel length seems to have been

lost in final syllables but was introduced elsewhere in the language following loss of

/ h / before resonant consonants (cf. WY-7 in 17.3).

The plosives / t /, / k /, and / kʷ / appear to have remained voiceless in all

environments in Wyandot. The phoneme / w / was realized as [m] intervocalically

when preceded or followed by a nasal vowel (e.g. Wy. / ɔ̃watɔ̃ːˈwɛ̃tsaʔ / 'our land' →

[ɔ̃matɔ̃ːˈmɛ̃tsaʔ]), although an argument can also be made for the marginal phonemic

status of [m] based on its occurrence in word-initial position in words where an initial

vowel has been dropped (e.g. Wy. [ˈmɛ̃ʔjeh] 'in the water', from Hu. / aˈwẽʔxeh / [196])

(cf. Kopris 2001:53). The phoneme / ʒ / had an unusual (but regular) allophone [ɲ]

when it preceded nasal vowels, and an allophone [ʒ] occurred elsewhere

(e.g. Wy. / haˈʒɛ̃ːwih / 'he knows how' → [haˈɲɛ̃ːmih]; / eːʒaːˈʒuʔ / 'he will kill you' →

[eːʒaːˈʒuʔ]). The Wyandot phoneme / n / was realized as [n] when it preceded a

nasal vowel, as [nd] when it preceded a non-nasal vowel or / ɹ /, and as [ŋ] when it

preceded / w / or / j / (e.g. Wy. / jaˈnɔ̃hʃaʔ / 'house' → [jaˈnɔ̃hʃaʔ]; / uˈnaʔtaɹaʔ /

'bread' → [unˈdaʔtaɹaʔ]; / unrahˈtaʔjeh / 'on the leaves' → [undɹahˈtaʔjeh];

/ ˈtsiʔnwaɹaʔ / 'green' → [ˈtsiʔŋwaɹaʔ]; / hahˈʃɹɔ̃njah / 'he makes it' →

[hahˈʃɹɔ̃ŋjah]). Note, however, that an argument can also be made that / n / and

/ nd / were separate phonemes due to cliticization of contrastive temporal and

nominalizer particles (as [n] versus [nd], from respective freestanding forms / ˈnɛ̃h /

[ˈnɛ̃h] 'now' and / ˈneʔ / [ˈndeʔ] 'the') word-initially before vowels

(cf. Kopris 2001:73). Pronunciation of the vowel / ɛ̃(ː) / approached [ã(ː)] when the

phoneme / w / preceded (e.g. Wy. / wɛ̃ːˈnat / 'Wyandot' → [wãːnˈdat]).

　　Curiously many, but not all, reflexes of words that had long vowels in final syllables

in PNI appear to have developed accent on the final syllable in Wyandot

(e.g. Hu. / ˈteniːh / 'two' [438] > Wy. / teˈnih /; Hu. / ˈahshɛ̃ːh / 'ten' [135] >

Wy. / ahˈsɛ̃h /; Hu. / ˈxajoːʔ / 'animal' [429] > Wy. / jaˈʒuʔ / or / jaˈʃuʔ /;

Hu. / xaˈtoːkɛ̃ːh / 'it is certain' [448] > Wy. / jatuːˈjɛ̃h /; Hu. / ˈwɛ̃ːnaːt / 'Huron' [159] [476] >

Wy. / wɛ̃ːˈnat / 'Wyandot'). Shortening of vowels in final syllables and alterations to

PNI word accent may already have been present in Huron, but cannot be discerned

from Jesuit Huron orthography; in-depth analysis of unexpected patterns of accent in

Wyandot is a promising subject of future inquiry.

17.3 PHONOLOGICAL CHANGES

　　Phonological changes that have occurred during the transition from Huron to

Wyandot are described below as WY-1 through WY-18. Where ordering of any two

changes appears to be necessary in order to produce a correct output in Wyandot, this is

noted.

By WY-1, long vowels have been shortened in final syllables

(e.g. Hu. * / tjohˈnhõhskʷeɹõːt / 'it has jowls protruding' [235] > Wy. / kjuˈtõhskʷeɹõt /

'cow'; Hu. / ˈteʔxẽːh / 'it is not' [275] > Wy. / ˈteʔjẽh / 'it is not'; Hu. * / otõtaˈɹõːniːh /

'she has made a lake' [260] [412] > Wy. / utõtaˈɹõːnih /).

By WY-2, * / t / has become * / k / before * / j / (e.g. Hu. / tjoʔˈxjẽtsihk /

'snake' [445] > Wy. / kjuʔˈʒẽtsih /; Hu. / tjohˈskẽːẽʔ / 'it is nearby' [444] >

Wy. / kjuhˈskẽːʒẽʔ /; Hu. / oˈtjohkʷaʔ / 'crowd' [288] > Wy. / uˈkjuhkʷaʔ /). This change

was already present in the Petun dialect of Huron (cf. HU-D6 in 16.3) from which

Wyandot descends.

By WY-3, * / xʷ / has become * / w / (e.g. Hu. / aˈxõːxʷeh / 'she is a person' [405] >

Wy. / ajõːˈweh /). This change was earlier common to at least the Lorette and Northern

Bear dialects of Huron (cf. HU-D2 in 16.3), with sporadic attestation in other dialects.

By WY-4, a glottal consonant has been lost before * / nh /

(e.g. Hu. * / tjohˈnhõhskʷeɹõːt / 'it has jowls protruding' [235] > Wy. / kjuˈtõhskʷeɹõt /

'cow'; Hu. / oʔˈnhõhʃaʔ / 'egg' [490] > Wy. / uˈtõhʃaʔ /; Hu. / xahˈnhohwaʔ / 'door' [233] >

Wy. / jatuːˈwaʔ /). This change must precede WY-5 and WY-7.

By WY-5, * / n / has become * / t / before * / h / (e.g. Hu. * / iõˈnhoʔtɛ̃ʔ /

'that kind of life' [401] [406] > Wy. / iˈʒõtuʔtɛ̃ʔ /; Hu. / oʔˈnhõhʃaʔ / 'egg' [490] >

Wy. / uˈtõhʃaʔ /; Hu. / xahˈnhohwaʔ / 'door' [233] > Wy. / jatuːˈwaʔ /). This change must

follow WY-4 and precede WY-6.

By WY-6, * / h / has been lost after a non-resonant consonant

(e.g. Hu. / otsiˈkheʔtaʔ / 'sugar' [456] > Wy. / uˈtsikeʔtaʔ /; Hu. / thatiˈnaxɹeʔ /

'they live there' [354] > Wy. / tatiˈnaːɹeʔ /; Hu. / shaxoˈẽhtih / 'he has hit someone' [307] >

Wy. / sajuˈwɛ̃htih /). This change must follow WY-5.

By WY-7, * / h / has been lost between a vowel and a resonant consonant, and the

vowel has been lengthened (e.g. Hu. / aʔˈxehnɹɛ̃x / 'I tied it' [240] > Wy. / aʔˈjeːnɹɛ̃ /;

Hu. / aʔˈwahɹõx / 'she understood' [138] > Wy. / aʔˈwaːɹõ /;

Hu. * / nõsahjatɹihwahˈʃɹõnjaʔ / 'now again they made an agreement' [260] [427] >

Wy. / nusaːʒaˈtɹiːwahʃɹõnjaʔ /). This change must follow WY-4 and precede WY-12.

By WY-8, * / w / has been inserted between a rounded vowel and a following vowel

(e.g. Hu. / axoˈẽʔah / 'her child' [313] > Wy. / ajuˈwɛ̃ʔah /; Hu. / aʔhoeˈnaːõʔ /

'they caught him' [301] > Wy. / aʔhuweˈnaːõʔ /; Hu. / aʔshaxoaʔˈtõːtiʔ /

'he threw them out' [174] > Wy. / aʔsajuwaʔˈtõːtiʔ /), and this change must precede

WY-10. Similarly, by WY-9, * / j / has been inserted between a front vowel and a

following vowel (e.g. Hu. / tehsti'ahjaʔx / 'you cross over' [277] > Wy. / tehsti'ʒaːʒaʔ /;

Hu. / õxi'ẽkhwih / 'we have planted it' [311] > Wy. / ɔ̃i'ʒẽkwih /; Hu. * / iõhwẽ'tsoʔtẽh /

'that kind of land' [401] [402] > Wy. / iʒɔ̃ːwẽ'tsuʔtẽh /). Since phonetically this change is

more likely to have involved phonetic [j] (rather than [ʒ] and [ɲ] as allophones of

/ ʒ /), WY-9 is assumed to have preceded WY-12, and must precede WY-13.

By WY-10, * / x / has been lost before * / i / or * / j / (e.g. Hu. / õxi'ẽkhwih /

'we have planted it' [311] > Wy. / ɔ̃i'ʒẽkwih /; Hu. / axe'njaːkih / 'I am married' [372] >

Wy. / aje'njaːih /; Hu. / teʔxjẽ'teːɹih / 'I don't know' [310] > Wy. / teʔʒẽ'teːɹih /). This

change must follow WY-7 and precede WY-13 and WY-14.

By WY-11, * / x / has become * / e / before * / ɹ / word-initially

(e.g. Hu. / 'xɹiːjohʃ / 'I kill it' [428] > Wy. / eɹiː'ʒuhʃ /; Hu. * / xɹihwah'ɹõkhaʔ / 'I hear a

story' [138] [427] > Wy. / eɹiːwaː'ɹõkaʔ /). This change must precede WY-14.

By WY-12, * / j / has become * / ʒ / when it followed a word boundary, glottal

stop, or vowel, and preceded a vowel (e.g. Hu. / tehsti'ahjaʔx / 'you cross over' [277] >

Wy. / tehsti'ʒaːʒaʔ /; Hu. / 'xajoːʔ / 'animal' [429] > Wy. / ja'ʒuʔ /; Hu. / eh'jajoʔ /

'he will kill you' [428] > Wy. / eːʒaː'ʒuʔ /). This change must follow WY-7 and WY-9, and

precede WY-13. However, note that in at least one instance WY-13 appears to feed

WY-12: from Hu. * / aʔxõxõhʃoˈɹẽhaʔ /, literally 'I found your face', one finds both a

form / aʔjɔ̃jõhʃuˈɹẽhaʔ / [aʔjɔ̃jɔ̃hʃuˈrẽhaʔ] and a form / aʔjɔ̃ʒɔ̃hʃuˈɹẽhaʔ /

[aʔjɔ̃ɲɔ̃hʃuˈɹẽhaʔ] in Wyandot, used by the same speaker in the same narrative

(Barbeau 1960:177). This suggests that WY-12 and WY-13 may have overlapped to

some extent. (cf. also Mithun 1979:168).

By WY-13, * / x / has become * / j / before a vowel (e.g. Hu. / ˈxanxõh / 'blood' [376]

> Wy. / jaˈnjɔ̃h /; Hu. / aˈtoːxẽʔ / 'axe' [182] > Wy. / aˈtuːjẽʔ /; Hu. / xaaʔtaˈxẽhtsihk /

'old woman' [298] [333] > Wy. / jaˈaʔtajẽhtsih /; Hu. / xõtaˈɹaʔxeh / 'at the lake' [412] >

Wy. / jõtaˈɹaʔjeh /). This change must follow WY-12 and must precede WY-14.

(cf. also Mithun 1979:168).

By WY-14, * / x / has been lost elsewhere (e.g. Hu. / aʔˈhahɹõx / 'he heard' [138] >

Wy. / aʔˈhaːɹõ /; Hu. / tehstihˈtiːaʔx / 'you cross a field' [277] > Wy. / tehstihˈtiːʒaʔ /;

Hu. / thatiˈnaxɹeʔ / 'they live there' [354] > Wy. / tatiˈnaːɹeʔ /; Hu. / õsaˈxɹiːjoʔ /

'I killed again' [428] > Wy. / usaɹiːˈʒuʔ /). This change must follow WY-10, WY-11, and

WY-13.

By WY-15, * / k / has been lost word-finally (e.g. Hu. / tjoʔˈxjẽtsihk / 'snake' [445] >

Wy. / kjuʔˈʒẽtsih /; Hu. / xaaʔtaˈxẽhtsihk / 'old woman' [298] [333] > Wy. / jaaʔtaˈjẽhtsih /;

Hu. * / hateʔˈnõnjahk / 'he makes arrows' [260] [488] > Wy. / hateʔˈnõnjah /).

By WY-16, * / ẽ(ː) / has shifted to * / ɛ̃(ː) / (e.g. Hu. / ohskẽˈnõːtõʔ / 'deer' [254] >

Wy. / uhskɛ̃ˈnõːtõʔ /; Hu. / ˈskwẽːtaːt / 'one day' [159] [219] > Wy. / ˈskwẽːtat /;

Hu. / teʔxjẽˈteːɹih / 'I don't know' [310] > Wy. / teʔʒɛ̃ˈteːɹih /), and by WY-17, * / õ(ː) /

has shifted to * / ɔ̃(ː) / (e.g. Hu. / xaˈnõhʃaʔ / 'house' [382] > Wy. / jaˈnɔ̃hʃaʔ /;

Hu. / aˈxõːxʷeh / 'she is a person' [405] > Wy. / ajɔ̃ˈweh /; Hu. / tahatiˈɹõːtẽʔ /

'he pulled it' [175] > Wy. / tahatiɹɔ̃ːtɛ̃ʔ /).

By WY-18, * / o(ː) / has shifted to * / u(ː) / (e.g. Hu. / oˈtjohkʷaʔ / 'crowd' [288] >

Wy. / uˈkjuhkʷaʔ /; Hu. / aˈtoːxẽʔ / 'axe' [182] > Wy. / aˈtuːjɛ̃ʔ /; Hu. / tjoˈnõːtoːt /

'the hill sticks up there' [385] [397] > Wy. / kjuˈnɔ̃ːtut /).

Phonological changes that have occurred in the transition from Common Huron to

Wyandot are recapitulated in (2).

(2)   Phonological Changes in the Transition from Common Huron to Wyandot

WY-1	V^1ː > V^1 (in final syllables)
WY-2	t > k / _j
WY-3	x^w > w
WY-4	H > Ø / nh
WY-5	n > t / _h
WY-6	h > Ø / k, s, t, ts_
WY-7	V^1h > V^1ː / _R
WY-8	Ø > w / o, õ_V
WY-9	Ø > j / e, ẽ, i_V
WY-10	x > Ø / _i, j
WY-11	x > e / #_r

WY-12	j > ʒ / #, ʔ, V_V
WY-13	x > j / _V
WY-14	x > Ø
WY-15	k > Ø / _#
WY-16	ẽ(ː) > ɛ̃(ː)
WY-17	õ(ː) > ɔ̃(ː)
WY-18	o(ː) > u(ː)

17.4 MORPHOLOGICAL CHANGES

From what can be discerned from Barbeau's (1960) narratives, Wyandot

morphology appears to have been essentially the same as that of Huron, though the

factual prepronominal prefix allomorph / õ / [006] unexpectedly becomes / u / in

Wyandot (e.g. Wy. / utaˈʒaʔkjɔ̃ʔ / 'I am bringing [the dog] in' [315] ; / usahɔ̃tɹiːˈʒuʔ /

'they fought again' [428]).

CHAPTER 18: FRAGMENTARY LANGUAGES

18.1 INTRODUCTION

In all, about seventeen Iroquoian languages are thought to have been spoken at the time of first European contact (at least sixteen Northern Iroquoian languages plus Cherokee), but records for four of these languages are fragmentary or non-existent, and two nations that were identified as speakers of Iroquoian languages in the seventeenth century, called in Northern Bear Huron <Conkhandeenrhonon> 'Nation of the ? ' and <Scahentoarrhonon> 'Nation of the Great Meadow', have yet to be identified conclusively.

Assessment of the number of Northern Iroquoian languages spoken in the early seventeenth century, excluding those spoken in Virginia and North Carolina, is based largely on the following entry in Volume Eight of the Jesuit Relations (Thwaites 1896-1901, 8:114), in which Father Jean de Brébeuf indicates that Huron [i.e. Iroquoian] is the language of at least twelve other Nations:

> There are twenty [Huron] Towns, which indicate about 30,000 souls
> speaking the same tongue, which is not difficult to one who has a master.
> It has distinction of genders, number, tense, person, moods; and, in short,
> it is very complete and very regular, contrary to the opinion of many. I am
> rejoiced to find that this language is common to some twelve other Nations,
> all settled and numerous; these are, the *Conkhandeenrhonons* [?],

Khionontaterrhonons [Petun], *Atiouandaronks* [Neutral], *Sonontoerrhonons* [Seneca], *Onontaerrhonons* [Onondaga], *Oüioenrhonons* [Cayuga], *Onoiochrhonons* [Oneida], *Agnierrhonons* [Mohawk], *Andastoerrhonons* [Susquehannock], *Scahentoarrhonons* [?], *Rhiierrhonons* [Erie], and *Ahouenrochrhonons* [Wenro]. The Hurons are friends of all these people, except the *Sonontoerrhonons, Onontaerrhonons, Oüioenrhonons, Onoiochrhonons* and *Agnierrhonons,* all of whom we comprise under the name Hiroquois.

To the languages mentioned may be added Laurentian, which was already extinct by the seventeenth century, as well as Tuscarora, Nottoway, Meherrin, and Cherokee, all spoken further to the south. In analyzing Petun and Huron as dialects of a single language, a total of seventeen Iroquoian languages is reached. What is known of the fragmentary (or altogether unattested) Northern Iroquoian languages is related in four sections that follow: Meherrin, Wenro, Erie, and Neutral.

18.2 MEHERRIN

The territory of the Meherrin in the early seventeenth century seems to have ranged from the Blue Ridge Mountains in the west, bordering on the territory of the Catawba, to the mouth of the Blackwater River in the east, bordering on the territory of the Chowan, north to the Nottoway River, bordering on the territory of the Nottoway, and south to the Roanoke River, bordering on the territory of the Tuscarora

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(cf. Binford 1967:116, Boyce 1978:282; see Map 3). The Meherrin appear to have

merged with the Tuscarora by about 1730 (Binford 1967:193).

The names of two Meherrin settlements, given during legal depositions in Virginia

in 1707, represent all that is known to survive of the Meherrin language. The first of

these names is <Cowochahawkon> or <Cowinchahawkon>, the second <Unote>

(Binford 1967:153). Both names appear to begin with reflexes of third person

pronominal prefixes (cf. PNI * { ka } '3SG:3' [051] and * { jo } '3:3SG' [054], * / o- /

word-initially in nouns). The first name is doubtless the source of the Tuscarora word

/ akawə̃tʃ'ʔaːkaːʔ / 'Meherrin' (Rudes 1981b:33). Given the geographic location of the

Meherrin between the territories of the Tuscarora and Nottoway, it seems likely that the

language belonged to the Tuscarora-Nottoway subgroup of the Northern Iroquoian

languages, though no proof of this exists.

18.3 WENRO

The territory of the Wenro in the early seventeenth century seems to have ranged

from the Niagara River in the west, bordering on the territory of the Neutral, to the

Genesee River in the east, bordering on the territory of the Seneca, north to Lake

Ontario, and south to Buffalo Creek, bordering on the territory of the Erie

(cf. White 1978a:407, Trigger 1987:96-97; see Map 8). The Wenro were known to the

Huron as <8enro'ronon> or <Ahouenrochrhonon>, names which best seem to

translate as 'Nation of the moss in the water' or 'Nation of the floating scum', and have

led to a belief, as yet unsubstantiated, that the primary Wenro village was once located

at an oil springs near modern Cuba, New York (Hewitt 1912:933). Beginning in the late

1630s, their traditional protective alliance with the Neutral and Erie having lapsed, the

Wenro were driven from their territory by the Iroquois Confederacy and survivors

sought refuge among the Huron, Erie, and Neutral.

The name of a Wenro village was recorded as <Ouaroronon> by Joseph de la

Roche Dallion in 1627 (Le Clerq 1882:268), although this was more likely the

ethnonym for informants who had come from there (Hu. <8enro'ronon> 'Wenro').

18.4 ERIE

The territory of the Erie in the early seventeenth century seems to have ranged at

least from Presque Isle Bay in the west, bordering on the territory of unknown tribes, to

the Genesee River in the east, bordering on the territory of the Seneca, north to Buffalo

Creek, bordering on the territory of the Wenro, and south into what is now

northwestern Pennsylvania, again bordering on unknown tribes (cf. White 1978b:412,

Trigger 1987:96; see Map 8). The Erie were known to the Huron as / eɹiʔxehˈɹoːnõʔ /

(NBeHu. / ɹiʔehˈɹoːnõʔ /), the most etymologically plausible translation of which is

'Nation at the Cherry Trees' (cf. Wright 1972:63). The Erie survived as a political entity

until being defeated by the Iroquois Confederacy in 1656, after which survivors, among

them many Wenro and Neutral refugees, were assimilated into the ranks of their

conquerors.

No words of the Erie language are known to have been recorded, although the

personal name <Gandeaktena> (Thwaites 1896-1901, 61:193) and the place names

<Rigué> (Thwaites 1896-1901, 42:185) and <Gentaienton> (Thwaites 1896-1901,

61:193), all of which were recorded by Jesuits living among the Iroquois Proper after

the conquest of the Erie, could conceivably represent authentic Erie names.

A linguistically-driven ethnology of the Erie with analysis of pertinent ethnonyms found

in other Northern Iroquoian languages is presented in Wright (1972).

18.5 NEUTRAL

The territory of the Neutral in the early seventeenth century seems to have ranged

from Lake Saint Clair in the west, bordering on the territories of the Fox and Kickapoo,

to the Credit and Niagara Rivers in the east, bordering on the territories of the Huron

and Wenro, north to the Grand River Valley, bordering on the territories of the

Ottawa and Petun, and south to Lake Erie (cf. White 1978a:407, Trigger 1987:94-95;

see Map 8). The Neutral were known to the Huron as <Atiouandaronk> meaning

probably 'they understand the language' (Lounsbury 1978:334;

cf. Hu. / atiwẽnahˈɹõkhaʔ / 'they understand the language'). The Neutral continued to

exist as a nation until the early 1650s when they were defeated by the Iroquois

Confederacy and survivors, for the most part, were assimilated into the ranks of their

conquerors.

   Two words of what may represent authentic Neutral are preserved in a letter sent to

France in 1627 by Jesuit Father Joseph de la Roche Dallion, who had spent several

months residing in Neutral towns the previous year: the name of a town,

<Ounontisaston>, and its chief, <Souharissen> (Le Clercq 1882: 265, 269). From

these words, the first perhaps meaning 'Mountain Corner' (Hu. / onõtiˈsahtih /),

one can discern that Neutral was indeed an Iroquoian language, was rhotic

(i.e. retained PNI * / ɹ /, unlike Seneca and Modern Onondaga), had causative perfects

in * { -õh } (in contrast to the { -ih } of Huron and Onondaga), and realized the reflex

of PNI * / o / as [u] rather than [o].

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001   PNI * { **teʔ** } 'negative'

PNI * / taʔ / before the duplicative prefix; * / teʔ / elsewhere.

Mo. / te / before / h /; / teʔ / elsewhere.

Oe. / te / before / h /; / teʔ / elsewhere.

Oo. / taʔ / before the duplicative prefix; / t / before the translocative prefix;
/ Ø / before the contrastive prefix; / teʔ / before / j / and / w / with loss
of / j / and / w /, and before remaining consonants elsewhere.

Ca. / tʔe / in unaccented odd syllables; / teʔ / before / j / and / w / elsewhere
with loss of / j / and / w /, and before remaining consonants elsewhere.

Se. / taʔ / before the duplicative prefix and before the factual; / t / before the
translocative prefix; / te: / before / hC / with loss of / h /; / te / before
/ hV / with loss of / h /; / teʔ / elsewhere.

Hu. / taʔ / before the duplicative prefix; / t / before vowels; / teʔ / elsewhere.

002   PI * { **ts** } 'coincident' (perhaps also relativizer)

PI * / ts / before vowels; elsewhere = ?

Ch. / ts / before vowels, and before / h /; / tsì / before remaining consonants.

PNI (here hypothesized to derive from PI * / ts + iji: / 'coincident+partitive'):
* / tshõ / before * / wa / in an imperative verb with loss of * / wa /, and
before the cislocative or repetitive prefix in imperative verbs not
containing the 1+2DU:3 or 1+2PL:3 prefixes; * / tshe / before certain
pronominal prefixes (see 4.4) in an imperative verb; * / tshaʔ / before
* / j / in an imperative verb with loss of * / j /, and before remaining
consonants in an imperative verb, and before the duplicative prefix;
* / tsh / before glides and vowels elsewhere (cf. Oe. * / tshje /
'coincident+translocative'; Oo. * / tshwaʔ / 'coincident+factual');
* / tshi / before consonants elsewhere.

Mo. / sh / before the translocative prefix, and before vowels; / shũ / before
/ wa / in an imperative verb with loss of / wa /, and before the
cislocative or repetitive prefix in imperative verbs not containing the
1+2DU:3 or 1+2PL:3 prefixes; / she / before certain pronominal
prefixes (see 4.4) in an imperative verb; / sha / before / h / in an
imperative verb; / shaʔ / before / j / in an imperative verb with loss of

/ j /, and before remaining consonants in an imperative verb, and before the duplicative prefix; / shi / elsewhere.

Oe. / tsh / before the translocative prefix, and before vowels; / tshũ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / tshe / before certain pronominal prefixes (see 4.4) in an imperative verb; / tsha / before / h / in an imperative verb; / tshaʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb, and before the duplicative prefix; / tshi / elsewhere.

Oo. / ts / before the translocative prefix; / tsh / before the factual prefix, and before vowels; / tshũ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / tsheʔ / after the negative prefix, and before certain pronominal prefixes (see 4.4) in an imperative verb; / tshaʔ / before / j / in an imperative verb with loss of / j /, and before the duplicative prefix; / tshi / before consonants elsewhere.

Ca. / ts / before the translocative prefix; / tsh / before vowels; / tshõ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / tsheʔ / before certain pronominal prefixes (see 4.4) in an imperative verb; / tsha / before / h / in an imperative verb; / tshaʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb, and before the duplicative prefix; / tshi / before consonants elsewhere.

Se. / ts / or / s / before the translocative prefix; / tsh / or / sh / before vowels; / tshõ / or / shõ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / tsheʔ / or / sheʔ / before certain pronominal prefixes (see 4.4) in an imperative verb; / tsha: / or / sha: / before / hC / in an imperative verb with loss of / h /; / tsha / or / sha / before / hV / in an imperative verb with loss of / h /; / tshaʔ / or / shaʔ / before / j / in an imperative verb with loss of / j /, and before the duplicative prefix; / tshaʔ / or / shaʔ / before remaining consonants in an imperative verb; / tshi: / or / shi: / before / hC / with

loss of / h /; / tshi / or / shi / before / hV / with loss of / h /, and before remaining consonants elsewhere.

Hu. / ʃ / before vowels; / ʃõ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / ʃe / before certain pronominal prefixes; / ʃaʔ / before / j / in an imperative verb with loss of / j /, and before the duplicative prefix; / ʃi / before consonants elsewhere.

003   PNI * { **thi** } 'contrastive'

PNI * / thõ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; * / the / before certain pronominal prefixes (see 4.4) in an imperative verb; * / thaʔ / before * / j / in an imperative verb with loss of * / j /, and before remaining consonants in an imperative verb, and before the duplicative prefix; * / th / before glides and vowels elsewhere (cf. Tu. / thj / 'contrastive + translocative'; Oo. / thwaʔ / 'coincident + factual'); * / thi / before consonants elsewhere.

Tu. / thõ̃ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / thɛ / before certain pronominal prefixes (see 4.4) in an imperative verb; / tha / before / h / in an imperative verb; / thaʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb, and before the duplicative prefix; / th / before glides and vowels elsewhere; / thi / before consonants elsewhere.

Mo. / th / before the translocative prefix, and before vowels; / thũ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / the / before certain pronominal prefixes (see 4.4) in an imperative verb; / tha / before / h / in an imperative verb; / thaʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb, and before the duplicative prefix; / thi / before consonants elsewhere.

Oe. [as in Mohawk].

Oo. / t / before the translocative prefix; / th / before the factual prefix, and before vowels; / thũ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / theʔ / before certain pronominal prefixes (see 4.4) in an imperative verb; / thaʔ / before / j / in an imperative verb with loss of / j /, and before the duplicative prefix; / thi / before consonants elsewhere.

Ca. / t / before the translocative prefix; / th / before vowels; / thõ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / theʔ / before certain pronominal prefixes (see 4.4) in an imperative verb; / tha / before / h / in an imperative verb; / thaʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb, and before the duplicative prefix; / thi / before consonants elsewhere.

Se. / th / before vowels; / thɔ̃ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / theʔ / before certain pronominal prefixes (see 4.4) in an imperative verb; / tha: / before / hC / in an imperative verb with loss of / h /; / tha / before / hV / in an imperative verb with loss of / h /; / thaʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb, and before the duplicative prefix; / thi: / before / hC / with loss of / h /; / thi / before / hV / with loss of / h /, and before remaining consonants elsewhere.

Hu. / th / before vowels; / thõ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / the / before certain pronominal prefixes (see 4.4); / thaʔ / before / j / in an imperative verb with loss of / j /, and before the duplicative prefix; / thi / before consonants elsewhere.

004   PI * { **iji:** } 'partitive'

PI * / ij / before vowels in deverbalized nouns and some (dependent?) verb forms; * / iji: / before consonants in deverbalized nouns and some (dependent?) verb forms; * / n / before vowels elsewhere; * / ni /

(probably) before consonants elsewhere.

Ch. / ìj / before vowels in deverbalized nouns and dependent verb forms; / ǐ: / before consonants in deverbalized nouns and dependent verb forms; / n / before vowels elsewhere, and before / h / elsewhere; / nì / before remaining consonants elsewhere.

PNI (here hypothesized to derive from PI * / n + iji: / 'partitive (independent form) + partitive (dependent form)', with Huron perhaps retaining reflexes of * / iji: / 'partitive (dependent form) without initial * / n /): * / nõ / before * / wa / in an imperative verb with loss of * / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; * / nwe / before certain pronominal prefixes (see 4.4) in an imperative verb; * / nwaʔ / before * / j / in an imperative verb with loss of * / j /, and before remaining consonants in an imperative verb; * / naʔ / before the duplicative prefix elsewhere; * / n / before vowels and glides elsewhere (cf. Tu. / tj / 'partitive + translocative'; Oo. / nwaʔ / 'partitive + factual'); * / ni / before consonants elsewhere.

Tu. / nə̃ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / thwɛ / before certain pronominal prefixes (see 4.4) in an imperative verb; / thwa / before / h / in an imperative verb; / thwaʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb; / taʔ / before the duplicative prefix elsewhere; / th / before / w / elsewhere; / n / before / jə̃ / elsewhere, and before vowels; / t / before / j / elsewhere; / ti / before remaining consonants elsewhere.

Mo. / n / before the translocative prefix, and before vowels; / nũ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / ne / before certain pronominal prefixes (see 4.4) in an imperative verb; / na / before / h / in an imperative verb; / naʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb, and before the duplicative prefix; / ni / before consonants elsewhere.

Oe. [as in Mohawk].

Oo. / n / before the translocative prefix, and before the factual prefix, and

before vowels; / nũ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / nweʔ / before certain pronominal prefixes (see 4.4) in an imperative verb; / nwaʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb; / naʔ / before the duplicative prefix elsewhere; / ni / before consonants elsewhere.

Ca. / n / before the translocative prefix, and before vowels; / nõ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / neʔ / before certain pronominal prefixes (see 4.4) in an imperative verb; / na / before / h / in an imperative verb; / naʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb, and before the duplicative prefix; / ni / before consonants elsewhere.

Se. / n / before vowels; / nõ: / before / hC / in an imperative verb with loss of / h /; / nõ / before / hV / in an imperative verb with loss of / h /, and before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / neʔ / before certain pronominal prefixes (see 4.4) in an imperative verb; / nõʔ / before / j / in an imperative verb with loss of / j /, and before the duplicative prefix; / nõʔ / before remaining consonants in an imperative verb; / ni: / before / hC / with loss of / h /; / ni / before / hV / with loss of / h /, and before remaining consonants elsewhere.

Hu. / Ø / before vowels; / õ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / e / before certain pronominal prefixes (see 4.4); / aʔ / before / j / in an imperative verb with loss of / j /, and before the duplicative prefix; / i / before consonants elsewhere.

005   PI * { **wi** } 'translocative'

PI * / w / before vowels; * / wi / before at least some consonants; (elsewhere = ?)

Ch. / w / before vowels, and before / h /; / wì / before remaining consonants.

PNI (here hypothesized to derive from PI * / wi / preceded by a cliticized particle with the form * / jah /): * / j(a)hõ / before * / wa / in an imperative verb with loss of * / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; * / j(a)hwe / before certain pronominal prefixes (see 4.4) in an imperative verb; * / j(a)hwaʔ / before * / j / in an imperative verb with loss of * / j /, and before remaining consonants in an imperative verb; * / jaʔ / before the duplicative prefix elsewhere; * / jah / before the factual prefix; * / j(a)hw / before vowels; * / j(a)hwe / before consonants elsewhere.

Tu. / ə̃ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / wɛ / before certain pronominal prefixes (see 4.4) in an imperative verb; / wa / before / h / in an imperative verb; / waʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb; / jaʔ / before the duplicative prefix elsewhere; / jah / before the factual prefix; / j / before vowels; / wɛ / before consonants elsewhere.

Mo. / jũ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / jaˈha / before / h / in an imperative verb provided word accent falls on / ˈha / as indicated; / jaˈhe / before certain pronominal prefixes (see 4.4) in an imperative verb, provided word accent falls on / ˈhe / as indicated; / jaˈhaʔ / before / j / in an imperative verb with loss of / j /, provided word accent falls on / ˈhaʔ / as indicated; / ja / before / h / in an imperative verb elsewhere; / je / before certain pronominal prefixes (4.4) in an imperative verb elsewhere; / jaʔ / before / j / in an imperative verb elsewhere with loss of / j /, and before remaining consonants in an imperative verb elsewhere, and before the duplicative prefix; / jaˈh / before an accented vowel / a / or / e / elsewhere; / jʌ̃ˈh / before an accented vowel / ʌ̃ / elsewhere; / j / before vowels elsewhere; / je / before consonants elsewhere.

Oe. [as in Mohawk].

Oo. / hũ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the

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1 + 2DU:3 or 1 + 2PL:3 prefixes; / hweʔ / before certain pronominal prefixes (see 4.4) in an imperative verb; / hwaʔ / before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb; / haʔ / before the duplicative prefix elsewhere; / h / before the factual prefix, and before vowels; / he / before consonants elsewhere.

Ca. / hõ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / heʔ / before certain pronominal prefixes (see 4.4) in an imperative verb; / haʔ / before the duplicative prefix, and before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb, and before the duplicative prefix; / h / before vowels; / he / before consonants elsewhere.

Se. / hɔ̃ / before / wa / in an imperative verb with loss of / wa /, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / heʔ / before certain pronominal prefixes (see 4.4) in an imperative verb; / haː / before / hC / in an imperative verb with loss of / h /; / ha / before / hV / in an imperative verb with loss of / h /; / haʔ / before the duplicative prefix, and before / j / in an imperative verb with loss of / j /, and before remaining consonants in an imperative verb; / h / before vowels and glides elsewhere; / heː / before / hC / with loss of / h /; / he / before / hV / with loss of / h /, and before remaining consonants elsewhere.

Hu. / Ø / in imperative verbs; / haʔ / before the duplicative prefix; / h / before vowels; / he / before consonants elsewhere.

006   PNI * { **waʔ** } 'factual'

PNI * / Ø / word-initially before the cislocative or repetitive prefix; * / õ / before * / wa / with loss of * / wa /, and before the cislocative or repetitive prefix elsewhere; * / we / before certain pronominal prefixes (see 4.4); * / waʔ / before * / j / with loss of * / j /, and before remaining consonants elsewhere.

Tu. / Ø / word-initially before the cislocative or repetitive prefix; / ɔ̃ / before / wa / with loss of / wa /, and before the repetitive or cislocative prefix elsewhere; / wɛ / before certain pronominal prefixes (see 4.4); / wa / before / h /; / waʔ / before / j / with loss of / j /, and before remaining

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consonants elsewhere.

Mo. / Ø / word-initially before the cislocative or repetitive prefix; / ũ / before / wa / with loss of / wa /, and before the repetitive or cislocative prefix elsewhere; / we / word-initially before certain pronominal prefixes (see 4.4); / e / before certain pronominal prefixes (4.4) elsewhere; / wa / word-initially before / h /; / a / before / h / elsewhere; / waʔ / word-initially before / j / with loss of / j /, and word-initially before remaining consonants; / aʔ / before / j / elsewhere with loss of / j /, and before remaining consonants elsewhere.

Oe. [as in Mohawk].

Oo. / Ø / word-initially before the cislocative or repetitive prefix; / ũ / before / wa / with loss of / wa /, and before the repetitive or cislocative prefix elsewhere; / eʔ / following the coincident or contrastive prefix before certain pronominal prefixes (see 4.4); / weʔ / before certain pronominal prefixes (see 4.4) elsewhere; / aʔ / following the coincident or contrastive prefix before / j / with loss of / j /, and following the coincident or contrastive prefix before remaining consonants; / waʔ / before / j / elsewhere with loss of / j /, and before remaining consonants elsewhere.

Ca. / Ø / word-initially before the cislocative or repetitive prefix; / õ / before / wa / with loss of / wa /, and before the repetitive or cislocative prefix elsewhere; / eʔ / before certain pronominal prefixes (see 4.4); / a / before / h / elsewhere; / aʔ / before / j / elsewhere with loss of / j /, and before remaining consonants elsewhere.

Se. / Ø / word-initially before the cislocative or repetitive prefix; / ɔ̃ / before the cislocative or repetitive prefix elsewhere; / eʔ / before certain pronominal prefixes (see 4.4); / waː / word-initially before / hC / with loss of / h /; / ɔ̃ː / following the partitive prefix before / hC / with loss of / h /; / aː / before / hC / elsewhere with loss of / h /; / wa / word-initially before / hV / with loss of / h /; / ɔ̃ / following the partitive prefix before / hV / with loss of / h /; / a / before / hV / elsewhere with loss of / h /; / waʔ / word-initially before / j / with loss of / j /; / ɔ̃ʔ / following the partitive prefix before / j / with loss of / j /; / aʔ / before / j / elsewhere with loss of / j /; / oʔ / elsewhere.

Hu. / Ø / word-initially before the cislocative or repetitive prefix (but more usually / õ / in this environment); / õ / before / wa / with loss of

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/ wa /, and before the repetitive or cislocative prefix elsewhere; / e / before certain pronominal prefixes (see 4.4); / aʔ / before / j / with loss of / j /, and before remaining consonants elsewhere.

007   PI * { **te:** } 'duplicative'

PI * / ti / before consonants in deverbalized nouns and some (dependent?) verb forms; * / t / before at least some vowels elsewhere; * / te: / before at least some consonants elsewhere; (elsewhere = ?)

Ch. / t / before the repetitive prefix; / tò: / before the cislocative prefix; / tì: / in deverbalized nouns and dependent verb forms before / à / and / ì / with loss of / à / and / ì /; / ts / in deverbalized nouns and dependent verb forms before remaining vowels; / t / in deverbalized nouns and dependent verb forms before / h / with loss of / h /; / tì / in deverbalized nouns and dependent verb forms before remaining consonants; / té: / before / è: / and / ì: / elsewhere with loss of / è: / and / ì: /; / t / before remaining vowels elsewhere; / tè: / before consonants elsewhere.

PNI * / tõ / following the factual prefix before the cislocative or repetitive prefix, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes, and before the 2:1 imperative pronominal prefixes; * / ti / following the factual prefix before certain pronominal prefixes (see 4.4); * / t / before vowels, and following the factual prefix elsewhere; * / te / before consonants elsewhere.

Tu. / nɔ̃ / following the factual prefix before the cislocative or repetitive prefix, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes, and before the 2:1 imperative pronominal prefixes; / ni / following the factual prefix before certain pronominal prefixes (see 4.4); / n / following the factual prefix before / j /, / w /, or a vowel; / tʃ / following the factual prefix before / hs / or / hsj / with loss of / hs / or / hsj /, and following the factual prefix before remaining consonants; / n / before a vowel elsewhere; / nɛ / elsewhere.

Mo. / tũ / following the factual prefix before the cislocative or repetitive prefix, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes, and before the 2:1

imperative pronominal prefixes; / t / before vowels, and following the factual prefix before / hV /, / jV /, or the '1SG:3' pronominal prefix allomorph / k /; / te / elsewhere.

Oe. [as in Mohawk].

Oo. / tũ / following the factual prefix before the cislocative or repetitive prefix, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes, and before the 2:1 imperative pronominal prefixes; / ti / following the factual prefix before certain pronominal prefixes (see 4.4); / t / before vowels, and following the factual prefix elsewhere; / te / elsewhere.

Ca. / tõ / following the factual prefix before the cislocative or repetitive prefix, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes, and before the 2:1 imperative pronominal prefixes; / ti / following the factual prefix before certain pronominal prefixes (see 4.4); / t / before vowels, and following the factual prefix elsewhere; / te / elsewhere.

Se. / tɔ̃ / following the factual prefix before the cislocative or repetitive prefix, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes, and before the 2:1 imperative pronominal prefixes; / ti / following the factual prefix before certain pronominal prefixes (see 4.4), / t / before vowels, and following the factual prefix elsewhere; / te: / before / hC / elsewhere with loss of / h /; / te / before / hV / elsewhere with loss of / h /, and before remaining consonants elsewhere.

Hu. / tõ / following the factual prefix before the cislocative or repetitive prefix, and before the cislocative or repetitive prefix in imperative verbs not containing the 1 + 2DU:3 or 1 + 2PL:3 prefixes; / ti / following the factual prefix before certain pronominal prefixes (see 4.4), and in imperative verbs elsewhere; / k / following the factual prefix before / w /; / Ø / following the factual prefix before / k / or / s /; / t / before vowels, and following the factual prefix elsewhere; / te / elsewhere.

008   PI * { ẽ: } 'future'

PI * / ẽ: /;

Ch. / ò: / (synchronically absent; preserved in the combination / tò:t / 'duplicative + cislocative).

PNI * / ẽ /.
Tu. / ə̃ /.
Mo. / ʌ̃ /.
Oe. / ʌ̃ /.
Oo. / ẽ /.
Ca. / ẽ /.
Se. / ẽ: / before / hC / with loss of / h /; / ẽ / before / hV / with loss of / h /,
and before remaining consonants elsewhere.
Hu. / e /.

009   PNI * { aɹa } 'optative'
PNI * / aɹe / before certain pronominal prefixes (see 4.4); * / aɹõ / before
* / wa / with loss of / wa /; * / aɹ / before glides; * / aɹa / before
remaining consonants.
Tu. / ə̃ / before the cislocative or repetitive prefix; / aˈrɛ / before certain
pronominal prefixes (see 4.4) provided word accent falls on / ˈrɛ / as
indicated; / aˈrə̃ / before / wa / with loss of / wa / provided word accent
falls on / ˈrə̃ / as indicated; / aˈra / before remaining consonants
provided word accent falls on / ˈra / as indicated; / ar / before / w / and
/ j / elsewhere; / a / elsewhere.
Mo. / ae / before certain pronominal prefixes (see 4.4); / aũ / before / wa /
with loss of / wa /, and before the repetitive or cislocative prefix; / a: /
elsewhere.
Oe. / ae / before certain pronominal prefixes (see 4.4); / aũ / before / wa /
with loss of / wa /; / ũ: / or / ũ / before the repetitive or cislocative
prefix; / a: / elsewhere.
Oo. / ae / before certain pronominal prefixes (see 4.4); / aũ / before / wa /
with loss of / wa /; / ũ: / before the repetitive or cislocative prefix; / a: /
elsewhere.
Ca. / ae / before certain pronominal prefixes (see 4.4); / aõ / or / õ: / before
/ wa / with loss of / wa /, and before the repetitive or cislocative prefix;
/ a: / elsewhere.
Se. / ae / before certain pronominal prefixes (see 4.4); / ɔ̃: / before / wa / with
loss of / wa /, and before the cislocative or repetitive prefix; / a: / before
/ h / with loss of / h /, and before remaining consonants elsewhere.
Hu. / ae / before certain pronominal prefixes (see 4.4); / aõ / before / wa /

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with loss of / wa /, and before the repetitive or cislocative prefix; / a / before / j /; / aː / before remaining consonants elsewhere.

PI * { **t** } 'cislocative'

PI * / k / or / ka / word-initially in at least some imperative verbs; * / ta / before at least some consonants in some (dependent?) verb forms; * / t / before at least some vowels and consonants elsewhere; (elsewhere = ?)

Ch. / k / word-initially in some imperative verbs (cf. / khěːnä̌ː / 'come here!'); / t / before the repetitive prefix and before / h /; / tä̀ː / in deverbalized nouns and dependent verb forms before / à / with loss of / à /; / tä̀ːʔ / in deverbalized nouns and dependent verb forms before / ì / with loss of / ì /; / tàj / in deverbalized nouns and dependent verb forms before remaining vowels; / tà / in deverbalized nouns and dependent verb forms before remaining consonants; / tìː / before / à̀ː / and / ì̀ː / elsewhere with loss of / à̀ː / and / ì̀ː /; / t / before vowels elsewhere; / tì / before consonants elsewhere.

PNI * / ka / word-initially in at least some imperative verbs; * / ti / before the 1 + 2DU:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; * / te / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); * / tõ / following the factual prefix or optative prefix before * / wa / with loss of * / wa /; * / ta / in imperative verbs elsewhere, and following the factual prefix or optative prefix elsewhere; * / ti / before certain pronominal prefixes (4.4) elsewhere; * / t / elsewhere.

Tu. / ka / word-initially in some imperative verbs (cf. / ˈkaːtʃi / 'come!'); / ni / word-initially before the 1 + 2SG:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / ʔni / before the 1 + 2SG:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs elsewhere; / ʔnɛ / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / ʔnə̃ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / na / word-initially in imperative verbs elsewhere; / ʔna / in imperative verbs elsewhere, and following the factual prefix or optative prefix elsewhere; / ni / word-initially before certain pronominal prefixes (4.4) elsewhere; / ʔni / before certain pronominal prefixes (4.4) elsewhere; / n / word-initially before / w / or / j /; / ʔn / before

/ w / or / j / elsewhere; / tʃ / before / hs / or / hsj / elsewhere with loss of / hs / or / hsj /; / t / elsewhere.

Mo. / ka / word-initially in some imperative verbs (cf. / ka:ts / 'come here!'); / ti / before the 1 + 2DU:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / te / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / tũ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / ta / in imperative verbs elsewhere, and following the factual prefix or optative prefix elsewhere; / ti / before certain pronominal prefixes (4.4) elsewhere; / te / before consonant clusters elsewhere; / t / elsewhere.

Oe. / ka / word-initially in some imperative verbs (cf. / ka:ˈats / 'come here!'); / ti / before the 1 + 2DU:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / te / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / tũ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / ta / in imperative verbs elsewhere, and following the factual prefix or optative prefix elsewhere; / ti / before certain pronominal prefixes (4.4) elsewhere; / te / before consonant clusters elsewhere; / t / elsewhere.

Oo. / ka / word-initially in some imperative verbs (cf. / ˈká:tsih / 'come here!'); / ti / before the 1 + 2DU:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / te / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / tũ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / ta / in imperative verbs elsewhere, and following the factual prefix or optative prefix elsewhere; / ti / before certain pronominal prefixes (4.4) elsewhere; / t / elsewhere.

Ca. / ka / word-initially in some imperative verbs (cf. / ˈka:tsih / 'come here!'); / ti / before the 1 + 2DU:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / te / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / tõ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / ta / in imperative verbs elsewhere, and following the factual prefix or optative prefix elsewhere; / ti / before certain pronominal prefixes (4.4) elsewhere; / t / elsewhere.

Se. / ka / word-initially in some imperative verbs (cf. / ka:tsih / 'come here!'); / ti / before the 1 + 2DU:3 and 1 + 2PL:3 pronominal prefixes in

imperative verbs; / te / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / tõ̃ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / ta: / in imperative verbs before / hC / with loss of / h /, and following the factual prefix or optative prefix before / hC / with loss of / h /; / ta / in imperative verbs before / hV / with loss of / h /, and following the factual prefix or optative prefix before / hV / with loss of / h /, and following the factual prefix or optative prefix before remaining consonants elsewhere, and before remaining consonants in imperative verbs; / ti / before certain pronominal prefixes (4.4) elsewhere; / t / elsewhere.

Hu. / a / word-initially in imperative verbs; / ti / before the 1 + 2DU:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / te / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / tõ̃ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / ta / in imperative verbs, and following the factual prefix or optative prefix elsewhere; / k / before / wV / elsewhere; / Ø / before / k / or / s / elsewhere; / ti / before certain pronominal prefixes (4.4) elsewhere; / et / word-initially before a consonant elsewhere; / t / elsewhere.

011   PI * { **ts** } 'repetitive'

PI * / tsi: / in certain verb forms before the 1 + 2DU:3 and 1 + 2PL:3 pronominal prefixes and the 3:2SG pronominal prefix; elsewhere = ?

Ch. / ě:ʔ / following the duplicative prefix before / è: / or / ì: / with loss of / è: / or / ì: /, and following the duplicative prefix before remaining vowels; / ě: / following the duplicative prefix before consonants; / tsǐ:ʔ / in deverbalized nouns and dependent verb forms before the 1 + 2DU:3 and 1 + 2PL:3 pronominal prefixes; / tsǐ: / in deverbalized nouns and dependent verb forms before the 3:2SG pronominal prefix'; / ƛ́: / word-initially in deverbalized nouns and dependent verb forms before / ì / with loss of / ì /; / hƛ́: / in deverbalized nouns and dependent verb forms before / ì / elsewhere with loss of / ì /; / ƛ̌:ʔ / word-initially in deverbalized nouns and dependent verb forms before remaining vowels; / hƛ̌:ʔ / in deverbalized nouns and dependent verb forms before remaining vowels elsewhere; / ƛ̌: / word-initially in deverbalized nouns

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and dependent verb forms before consonants; / h̃ˑ: / in deverbalized nouns and dependent verb forms before consonants elsewhere; / íː / word-initially before / ìː /; elsewhere with loss of / ìː /; / híː / before / ìː / elsewhere with loss of / ìː /; / ĭːʔ / word-initially before vowels elsewhere; / hĭːʔ / before vowels elsewhere; / ĭː / word-initially before consonants elsewhere; / hĭː / before consonants elsewhere.

PNI * / tsi / before the 1 + 2SG:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; * / tse / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); * / tsõ / following the factual prefix or optative prefix before * / wa / with loss of * / wa /; * / tsa / in imperative verbs elsewhere, and following the factual prefix or optative prefix elsewhere; * / tsi / before certain pronominal prefixes (4.4) elsewhere; * / ts / elsewhere.

Tu. / tʃi / before the 1 + 2SG:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / θɛ / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / θõ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / θa / in imperative verbs elsewhere, and following the factual prefix or optative prefix elsewhere; / tʃi / before certain pronominal prefixes (4.4) elsewhere; / tʃ / before / j / elsewhere; / θ / elsewhere.

Mo. / tsi / before the 1 + 2SG:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / se / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / sũ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / sa / in imperative verbs elsewhere, and following the factual prefix or optative prefix elsewhere; / tsi / before certain pronominal prefixes (4.4) elsewhere; / ts / before / j / elsewhere; / s / before / hV / or / kV / elsewhere; / se / elsewhere.

Oe. [as in Mohawk].

Oo. / tsi / before the 1 + 2SG:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / se / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / sũ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / sa / in imperative verbs elsewhere, and following the factual prefix or optative prefix elsewhere; / tsi / before certain pronominal prefixes (4.4) elsewhere; / ts / before / j / elsewhere; / t / before / s / elsewhere; / s / elsewhere.

Ca. / tsi / before the 1 + 2SG:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / se / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / sõ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / sa / in imperative verbs elsewhere, and following the factual prefix or optative prefix elsewhere; / tsi / before certain pronominal prefixes (4.4) elsewhere; / ts / before / j / elsewhere with loss of / j /; / t / before / s / elsewhere; / s / elsewhere.

Se. / tsi / before the 1 + 2SG:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / se / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / sɛ̃ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / sa: / in imperative verbs before / hC / with loss of / h /, and following the factual prefix or optative prefix before / hC / with loss of / h /; / sa / in imperative verbs before / hV / with loss of / h /, and following the factual prefix or optative prefix before / hV / with loss of / h /, and following the factual prefix or optative prefix elsewhere, and in imperative verbs elsewhere; / tsi / before certain pronominal prefixes (4.4) elsewhere; / ts / before / j / elsewhere with loss of / j /; / t / before / s / elsewhere; / s / elsewhere.

Hu. / tsi / before the 1 + 2DU:3 and 1 + 2PL:3 pronominal prefixes in imperative verbs; / se / following the factual prefix or optative prefix before certain pronominal prefixes (see 4.4); / sõ / following the factual prefix or optative prefix before / wa / with loss of / wa /; / sa / in imperative verbs, and following the factual prefix or optative prefix elsewhere; / tsi / before certain pronominal prefixes (4.4) elsewhere; / Ø / before / sC / with / h / added after / C /; / sk / before / w /; / ts / before / j / elsewhere with loss of / j /; / s / before / ʃ / elsewhere; / s / elsewhere.

⁰¹² PI * { **ka** } 'non-singular animate'

PI * / ka / before at least some consonants; (elsewhere = ?)

Ch. / k / before vowels; / kà / before consonants.

PNI * / ka /.

Tu. / ka /.

Ca. / ka / before / j / with loss of / j /, and before remaining consonants;

Hu. / kõ / following any consonant except / ʔ / before / wa / with loss of

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/ wa /; / xõ / before / wa / elsewhere with loss of / wa /; / kae /
following any consonant except / ʔ / before certain prepronominal
prefixes (see 4.4); / xae / before certain pronominal prefixes (4.4)
elsewhere; / ka / following any consonant except / ʔ / elsewhere; / xa /
elsewhere.

013   PI * { **kõ:** } '1:2.SG'

PI * / kõ: / before consonants; * / kõ:j / before vowels.

Ch. / kʎ̀: / before consonants; / kʎ̀:j / before vowels.

PNI * / kõ / before consonants, and before * / i / with loss of * / i /; * / kõj /
     before vowels.

Tu. / kə̃ / before consonants, and before / i / with loss of / i /; / kə̃j / before
     vowels.

Mo. / kũ / before consonants, and before / i / with loss of / i /; / kũj / before
     remaining vowels.

Oe. [as in Mohawk].

Oo. / kũ / before consonants, and before / i / with loss of / i /; / kũj / before
     remaining vowels.

Ca. / kõ / before consonants, and before / i / with loss of / i /; / kõj / before
     remaining vowels.

Se. / kɔ̃: / before / hC / with loss of / h /; / kɔ̃ / before / hV / with loss of / h /,
     and before remaining consonants, and before / i / with loss of / i /;
     / kɔ̃j / before remaining vowels.

Hu. / kõ / following any consonant except / ʔ / before / i / with loss of / i /,
     and following any consonant except / ʔ / before consonants and
     remaining vowels; / xõ / before / i / elsewhere with loss of / i /, and
     before consonants and remaining vowels elsewhere.

014   PNI * { **kni** } '1:2.DU'

PNI * / kni / before consonants; * / kj / before * / a /; * / kn / before remaining
     vowels.

Tu. / kjɛkti / before consonants; / kjɛkj / before / a /; / kjɛkn / before / ə̃ / and
     before some bases beginning in / o /; / kjɛkt / before remaining vowels.

Mo. / keni / before consonants; / kj / before / a /; / ken / before remaining
     vowels.

Oe. / kni / before consonants; / kj / before / a /; / kn / before remaining

vowels.

Oo. / kni / before consonants; / kj / before / a / and / ẽ /; / kn / before
    remaining vowels.

Ca. / khni / before consonants; / kj / before / a /; / khn / before remaining
    vowels.

Se. / khni: / before / hC / with loss of / h /; / khni / before / hV / with loss of
    / h /, and before remaining consonants; / khnj / before / a / and / ɛ̃ /
    (appearance of / n / interpreted as analogy); / khn / before remaining
    vowels.

Hu. / ki / following any consonant except / ʔ / before a consonant; / xi / before
    a consonant elsewhere; / kj / following any consonant except / ʔ / before
    / a /; / xj / before / a / elsewhere; / in / word-initially before remaining
    vowels; / n / before remaining vowels elsewhere.

⁰¹⁵ PNI * { **kwa** } '1:2.PL'

PNI * / kwa / before consonants; * / kwẽ / before * / i / with loss of * / i /;
    * / kj / before / o / and / õ /; * / kw / before remaining vowels.

Tu. / kjɛkwa / before consonants; / kjɛkwɔ̃ / before / i / with loss of / i /;
    / kjɛkw / before remaining vowels.

Mo. / kwa / before consonants; / kwɑ̃ / before / i / with loss of / i /; / kj /
    before / o / and / ũ /; / kw / before remaining vowels.

Oe. / kwa / before consonants; / jakwɑ̃ / before / i / with loss of / i /; / kj /
    before / o / and / ũ /; / kw / before remaining vowels.

Oo. / kwa / before consonants; / kwẽ / before / i / with loss of / i /; / kj /
    before / o / and / ũ /; / kw / before remaining vowels.

Ca. / kwa / before consonants; / kwẽ / before / i / with loss of / i /; / kj /
    before / o /, / õ /, and / u /; / kw / before remaining vowels.

Se. / kwæ: / before / Ræ / with loss of / Ræ /; / kwa: / before / hC / with loss
    of / h /; / kwa / before / hV / with loss of / h /, and before remaining
    consonants; / kwɛ̃ / before some bases beginning in / i / with loss of
    / i /, and before / jɔ̃ / with loss of / j /; / kj / before / o / and / ɔ̃ /;
    / kw / before some bases beginning in / i /, and before remaining
    vowels.

Hu. / kwa / following any consonant except / ʔ / before a consonant; / xwa /
    before a consonant elsewhere; / kwẽ / following any consonant except
    / ʔ / before / i / with loss of / i /; / xwẽ / before / i / elsewhere with

loss of / i /; / kj / following any consonant except / ʔ / before / o / or / õ /; / xj / before / o / and / õ / elsewhere; / kw / following any consonant except / ʔ / before remaining vowels; / xw / before remaining vowels elsewhere.

016   PI * { **hskʷi** } '2:1.SG'

PI * / skʷ / word-initially or following a consonant before * / a /, and perhaps word-initially or following a consonant before all vowels; * / hskʷ / before / a / elsewhere, and perhaps before all vowels elsewhere; * / skʷi / word-initially or following a consonant before certain consonants and clusters, and perhaps word-initially or following a consonant before all consonants and clusters; * / hskʷi / before certain consonants and clusters elsewhere, and perhaps before all consonants and clusters elsewhere.

Ch. / skʷ / word-initially or following a consonant before a vowel; / hskʷ / before a vowel elsewhere; / skì / word-initially or following a consonant before a consonant; / hskì / before a consonant elsewhere.

PNI * / skʷ / word-initially or following a consonant before * / a /; * / hskʷ / before * / a / elsewhere; * / ske / word-initially or following a consonant before certain consonants and clusters (cf. 4.4); * / hske / before certain consonants and clusters (4.4) elsewhere; * / sk / word-initially or following a consonant before certain other consonants and clusters (4.4), and word-initially or following a consonant before remaining vowels; * / hsk / before certain other consonants and clusters (4.4) elsewhere, and before remaining vowels elsewhere.

Tu. / skʷ / word-initially or following a consonant before / a /; / hskʷ / before / a / elsewhere; / skɛ / word-initially or following a consonant before certain consonants and clusters (cf. 6.4); / hskɛ / before certain consonants and clusters (6.4) elsewhere; / sk / word-initially or following a consonant before certain other consonants and clusters (6.4), and word-initially or following a consonant before remaining vowels; / hsk / before certain other consonants and clusters (6.4) elsewhere, and before remaining vowels elsewhere.

Mo. / skʷ / word-initially or following a consonant before / a /, / e / and / ə̃ /; / hskʷ / before / a /, / e / and / ʌ̃ / elsewhere; / ske / word-initially or following a consonant before certain consonants and clusters (cf. 11.4);

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/ hske / before certain consonants and clusters (11.4) elsewhere; / sk / word-initially or following a consonant before certain other consonants and clusters (11.4), and word-initially or following a consonant before vowels; / hsk / before certain other consonants and clusters (11.4) elsewhere, and before vowels elsewhere.

Oe. / skʷ / before / a /, / e /, and / ʌ̃ /; / ske / before certain consonants and clusters (cf. 12.4); / sk / before certain other consonants and clusters (12.4), and before vowels.

Oo. / ske / before certain consonants and clusters (cf. 13.4); / ske: / before certain other consonants and certain vowels (13.4); / sk / before certain other consonants and clusters (13.4), and before remaining vowels.

Ca. / ske / word-initially or following a consonant before certain consonants and clusters (cf. 14.4); / hske / before certain consonants and clusters (14.4) elsewhere; / sk / word-initially or following a consonant before certain other consonants and clusters (14.4), and word-initially before vowels; / hsk / or following a consonant before certain other consonants and clusters (14.4) elsewhere, and before vowels elsewhere.

Se. / ske / before certain consonants and clusters (cf. 15.4); / sk / before certain other consonants and clusters (15.4), and before vowels.

Hu. / s / word-initially or following a consonant before / n / with change of / n / to / t /; / hs / before / n / elsewhere with change of / n / to / t /; / sk / word-initially or following a consonant before vowels, and word-initially before / ɹ /, and word-initially or following a consonant before some bases beginning in / j / (< PNI * / j /); / hsk / before vowels elsewhere, and before / ɹ / elsewhere, and before some bases beginning in / j / (< PNI * / j /) elsewhere; / ske / word-initially or following a consonant before certain remaining consonants and clusters (see 16.4); / hske / before certain remaining consonants and clusters (16.4) elsewhere.

017   PI * { **hskni:** } '2:1.DU'

PI * / skni: / word-initially or following a consonant before consonants; * / hskni: / before consonants elsewhere; * / skn / word-initially or following a consonant before at least some vowels; * / hskn / before at least some vowels elsewhere; (elsewhere = ?)

Ch. / skìnì: / word-initially or following a consonant before / à: / with loss of

/ à: /, and word-initially or following a consonant before a consonant;
/ hskìnì: / before / à: / with loss of / à: / elsewhere, and before a
consonant elsewhere; / skìn / word-initially or following a consonant
before vowels; / hskìn / before vowels elsewhere.

PNI * / skni / word-initially or following a consonant before consonants;
* / hskni / before consonants elsewhere; * / skj / word-initially or
following a consonant before / a /; * / hskj / before / a / elsewhere;
* / skn / word-initially or following a consonant before remaining
vowels; * / hskn / before remaining vowels elsewhere.

Tu. / skti / word-initially or following a consonant before consonants; / hskti /
before consonants elsewhere; / skj / word-initially or following a
consonant before / a /; / hskj / before / a / elsewhere; / skn /
word-initially or following a consonant before / ɔ̃ / and word-initially or
following a consonant before some bases beginning in / o /; / hskn /
before / ɔ̃ / elsewhere and before some bases beginning in / o /
elsewhere; / skt / word-initially or following a consonant before
remaining vowels; / hskt / before remaining vowels elsewhere.

Mo. / skeni / word-initially before consonants; / hskeni / before consonants
elsewhere; / skj / word-initially before / a /; / hskj / before / a /
elsewhere; / sken / word-initially before remaining vowels; / hsken /
before remaining vowels elsewhere.

Oe. / skni / before consonants; / skj / before / a /; / skn / before remaining
vowels.

Oo. / skni / before consonants; / skj / before / a / and / ẽ /; / skn / before
remaining vowels.

Ca. / skhni / word-initially or following a consonant before consonants;
/ hskhni / before consonants elsewhere; / skj / word-initially or
following a consonant before / a /; / hskj / before / a / elsewhere;
/ skhn / word-initially or following a consonant before remaining
vowels; / hskhn / before remaining vowels elsewhere.

Se. / skhni: / before / hC / with loss of / h /; / skhni / before / hV / with loss of
/ h /, and before remaining consonants; / skhnj / before / a / and / ɛ̃ /
(appearance of / n / interpreted as analogy); / skhn / before remaining
vowels.

Hu. / ski / word-initially or following a consonant before consonants; / hski /
before consonants elsewhere; / skj / word-initially or following a

consonant before / a /; / hskj / before / a / elsewhere; / st /
word-initially or following a consonant before remaining vowels; / hst /
before remaining vowels elsewhere.

PI * { **hsk**ʷ… } '2:1.PL'

Ch. / hskì: / word-initially or following a consonant before / à: / with loss of
/ à: /, and word-initially or following a consonant before a consonant;
/ skì / before / à: / elsewhere with loss of / à: /, and before a consonant
elsewhere; / hskì:j / word-initially or following a consonant before
remaining vowels; / skì:j / elsewhere before remaining vowels.

PNI * / skwa / word-initially or following a consonant before consonants;
* / hskwa / before consonants elsewhere; * / skwẽ / word-initially or
following a consonant before * / i / with loss of * / i /;
* / hskwẽ / before * / i / elsewhere with loss of * / i /; * / skj /
word-initially or following a consonant before * / o / and * / õ /;
* / hskj / before * / o / and * / õ / elsewhere; * / skw / word-initially or
following a consonant before remaining vowels; * / hskw / before
remaining vowels elsewhere.

Tu. / skwa / word-initially or following a consonant before consonants;
/ hskwa / before consonants elsewhere; / skwə̃ / word-initially or
following a consonant before / i / with loss of / i /; / hskwə̃ / before
/ i / elsewhere with loss of / i /; / skw / word-initially or following a
consonant before remaining vowels; / hskw / before remaining vowels
elsewhere.

Mo. / skwa / word-initially or following a consonant before consonants;
/ hskwa / before consonants elsewhere; / skwʎ̃ / word-initially or
following a consonant before / i / with loss of / i /; / hskwʎ̃ / before
/ i / elsewhere with loss of / i /; / skj / word-initially or following a
consonant before / o / and / ũ /; / hskj / before / o / and / ũ /
elsewhere; / skw / word-initially or following a consonant before
remaining vowels; / hskw / before remaining vowels elsewhere.

Oe. / skwa / before consonants; / skwʎ̃ / before / i / with loss of / i /; / skj /
before / o / and / ũ /; / skw / before remaining vowels.

Oo. / skwa / before consonants; / skwẽ / before / i / with loss of / i /; / skj /
before / o / and / ũ /; / skw / before remaining vowels.

Ca. / skwa / word-initially or following a consonant before consonants;

/ hskwa / before consonants elsewhere; / skwẽ / word-initially or following a consonant before / i / with loss of / i /; / hskwẽ / before / i / elsewhere with loss of / i /; / skj / word-initially or following a consonant before / o /, / õ / and / u /; / hskj / before / o /, / õ / and / u / elsewhere; / skw / word-initially or following a consonant before remaining vowels; / hskw / before remaining vowels elsewhere.

Se. / skwæ: / before / Ræ / with loss of / Ræ /; / skwa: / before / hC / with loss of / h /; / skwa / before / hV / with loss of / h /, and before remaining consonants; / skwẽ / before some bases beginning in / i / with loss of / i /, and before / jõ / with loss of / j /; / skj / before / o / and / õ /; / skw / before some bases beginning in / i /, and before remaining vowels.

Hu. / skwa / word-initially or following a consonant before consonants; / hskwa / before consonants elsewhere; / skwẽ / word-initially or following a consonant before / i / with loss of / i /; / hskwẽ / before / i / elsewhere with loss of / i /; / skj / word-initially or following a consonant before / o / and / õ / elsewhere; / hskj / before / o / and / õ / elsewhere; / skw / word-initially or following a consonant before remaining vowels; / hskw / before remaining vowels elsewhere.

019   PI * { **ki** } '1SG:3'

PI * / ki / before certain consonants, and perhaps before all consonants; * / k / before vowels, and perhaps also before certain other consonants.

Ch. / tsì / before consonants; / tsì: / before / à: / with loss of / à: /; / k / before remaining vowels.

PNI * / ke / before certain consonants and clusters (see 4.4); * / k / before certain other consonants and clusters (4.4), and before vowels.

Tu. / kjɛ / before certain consonants and clusters (see 6.4); / kj / before / ɛ /; / k / before certain other consonants and clusters (6.4), and before remaining vowels.

Mo. / ke / before certain consonants and clusters (see 11.4); / k / before certain other consonants and clusters (11.4), and before vowels.

Oe. / ke / before certain consonants and clusters (see 12.4); / k / before certain other consonants and clusters (12.4), and before vowels.

Oo. / h / before / k / and / kʷ /; / ke / before certain remaining consonants and clusters (see 13.4); / ke: / before certain other remaining consonants

(13.4) and certain vowels; / sk / before certain other remaining consonants and clusters (13.4), and before remaining vowels.

Ca. / ke / before certain consonants and clusters (see 14.4); / k / before certain other consonants and clusters (14.4), and before vowels.

Se. / Ø / before / hts /; / kh / before / nV /; / ke / before certain consonants and clusters (see 15.4); / k / before certain other consonants and clusters (15.4), and before vowels.

Hu. / ke / following any consonant except / ʔ / before certain consonants and clusters (see 16.4); / xe / before certain consonants and clusters (16.4) elsewhere; / k / following any consonant except / ʔ / before certain other consonants and clusters (16.4), and following any consonant except / ʔ / before vowels; / i / before / n / word-initially; / Ø / before / n / elsewhere; / x / before certain other remaining consonants and clusters (16.4) elsewhere, and before vowels elsewhere.

020   PI * { **kiji** } '1SG:3A' (→ PNI '1SG:3I')

PI * / kiji / before consonants; * / kijij / before vowels.

Ch. / tsì: / before consonants; / tsì:j / before vowels.

PNI * / khe / before consonants, and possibly before / i / with loss of / i /;
           * / khe / before (remaining) vowels.

Tu. / khɛ / before consonants; / khɛj / before vowels.

Mo. / khe / before consonants, and before / i / with loss of / i /; / khej / before remaining vowels.

Oe. [as in Mohawk].

Oo. / khe / before consonants, and before / i / with loss of / i /; / khej / before remaining vowels.

Ca. / khe / before consonants, and before / i / with loss of / i /; / khej / before remaining vowels.

Se. / khe: / before / hC / with loss of / h /; / khe / before / hV / with loss of / h /, before remaining consonants, and before / i / with loss of / i /; / khej / before remaining vowels.

Hu. / khe / before consonants, and before / i / with loss of / i /, and before remaining vowels.

021   PNI * { **he** } or * { **hɹi** } '1SG:3M'

PNI * / he / or * / ɹi / word-initially before consonants, and word-initially

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before * / i / with loss of * / i /; * / he / or * / hi / (or possibly
* / hɹi /) elsewhere before consonants, and before * / i / elsewhere
with loss of * / i /; * / hej / or * / ɹij / word-initially before remaining
vowels; * / hej / or * / hij / (or possibly * / hɹij /) before remaining
vowels elsewhere.

Mo. / ɹi / word-initially before consonants, and word-initially before / i / with
loss of / i /; / hi / before consonants elsewhere, and before / i /
elsewhere with loss of / i /; / ɹij / word-initially before remaining
vowels; / hij / before remaining vowels elsewhere.

Oe. / li / word-initially before consonants, and word-initially before / i / with
loss of / i /; / hi / before consonants elsewhere, and before / i /
elsewhere with loss of / i /; / lij / word-initially before remaining
vowels; / hij / before remaining vowels elsewhere.

Oo. / he / before consonants, and before / i / with loss of / i /; / hej / before
remaining vowels.

Ca. / hi / or / he / before consonants; / he / before / i / with loss of / i /;
/ hej / before remaining vowels.

Se. / heː / before / hC / with loss of / h /; / he / before / hV / with loss of / h /,
before remaining consonants, and before / i / with loss of / i /; / hej /
before remaining vowels.

Hu. / he / before consonants, and before / i / with loss of / i /, and before
remaining vowels.

⁰²² PI * { **hsi** } '2SG:3'

PI * / hsi / before consonants; * / hs / before vowels.

Ch. / hì / before consonants; / hìː / before / àː / with loss of / àː /; / h / before
vowels.

PNI * / se / word-initially or following a consonant before certain consonants
and clusters (cf. 4.4); * / hse / before certain consonants and clusters
(4.4) elsewhere; * / s / word-initially or following a consonant before
certain other consonants and clusters (4.4), and word-initially before
vowels; * / hs / before certain other consonants and clusters (4.4)
elsewhere, and before vowels elsewhere.

Tu. / sɛ / word-initially or following a consonant before certain consonants and
clusters (cf. 6.4); / hsɛ / before certain consonants and clusters (6.4)
elsewhere; / s / word-initially or following a consonant before certain

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other consonants and clusters (6.4), and word-initially or following a

consonant before vowels; / hs / before certain other consonants and clusters (6.4) elsewhere, and before vowels elsewhere.

Mo. / t / before / hs /; / se / word-initially or following a consonant before certain consonants and clusters (cf. 11.4); / hse / before certain consonants and clusters (11.4) elsewhere; / s / word-initially or following a consonant before certain other consonants and clusters (11.4), and word-initially or following a consonant before vowels; / hs / before certain other consonants and clusters (11.4) elsewhere, and before vowels elsewhere.

Oe. / t / before / hs / with metathesis of / hs / to / sh /; / se / word-initially or following a consonant before certain consonants and clusters (cf. 12.4); / hse / before certain consonants and clusters (12.4) elsewhere; / s / word-initially or following a consonant before vowels, and before certain other consonants and clusters (12.4) elsewhere; / hs / before vowels elsewhere.

Oo. / se / word-initially before certain consonants and clusters (cf. 13.4); / she / following a consonant before certain consonants and clusters (13.4); / hse / before certain consonants and clusters (13.4) elsewhere; / s / before certain other consonants and clusters (13.4), and word-initially before vowels; / sh / following a consonant before vowels; / hs / before vowels elsewhere.

Ca. / se / word-initially before certain consonants and clusters (cf. 14.4); / she / following a consonant before certain consonants and clusters (14.4); / hse / before certain consonants and clusters (14.4) elsewhere; / s / word-initially before certain other consonants and clusters (14.4), and word-initially before vowels; / sh / following a consonant before vowels; / hs / before certain other consonants and clusters (14.4) elsewhere, and before vowels elsewhere.

Se. / se / word-initially before certain consonants and clusters (cf. 15.4); / she / following a consonant before certain consonants and clusters (15.4); / hse / before certain consonants and clusters elsewhere; / s / before certain other consonants and clusters (15.4), and word-initially before vowels; / sh / following a consonant before vowels; / hs / before vowels elsewhere.

Hu. / se / following a cislocative prepronominal prefix allomorph / t /, which is lost, before certain consonants and clusters (cf. 16.4); / hʃe / following a vowel before certain consonants and clusters (16.4) elsewhere; / ʃe / word-initially before certain consonants and clusters (16.4); / s / following a cislocative prepronominal prefix allomorph / t /, which is lost, before certain other consonants and clusters (16.4) and before vowels; / ʃ / word-initially before certain other consonants and clusters (16.4), and word-initially before vowels.

023   PI * { **hsiji** } '2SG:3A' (→ PNI '2SG:3I')

PI * / hsiji / before consonants; * / hsijij / before vowels.

Ch. / hì: / before consonants; / hì:j / before vowels.

PNI * / she / word-initially or following a consonant before consonants, and possibly word-initially or following a consonant before * / i / with loss of * / i /; * / hshe / before consonants elsewhere, and possibly before * / i / elsewhere with loss of * / i /; * / shej / word-initially or following a consonant before remaining vowels; * / hshej / before remaining vowels elsewhere.

Tu. / shɛ / word-initially or following a consonant before consonants, and word-initially or following a consonant before / i / with loss of / i /; / hshɛ / before consonants elsewhere, and before / i / elsewhere with loss of / i /; / shɛj / word-initially or following a consonant before remaining vowels; / hshɛj / before remaining vowels elsewhere.

Mo. / she / word-initially or following a consonant before consonants, and word-initially or following a consonant before / i / with loss of / i /; / hshe / before consonants elsewhere, and before / i / elsewhere with loss of / i /; / shej / word-initially or following a consonant before remaining vowels; / hshej / before remaining vowels elsewhere.

Oe. / she / before consonants, and before / i / with loss of / i /; / shej / before remaining vowels.

Oo. / she / before consonants, and before / i / with loss of / i /; / shej / before remaining vowels.

Ca. / she / word-initially or following a consonant before consonants, and word-initially or following a consonant before / i / with loss of / i /; / hshe / before consonants elsewhere, and before / i / elsewhere with loss of / i /; / shej / word-initially or following a consonant before

remaining vowels; / hshej / before remaining vowels elsewhere.

Se. / she: / before / hC / with loss of / h /; / she / before / hV / with loss of
/ h /, and before remaining consonants, and before / i / with loss of / i /;
/ shej / before remaining vowels.

Hu. / she / following a cislocative prepronominal prefix allomorph / t /, which
is lost; / ʃhe / word-initially or following a repetitive prepronominal
prefix allomorph / s / before consonants, and before / i / with loss of
/ i /, and before remaining vowels; / hʃhe / following a vowel before
consonants elsewhere, and before / i / elsewhere with loss of / i /, and
before remaining vowels elsewhere.

⁰²⁴ PNI * { **hehse** } '2SG:3M'

PNI * / hehse / before certain consonants and clusters (see 4.4); * / hehs /
before certain other consonants and clusters (4.4), and before vowels.

Mo. / he / before / ts /; / het / before / hs /; / hetshe / before certain
consonants and clusters (cf. 11.4); / hetsh / before certain other
consonants and clusters (11.4), and before vowels.

Oe. / e / word-initially before / ts /; / he / before / ts / elsewhere; / et /
word-initially before / hs / with metathesis of / hs / to / sh /; / het /
before / hs / elsewhere with metathesis of / hs / to / sh /; / etshe /
word-initially before certain consonants and clusters (cf. 12.4);
/ hetshe / before certain consonants and clusters (12.4) elsewhere;
/ etsh / word-initially before certain other consonants and clusters
(12.4), and word-initially before vowels; / hetsh / before certain other
consonants and clusters elsewhere, and before vowels elsewhere.

Oo. / hehse / before certain consonants and clusters (cf. 13.4); / hes / before
certain other consonants and clusters (13.4); / hehs / before vowels.

Ca. / hehse / before certain consonants and clusters (cf. 14.4); / hehs / before
certain other consonants and clusters (14.4), and before vowels.

Se. / hehse / before certain consonants and clusters (cf. 15.4); / hes / before
certain other consonants and clusters (15.4); / hehs / before vowels.

Hu. / hehs / before / n / with change of / n / to / t /; / hehʃe / before certain
consonants and clusters (cf. 16.4); / hehʃ / before certain other
consonants and clusters (16.4), and before vowels.

PI * { **wakʷi** } '3:1SG'

PI * / wakʷi / before certain consonants, and perhaps before all consonants;
* / wakʷ / before * / a(:) /, and perhaps before all vowels.

Ch. / ằ:kì / before consonants; / ằ:kì: / before / à: / with loss of / à: /; / ằ:kʷ / before remaining vowels.

PNI * / wakʷ / before * / a /, and perhaps also before * / e / and * / ẽ /;
* / wake / before certain consonants and clusters (see 4.4); * / wak / before certain other consonants and clusters (4.4), and before remaining vowels.

Tu. / wakʷ / before / a /; / wakjɛ / before certain consonants and clusters (see 6.4); / wakj / before / ɛ /; / wak / before certain other consonants and clusters (6.4), and before remaining vowels.

Mo. / wakʷ / following the factual or optative prefix before / a /, / e /, or / ã̃ /;
/ wake / before certain consonants and clusters (see 11.4); / wak / before certain other consonants and clusters (11.4), and before remaining vowels elsewhere.

Oe. / wakʷ / following the factual or optative prefix before / a /, / e /, or / ã̃ /;
/ wake / before certain consonants and clusters (see 12.4); / wak / before certain other consonants and clusters (12.4), and before remaining vowels elsewhere.

Oo. / ah / word-initially before / k / and / kʷ /; / wah / before / k / and / kʷ / elsewhere; / ake / word-initially before certain consonants and clusters (see 13.4); / wake / before certain consonants and clusters (13.4) elsewhere; / ake: / word-initially before certain other consonants and certain other vowels (13.4); / wake: / before certain other consonants and certain other vowels (13.4) elsewhere; / ak / word-initially before certain other consonants and clusters (13.4), and word-initially before remaining vowels; / wak / before certain other consonants and clusters (13.4) elsewhere, and before remaining vowels elsewhere.

Ca. / ake / word-initially before certain consonants and clusters (see 14.4);
/ wake / before certain consonants and clusters (14.4) elsewhere; / ak / word-initially before certain other consonants and clusters (14.4), and word-initially before vowels; / wak / before certain other consonants and clusters (14.4) elsewhere, and before vowels elsewhere.

Se. / ake / word-initially before certain consonants and clusters (see 15.4);
/ wõke / following the future prefix before certain consonants and

clusters (see 15.4); / wake / before certain consonants and clusters (15.4) elsewhere; / a / word-initially before / hts /; / wɔ̃ / following the future prefix before / hts /; / wa / before / hts / elsewhere; / akh / word-initially before / n /; / wɔ̃kh / following the future prefix before / n /; / wakh / before / n / elsewhere; / ak / word-initially before certain other consonants and clusters (15.4), and word-initially before vowels; / wɔ̃k / following the future prefix before certain other consonants and clusters (15.4), and following the future prefix before vowels; / wak / before certain consonants and clusters (15.4) elsewhere, and before vowels elsewhere.

Hu. / a / word-initial before / n /; / wa / before / n / elsewhere; / axe / word-initially before certain remaining consonants and clusters (see 16.4); / waxe / before certain remaining consonants and clusters (16.4) elsewhere; / ax / word-initially before certain remaining consonants and clusters (16.4) and word-initially before vowels; / wax / before certain remaining consonants and clusters (16.4) elsewhere, and before vowels elsewhere.

026   PI * { **jõ:kʷi** } '3A:1SG' (→ PNI '3I:1SG')

PI * / jõ:kʷi / before consonants; * / jõ:kʷ / before * / a(:) /, and perhaps before all vowels.

Ch. / ƛ̃̀:kì / before consonants; / ƛ̃̀:kì: / before / à: / with loss of / à: /; / ƛ̃̀:kʷ / before remaining vowels.

PNI * / jõkʷ / before * / a /, and perhaps also before * / e / and * / ẽ /; * / jõke / before certain consonants and clusters (see 4.4); * / jõk / before certain other consonants and clusters (4.4), and before remaining vowels.

Tu. / jə̃kʷ / before / a /; / jə̃kjɛ / before certain consonants and clusters (see 6.4); / jə̃kj / before / ɛ /; / jə̃k / before certain other consonants and clusters (6.4), and before remaining vowels.

Mo. / jũkʷ / before / a /, / e /, and / ã /; / jũke / before certain consonants and clusters (see 11.4); / jũk / before certain other consonants and clusters (11.4), and before remaining vowels elsewhere.

Oe. / jũkʷ / before / a /, / e /, and / ã /; / jũke / before certain consonants and clusters (see 12.4); / jũk / before certain other consonants and clusters (12.4), and before remaining vowels elsewhere.

Oo. / ũh / word-initially before / k / and / kʷ /; / jũh / before / k / and / kʷ /
elsewhere; / ũke / word-initially before certain consonants and clusters
(see 13.4); / jũke / before certain consonants and clusters (13.4)
elsewhere; / ũke: / word-initially before certain other consonants and
certain vowels (13.4); / jũke: / before certain other consonants and
certain vowels (13.4) elsewhere; / ũk / word-initially before certain
other consonants and clusters (13.4), and word-initially before
remaining vowels; / jũk / before certain other consonants and clusters
(13.4) elsewhere, and before remaining vowels elsewhere.

Ca. / jõke / before certain consonants and clusters (see 14.4); / jõk / before
certain other consonants and clusters (14.4), and before vowels.

Se. / ɔ̃ke / word-initially before certain consonants and clusters (see 15.4);
/ jɔ̃ke / before certain consonants and clusters (15.4) elsewhere;
/ ɔ̃kh / word-initially before / n /; / jɔ̃kh / before / n / elsewhere;
/ ɔ̃ / word-initially before / hts /; / jɔ̃ / before / hts / elsewhere; / ɔ̃k /
word-initially before certain other consonants and clusters (15.4), and
word-initially before vowels; / jɔ̃k / before certain other consonants and
clusters (15.4) elsewhere, and before vowels elsewhere.

Hu. / jõ / following a consonant before / n /; / õ / before / n / elsewhere;
/ jõxe / following a consonant before certain remaining consonants and
clusters (see 16.4); / õxe / before certain remaining consonants and
clusters (16.4) elsewhere; / jõx / following a consonant before certain
remaining consonants and clusters (16.4), and following a consonant
before a vowel; / õx / before certain remaining consonants and clusters
(16.4) elsewhere, and before vowels elsewhere.

027   PNI * { hɹake } '3M:1SG'

PNI * / ɹakʷ / word-initially before * / a /, and perhaps also word-initially
before * / e / and * / ẽ /; * / hɹakʷ / before * / a / elsewhere, and
perhaps also before * / e / and * / ẽ / elsewhere; * / ɹake / word-initially
before certain consonants and clusters (see 4.4); * / hɹake / before
certain consonants and clusters (4.4) elsewhere; * / ɹak / word-initially
before certain other consonants and clusters (4.4), and word-initially
before remaining vowels; * / hɹak / before certain other consonants and
clusters (4.4) elsewhere, and before remaining vowels elsewhere.

Tu. / rakʷ / word-initially before / a /; / hrakʷ / before / a / elsewhere; / rakj /

word-initially before / ɛ /; / hrakj / before / ɛ / elsewhere; / rakjɛ /
word-initially before certain consonants and clusters (see 6.4);
/ hrakjɛ / before certain consonants and clusters (6.4) elsewhere;
/ rak / word-initially before certain other consonants and clusters (6.4),
and before remaining vowels; / hrak / before certain other consonants
and clusters (6.4) elsewhere, and before remaining vowels elsewhere.

Mo. / ɹakʷ / word-initially before / a /, / e /, and / ɑ̃ /; / hakʷ / before / a /,
/ e /, and / ɑ̃ / elsewhere; / ɹake / word-initially before certain
consonants and clusters (see 11.4); / hake / before certain consonants
and clusters (11.4)elsewhere; / ɹak / word-initially before certain other
consonants and clusters (11.4), and word-initially before remaining
vowels; / hak / before certain other consonants and clusters (11.4)
elsewhere, and before remaining vowels elsewhere.

Oe. / lakʷ / word-initially before / a /, / e /, and / ɑ̃ /; / hakʷ / before / a /,
/ e /, and / ɑ̃ / elsewhere; / lake / word-initially before certain
consonants and clusters (see 12.4); / hake / before certain consonants
and clusters (12.4) elsewhere; / lak / word-initially before certain other
consonants and clusters (12.4), and word-initially before remaining
vowels; / hak / before certain other consonants and clusters (12.4)
elsewhere, and before remaining vowels elsewhere.

Oo. / hah / before / k / and / kʷ /; / hake / before certain consonants and
clusters (see 13.4); / hake: / before certain other consonants and certain
vowels (13.4); / hak / before certain other consonants and clusters
(13.4), and before remaining vowels.

Ca. / hake / before certain consonants and clusters (see 14.4); / hak / before
certain other consonants and clusters (14.4), and before vowels.

Se. / hake / before certain consonants and clusters (see 15.4); / hakh / before
/ n /; / ha / before / hts /; / hak / before certain other consonants and
clusters (15.4), and before vowels.

Hu. / ha / before / n /; / haxe / before certain remaining consonants and
clusters (see 16.4); / hax / before certain other remaining consonants
and clusters (16.4), and before vowels.

028   PI * { **tsa** } '3:2SG'

PI * / tsa / before consonants; * / ts / before certain vowels, perhaps before all
vowels.

Ch. / tsà / before consonants; / ts / before vowels.

PNI * / tsa / before consonants; * / tsẽ / before * / i / with loss of * / i /;
　　* / ts / before remaining vowels.

Tu. / θa / before consonants; / θɔ̃ / before / i / with loss of / i /; / θ / before
　　remaining vowels.

Mo. / sa / before consonants; / sʌ̃ / before / i / with loss of / i /; / s / before
　　remaining vowels.

Oe. [as in Mohawk].

Oo. / sa / before consonants; / sẽ / before / i / with loss of / i /; / s / before
　　remaining vowels.

Ca. / sa / before consonants; / sẽ / before / i / with loss of / i /; / s / before
　　remaining vowels.

Se. / sæ: / before / Ræ / with loss of / Ræ /; / sa: / before / hC / with loss of
　　/ h /; / sa / before / hV / with loss of / h /, and before / o / and / ɔ̃ /,
　　and before remaining consonants; / sẽ / before some bases beginning in
　　/ i / with loss of / i /, and before / jɔ̃ / with loss of / j /; / s / before
　　some bases beginning in / i /, and before remaining vowels.

Hu. / sa / before consonants; / sẽ / before / i / with loss of / i /; / s / before
　　remaining vowels.

029　　PI * { **jeːtsa** } '3A:2SG' (→ PNI 3I:2SG')

PI * / jeːtsa / before consonants; / jeːts / before certain vowels, perhaps before
　　all vowels.

Ch. / èːtsà / before consonants; / èːts / before vowels.

PNI * / jetsa / before consonants; * / jetsẽ / before * / i / with loss of * / i /;
　　* / jets / before remaining vowels.

Tu. / jɛθa / before consonants; / jɛθɔ̃ / before / i / with loss of / i /; / jɛθ /
　　before remaining vowels.

Mo. / jesa / before consonants; / jesʌ̃ / before / i / with loss of / i /; / jesaj /
　　before / o / and / ũ /; / jes / before remaining vowels.

Oe. / esa / word-initially before consonants; / jesa / before consonants
　　elsewhere; / esʌ̃ / word-initially before / i / with loss of / i /; / jesʌ̃ /
　　before / i / elsewhere with loss of / i /; / esaj / word-initially before
　　/ o / and / ũ /; / jesaj / before / o / and / ũ / elsewhere; / es /
　　word-initially before remaining vowels; / jes / before remaining vowels
　　elsewhere.

Oo. / esa / word-initially before consonants; / jesa / before consonants
elsewhere; / esẽ / word-initially before / i / with loss of / i /; / jesẽ /
before / i / elsewhere with loss of / i /; / esaj / word-initially before
/ o / and / ũ /; / jesaj / before / o / and / ũ / elsewhere; / es /
word-initially before remaining vowels; / jes / before remaining vowels
elsewhere.

Ca. / jesa / before consonants; / jesẽ / before / i / with loss of / i /; / jesaj /
before / o /, / õ / and / u /; / jes / before remaining vowels.

Se. / esæ: / before / Ræ / word-initially with loss of / Ræ /; / jesæ: / before
/ Ræ / elsewhere with loss of / Ræ /; / esa: / before / hC / word-initially
with loss of / h /; / jesa: / before / hC / elsewhere with loss of / h /;
/ esa / before / hV / word-initially with loss of / h /, and before / o /
and / õ / word-initially, and before remaining consonants word-initially;
/ jesa / before / hV / elsewhere with loss of / h /, and before / o / and
/ õ / elsewhere, and before remaining consonants elsewhere; / esẽ /
before some bases beginning in / i / word-initially with loss of / i /, and
before / jõ / word-initially with loss of / j /; / jesẽ / before some bases
beginning in / i / elsewhere with loss of / i /, and before / jõ / elsewhere
with loss of / j /; / es / before some bases beginning in / i /
word-initially, and before remaining vowels word-initially; / jes / before
some bases beginning in / i / elsewhere, and before remaining vowels
elsewhere.

Hu. / esa / following a consonant before a consonant; / esa / before consonants
elsewhere; / jesẽ / following a consonant before / i / with loss of / i /;
/ esẽ / before / i / elsewhere with loss of / i /; / jes / following a
consonant before remaining vowels; / es / before remaining vowels
elsewhere.

030   PNI * { **hja** } '3M:2SG'

PNI * / hja / before consonants; * / hjẽ / before * / i / with loss of * / i /;
* / hjaj / before * / o / and * / õ /; * / hj / before remaining vowels.

Mo. / hja / before consonants; / hjᴧ̃ / before / i / with loss of / i /; / hjaj /
before / o / and / ũ /; / hj / before remaining vowels.

Oe. / ja / word-initially before consonants; / hja / before consonants elsewhere;
/ jᴧ̃ / word-initially before / i / with loss of / i /; / hjᴧ̃ / before / i /
elsewhere with loss of / i /; / jaj / word-initially before / o / and / ũ /;

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/ hjaj / before / o / and / ũ / elsewhere; / j / word-initially before remaining vowels; / hj / before remaining vowels elsewhere.

Oo. / hja / before consonants; / hjẽ / before / i / with loss of / i /; / hjaj / before / o / and / ũ /; / hj / before remaining vowels.

Ca. / hja / before consonants; / hjẽ / before / i / with loss of / i /; / hjaj / before / o /, / õ / and / u /; / hj / before remaining vowels.

Se. / jæ: / before / Ræ / word-initially with loss of / Ræ /; / hjæ: / before / Ræ / elsewhere with loss of / Ræ /; / ja: / before / hC / word-initially with loss of / h /; / hja: / before / hC / elsewhere with loss of / h /; / ja / before / hV / word-initially with loss of / h /, and before / o / and / ɔ̃ / word-initially, and before remaining consonants word-initially; / hja / before / hV / elsewhere with loss of / h /, and before / o / and / õ / elsewhere, and before remaining consonants elsewhere; / jɛ̃ / before some bases beginning in / i / word-initially with loss of / i /, and before / jɔ̃ / word-initially with loss of / j /; / hjɛ̃ / before some bases beginning in / i / elsewhere with loss of / i /, and before / jɔ̃ / elsewhere with loss of / j /; / j / before some bases beginning in / i / word-initially, and before remaining vowels word-initially; / hj / before some bases beginning in / i / elsewhere, and before remaining vowels elsewhere.

Hu. / hja / before consonants; / hjẽ / before / i / with loss of / i /; / hj / before remaining vowels.

031   PI * { **tsni:** } '2DU&3'

PI * / tsni: / before consonants; * / tsn / before at least some vowels; (elsewhere = ?)

Ch. / stì: / word-initially or following a consonant before / à: / with loss of / à: /, and word-initially or following a consonant before a consonant; / hstì: / before / à: / with loss of / à: / elsewhere, and before a consonant elsewhere; / st / word-initially or following a consonant before vowels; / hst / before vowels elsewhere.

PNI * / tsni / before consonants; * / tsj / before * / a /; * / tsn / before remaining vowels.

Tu. / θti / before consonants; / θn / before / ɔ̃ / and before some bases beginning in / o /; / tʃ / before / a /; / θt / before remaining vowels.

Mo. / seni / before consonants; / tsj / before / a /; / sen / before remaining vowels.

Oe. / sni / before consonants; / tsj / before / a /; / sn / before remaining
vowels.

Oo. / sni / before consonants; / tsj / before / a / and / ẽ /; / sn / before
remaining vowels.

Ca. / hsni / following a vowel before a consonant; / sni / before a consonant
elsewhere; / ts / before / a /; / hsn / following a vowel before remaining
vowels; / sn / before remaining vowels elsewhere.

Se. / sni: / before / hC / with loss of / h /; / sni / before / hV / with loss of
/ h /, and before remaining consonants; / snj / before / a / and / ẽ /
(appearance of / n / interpreted as analogy); / sn / before remaining
vowels.

Hu. / tsi / before consonants; / ts / before / a /; / st / before remaining vowels.

032   PNI * { **hshetsni** } '2DU&3M'

PNI * / shetsni / word-initially or following a consonant before a consonant;
* / hshetsni / before a consonant elsewhere; * / shetsj / word-initially or
following a consonant before / a /; * / hshetsj / before / a / elsewhere;
* / shetsn / word-initially or following a consonant and before remaining
vowels; * / hshetsn / before remaining vowels elsewhere.

Mo. / hetshiseni / before consonants; / hetshitsj / before / a /; / hetshisen /
before remaining vowels.

Oe. / etsni / word-initially before consonants; / hetsni / before consonants
elsewhere; / etsj / word-initially before / a /; / hetsj / before / a /
elsewhere; / etsn / word-initially before remaining vowels; / hetsn /
before remaining vowels elsewhere.

Oo. / shesni / before consonants; / shetsj / before / a / and / ẽ /; / shesn /
before remaining vowels.

Ca. / shehsni / word-initially or following a consonant before a consonant;
/ hshehsni / before a consonant elsewhere; / shets / word-initially or
following a consonant before / a /; / hshets / before / a / elsewhere;
/ shehsn / word-initially or following a consonant and before remaining
vowels; / hshehsn / before remaining vowels elsewhere.

Se. / shesni: / before / hC / with loss of / h /; / shesni / before / hV / with loss
of / h /, and before remaining consonants; / shesnj / before / a / and
/ ẽ / (appearance of / n / interpreted as analogy); / shesn / before
remaining vowels.

Hu. / hetsi / before consonants; / hets / before / a /; / hest / before remaining
      vowels.

033   PI * { **ts...** } '2PL&3'

Ch. / ì:tsì / before / à: / with loss of / à: /, and before a consonant; / ì:ts /
      before remaining vowels.

PNI * / tswa / before consonants; * / tswẽ / before * / i / with loss of * / i /;
      * / tsʝ / before * / o / and * / õ /; * / tsw / before remaining vowels.

Tu. / θwa / before consonants; / θwə̃ / before / i / with loss of / i /; / θw /
      before remaining vowels.

Mo. / sewa / before consonants; / sewʌ̃ / before / i / with loss of / i /; / tsʝ /
      before / o / and / ũ /; / sew / before remaining vowels.

Oe. / swa / before consonants; / swʌ̃ / before / i / with loss of / i /; / tsʝ /
      before / o / and / ũ /; / sw / before remaining vowels.

Oo. / swa / before consonants; / swẽ / before / i / with loss of / i /; / tsʝ /
      before / o / and / ũ /; / sw / before remaining vowels.

Ca. / swa / word-initially or following a consonant before a consonant; / hswa /
      before a consonant elsewhere; / swẽ / word-initially or following a
      consonant before / i / with loss of / i /; / hswẽ / before / i / elsewhere
      with loss of / i /; / tsʝ / before / o /, / õ / and / u /; / sw / word-initially
      or following a consonant before remaining vowels; / hsw / before
      remaining vowels elsewhere.

Se. / swæ: / before / Ræ / with loss of / Ræ /; / swa: / before / hC / with loss of
      / h /; / swa / before / hV / with loss of / h /, and before remaining
      consonants; / swẽ / before some bases beginning in / i / with loss of
      / i /, and before / jõ / with loss of / j /; / ts / before / o / and / õ /;
      / sw / before some bases beginning in / i /, and before remaining
      vowels.

Hu. / skwa / before consonants; / skwẽ / before / i / with loss of / i /; / ts /
      before / o / and / ũ /; / skw / before remaining vowels.

034   PNI * { **hshetswa** } '2PL&3M'

PNI * / shetswa / word-initially or following a consonant before a consonant;
      * / hshetswa / before a consonant elsewhere; * / shetswẽ / word-initially
      or following a consonant before * / i / with loss of * / i /; * / hshetswẽ /
      before * / i / elsewhere with loss of * / i /; * / shetsʝ / word-initially or

following a consonant before * / o / and * / õ /; * / hshetsj / before * / o / and * / õ / elsewhere; * / shetsw / word-initially or following a consonant before remaining vowels; * / hshetsw / before remaining vowels elsewhere.

Mo. / hetshisewa / before consonants; / hetshisewᴧ̃ / before / i / with loss of / i /; / hetshitsj / before / o / and / ũ /; / hetshisew / before remaining vowels.

Oe. / etswa / word-initially before consonants; / hetswa / before consonants elsewhere; / etswᴧ̃ / word-initially before / i / with loss of / i /; / hetswᴧ̃ / before / i / elsewhere with loss of / i /; / etsj / word-initially before / o / and / ũ /; / hetsj / before / o / and / ũ / elsewhere; / etsw / word-initially before remaining vowels; / etsw / before remaining vowels elsewhere.

Oo. / sheswa / before consonants; / sheswẽ / before / i / with loss of / i /; / shetsj / before / o / and / ũ /; / shesw / before remaining vowels.

Ca. / shehswa / word-initially or following a consonant before a consonant; / hshehswa / before a consonant elsewhere; / shehswẽ / word-initially or following a consonant before / i / with loss of / i /; / hshehswẽ / before / i / elsewhere with loss of / i /; / shetsj / word-initially or following a consonant before / o /, / õ / or / u /; / hshetsj / before / o /, / õ / and / u / elsewhere; / shehsw / word-initially or following a consonant before remaining vowels; / hshehsw / before remaining vowels elsewhere.

Se. / sheswæ: / before / Ræ / with loss of / Ræ /; / sheswa: / before / hC / with loss of / h /; / sheswa / before / hV / with loss of / h /, and before remaining consonants; / sheswẽ / before some bases beginning in / i / with loss of / i /, and before / jõ / with loss of / j /; / shets / before / o / and / õ /; / sw / before some bases beginning in / i /, and before remaining vowels.

Hu. / heskwa / before consonants; / heskwẽ / before / i / with loss of / i /; / hets / before / o / and / ũ /; / heskw / before remaining vowels.

035   PNI * { **jetshi** } '2NS&3I'

PNI * / jetshi / before consonants and before * / i / with loss of * / i /; * / jetshij / before remaining vowels.

Tu. / jə̃tʃhi / before consonants and before * / i / with loss of * / i /; / jə̃tʃhij /

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before remaining vowels.

Mo. / jetshi / before consonants, and before / i / elsewhere with loss of / i /; / jetshij / before remaining vowels.

Oe. / etshi / word-initially before consonants, and word-initially before / i / with loss of / i /; / jetshi / before consonants elsewhere, and before / i / elsewhere with loss of / i /; / etshij / word-initially before remaining vowels; / jetshij / before remaining vowels elsewhere.

Oo. / etshi / word-initially before consonants, and word-initially before / i / with loss of / i /; / jetshi / before consonants elsewhere, and before / i / elsewhere with loss of / i /; / etshij / word-initially before remaining vowels; / jetshij / before remaining vowels elsewhere.

Ca. / etshi / word-initially before consonants, and word-initially before / i / with loss of / i /; / jetshi / before consonants elsewhere, and before / i / elsewhere with loss of / i /; / etshij / word-initially before remaining vowels; / jetshij / before remaining vowels elsewhere.

Se. / etshi: / word-initially before / hC / with loss of / h /; / jetshi: / before / hC / elsewhere with loss of / h /; / etshi / word-initially before / hV / with loss of / h /, and word-initially before remaining consonants, and word-initially before / i / with loss of / i /; / jetshi / before / hV / elsewhere with loss of / h /, and before remaining consonants elsewhere, and before / i / elsewhere with loss of / i /; / etshij / word-initially before remaining vowels; / jetshij / before remaining vowels elsewhere.

Hu. / jetshi / following a consonant before a consonant, and following a consonant before / i / with loss of / i /, and following a consonant before remaining vowels; / etshi / before a consonant elsewhere, and before / i / elsewhere with loss of / i /, and before remaining vowels elsewhere.

036   PI * { **tni:** } '1 + 2DU:3'

PI * / tni: / before consonants; * / tn / before at least some vowels; (elsewhere = ?)

Ch. / ì:tì / before / à: / with loss of / à: /, and before a consonant; / ì:t / before remaining vowels.

PNI * / tni / before consonants; * / tj / before * / a /; * / tn / before remaining vowels.

Tu. / ti / before consonants; / nj / before / a /; / n / before / ə̃ / and before some bases beginning in / o /; / t / before remaining vowels.

Mo. / teni / before consonants; / tj / before / a /; / ten / before remaining
    vowels.

Oe. / tni / before consonants; / tj / before / a /; / tn / before remaining vowels.

Oo. / tni / before consonants; / tj / before / a / and / ẽ /; / tn / before
    remaining vowels.

Ca. / thni / before consonants; / tj / before / a /; / thn / before remaining
    vowels.

Se. / hni: / before / hC / with loss of / h /; / hni / before / hV / with loss of
    / h /, and before remaining consonants; / hnj / before / a / and / ɛ̃ /
    (appearance of / n / interpreted as analogy); / hn / before remaining
    vowels.

Hu. / ti / before consonants; / tj / before / a /; / t / before remaining vowels.

⁰³⁷ PNI * { **hshetni** } '1 + 2DU:3M'

PNI * / shetni / word-initially or following a consonant before a consonant;
    * / hshetni / before a consonant elsewhere; * / shetj / word-initially or
    following a consonant before * / a /; * / hshetj / before * / a /
    elsewhere; * / shetn / word-initially or following a consonant before
    remaining vowels; * / hshetn / before remaining vowels elsewhere.

Mo. / hetshiteni / before consonants; / hetshitj / before / a /; / hetshiten /
    before remaining vowels.

Oe. / ethni / word-initially before consonants; / hethni / before consonants
    elsewhere; / ethj / word-initially before / a /; / hethj / before / a /
    elsewhere; / ethn / word-initially before remaining vowels; / ethni /
    before remaining vowels elsewhere.

Oo. / shetni / before consonants; / shetj / before / a / and / ẽ /; / shetn / before
    remaining vowels.

Ca. / shethni / word-initially or following a consonant before a consonant;
    / hshethni / before a consonant elsewhere; / shetj / word-initially or
    following a consonant before / a /; / hshetj / before / a / elsewhere;
    / shethn / word-initially or following a consonant before remaining
    vowels; / hshethn / before remaining vowels elsewhere.

Se. / shehni: / before / hC / with loss of / h /; / shehni / before / hV / with loss
    of / h /, and before remaining consonants; / shehnj / before / a / and
    / ɛ̃ / (appearance of / n / interpreted as analogy); / shehn / before
    remaining vowels.

Hu. / heti / before consonants; / hetj / before / a /; / het / before remaining
  vowels.

038   PI * { **t...** } '1 + 2PL:3'
Ch. / ì:tì / before / à: / with loss of / à: / and before a consonant; / ì:t / before
  remaining vowels.
PNI * / twa / before consonants; * / twẽ / before * / i / with loss of * / i /;
  * / tj / before * / o / and * / õ /; * / tw / before remaining vowels.
Tu. / ʔnwa / after a vowel and before a consonant; / nwa / before a consonant
  elsewhere; / ʔnwə̃ / after a vowel and before / i / with loss of / i /;
  / nwə̃ / before / i / elsewhere with loss of / i /; / ʔnw / after a vowel
  before remaining vowels / nw / before remaining vowels elsewhere.
Mo. / tewa / before consonants; / tewʌ̃ / before / i / with loss of / i /; / tj /
  before / o / and / ũ /; / tew / before remaining vowels.
Oe. / twa / before consonants; / twʌ̃ / before / i / with loss of / i /; / tj / before
  / o / and / ũ /; / tw / before remaining vowels.
Oo. / twa / before consonants; / twẽ / before / i / with loss of / i /; / tj / before
  / o / and / ũ /; / tw / before remaining vowels.
Ca. / twa / before consonants; / twẽ / before / i / with loss of / i /; / tj / before
  / o /, / õ / and / u /; / tw / before remaining vowels.
Se. / twæ: / before / Ræ / with loss of / Ræ /; / twa: / before / hC / with loss of
  / h /; / twa / before / hV / with loss of / h /, and before remaining
  consonants; / twẽ / before some bases beginning in / i / with loss of
  / i /, and before / jõ / with loss of / j /; / tj / before / o / and / õ /;
  / tw / before some bases beginning in / i /, and before remaining
  vowels.
Hu. / kwa / before consonants; / kwẽ / before / i / with loss of / i /; / tj /
  before / o / and / õ /; / kw / before remaining vowels.

039   PNI * { **hshetwa** } '1 + 2PL:3M'
PNI * / shetwa / word-initially or following a consonant before a consonant;
  * / hshetwa / before a consonant elsewhere; * / shetwẽ / word-initially
  or following a consonant before * / i / with loss of * / i /; * / hshetwẽ /
  before * / i / elsewhere with loss of * / i /; * / shetj / word-initially or
  following a consonant before * / o / and * / õ /; * / hshetj / before
  * / o / and * / õ / elsewhere; * / shetw / word-initially or following a

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consonant before remaining vowels; * / hshetw / before remaining vowels elsewhere.

Mo. / hetshitewa / before consonants; / hetshitewᷛ / before / i / with loss of / i /; / hetshitj / before / o / and / ũ /; / hetshitew / before remaining vowels.

Oe. / ethwa / word-initially before consonants; / hethwa / before consonants elsewhere; / ethwᷛ / word-initially before / i / with loss of / i /; / hethwᷛ / before / i / elsewhere with loss of / i /; / ethj / word-initially before / o / and / ũ /; / hethj / before / o / and / ũ / elsewhere; / ethw / word-initially before remaining vowels; / hethw / before remaining vowels elsewhere.

Oo. / shetwa / before consonants; / shetwẽ / before / i / with loss of / i /; / shetj / before / o / and / ũ /; / shetw / before remaining vowels.

Ca. / shetwa / word-initially or following a consonant before a consonant; / hshetwa / before a consonant elsewhere; / shetwẽ / word-initially or following a consonant before / i / with loss of / i /; / hshetwẽ / before / i / elsewhere with loss of / i /; / shetj / word-initially or following a consonant before / o /, / õ / or / u /; / hshetj / before / o /, / õ / or / u / elsewhere; / shetw / word-initially or following a consonant before remaining vowels; / hshetw / before remaining vowels elsewhere.

Se. / shetwæ: / before / Ræ / with loss of / Ræ /; / shetwa: / before / hC / with loss of / h /; / shetwa / before / hV / with loss of / h /, and before remaining consonants; / shetwẽ / before some bases beginning in / i / with loss of / i /, and before / jõ / with loss of / j /; / shetj / before / o / and / õ /; / shetw / before some bases beginning in / i /, and before remaining vowels.

Hu. / hekwa / before consonants; / hekwẽ / before / i / with loss of / i /; / hetj / before / o / and / õ /; / hekw / before remaining vowels.

040   PNI * { **jakni** } '1 + 3DU:3'

PNI * / jakni / before consonants; * / jakj / before * / a /; * / jakn / before remaining vowels.

Tu. / jakti / before consonants; / jakj / before / a /; / jakn / before / ə̃ / and before some bases beginning in / o /; / jakt / before remaining vowels.

Mo. / jakeni / before consonants; / jakj / before / a /; / jaken / before remaining vowels.

Oe. / akni / word-initially before consonants; / jakni / before consonants elsewhere; / akj / word-initially before / a /; / jakj / before / a / elsewhere; / akn / word-initially before remaining vowels; / jakn / before remaining vowels elsewhere.

Oo. / akni / word-initially before consonants; / jakni / before consonants elsewhere; / akj / word-initially before / a / and / ẽ /; / jakj / before / a / and / ẽ / elsewhere; / akn / word-initially before remaining vowels; / jakn / before remaining vowels elsewhere.

Ca. / akhni / word-initially before consonants; / jakhni / before consonants elsewhere; / akj / word-initially before / a /; / jakj / before / a / elsewhere; / akhn / word-initially before remaining vowels; / jakhn / before remaining vowels elsewhere.

Se. / akhni: / word-initially before / hC / with loss of / h /; / jakhni: / before / hC / elsewhere with loss of / h /; / akhni / word-initially before / hV / with loss of / h /, and word-initially before remaining consonants; / jakhni / before / hV / elsewhere with loss of / h /, and before remaining consonants elsewhere; / akhnj / word-initially before / a / and / ɛ̃ / (appearance of / n / interpreted as analogy); / jakhnj / before / a / and / ɛ̃ / elsewhere (appearance of / n / interpreted as analogy); / akhn / word-initially before remaining vowels; / jakn / elsewhere before remaining vowels.

Hu. / jaxi / following a consonant before a consonant; / axi / before a consonant elsewhere; / jaxj / following a consonant before / a /; / axj / before / a / elsewhere; / jan / following a consonant before remaining vowels; / an / before remaining vowels elsewhere.

041 PNI * { **hshakni** } '1 + 3DU:3M'

PNI * / shakni / word-initially or following a consonant before consonants; * / hshakni / before consonants elsewhere; * / shakj / word-initially or following a consonant before * / a /; * / hshakj / before * / a / elsewhere; * / shakn / word-initially or following a consonant before remaining vowels; * / hshakn / before remaining vowels elsewhere.

Mo. / shakeni / word-initially or following a consonant before consonants; / hshakeni / before consonants elsewhere; / shakj / word-initially or following a consonant before / a /; / hshakj / before / a / elsewhere; / shaken / word-initially or following a consonant before remaining

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vowels; / hshaken / before remaining vowels elsewhere.

Oe. / shakni / before consonants; / shakj / before / a /; / shakn / before
remaining vowels.

Oo. / shakni / before consonants; / shakj / before / a / and / ẽ /; / shakn /
before remaining vowels.

Ca. / shakhni / word-initially or following a consonant before consonants;
/ hshakhni / before consonants elsewhere; / shakj / word-initially or
following a consonant before / a /; / hshakj / before / a / elsewhere;
/ shakhn / word-initially or following a consonant before remaining
vowels; / hshakhn / before remaining vowels elsewhere.

Se. / shakhni: / before / hC / with loss of / h /; / shakhni / before / hV / with
loss of / h /, and before remaining consonants; / shakhnj / before / a /
and / ɛ̃ / (appearance of / n / interpreted as analogy); / shakhn /
before remaining vowels.

Hu. / shaxi / before a consonant; / shaxj / before / a /; / shan / before
remaining vowels.

042   PNI * { **jakwa** } '1 + 3PL:3'

PNI * / jakwa / before consonants; * / jakwẽ / before * / i / with loss of * / i /;
* / jakj / before * / o / and * / õ /; * / jakw / before remaining vowels.

Tu. / jakwa / before consonants; / jakwə̃ / before / i / with loss of / i /;
/ jakw / before remaining vowels.

Mo. / jakwa / before consonants; / jakwʌ̃ / before / i / with loss of / i /; / jakj /
before / o / and / ũ /; / jakw / before remaining vowels.

Oe. / akwa / word-initially before consonants; / jakwa / before consonants
elsewhere; / akwʌ̃ / word-initially before / i / with loss of / i /;
/ jakwʌ̃ / before / i / elsewhere with loss of / i /; / akj / word-initially
before / o / and / ũ /; / jakj / before / o / and / ũ / elsewhere; / akw /
word-initially before remaining vowels; / jakw / before remaining
vowels elsewhere.

Oo. / akwa / word-initially before consonants; / jakwa / before consonants
elsewhere; / akwẽ / word-initially before / i / with loss of / i /;
/ jakwẽ / before / i / elsewhere with loss of / i /; / akj / word-initially
before / o / and / ũ /; / jakj / before / o / and / ũ / elsewhere; / akw /
word-initially before remaining vowels; / jakw / before remaining
vowels elsewhere.

Ca. / akwa / word-initially before consonants; / jakwa / before consonants elsewhere; / akwẽ / word-initially before / i / with loss of / i /; / jakwẽ / before / i / elsewhere with loss of / i /; / akj / word-initially before / o /, / õ /, and / u /; / jakj / before / o /, / õ /, and / u / elsewhere; / akw / word-initially before remaining vowels; / jakw / before remaining vowels elsewhere.

Se. / akwæ: / word-initially before / Ræ / with loss of / Ræ /; / jakwæ: / before / Ræ / elsewhere with loss of / Ræ /; / akwa: / word-initially before / hC / with loss of / h /; / jakwa: / before / hC / elsewhere with loss of / h /; / akwa / word-initially before / hV / with loss of / h /, and word-initially before remaining consonants; / jakwa / before / hV / elsewhere with loss of / h /, and before remaining consonants elsewhere; / akwẽ / word-initially before some bases beginning in / i / with loss of / i /, and word-initially before / jõ / with loss of / j /; / jakwẽ / before some bases beginning in / i / elsewhere with loss of / i /, and before / jõ / elsewhere with loss of / j /; / akj / word-initially before / o / and / õ /; / jakj / before / o / and / õ / elsewhere; / akw / word-initially before some bases beginning in / i /, and word-initially before remaining vowels; / jakw / before some bases beginning in / i / elsewhere, and before remaining vowels elsewhere.

Hu. / jaxwa / following a consonant before a consonant; / axwa / before a consonant elsewhere; / jaxwẽ / following a consonant before / i / with loss of / i /; / axwẽ / before / i / elsewhere with loss of / i /; / jaxj / following a consonant before / o / or / õ /; / axj / before / o / and / õ / elsewhere; / jaxw / following a consonant before remaining vowels; / axw / before remaining vowels elsewhere.

043   PNI * { **hshakwa** } '1 + 3PL:3M'

PNI * / shakwa / word-initially or following a consonant before consonants; * / hshakwa / before consonants elsewhere; * / shakwẽ / word-initially or following a consonant before * / i / with loss of * / i /; * / hshakwẽ / before * / i / elsewhere with loss of * / i /; * / shakj / word-initially or following a consonant before * / o / and * / õ /; * / hshakj / before * / o / and * / õ / elsewhere; * / shakw / word-initially or following a consonant before remaining vowels; * / hshakw / before remaining vowels elsewhere.

Mo. / shakwa / word-initially or following a consonant before consonants;
/ hshakwa / before consonants elsewhere; / shakwɅ̃ / word-initially or
following a consonant before / i / with loss of / i /; / hshakwɅ̃ / before
/ i / elsewhere with loss of / i /; / shakj / word-initially or following a
consonant before / o / and / ũ /; / hshakj / before / o / and / ũ /
elsewhere; / shakw / word-initially or following a consonant before
remaining vowels; / hshakw / before remaining vowels elsewhere.

Oe. / shakwa / before consonants; / shakwɅ̃ / before / i / with loss of / i /;
/ shakj / before / o / and / ũ /; / shakw / before remaining vowels.

Oo. / shakwa / before consonants; / shakwẽ / before / i / with loss of / i /;
/ shakj / before / o / and / ũ /; / shakw / before remaining vowels.

Ca. / shakwa / word-initially or following a consonant before consonants;
/ hshakwa / before consonants elsewhere; / shakwẽ / word-initially or
following a consonant before / i / with loss of / i /; / hshakwẽ / before
/ i / elsewhere with loss of / i /; / shakj / word-initially or following a
consonant before / o /, / õ / and / u /; / hshakj / before / o /, / õ / and
/ u / elsewhere; / shakw / word-initially or following a consonant before
remaining vowels; / hshakw / before remaining vowels elsewhere.

Se. / shakwæ: / before / Ræ / with loss of / Ræ /; / shakwa: / before / hC /
with loss of / h /; / shakwa / before / hV / with loss of / h /, and before
remaining consonants; / shakwẽ / before some bases beginning in / i /
with loss of / i /, and before / jõ / with loss of / j /; / shakj / before / o /
and / õ /; / shakw / before some bases beginning in / i /, and before
remaining vowels.

Hu. / shaxwa / before a consonant; / shaxwẽ / before / i / with loss of / i /;
/ shaxj / before / o / and / õ /; / shaxw / before remaining vowels.

044   PI * { **kni:** } '3:1DU'

PI * / kni: / before consonants; * / kn / before at least some vowels;
(elsewhere = ?)

Ch. (3:1 + 2DU): / kìnì: / before / à: / with loss of / à: /, and before a
consonant; / kìn / before remaining vowels.

PNI * / jõkni / before consonants; * / jõkj / before / a /; * / jõkn / before
remaining vowels.

Tu. / jə̃kti / before consonants; / jə̃kj / before / a /; / jə̃kn / before / ə̃ / and
before some bases beginning in / o /; / jə̃kt / before remaining vowels.

Mo. / jũkeni / before consonants; / jũkj / before / a /; / jũken / before
   remaining vowels.

Oe. / ũkni / word-initially before consonants; / jũkni / before consonants
   elsewhere; / ũkj / word-initially before / a /; / jũkj / before / a /
   elsewhere; / ũkn / word-initially before remaining consonants; / jũkn /
   before remaining consonants elsewhere.

Oo. / ũkni / word-initially before consonants; / jũkni / before consonants
   elsewhere; / ũkj / word-initially before / a / and / ẽ /; / jũkj / before
   / a / and / ẽ / elsewhere; / ũkn / word-initially before remaining vowels;
   / jũkn / before remaining vowels elsewhere.

Ca. / õkhni / word-initially before consonants; / jõkhni / before consonants
   elsewhere; / õkj / word-initially before / a /; / jõkj / before / a /
   elsewhere; / õkhn / word-initially before remaining vowels; / jõkhn /
   before remaining vowels elsewhere.

Se. / ɔ̃khni: / word-initially before / hC / with loss of / h /; / jɔ̃khni: / before
   / hC / elsewhere with loss of / h /; / ɔ̃khni / word-initially before / hV /
   with loss of / h /, and word-initially before remaining consonants;
   / jɔ̃khni / before / hV / elsewhere with loss of / h /, and before
   remaining consonants elsewhere; / ɔ̃khnj / word-initially before / a / and
   / ẽ / (appearance of / n / interpreted as analogy); / jɔ̃khnj / before
   / a / and / ẽ / elsewhere; / ɔ̃khn / word-initially before remaining
   vowels; / jɔ̃khn / elsewhere before remaining vowels.

Hu. / jõxi / following a consonant before a consonant; / õxi / before a
   consonant elsewhere; / jõxj / following a consonant before / a /; / õxj /
   before / a / elsewhere; / jõn / following a consonant before remaining
   vowels; / õn / before remaining vowels elsewhere.

045   PNI * { **hshõkni** } '3M:1DU'

PNI * / shõkni / word-initially or following a consonant before consonants;
   * / hshõkni / before consonants elsewhere; * / shõkj / word-initially or
   following a consonant before * / a /; * / hshõkj / before * / a /
   elsewhere; * / shõkn / word-initially or following a consonant before
   remaining vowels; * / hshõkn / before remaining vowels elsewhere.

Mo. / shũkeni / word-initially or following a consonant before consonants;
   / hshũkeni / before consonants elsewhere; / shũkj / word-initially or
   following a consonant before / a /; / hshũkj / before / a / elsewhere;

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/ shũken / word-initially or following a consonant before remaining vowels; / hshũken / before remaining vowels elsewhere.

Oe. / shũkni / before consonants; / shũkj / before / a /; / shũkn / before remaining vowels.

Oo. / shũkni / before consonants; / shũkj / before / a / and / ẽ /; / shũkn / before remaining vowels.

Ca. / shõkhni / word-initially or following a consonant before consonants; / hshõkhni / before consonants elsewhere; / shõkj / word-initially or following a consonant before / a /; / hshõkj / before / a / elsewhere; / shõkhn / word-initially or following a consonant before remaining vowels; / hshõkhn / before remaining vowels elsewhere.

Se. / shɔ̃khni: / before / hC / with loss of / h /; / shɔ̃khni / before / hV / with loss of / h /, and before remaining consonants; / shɔ̃khnj / before / a / and / ɛ̃ / (appearance of / n / interpreted as analogy); / shɔ̃khn / before remaining vowels.

Hu. / shõxi / before a consonant; / shõxj / before / a /; / shõn / before remaining vowels.

046   PI * { **k**ʷ… } '3:1PL'

Ch. (3:1 + 2PL): / ì:kì: / before / à: / with loss of / à: /, and before a consonant; / ì:k / before remaining vowels.

PNI * / jõkwa / before consonants; * / jõkwẽ / before / i / with loss of / i /; * / jõkj / before / o / and / õ /; * / jõkw / before remaining vowels.

Tu. / jə̃kwa / before consonants; / jə̃kwə̃ / before / i / with loss of / i /; / jə̃kw / before remaining vowels.

Mo. / jũkwa / before consonants; / jũkwɑ̃ / before / i / with loss of / i /; / jũkj / before / o / and / ũ /; / jũkw / before remaining vowels.

Oe. / ũkwa / word-initially before consonants; / jũkwa / before consonants elsewhere; / ũkwɑ̃ / word-initially before / i / with loss of / i /; / jũkwɑ̃ / before / i / elsewhere with loss of / i /; / ũkj / word-initially before / o / and / ũ /; / jũkj / before / o / and / ũ / elsewhere; / ũkw / word-initially before remaining vowels; / jũkw / before remaining vowels elsewhere.

Oo. / ũkwa / word-initially before consonants; / jũkwa / before consonants elsewhere; / ũkwẽ / word-initially before / i / with loss of / i /; / jũkwẽ / before / i / elsewhere with loss of / i /; / ũkj / word-initially

before / o / and / ũ /; / jũkj / before / o / and / ũ / elsewhere; / ũkw / word-initially before remaining vowels; / jũkw / before remaining vowels elsewhere.

Ca. / õkwa / word-initially before consonants; / jõkwa / before consonants elsewhere; / õkwẽ / word-initially before / i / with loss of / i /; / jõkwẽ / before / i / elsewhere with loss of / i /; / õkj / word-initially before / o /, / õ /, and / u /; / jõkj / before / o /, / õ /, and / u / elsewhere; / õkw / word-initially before remaining vowels; / jõkw / before remaining vowels elsewhere.

Se. / ɔ̃kwæ: / word-initially before / Ræ / with loss of / Ræ /; / jɔ̃kwæ: / before / Ræ / elsewhere with loss of / Ræ /; / ɔ̃kwa: / word-initially before / hC / with loss of / h /; / jɔ̃kwa: / before / hC / elsewhere with loss of / h /; / ɔ̃kwa / word-initially before / hV / with loss of / h /, and word-initially before remaining consonants; / jɔ̃kwa / before / hV / elsewhere with loss of / h /, and before remaining consonants elsewhere; / ɔ̃kwẽ / word-initially before some bases beginning in / i / with loss of / i /, and word-initially before / jɔ̃ / with loss of / j /; / jɔ̃kwẽ / before some bases beginning in / i / elsewhere with loss of / i /, and before / jɔ̃ / elsewhere with loss of / j /; / ɔ̃kj / word-initially before / o / and / ɔ̃ /; / jɔ̃kj / before / o / and / ɔ̃ / elsewhere; / ɔ̃kw / word-initially before some bases beginning in / i /, and word-initially before remaining vowels; / jɔ̃kw / before some bases beginning in / i / elsewhere, and before remaining vowels elsewhere.

Hu. / jõxwa / following a consonant before a consonant; / õxwa / before a consonant elsewhere; / jõxwẽ / following a consonant before / i / with loss of / i /; / õxwẽ / before / i / elsewhere with loss of / i /; / jõxj / following a consonant before / o / or / õ /; / õxj / before / o / and / õ / elsewhere; / jõxw / following a consonant before remaining vowels; / õxw / before remaining vowels elsewhere.

047 PNI * { **hshõkwa** } '3M:1PL'

PNI * / shõkwa / word-initially or following a consonant before consonants; * / hshõkwa / before consonants elsewhere; * / shõkwẽ / word-initially or following a consonant before * / i / with loss of * / i /; * / hshõkwẽ / before * / i / elsewhere with loss of * / i /; * / shõkj / word-initially or following a consonant before * / o / and * / õ /; * / hshõkj / before

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* / o / and * / õ /; * / shõkw / word-initially or following a consonant before remaining vowels; * / hshõkw / before remaining vowels elsewhere.

Mo. / shũkwa / word-initially or following a consonant before consonants; / hshũkwa / before consonants elsewhere; / shũkwã̃ / word-initially or following a consonant before / i / with loss of / i /; / hshũkwã̃ / before / i / elsewhere with loss of / i /; / shũkj / word-initially or following a consonant before / o / and / ũ /; / hshũkj / before / o / and / ũ / elsewhere; / shũkw / word-initially or following a consonant before remaining vowels; / hshũkw / before remaining vowels elsewhere.

Oe. / shũkwa / before consonants; / shũkwã̃ / before / i / with loss of / i /; / shũkj / before / o / and / ũ /; / shũkw / before remaining vowels.

Oo. / shũkwa / before consonants; / shũkwẽ / before / i / with loss of / i /; / shũkj / before / o / and / ũ /; / shũkw / before remaining vowels.

Ca. / shõkwa / word-initially or following a consonant before consonants; / hshõkwa / before consonants elsewhere; / shõkwẽ / word-initially or following a consonant before / i / with loss of / i /; / hshõkwẽ / before / i / elsewhere with loss of / i /; / shõkj / word-initially or following a consonant before / o /, / õ / and / u /; / hshõkj / before / o /, / õ / and / u / elsewhere; / shõkw / word-initially or following a consonant before remaining vowels; / hshõkw / before remaining vowels elsewhere.

Se. / shɔ̃kwæ: / before / Ræ / with loss of / Ræ /; / shɔ̃kwa: / before / hC / with loss of / h /; / shɔ̃kwa / before / hV / with loss of / h /, and before remaining consonants; / shɔ̃kwẽ / before some bases beginning in / i / with loss of / i /, and before / jɔ̃ / with loss of / j /; / shɔ̃kj / before / o / and / ɔ̃ /; / shɔ̃kw / before some bases beginning in / i /, and before remaining vowels.

Hu. / shõxwa / before a consonant; / shõxwẽ / before / i / with loss of / i /; / shõxj / before / o / and / õ /; / shõxw / before remaining vowels.

048   PNI * { **jethi** } '1 + 2NS:3I' (limited to Iroquoia)
       PNI * / jethi / before consonants, and before / i / with loss of / i /; * / jethij / before remaining vowels.
       Mo. / jethi / before consonants, and before / i / with loss of / i /; / jethij / before remaining vowels.
       Oe. / ethi / word-initially before consonants, and word-initially before / i / with

loss of / i /; / jethi / before consonants elsewhere, and before / i /
elsewhere with loss of / i /; / ethij / word-initially before remaining
vowels; / jethij / before remaining vowels elsewhere.

Oo. / ethi / word-initially before consonants, and word-initially before / i / with
loss of / i /; / jethi / before consonants elsewhere, and before / i /
elsewhere with loss of / i /; / ethij / word-initially before remaining
vowels; / jethij / before remaining vowels elsewhere.

Ca. / ethi / word-initially before consonants, and word-initially before / i / with
loss of / i /; / jethi / before consonants elsewhere, and before / i /
elsewhere with loss of / i /; / ethij / word-initially before remaining
vowels; / jethij / before remaining vowels elsewhere.

Se. / ethi: / word-initially before / hC / with loss of / h /; / jethi: / before / hC /
elsewhere with loss of / h /; / ethi / word-initially before / hV / with
loss of / h /, and word-initially before remaining consonants, and
word-initially before / i / with loss of / i /; / jethi / before / hV /
elsewhere with loss of / h /, and before remaining consonants elsewhere,
and before / i / elsewhere with loss of / i /; / ethij / word-initially before
remaining vowels; / jethij / before remaining vowels elsewhere.

⁰⁴⁹ PNI * { **jakhi** } '1 + 3NS:3I' (→ Hu. 1NS:3I)

PNI * / jakhi / before consonants, and possibly before * / i / with loss of * / i /;
* / jakhij / before remaining vowels.

Mo. / jakhi / before consonants, and before / i / with loss of / i /; / jakhij /
before remaining vowels.

Oe. / akhi / word-initially before consonants, and word-initially before / i /
with loss of / i /; / jakhi / before consonants elsewhere, and before / i /
elsewhere with loss of / i /; / akhij / word-initially before remaining
vowels; / jakhij / before remaining vowels elsewhere.

Oo. / akhi / word-initially before consonants, and word-initially before / i /
with loss of / i /; / jakhi / before consonants elsewhere, and before / i /
elsewhere with loss of / i /; / akhij / word-initially before remaining
vowels; / jakhij / before remaining vowels elsewhere.

Ca. / akhi / word-initially before consonants, and word-initially before / i / with
loss of / i /; / jakhi / before consonants elsewhere, and before / i /
elsewhere with loss of / i /; / akhij / word-initially before remaining
vowels; / jakhij / before remaining vowels elsewhere.

Se. / akhi: / word-initially before / hC / with loss of / h /; / jakhi: / before / hC / elsewhere with loss of / h /; / akhi / word-initially before / hV / with loss of / h /, and word-initially before remaining consonants, and word-initially before / i / with loss of / i /; / jakhi / before / hV / elsewhere with loss of / h /, and before remaining consonants elsewhere, and before / i / elsewhere with loss of / i /; / akhij / word-initially before remaining vowels; / jakhij / before remaining vowels elsewhere.

Hu. / jakhi / following a consonant before a consonant, and following a consonant before / i / with loss of / i /, and following a consonant before remaining vowels; / akhi / before a consonant elsewhere, and before / i / elsewhere with loss of / i /, and before remaining vowels elsewhere.

⁰⁵⁰ PNI * { **jõkhi** } '3I:1NS' (→ Tu. '1NS&3I')

PNI * / jõkhi / before consonants, and before * / i / with loss of / i /; * / jõkhij / before remaining vowels.

Tu. / jə̃khi / before consonants, and before before * / i / with loss of / i /; / jə̃khij / before vowels.

Mo. / jũkhi / before consonants, and before / i / with loss of / i /; / jũkhij / before remaining vowels.

Oe. / ũkhi / word-initially before consonants, and word-initially before / i / with loss of / i /; / jũkhi / before consonants elsewhere, and before / i / elsewhere with loss of / i /; / ũkhij / word-initially before remaining vowels; / jũkhij / before remaining vowels elsewhere.

Oo. / ũkhi / word-initially before consonants, and word-initially before / i / with loss of / i /; / jũkhi / before consonants elsewhere, and before / i / elsewhere with loss of / i /; / ũkhij / word-initially before remaining vowels; / jũkhij / before remaining vowels elsewhere.

Ca. / õkhi / word-initially before consonants, and word-initially before / i / with loss of / i /; / jõkhi / before consonants elsewhere, and before / i / elsewhere with loss of / i /; / õkhij / word-initially before remaining vowels; / jõkhij / before remaining vowels elsewhere.

Se. / ɔ̃khi: / word-initially before / hC / with loss of / h /; / jɔ̃khi: / before / hC / elsewhere with loss of / h /; / ɔ̃khi / word-initially before / hV / with loss of / h /, and word-initially before remaining consonants, and word-initially before / i / with loss of / i /; / jɔ̃khi / before / hV / elsewhere with loss of / h /, and before remaining consonants elsewhere,

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and before / i / elsewhere with loss of / i /; / ɔ̃khij / word-initially
before remaining vowels; / jɔ̃khij / before remaining vowels elsewhere.

Hu. / jõkhi / following a consonant before a consonant, and following a
consonant before / i / with loss of / i /, and following a consonant before
remaining vowels; / õkhi / before a consonant elsewhere, and before
/ i / elsewhere with loss of / i /, and before remaining vowels elsewhere.

PI * { **ka** } '3SG:3' (lexically determined variant 1)

PI * / ka / before consonants; / k / before certain vowels, perhaps all vowels.

Ch. / kà / before consonants; / k / before vowels.

PNI * / ka / before consonants; * / kẽ / before * / i / with loss of * / i /; * / k /
before some bases beginning in * / o /; * / j / before some bases
beginning in * / o / and before * / õ /; * / w / before remaining
vowels.

Tu. / ka / before consonants; / kə̃ / before / i / with loss of / i /; / w / before
remaining vowels.

Mo. / ka / before consonants; / kʌ̃ / before / i / with loss of / i /; / k / before
some bases beginning in / o /; / j / before some bases beginning in / o /
and before / ũ /; / w / before remaining vowels.

Oe. / ka / before consonants; / kʌ̃ / before / i / with loss of / i /; / j / before
/ o / and / ũ /; / w / before remaining vowels.

Oo. / ka / before consonants; / kẽ / before / i / with loss of / i /; / k / before
some bases beginning in / o /; / Ø / word-initially before some bases
beginning in / o / and word-initially before / ũ /; / j / before some bases
beginning in / o / elsewhere and before / ũ / elsewhere; / w / before
remaining vowels.

Ca. / ka / before consonants; / kẽ / before / i / with loss of / i /; / k / before
some bases beginning in / o /; / Ø / word-initially before some bases
beginning in / o / and word-initially before / õ /; / j / before some bases
beginning in / o / elsewhere and before / õ / elsewhere; / w / before
remaining vowels.

Se. / kæː / before / Ræ / with loss of / Ræ /; / kaː / before / hC / with loss of
/ h /; / ka / before / hV / with loss of / h /, and before remaining
consonants; / kẽ / before some bases beginning in / i / with loss of / i /,
and before / jɔ̃ / with loss of / j /; / k / before some bases beginning in
/ o /; / j / before some bases beginning in / o / and before / ɔ̃ /; / w /

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before some bases beginning in / i /, and before remaining vowels.

Hu. / ka / following any consonant except / ʔ / before a consonant; / xa / before a consonant elsewhere; / kẽ / following any consonant except / ʔ / before / i / with loss of / i /; / xẽ / before / i / elsewhere with loss of / i /; / k / following any consonant except / ʔ / before some bases beginning in / o /; / x / before some bases beginning in / o / elsewhere; / j / following any consonant except / ʔ / before some bases beginning in / o / and before / õ /; / Ø / before some bases beginning in / o / and before / õ / elsewhere, as well as word-initially following / a /, / e /, and / ẽ /; / w / before / a /, / e /, and / ẽ / elsewhere.

⁰⁵² PI * { **wa** } '3SG:3' (lexically determined variant 2)

PI * / wa / before consonants; / w / before certain vowels, perhaps all vowels.

Ch. / ã: / before consonants; / Ø / before vowels.

PNI * / w / before certain vowels (partial paradigm preserved following merger with reflexes of PI * { ka } '3SG:3' ⁰⁵¹).

⁰⁵³ PNI * { **hɹa** } '3SGM:3'

PNI * / ɹa / word-initially before consonants; * / hɹa / before consonants elsewhere; * / ɹẽ / word-initially before * / i / with loss of * / i /; * / hɹẽ / before * / i / elsewhere with loss of * / i /; * / ɹ / word-initially before remaining vowels; * / hɹ / before remaining vowels elsewhere.

Tu. / ra / word-initially before consonants; / hra / before consonants elsewhere; / rə̃ / word-initially before / i / with loss of / i /; / hrə̃ / before / i / elsewhere with loss of / i /; / r / word-initially before remaining vowels; / hr / before remaining vowels elsewhere.

Mo. / ɹa / word-initially before consonants; / ha / before consonants elsewhere; / ɹə̃ / word-initially before / i / with loss of / i /; / hə̃ / before / i / elsewhere with loss of / i /; / ɹ / word-initially before remaining vowels; / h / before / a / elsewhere; / hɹ / before vowels elsewhere.

Oe. / la / word-initially before consonants; / ha / before consonants elsewhere; / lə̃ / word-initially before / i / with loss of / i /; / hə̃ / before / i / elsewhere with loss of / i /; / l / word-initially before remaining vowels; / h / before / a / elsewhere; / hl / before vowels elsewhere.

Oo. / ha / before consonants; / hẽ / before / i / with loss of / i /; / h / before remaining vowels.

Ca. / ha / before consonants; / hẽ / before / i / with loss of / i /; / h / before remaining vowels.

Se. / hæ: / before / Ræ / with loss of / Ræ /; / ha: / before / hC / with loss of / h /; / ha / before / hV / with loss of / h /, and before remaining consonants; / hẽ / before some bases beginning in / i / with loss of / i /, and before / jɔ̃ / with loss of / j /; / h / before remaining vowels.

Hu. / ha / before consonants; / hẽ / before / i / with loss of / i /; / h / before / a /; / hɹ / before remaining vowels.

054   PI * { **ju:** } '3:3SG'

PI * / ju: / before consonants, and before * / a / with loss of * / a /, and perhaps before certain other vowels.

Ch. / ũ: / before consonants, and before / à / with loss of / a /; / ũ:w / before remaining vowels.

PNI * / jaw / before * / e / and before some bases beginning in * / ẽ /; * / ja / before * / o / and * / õ /; * / jo / before some bases beginning in * / ẽ / with loss of * / ẽ /, and before * / a / and * / i / with loss of * / a / and * / i /, and before consonants.

Tu. / jo / before consonants, and before / a / with loss of / a /; / jaw / before remaining vowels.

Mo. / jaw / before / e / and before some bases beginning in / ʌ̃ /; / ja / before / o / and / ũ /; / jo / before some bases beginning in / ʌ̃ / with loss of / ʌ̃ /, and before / a / and / i / with loss of / a / and / i /, and before consonants.

Oe. / aw / word-initially before / e / and before some bases beginning in / ʌ̃ /; / jaw / before / e / elsewhere and before some bases beginning in / ʌ̃ / elsewhere; / oj / word-initially before / o / and / ũ / in semantically transitive verbs; / joj / before / o / and / ũ / in semantically transitive verbs elsewhere; / a / word-initially before / o / and / ũ / elsewhere; / ja / before / o / and / ũ / elsewhere; / o / word-initially before some bases beginning in / ʌ̃ / with loss of / ʌ̃ /, and word-initially before / a / and / i / with loss of / a / and / i /, and word-initially before consonants; / jo / before some bases beginning in / ʌ̃ / elsewhere with loss of / ʌ̃ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

Oo. / aw / word-initially before / e / and before some bases beginning in / ẽ /;

/ jaw / before / e / elsewhere and before some bases beginning in / ẽ / elsewhere; / a / word-initially before / o / and / ũ / elsewhere; / ja / before / o / and / ũ / elsewhere; / o / word-initially before some bases beginning in / ẽ / with loss of / ẽ /, and word-initially before / a / and / i / with loss of / a / and / i /, and word-initially before consonants; / jo / before some bases beginning in / ẽ / elsewhere with loss of / ẽ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

Ca. / aw / word-initially before / e / and before some bases beginning in / ẽ /; / jaw / before / e / elsewhere and before some bases beginning in / ẽ / elsewhere; / a / word-initially before / o /, / õ /, and / u / elsewhere; / ja / before / o /, / õ /, and / u / elsewhere; / o / word-initially before some bases beginning in / ẽ / with loss of / ẽ /, and word-initially before / a / and / i / with loss of / a / and / i /, and word-initially before consonants; / jo / before some bases beginning in / ẽ / elsewhere with loss of / ẽ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

Se. / aw / word-initially before / e / and before some bases beginning in / ɛ̃ /; / jaw / before / e / elsewhere and before some bases beginning in / ẽ / elsewhere; / a / word-initially before / o / and / ɔ̃ /; / ja / before / o / and / ɔ̃ / elsewhere; / o / word-initially before some bases beginning in / ɛ̃ / with loss of / ɛ̃ /, and word-initially before / a / and / i / with loss of / a / and / i /; / jo / before some bases beginning in / ɛ̃ / elsewhere with loss of / ɛ̃ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants.

Hu. / jaw / following a consonant before / e /, and following a consonant before some bases beginning in / ẽ /; / aw / before / e / elsewhere, and before some bases beginning in / ẽ / elsewhere; / ja / following a consonant before / o / or / õ /; / a / before / o / and / õ / elsewhere; / jo / following a consonant before some bases beginning in / ẽ / with loss of / ẽ /, and following a consonant before / a / and / i / with loss of / a / and / i /, and following a consonant before consonants; / o / before some bases beginning in / ẽ / elsewhere with loss of / ẽ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

PNI * { **hɹo** } '3:3SGM'

PNI * / ɹaw / word-initially before * / e / and word-initially before some bases beginning in * / ẽ /; * / hɹaw / before * / e / elsewhere and before some bases beginning in * / ẽ / elsewhere; * / ɹa / word-initially before * / o / and * / õ /; * / hɹa / before * / o / and * / õ / elsewhere; * / ɹo / word-initially before some bases beginning in * / ẽ / with loss of * / ẽ /, and word-initially before * / a / and * / i / with loss of * / a / and * / i /, and word-initially before consonants; * / hɹo / before some bases beginning in * / ẽ / elsewhere with loss of * / ẽ /, and before * / a / and * / i / elsewhere with loss of * / a / and * / i /, and before consonants elsewhere.

Tu. / ro / word-initially before consonants, and word-initially before / a / with loss of / a /; / hro / before consonants elsewhere, and before / a / elsewhere with loss of / a /; / raw / word-initially before remaining vowels; / hraw / before remaining vowels elsewhere.

Mo. / ɹaw / word-initially before / e / and before some bases beginning in / ʌ̃ /; / haw / before / e / elsewhere and before some bases beginning in / ʌ̃ / elsewhere; / ɹa / word-initially before / o / and / ũ /; / ha / before / o / and / ũ / elsewhere; / ɹo / word-initially before some bases beginning in / ʌ̃ / with loss of / ʌ̃ /, and word-initially before / a / and / i / with loss of / a / and / i /, and word-initially before consonants; / ho / before some bases beginning in / ʌ̃ / elsewhere with loss of / ʌ̃ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

Oe. / law / word-initially before / e / and before some bases beginning in / ʌ̃ /; / haw / before / e / elsewhere and before some bases beginning in / ʌ̃ / elsewhere; / loj / word-initially before / o / and / ũ / in semantically transitive verbs; / hoj / before / o / and / ũ / in semantically transitive verbs elsewhere; / la / word-initially before / o / and / ũ / elsewhere; / ha / before / o / and / ũ / elsewhere; / lo / word-initially before some bases beginning in / ʌ̃ / with loss of / ʌ̃ /, and word-initially before / a / and / i / with loss of / a / and / i /, and word-initially before consonants; / ho / before some bases beginning in / ʌ̃ / elsewhere with loss of / ʌ̃ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

Oo. / haw / before / e / and before some bases beginning in / ẽ /; / ha / before

/ o / and / ũ /; / ho / before some bases beginning in / ẽ / with loss of
/ ẽ /, and before / a / and / i / with loss of / a / and / i /, and before
consonants.

Ca. / haw / before / e / and before some bases beginning in / ẽ /; / ha / before
/ o /, / õ / and / u /; / ho / before some bases beginning in / ẽ / with
loss of / ẽ /, and before / a / and / i / with loss of / a / and / i /, and
before consonants.

Se. / haw / before / e / and before some bases beginning in / ɛ̃ /; / ha / before
/ o / and / ɔ̃ /; / ho / before some bases beginning in / ɛ̃ / with loss of
/ ɛ̃ /, and before / a / and / i / with loss of / a / and / i /, and before
consonants.

Hu. / haw / before / e / and before some bases beginning in / ẽ /; / ha / before
/ o / and / õ /; / ho / before some bases beginning in / ẽ / with loss of
/ ẽ /, and before / a / and / i / with loss of / a / and / i /, and before a
consonant.

⁰⁵⁶ PNI * { **kni** } '3DU:3'

PNI * / kni / before consonants; * / kj / before * / a /; * / kn / before remaining
vowels.

Mo. / keni / before consonants; / kj / before / a /; / ken / before remaining
vowels.

Oe. / kni / before consonants; / kj / before / a /; / kn / before remaining
vowels.

Oo. / kni / before consonants; / kj / before / a / and / ẽ /; / kn / before
remaining vowels.

Se. / khni: / before / hC / with loss of / h /; / khni / before / hV / with loss of
/ h /, and before remaining consonants; / khnj / before / a / and / ɛ̃ /
(appearance of / n / interpreted as analogy); / khn / before remaining
vowels.

Hu. / ki / following any consonant except / ʔ / before a consonant; / xi / before
a consonant elsewhere; / kj / following any consonant except / ʔ / before
/ a /; / xj / before / a / elsewhere; / in / word-initially before remaining
vowels; / n / before remaining vowels elsewhere.

⁰⁵⁷ PNI * { **hni** } '3DUM:3'

PNI * / hni / before consonants; * / hj / before / a /; * / hn / before remaining

vowels.

Mo. / ni / word-initially before consonants; / hni / before consonants elsewhere;
/ j / word-initially before / a /; / hj / before / a / elsewhere; / n /
word-initially before remaining vowels; / hn / before remaining vowels
elsewhere.

Oe. / ni / word-initially before consonants; / hni / before consonants elsewhere;
/ j / word-initially before / a /; / hj / before / a / elsewhere; / n /
word-initially before remaining vowels; / hn / before remaining vowels
elsewhere.

Oo. / hni / before consonants; / hj / before / a / and / ẽ /; / hn / before
remaining vowels.

Se. / hni: / before / hC / with loss of / h /; / hni / before / hV / with loss of
/ h /, and before remaining consonants; / hnj / before / a / and / ɛ̃ /
(appearance of / n / interpreted as analogy); / hn / before remaining
vowels.

Hu. / thi / following / s / before a consonant; / hi / before a consonant
otherwise; / hj / before / a /; / th / following / s / before remaining
vowels; / h / following / t / before remaining vowels; / ihn /
word-initially before remaining vowels; and / hn / before remaining
vowels elsewhere.

058   PI * { **wanti:** } '3NS:3' (→ PNI '3PL:3')

PI * / wanti: / before consonants; * / want / or possibly * / wan / before
vowels.

Ch. / ã:nì / before consonants; / ã:n / before vowels.

PNI * / wati / before consonants; * / wat / before * / i /; * / wẽn /
(< * / wan /) before remaining vowels.

Se. / wɔ̃ti: / following the future prefix before / hC / with loss of / h /; / wati: /
before / hC / elsewhere with loss of / h /; / wɔ̃ti / following the future
prefix before / hV / with loss of / h /, and following the future prefix
before remaining consonants; / wati / before / hV / elsewhere with
loss of / h /, and before remaining consonants elsewhere; / wẽn / before
vowels.

Hu. / kõ / following any consonant except / ʔ / before / a / with loss of / a /;
/ xõ / before / a / otherwise with loss of / a /; / ati / word-initially
before a consonant; / wati / before a consonant otherwise; / at /

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word-initially before / i /; / wat / before / i / otherwise; / ẽn / word-initially before a vowel; / wẽn / before a vowel elsewhere.

059   PNI * { **kõti** } '3PL:3' (second variant, in competition with * { wati } [058])

PNI * / kõti / before consonants; * / kõ / before * / a / with loss of * / a /; * / kũt / before * / i /; * / kõn / before remaining vowels.

Mo. / kũti / before consonants; / kũ / before / a / with loss of / a /; / kũt / before / i /; / kũn / before remaining vowels.

Oe. / kũti / before consonants; / kũ / before / a / with loss of / a /; / kũt / before / i /; / kũn / before remaining vowels.

Oo. / kũti / before consonants; / kũ / before / a / with loss of / a /; / kũn / before remaining vowels.

Hu. / kõ / following any consonant except / ʔ / before / a / with loss of / a /; / xõ / before / a / otherwise with loss of / a / (partial paradigm preserved following merger with reflexes of PNI * { wati } [059]).

060   PNI * { **hɹati** } '3PLM:3'

PNI * / ɹati / word-initially before consonants; * / hati / before consonants elsewhere; * / ɹõ / word-initially before * / a / with loss of * / a /; * / hõ / before / a / elsewhere with loss of / a /; * / ɹat / word-initially before / i /; * / hat / before / i / elsewhere; * / ɹẽn / word-initially before remaining vowels; * / hẽn / before remaining vowels elsewhere.

Mo. / ɹati / word-initially before consonants; / hati / before consonants elsewhere; / ɹũ / word-initially before / a / with loss of / a /; / hũ / before / a / elsewhere with loss of / a /; / ɹat / word-initially before / i /; / hat / before / i / elsewhere; / ɹũn / word-initially before remaining vowels; / hũn / before remaining vowels elsewhere.

Oe. / lati / word-initially before consonants; / hati / before consonants elsewhere; / lũ / word-initially before / a / with loss of / a /; / hũ / before / a / elsewhere with loss of / a /; / lat / word-initially before / i /; / hat / before / i / elsewhere; / lãn / word-initially before remaining vowels; / hãn / before remaining vowels elsewhere.

Oo. / hati / before consonants; / hũ / before / a / with loss of / a /; / han / before remaining vowels.

Ca. / hati / before consonants; / hat / before / i /; / hẽn / before remaining vowels.

Se. / hati: / before / hC / with loss of / h /; / hati / before / hV / with loss of / h /, and before remaining consonants; / hẽn / before vowels.

Hu. / hati / before consonants; / hat / before / i /; / hõ / before / a / with loss of / a /; / hẽn / before remaining vowels.

061 PI * { **juːnti:** } '3:3NS'

PI * / juːnti / before consonants; * / juːnt / or possibly * / juːn / before vowels.

Ch. / ũ̀ːnì / before consonants; / ũ̀ːn / before vowels.

PNI * / joti / before consonants; * / jot / before * / i /; * / jon / before remaining vowels.

Mo. / joti / before consonants; / jot / before / i /; / jon / before vowels.

Oe. / oti / word-initially before consonants; / joti / before consonants elsewhere; / ot / word-initially before / i /; / jot / before / i / elsewhere; / on / word-initially before remaining vowels; / jon / before remaining vowels elsewhere.

Oo. / oti / word-initially before consonants; / joti / before consonants elsewhere; / on / word-initially before vowels; / jon / before vowels elsewhere.

Ca. / oti / word-initially before consonants; / joti / before consonants elsewhere; / ot / word-initially before / i /; / jot / before / i / elsewhere; / on / word-initially before vowels; / jon / before vowels elsewhere.

Se. / oti: / word-initially before / hC / with loss of / h /; / joti: / before / hC / elsewhere with loss of / h /; / oti / word-initially before / hV / with loss of / h /, and word-initially before remaining consonants; / joti / before / hV / elsewhere with loss of / h /, and before remaining consonants; / on / word-initially before vowels; / jon / before vowels elsewhere.

Hu. / joti / following a consonant before a consonant; / oti / before a consonant elsewhere; / jot / following a consonant before / i /; / ot / before / i / elsewhere; / jon / following a consonant before a vowel; / on / before a vowel elsewhere.

062 PNI * { **hɹoti** } '3:3NSM'

PNI * / ɹoti / word-initially before consonants; * / hoti / or possibly * / hɹoti / before consonants elsewhere; * / ɹot / word-initially before / i /; * / hot / or possibly * / hɹot / before / i / elsewhere; * / ɹon / word-initially before remaining vowels; * / hon / or possibly * / hɹon /

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before remaining vowels elsewhere.

Mo. / ɹoti / word-initially before consonants; / hoti / before consonants
  elsewhere; / ɹot / word-initially before / i /; / hot / before / i /
  elsewhere; / ɹon / word-initially before remaining vowels; / hon /
  before remaining vowels elsewhere.

Oe. / loti / word-initially before consonants; / hoti / before consonants
  elsewhere; / lot / word-initially before / i /; / hot / before / i /
  elsewhere; / lon / word-initially before remaining vowels; / hon /
  before remaining vowels elsewhere.

Oo. / hoti / before consonants; / hon / before vowels.

Ca. / hoti / before consonants; / hot / before / i /; / hon / before remaining
  vowels.

Se. / hoti: / before / hC / with loss of / h /; / hoti / before / hV / with loss of
  / h /, and before remaining consonants; / hon / before vowels.

Hu. / hoti / before consonants; / hot / before / i /; / hon / before remaining
  vowels.

⁰⁶³ PNI * { **je** } '3I:3'

PNI * / jõ / before * / a / with loss of * / a /; * / ja / before some bases
  beginning in / i /; * / jak / before some bases beginning in * / e /, and
  before * / ẽ /, * / o /, and * / õ /; * / jẽ / before some bases beginning in
  * / e / with loss of * / e /; * / je / before some bases beginning in * / i /
  with loss of / i /, and before consonants.

Tu. / jə̃ / before / a / and / ɛ / with loss of / a / and / ɛ /; / j / before some
  bases begnning in / ə̃ /; / ja / before some bases beginning in / i /;
  / jak / before some bases beginning in / ə̃ / and before / o /;
  / jɛ / before some bases beginning in / i / with loss of / i /, and before
  consonants.

Mo. / jũ / before / a / with loss of / a /; / ja / before some bases beginning in
  / i /; / jak / before some bases beginning in / e /, and before / ʌ̃ /, / o /,
  and / ũ /; / jʌ̃ / before some bases beginning in / e / with loss of / e /;
  / je / before some bases beginning in / i / with loss of / i /, and before
  consonants.

Oe. / ũ / word-initially before / a / with loss of / a /; / jũ / before / a /
  elsewhere with loss of / a /; / a / word-initially before some bases
  beginning in / i /; / ja / before some bases beginning in / i / elsewhere;

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/ ak / word-initially before some bases beginning in / e /, and word-initially before / ᴧ̃ /, / o / and / ũ /; / jak / before some bases beginning in / e / elsewhere, and before / ᴧ̃ /, / o / and / ũ / elsewhere; / ᴧ̃ / word-initially before / e / with loss of / e /; / jᴧ̃ / before / e / elsewhere with loss of / e /; / e / word-initially before some bases beginning in / i / with loss of / i /, and word-initially before consonants; / je / before some bases beginning in / i / elsewhere with loss of / i /, and before consonants elsewhere.

Oo. / ũ / word-initially before / a / with loss of / a /; / jũ / before / a / elsewhere with loss of / a /; / a / word-initially before some bases beginning in / i /; / ja / before some bases beginning in / i / elsewhere; / ak / word-initially before some bases beginning in / e /, and word-initially before / ẽ /, / o / and / ũ /; / jak / before some bases beginning in / e / elsewhere, and before / ẽ /, / o / and / ũ / elsewhere; / ẽ / word-initially before / e / with loss of / e /; / jẽ / before / e / elsewhere with loss of / e /; / e / word-initially before some bases beginning in / i / with loss of / i /, and word-initially before consonants; / je / before some bases beginning in / i / elsewhere with loss of / i /, and before consonants elsewhere.

Ca. / õ / word-initially before / a / with loss of / a /; / jõ / before / a / elsewhere with loss of / a /; / a / word-initially before some bases beginning in / i /; / ja / before some bases beginning in / i / elsewhere; / ak / word-initially before some bases beginning in / e /, and word-initially before / ẽ /, / o /, / õ /, and / u /; / jak / before some bases beginning in / e / elsewhere, and before / ẽ /, / o /, / õ /, and / ũ / elsewhere; / ẽ / word-initially before / e / with loss of / e /; / jẽ / before / e / elsewhere with loss of / e /; / e / word-initially before some bases beginning in / i / with loss of / i /, and word-initially before consonants; / je / before some bases beginning in / i / elsewhere with loss of / i /, and before consonants elsewhere.

Se. / jɔ̃ / before / a / with loss of / a /; / ja / before some bases beginning in / i /; / jak / before some bases beginning in / a /, and before / o / and / ɔ̃ /; / jɛ̃ / before / e / and / ɛ̃ / with loss of / e / and / ɛ̃ /; / je / before some bases beginning in / i / with loss of / i /, and before consonants.

Hu. / jõ / following a consonant before / a / with loss of / a /; / õ / before / a / elsewhere with loss of / a /; / jax / following a consonant before some

bases beginning in / e /, and before / ẽ /, / o /, and / õ /; / ax / before some bases beginning in / e / elsewhere, and before / ẽ /, / o /, and / õ / elsewhere; / jaxẽ / following a consonant before some bases beginning in / i / with loss of / i /; / axẽ / before some bases beginning in / i / elsewhere with loss of / i /; / jẽ / following a consonant before some bases beginning in / e / with loss of / e /; / ẽ / before some bases beginning in / e / elsewhere with loss of / e /; / je / following a consonant before some bases beginning in / i / with loss of / i /, and following a consonant before a consonant; / e / before some bases beginning in / i / elsewhere with loss of / i /, and before a consonant elsewhere.

064   PNI * { **jako** } '3:3I'

PNI * / kaw / following / ka / before some bases beginning in * / ẽ /; * / jakaw / before some bases beginning in * / ẽ / elsewhere; * / ka / following * / ka / before * / o / or * / õ /; * / jaka / before * / o / or * / õ / elsewhere; * / ko / following * / ka / before some bases beginning in * / ẽ / with loss of * / ẽ /, and following * / ka / and before * / a / and * / i / with loss of * / a / and * / i /, and following * / ka / before consonants; * / jako / before some bases beginning in * / ẽ / elsewhere with loss of * / ẽ /, and before * / a / and * / i / elsewhere with loss of * / a / and * / i /, and before consonants elsewhere.

Tu. / ko / following / ka / before consonants, and following / ka / before / a / with loss of / a /; / jako / before consonants elsewhere, and before / a / elsewhere with loss of / a /; / kaw / following / ka / before remaining vowels; / jakaw / before remaining vowels elsewhere.

Mo. / jakaw / before / e / and before some bases beginning in / ʌ̃ /; / jaka / before / o / and / ũ /; / jako / before some bases beginning in / ʌ̃ / with loss of / ʌ̃ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants.

Oe. / akaw / word-initially before / e / and before some bases beginning in / ʌ̃ /; / jakaw / before / e / elsewhere and before some bases beginning in / ʌ̃ / elsewhere; / akoj / word-initially before / o / and / ũ / in semantically transitive verbs; / jakoj / before / o / and / ũ / in semantically transitive verbs elsewhere; / aka / word-initially before / o / and / ũ / elsewhere; / jaka / before / o / and / ũ / elsewhere;

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/ ako / word-initially before some bases beginning in / ᷉λ / with loss of / ᷉λ /, and word-initially before / a / and / i / with loss of / a / and / i /, and word-initially before consonants; / jako / before some bases beginning in / ᷉λ / elsewhere with loss of / ᷉λ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

Oo. / kaw / word-initially before / e / and before some bases beginning in / ẽ /; / jakaw / before / e / elsewhere and before some bases beginning in / ẽ / elsewhere; / ka / word-initially before / o / and / ũ /; / jaka / before / o / and / ũ / elsewhere; / ko / word-initially before some bases beginning in / ẽ / with loss of / ẽ /, and word-initially before / a / and / i / with loss of / a / and / i /, and word-initially before consonants; / jako / before some bases beginning in / ẽ / elsewhere with loss of / ẽ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

Ca. / kaw / word-initially or following / ka / before / e / and some bases beginning in / ẽ /; / jakaw / before / e / and some bases beginning in / ẽ / elsewhere; / ka / word-initially or following / ka / before / o /, / õ / or / u /; / jaka / before / o /, / õ / or / u / elsewhere; / ko / word-initially or following / ka / before some bases beginning in / ẽ / with loss of / ẽ /, and word-initially following / a / and / i / with loss of / a / and / i /, and word-initially before consonants; / jako / before some bases beginning in / ẽ / elsewhere with loss of / ẽ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

Se. / kaw / word-initially before / e / and before some bases beginning in / ᷉ɛ /; / jakaw / before / e / elsewhere and before some bases beginning in / ᷉ɛ / elsewhere; / ka / word-initially before / o / and / ᷉ɔ /; / jaka / before / o / and / ᷉ɔ / elsewhere; / ko / word-initially before some bases beginning in / ᷉ɛ / with loss of / ᷉ɛ /, and word-initially before / a / and / i / with loss of / a / and / i /, and word-initially before consonants; / jako / before some bases beginning in / ᷉ɛ / elsewhere with loss of / ᷉ɛ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

Hu. / jaxaw / following a consonant before / e / and some bases beginning in / ẽ /; / axaw / before / e / and some bases beginning in / ẽ / elsewhere; / jaxa / following a consonant before / o / or / õ /; / axa / before / o /

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and / õ / elsewhere; / jaxo / following a consonant before some bases beginning in / ẽ / with loss of / ẽ /, and following a consonant before / a / and / i / with loss of / a / and / i /, and following a consonant before a consonant; / axo / before some bases beginning in / ẽ / elsewhere with loss of / ẽ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

065   PNI * { **hshako** } '3SGM:3I'

    PNI * / shakaw / word-initially or following a consonant before / e / and some bases beginning in / ẽ /; / hshakaw / before / e / and some bases beginning in / ẽ / elsewhere; / shaka / word-initially or following a consonant before / o / or / õ /; / hshaka / before / o / or / õ / elsewhere; / shako / word-initially or following a consonant before some bases beginning in / ẽ / with loss of / ẽ /, and word-initially or following a consonant before / a / and / i / with loss of / a / and / i /, and word-initially or following a consonant before a consonant; / hshako / before some bases beginning in / ẽ / elsewhere with loss of / ẽ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

    Mo. / shakaw / word-initially or following a consonant before / e / and some bases beginning in / ᴧ̃ /; / hshakaw / before / e / and some bases beginning in / ᴧ̃ / elsewhere; / shaka / word-initially or following a consonant before / o / and / ũ /; / hshaka / before / o / and / ũ / elsewhere; / shako / word-initially or following a consonant before some bases beginning in / ᴧ̃ / with loss of / ᴧ̃ /, and word-initially before / a / and / i / with loss of / a / and / i /, and word-initially before a consonant; / hshako / before some bases beginning in / ᴧ̃ / elsewhere with loss of / ᴧ̃ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

    Oe. / shakaw / before / e / and before some bases beginning in / ᴧ̃ /; / shakoj / before / o / and / ũ / in semantically transitive verbs; / shaka / before / o / and / ũ /; / shako / before some bases beginning in / ᴧ̃ / with loss of / ᴧ̃ /, and before / a / and / i / with loss of / a / and / i /, and before consonants.

    Oo. / shakaw / before / e / and before some bases beginning in / ẽ /; / shaka / before / o / and / ũ /; / shako / before some bases beginning in / ẽ /

with loss of / ẽ /, and before / a / and / i / with loss of / a / and / i /, and before consonants.

Ca. / shakaw / word-initially or following a consonant before / e / and some bases beginning in / ẽ /; / hshakaw / before / e / and some bases beginning in / ẽ / elsewhere; / shaka / word-initially or following a consonant before / o /, / õ / or / u /; / hshaka / before / o /, / õ / or / u / elsewhere; / shako / word-initially or following a consonant before some bases beginning in / ẽ / with loss of / ẽ /, and word-initially or following a consonant before / a / and / i / with loss of / a / and / i /, and word-initially or following a consonant before consonants; / hshako / before some bases beginning in / ẽ / elsewhere with loss of / ẽ /, and before / a / and / i / elsewhere with loss of / a / and / i /, and before consonants elsewhere.

Se. / shakaw / before / e / and before some bases beginning in / ɛ̃ /; / shaka / before / o / and / õ /; / shako / before some bases beginning in / ɛ̃ / with loss of / ɛ̃ /, and before / a / and / i / with loss of / a / and / i /, and before consonants.

Hu. / shaxaw / before / e / and before some bases beginning in / ẽ /; / shaxa / before / o / and / õ /; / shaxo / before some bases beginning in / ẽ / with loss of / ẽ /, and before / a / and / i / with loss of / a / and / i /, and before consonants.

066 PI * { **kõ:wa** } '3A:3SGA' (→ Ch. '3NS:3SG', PNI '3I:3SG')

PI * / kõ:wa / before consonants; * / kõ:w / before some vowels, perhaps all vowels.

Ch. / kʌ̃:wà / before consonants; / kʌ̃:w / before vowels.

PNI * / kõwa / before consonants; * / kõwẽ / before * / i / with loss of * / i /; * / kõwaj / before / o / and / õ /; * / kõw / before remaining vowels.

Mo. / kũwa / before consonants; / kũwʌ̃ / before / i / with loss of / i /; / kũwaj / before / o / and / ũ /; / kũw / before remaining vowels.

Oe. / kũwa / before consonants; / kũwʌ̃ / before / i / with loss of / i /; / kũwaj / before / o / and / ũ /; / kũw / before remaining vowels.

Oo. / kũwa / before consonants; / kũwẽ / before / i / with loss of / i /; / kũwaj / before / o / and / ũ /; / kũw / before remaining vowels.

Se. / kõwæ: / before / Ræ / with loss of / Ræ /; / kõwa: / before / hC / with loss of / h /; / kõwa / before / hV / with loss of / h /, and before

remaining consonants; / kõwɛ̃ / before some bases beginning in / i / with loss of / i /, and before / jɔ̃ / with loss of / j /; / kõwɔ̃j / before / o / and / ɔ̃ /; / kõw / before some bases beginning in / i /, and before remaining vowels.

Hu. / kõwa / following any consonant except / ʔ / before a consonant, and following any consonant except / ʔ / before / o / or / õ /; / xõwa / before consonants elsewhere, and before / o / and / õ / elsewhere; / kõwɛ̃ / following any consonant except / ʔ / before / i / with loss of / i /; / xõwɛ̃ / before / i / elsewhere with loss of / i /; / kõw / following any consonant except / ʔ / and before remaining vowels; / xõw / before remaining vowels elsewhere.

⁰⁶⁷ PNI * { **hɹõwa** } '3I:3SGM'

PNI * / ɹõwa / word-initially before consonants; * / hõwa / or possibly * / hɹõwa / before consonants elsewhere; * / ɹõwɛ̃ / word-initially before * / i / with loss of * / i /; * / hõwɛ̃ / or possibly * / hɹõwɛ̃ / before * / i / elsewhere with loss of * / i /; * / ɹõwaj / word-initially before * / o / and * / õ /; * / hõwaj / or possibly * / hɹõwaj / before * / o / and * / õ / elsewhere; * / ɹõw / word-initially before remaining vowels; * / hõw / or possibly * / hɹõw / before remaining vowels elsewhere.

Mo. / ɹũwa / word-initially before consonants; / hũwa / before consonants elsewhere; / ɹũwʌ̃ / word-initially before / i / with loss of / i /; / hũwʌ̃ / before / i / elsewhere with loss of / i /; / ɹũwaj / word-initially before / o / and / ũ /; / hũwaj / before / o / and / ũ / elsewhere; / ɹũw / word-initially before remaining vowels; / hũw / before remaining vowels elsewhere.

Oe. / lũwa / word-initially before consonants; / hũwa / before consonants elsewhere; / lũwʌ̃ / word-initially before / i / with loss of / i /; / hũwʌ̃ / before / i / elsewhere with loss of / i /; / lũwaj / word-initially before / o / and / ũ /; / hũwaj / before / o / and / ũ / elsewhere; / lũw / word-initially before remaining vowels; / hũw / before remaining vowels elsewhere.

Oo. / hũwa / before consonants; / hũwɛ̃ / before / i / with loss of / i /; / hũwaj / before / o / and / ũ /; / hũw / before remaining vowels elsewhere.

Ca. / hõwa / before consonants; / hõwɛ̃ / before / i / with loss of / i /;

/ hõwaj / before / o /, / õ /, and / ũ /; / hõw / before remaining vowels elsewhere.

Se. / hɔ̃wæ: / before / Ræ / with loss of / Ræ /; / hɔ̃wa: / before / hC / with loss of / h /; / hõwa / before / hV / with loss of / h /, and before remaining consonants; / hɔ̃wɛ̃ / before some bases beginning in / i / with loss of / i /, and before / jɔ̃ / with loss of / j /; / hɔ̃wɔ̃j / before / o / and / ɔ̃ /; / hɔ̃w / before some bases beginning in / i /, and before remaining vowels.

Hu. / hõwa / before consonants, and before / o / and / õ /; / hõwɛ̃ / before / i / with loss of / i /; / hõw / before remaining vowels.

068 PI * { **kõ:wanti:** } '3A:3NSA' (→ Ch. '3NS:3NS', PNI '3I:3NS')

PI * / kõ:wanti: / before consonants; / * / kõ:wan / before vowels.

Ch. / kʌ̃̀:wànì: / before consonants; / kʌ̃̀:wàn / before vowels.

PNI * / kõwati / before consonants; * / kõwat / before * / i /; * / kõwɛ̃n / before remaining vowels.

Mo. / kũwati / before consonants; / kũwat / before / i /; / kũwʌ̃n / before remaining vowels.

Oe. / kũwati / before consonants; / kũwat / before / i /; / kũwʌ̃n / before remaining vowels.

Oo. / kũwati / before consonants; / kũwan / before vowels.

Se. / kɔ̃wɔ̃ti: / before / hC / with loss of / h /; / kɔ̃wɔ̃ti / before / hV / with loss of / h /, and before remaining consonants; / kɔ̃wɛ̃n / before vowels.

Hu. / kõwati / following any consonant except / ʔ / before consonants; / xõwati / before consonants elsewhere; / kõwɛ̃n / following any consonant except / ʔ / before remaining vowels; / xõwɛ̃n / before remaining vowels elsewhere.

069 PNI * { **hɹõwati** } '3I:3NSM'

PNI * / ɹõwati / word-initially before consonants; * / hõwati / or possibly * / hɹõwati / before consonants elsewhere; * / ɹõwat / word-initially before * / i /; * / hõwat / or possibly * / hɹõwat / before * / i / elsewhere; * / ɹõwɛ̃n / word-initially before remaining vowels; * / hõwɛ̃n / or possibly * / hɹõwɛ̃n / before remaining vowels elsewhere.

Mo. / ɹũwati / word-initially before consonants; / hũwati / before consonants elsewhere; / ɹũwat / word-initially before / i /; / hũwat / before / i /

elsewhere; / ɹũwʌ̃n / word-initially before remaining vowels; / hũwʌ̃n /
before remaining vowels elsewhere.

Oe. / lũwati / word-initially before consonants; / hũwati / before consonants
elsewhere; / lũwat / word-initially before / i /; / hũwat / before / i /
elsewhere; / lũwʌ̃n / word-initially before remaining vowels; / hũwʌ̃n /
before remaining vowels elsewhere.

Oo. / hũwati / before consonants; / hũwan / before vowels.

Ca. / hõwati / before consonants; / hõwat / before / i /; / hõwẽn / before
remaining vowels.

Se. / hɔ̃wɔ̃ti: / before / hC / with loss of / h /; / hɔ̃wɔ̃ti / before / hV / with loss
of / h /, and before remaining consonants; / hɔ̃wẽn / before vowels.

Hu. / hõwati / before consonants; / hõwat / before / i /; / hõwẽn / before
remaining vowels.

070   PNI * { **jakoti** } '3NS:3I' (limited to Iroquoia)

PNI * / jakoti / before consonants; * / jakot / before * / i /; * / jakon / before
remaining vowels.

Mo. / jakoti / before consonants; / jakot / before / i /; / jakon / before
remaining vowels.

Oe. / akoti / word-initially before consonants; / jakoti / before consonants
elsewhere; / akot / word-initially before / i /; / jakot / before / i /
elsewhere; / akon / word-initially before remaining vowels; / jakon /
before remaining vowels elsewhere.

Oo. / koti / word-initially before consonants; / jakoti / before consonants
elsewhere; / kon / word-initially before vowels; / jakon / before vowels
elsewhere.

071   PNI * { **hshakoti** } '3NSM:3I' (limited to Iroquoia)

PNI * / shakoti / word-initially or following a consonant before consonants;
* / hshakoti / before consonants elsewhere; * / shakot / word-initially or
following a consonant before * / i /; * / hshakot / before * / i /
elsewhere; * / shakon / word-initially or following a consonant before
remaining vowels; * / hshakon / before remaining vowels elsewhere.

Mo. / shakoti / word-initially or following a consonant before consonants;
/ hshakoti / before consonants elsewhere; / shakot / word-initially
before / i /; / hshakot / before / i / elsewhere; / shakon / word-initially

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or following a consonant before remaining vowels; / hshakon / before
remaining vowels elsewhere.

Oe. / shakoti / before consonants; / shakot / before / i /; / shakon / before
remaining vowels.

Oo. / shakoti / before consonants; / shakon / before vowels.

Se. / shakoti: / before / hC / with loss of / h /; / shakoti / before / hV / with
loss of / h /, and before remaining consonants; / shakon / before vowels.

⁰⁷² PNI * { **take** } '2:1.SG.IMP'

PNI * / tak^w / before * / a /; * / take / before certain consonants and clusters
(see 4.4); * / tak / before certain other consonants and clusters (4.4),
and word-initially before remaining vowels.

Tu. / ʔnak^w / after a vowel before / a /; / nak^w / before / a / elsewhere;
/ ʔnakj / after a vowel before / ɛ /; / nakj / before / ɛ / elsewhere;
/ ʔnakjɛ / after a vowel before certain consonants and clusters (see 6.4);
/ nakjɛ / before certain consonants and clusters (6.4) elsewhere;
/ ʔnak / after a vowel before certain other consonants and clusters
(6.4), and before remaining vowels; / nak / before certain other
consonants and clusters (6.4) and before remaining vowels elsewhere.

Mo. / tak^w / before / a /, / e /, and / ə̃ /; / take / before certain consonants and
clusters (see 11.4); / tak / before certain other consonants and clusters
(11.4), and before vowels.

Oe. / tak^w / before / a /, / e /, and / ʌ̃ /; / take / before certain consonants and
clusters (see 12.4); / tak / before certain other consonants and clusters
(12.4), and before vowels.

Oo. / tah / before / k / and / k^w /; / take / before certain consonants and
clusters (see 13.4); / take: / before certain other consonants and certain
vowels (13.4); / tak / before certain other consonants and clusters
(13.4), and before remaining vowels.

Ca. / tahske / before certain consonants and clusters (see 14.4); / tahsk /
before certain other consonants and clusters (14.4), and before vowels.

Se. / take / before certain consonants and clusters (see 15.4); / takh / before
/ n /; / ta / before / hts /; / tak / before certain other consonants and
clusters (15.4), and before vowels.

Hu. / ta / before / n /; / taxe / before certain remaining consonants and clusters
(see 16.4); / tax / before certain other remaining consonants and

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clusters (16.4), and before vowels elsewhere.

073　PNI * { **takni** } '2:1.DU.IMP'

PNI * / takni / before consonants; * / takj / before * / a /; * / takn / before
　　remaining vowels.

Tu. / ʔnakti / after a vowel before a consonant; / nakti / before consonants
　　elsewhere; / ʔnakj / after a vowel before / a /; / nakj / before / a /
　　elsewhere; / ʔnakn / after a vowel before / ə̃ / and before some bases
　　beginning in / o /; / nakn / before / ə̃ / and before some bases beginning
　　in / o / elsewhere; / ʔnakt / after a vowel before remaining vowels;
　　/ nakt / before remaining vowels elsewhere.

Mo. / takeni / before consonants; / takj / before / a /; / taken / before
　　remaining vowels.

Oe. / takni / before consonants; / takj / before / a /; / takn / before remaining
　　vowels.

Oo. / takni / before consonants; / takj / before / a / and / ẽ /; / takn / before
　　remaining vowels.

Ca. / tahskni / before consonants; / tahskj / before / a /; / tahskn / before
　　remaining vowels elsewhere.

Se. / takhni: / before / hC / with loss of / h /; / takhni / before / hV / with loss
　　of / h /, and before remaining consonants; / takhnj / before / a / and
　　/ ɛ̃ / (appearance of / n / interpreted as analogy); / takhn / before
　　remaining vowels.

Hu. / taxi / before consonants; / taxj / before / a /; / tan / before remaining
　　vowels elsewhere.

074　PNI * { **takwa** } '1:2.PL.IMP'

PNI * / takwa / before consonants; * / takwẽ / before * / i / with loss of * / i /;
　　* / takj / before * / o / and * / õ /; * / takw / before remaining vowels.

Tu. / ʔnakwa / after a vowel and before a consonant; / nakwa / before
　　consonants elsewhere; / ʔnakwə̃ / after a vowel and before / i / with loss
　　of / i /; / nakwə̃ / before / i / elsewhere with loss of / i /; / ʔnakw /
　　after a vowel before remaining vowels; / nakw / before remaining
　　vowels elsewhere.

Mo. / takwa / before consonants; / takwʌ̃ / before / i / with loss of / i /; / takj /
　　before / o / and / ũ /; / takw / before remaining vowels.

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Oe. / takwa / before consonants; / takwã̃ / before / i / with loss of / i /; / takj /
before / o / and / ũ /; / takw / before remaining vowels.

Oo. / takwa / before consonants; / takwẽ / before / i / with loss of / i /; / takj /
before / o / and / ũ /; / takw / before remaining vowels.

Ca. / tahskwa / before consonants; / tahskwẽ / before / i / with loss of / i /;
/ tahskj / before / o /, / õ / and / u /; / tahskw / before remaining
vowels.

Se. / takwæ: / before / Ræ / with loss of / Ræ /; / takwa: / before / hC / with
loss of / h /; / takwa / before / hV / with loss of / h /, and before
remaining consonants; / takwẽ̃ / before some bases beginning in / i /
with loss of / i /, and before / jõ̃ / with loss of / j /; / takj / before / o /
and / õ̃ /; / takw / before some bases beginning in / i /, and before
remaining vowels.

Hu. / taxwa / before consonants; / taxwẽ / before / i / with loss of / i /; / taxj /
before / o / and / õ /; / taxw / before remaining vowels.

⁰⁷⁵ PNI * { **tse** } '2SG:3.IMP'

PNI * / tse / before certain consonants and clusters (cf. 4.4); * / ts / before
certain other consonant clusters (4.4), and before vowels.

Tu. / tʃ / before / i /, and before / j / with loss of / j /; / θɛ / before certain
remaining consonants and clusters (cf. 6.4); / θ / before certain other
remaining consonants and clusters (6.4), and before remaining vowels.

Mo. / t / before / hs /; / ts / before / i / and / j /; / se / before certain
remaining consonants and clusters (cf. 11.4); / s / before certain other
remaining consonants and clusters (11.4), and before remaining vowels.

Oe. / t / before / hs / with metathesis of / hs / to / sh /; / se / word-initially
before certain remaining consonants and clusters (cf. 12.4); / hse /
before certain remaining consonants and clusters (12.4) elsewhere; / s /
word-initially before certain other remaining consonants and clusters
(12.4) elsewhere, and word-initially before vowels; / hs / before vowels
elsewhere (recast by analogy with 2SG:3).

Oo. / ts / before / i / and / j /; / se / before certain remaining consonants and
clusters (cf. 13.4); / se: / before certain other consonants and certain
vowels (13.4); / s / before certain other remaining consonants and
clusters (13.4), and before remaining vowels.

Ca. / se / word-initially before certain consonants and clusters (cf. 14.4);

/ hse / before certain consonants and clusters (14.4) elsewhere; / s /
word-initially before certain other consonants and clusters (14.4), and
word-initially before vowels; / hs / before certain other consonants and
clusters (14.4) elsewhere, and before vowels elsewhere (recast by
analogy with '2SG:3').

Se. / ts / before / i /, and before / j / with loss of / j /; / se / before certain
remaining consonants and clusters (cf. 15.4); / s / before certain other
remaining consonants and clusters (15.4), and before remaining vowels.

Hu. / ʃ / before / ɹV /; / ts / before / i / and before some bases beginning in
/ j / (< PNI * / j /) with loss of / j /; / s / before / nV /, and before
remaining vowels; / se / before certain remaining consonants and
clusters (see 16.4).

⁰⁷⁶ PI * { **ataːt** } 'reflexive'

PI * / ataːt / before some consonants, perhaps all consonants, and before at least
some vowels, perhaps all vowels; (elsewhere = ?)

Ch. / àtà: / before consonants; / àtà:t / before vowels.

PNI * / atẽ / before * / Hn /; * / atan / before * / i /; * / atate / before certain
consonants and clusters (cf. 4.4); * / atat / before certain other
consonants and clusters (4.4), and before remaining vowels.

Tu. / aʔnə̃ / before / Hnə̃ / and / HtV /; / aʔnaʔn / before vowels and glides;
/ aʔnaʔ / before / t /, / tʃ /, / r /, and / n /; / aʔnatʃ / before / hs /
with loss of / hs /; / aʔnaʔnɛ / before certain remaining consonants and
clusters (cf. 6.4); / aʔnat / before certain other remaining consonants
and clusters (6.4).

Mo. / atʎ̃ / before / Hn /; / atʎ̃n / before / i /; / atate / before certain
remaining consonants and clusters (cf. 11.4); / atat / before certain
other remaining consonants and clusters (11.4), and before remaining
vowels.

Oe. / atʎ̃ / before / Hn /; / atan / before / i /; / atate / before certain remaining
consonants and clusters (cf. 12.4); / atat / before certain other
remaining consonants and clusters (12.4), and before remaining vowels.

Oo. / atẽ / before / Hn /; / atẽn / before / i /; / atate / before certain
consonants and clusters (cf. 13.4); / atat / before certain other
consonants and clusters (13.4), and before remaining vowels.

Ca. / atẽ / before / Hn /; / atẽn / before / i /; / atate / before certain

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consonants and clusters (cf. 14.4); / atat / before certain other consonants and clusters (14.4), and before remaining vowels.

Se. / atɛ̃ / before / Hn /; / atɛ̃n / before / i /; / atatsh / before / ts / and / hs / with loss of / ts / and / hs /; / atah / before / t / and / n /; / atate / before certain remaining consonants and clusters (cf. 15.4); / atat / before certain other remaining consonants and clusters (15.4), and before remaining vowels.

Hu. / atẽ / before / Hn /; / atẽn / before / i /; / ata / before / kV /; / atate / before certain remaining consonants and clusters (cf. 16.4); / atat / before certain other remaining consonants and clusters (16.4), and before remaining vowels.

077   PI * { **at** } 'semireflexive' (lexically determined variant 1)

PI * / at / before some consonants, perhaps all consonants, and before at least some vowels, perhaps all vowels; (elsewhere = ?)

Ch. / à / before consonants; / àt / before vowels.

PNI (productive form): * / ẽ / before * / Hn /; * / an / before * / i /; * / ate / before certain consonants and clusters (cf. 4.4); * / at / before certain other consonants and clusters, and before remaining vowels.

Tu. / ɔ̃ / before / Hnɔ̃ / and / HtV /; / aʔn / before vowels and glides; / aʔ / before / t /, / tʃ /, / r /, and n /; / atʃ / before / hs / with loss of / hs /; / aʔnɛ / before certain remaining consonants and clusters (cf. 6.4); / at / before certain other remaining consonants and clusters (6.4).

Mo. / ʌ̃ / before / Hn /; / ʌ̃n / before / i /; / ate / before certain consonants and clusters (cf. 11.4); / at / before certain other consonants and clusters (11.4), and before remaining vowels.

Oe. / a / before / Hn /; / an / before / i /; / ate / before certain consonants and clusters (cf. 12.4); / at / before certain other consonants and clusters (12.4), and before remaining vowels.

Oo. / ẽ / before / Hn /; / ẽn / before / i /; / ate / before certain consonants and clusters (cf. 13.4); / at / before certain other consonants and clusters (13.4), and before remaining vowels.

Ca. / ẽ / before / Hn /; / ẽn / before / i /; / ate / before certain consonants and clusters (cf. 14.4); / at / before certain other consonants and clusters (14.4), and before remaining vowels.

Se. / ɛ̃ / before / Hn /; / ɛ̃n / before / i /; / atsh / before / ts / and / hs / with loss of / ts / and / hs /; / ah / before / t / and / n /; / ate / before certain remaining consonants and clusters (cf. 15.4); / at / before certain other remaining consonants and clusters (15.4), and before remaining vowels.

Hu. / ẽ / before / Hn /; / ẽn / before / i /; / a / before / kV /; / ate / before certain remaining consonants and clusters (cf. 16.4); / at / before certain other remaining consonants and clusters (16.4), and before remaining vowels.

078 PI * { **aɹ** } 'semireflexive' (lexically determined variant 2)

PI * / aɹ / before at least some vowels, perhaps all vowels; elsewhere = ?

Ch. / àr / before vowels; / àlì / before consonants.

PNI * / aɹ /, found only before some bases beginning in * / a /, e.g. * { -ahs- } 'foot' and * { -aht- } 'shoe'.

Tu. / ar / in / wahrarahˈsohtʃiʔ / 'he took off his shoes' (cf. Rudes 1999:47).

OMo. / aɹ / in / saɹahˈsîːtoʔ / <Sarasito> 'tu as le pied enflé' (Bruyas 1863:117).

Oe. / al / in / tekaˈlahtaʔas / 'I'm putting my shoes on' (cf. Michelson & Doxtator 2002:97).

Oo. / aR / in / tekaǽhˈtahsjũs / 'I take my shoes off' (cf. Woodbury 2003:74).

079 PI * { **a** } 'joiner vowel'

PI * / a /.

Ch. / à / in / kànìːhsl a̱ tíʔa̰ː / 'he's setting up a bed' (Feeling & Pulte 1975:108).

Tu. / a / in / θkakotahskʷ a̱ ˈjə̃ːʔnahk / 'they had a pet again' (cf. Rudes 1999:426).

Mo. / a / in / kehnhoh a̱ ˈketskʷahs / 'I raise the door' (cf. Maracle 1990:161).

Oe. / a / in / waʔknũhs a̱ kalaːˈtateʔ / 'I raised up the house' (cf. Michelson & Doxtator 2002:603).

Oo. / a / in / ẽkiːhw a̱ jeˈnaʔ / 'I will accept the obligation' (cf. Woodbury 2003:622).

Ca. / a / in / ẽhsɹihw a̱ ˈkʷeːniʔ / 'you will accomplish' (cf. Froman et al. 2002:64).

Se. / a / in / waʔakwanɔ̃t a̱ jɛ̃ːʔ / 'we camped' (cf. Chafe 1967:72).

Hu. / a / in / ʃehwatsiɹ a̱ ˈwahstih / <chieh8atsira8asti> 'tu as une belle famille'

(MS 59:78).

Wy. / a / in / hutiʔtaˈɹaːẽʔ / 'they have the (same) clan' (cf. Barbeau 1960:100).

⁰⁸⁰ PNI * { **hsɹ** } 'nominalizer' (lexically determined variant 1)

PNI * / hsɹ /;

Tu. / hstr / in / thraʔnə̃ri<u>hstr</u>aʔniˈhə̃ːthohs / 'he draws a breath'
      (cf. Rudes 1999:558).

Mo. / hseɹ / in / wakaʔtaɹihʌ̃<u>hseɹ</u>aˈnohsthaʔ / 'I have a cold
      [lit. my heat is made cool]' (cf. Maracle 1990:333).

Oe. / hsl / in / teʔwakattokʌ̃<u>hsl</u>aːˈjə̂ː / 'I have no sensations'
      (cf. Michelson & Doxtator 2002:276).

Oo. / hsR / 'nominalizer suffix' (cf. Woodbury 2003:549).

Ca. / hsɹ / 'nominalizer' (cf. Froman et al. 2002:708).

Se. / sh / in / otɛ̃ɔ̃ˈno<u>sh</u>ækɔ̃ːh / 'in the shade' (cf. Chafe 1967:22).

Hu. / hʃr / in / xahjaˈtõh<u>ʃɹ</u>aʔ / <gahiatoncha> 'Ecriture' (MS 59:75),
      preconsonantal / h / assumed present, / ɹ / has become / h /
      in Rock dialect.

⁰⁸¹ PNI * { **ʔtshɹ** } 'nominalizer' (lexically determined variant 2)

PNI * / (a)ʔtshɹ /.

Tu. / (a)ʔtʃhr / in / ranə̃hkʷ<u>aʔtʃhr</u>ajə̃ʔˈnɛːrih / 'healer [lit. he knows medicine]'
      (cf. Rudes 1999:594).

Mo. / (a)ʔtsheɹ / in / kanũhkʷ<u>aʔtshe</u>ˈɹiːjo / 'good medicine, a good remedy'
      (cf. Maracle 1990:273).

Oe. / (a)ʔtsl / in / wahsaʔk<u>aʔˈtsl</u>aksʌ̃ / 'tuberculosis [lit. the coughing is bad]'
      (cf. Michelson & Doxtator 2002:764).

Oo. / ʔtshR / 'nominalizer suffix' (cf. Woodbury 2003:977).

Ca. / (a)ʔtshɹ / 'nominalizer', Lower Ca. / (a)ʔthɹ / (cf. Froman et al. 2002:708).

Se. / (a)ʔsh / in / oʔkehotɔ̃kʷ<u>aʔˈsh</u>ækahaːthoʔ / 'I turned the key'
      (cf. Chafe 1967:25).

Hu. / (a)ʔʃhɹ / in / atɛ̃ˈna<u>ʔʃhɹ</u>aʔ / <Atendacha> 'Provisions, vivres, viatique'
      (MS 59:23), / ʔ / assumed present, / ɹ / lost in Rock dialect.

Wy. / (a)ʔʃɹ- / in / tahɔ̃tɛ̃ˈna<u>ʔʃɹ</u>ahʃaht / 'their food ran out'
      (cf. Barbeau 1960:295).

PI * { **t** } 'causative-instrumental' (lexically determined variant 1)

PI * / t /.

Ch. / t / in / ũ:lhàwì:ttánɛ́:ʔĩ́: / 'he made it fly' (Feeling & Pulte 1975:21).

PNI * / t /, * / (h)t /, * / (ah)t /, * / (ʔ)t /, * / (aʔ)t /.

Tu. / (h)t / in / raˈri<u>h</u>thaʔ / 'he cooks it [lit. makes it cooked]'
    (cf. Rudes 1999:567).

Mo. / (h)t / in / kheˈtkɲ̃<u>h</u>thaʔ / 'I make, cause something to be ugly
    [lit. make it ugly]' (cf. Maracle 1990:150).

Oe. / (aʔ)t / in / jũkʷahlũˈkâ:<u>:</u>thaʔ / 'she sends word to me [lit. makes me know]'
    (cf. Michelson & Doxtator 2002:66).

Oo. / (aʔ)t / in / waʔhatéˈka<u>ʔ</u>taʔ / 'he kindled a fire [lit. made it burn]'
    (cf. Woodbury 2003:112).

Ca. / (ih)t / in / ẽhˈse:tki<u>ht</u> / 'you will dirty it up [lit. make it dirty]'
    (cf. Froman et al. 2002:737).

Se. / (ʔ)t / in / kahˈtɔ̃<u>ʔ</u>thaʔ / 'I make it disappear [lit. make it lost]'
    (cf. Chafe 1967:24).

Hu. / (ah)t / in / ʃɹihˈwa:w<u>aht</u> / < chrih8awat > 'abbrége ton discours'
    (MS 59:1), preconsonantal / h / assumed present.

Wy. / (ah)t / in / aʔˈʃakjes<u>aht</u> / 'you spoiled it [lit. made it wasted]'
    (cf. Barbeau 1960:59).

PI * { **hst** } 'causative-instrumental' (lexically determined variant 2)

PI * / hst /.

Ch. / hst / in / à:jé:ʔì<u>hst</u>ǐ:hskóʔĩ́: / 'he woke him up [lit. made him wake]'
    (Feeling & Pulte 1975:63).

PNI * / hst /.

Tu. / hst / in / ratokɛ̃hˈti<u>hst</u>haʔ / 'he sanctifies [lit. makes it sanctified]'
    (cf. Rudes 1999:641).

Mo. / hst / in / kkaˈjũ<u>hst</u>haʔ / 'I make something look old [lit. make it old]'
    (cf. Maracle 1990:54).

Oe. / st / in / latatkʷeˈnjɲ̃<u>st</u>aʔ / 'he thinks he's better
    [lit. makes himself superior]' (cf. Michelson & Doxtator 2002:141).

Oo. / st / in / ẽwa:tæ:ʔshwíˈjo<u>st</u>aʔ / 'it will be good luck
    [lit. will be made lucky]' (cf. Woodbury 2003:110).

Ca. / hst / in / ẽhsaʔnikɔ̃ˈhi:jo<u>hs</u> / 'your mind will adjust
    [lit. will be made good]' (cf. Froman et al. 2002:520).

Se. / st / in / ɛˈkanɔ̃ʔnos̲ / 'it will get cold [lit. will be made cold]'
(cf. Chafe 1967:24).

Hu. / hst / in / ʃjaʔtaˈnohs̲thaʔ / <chiaatand8sθaʔ> 'as tu froid?
[lit. your body is made cold?]' (MS 59:106), preconsonantal / h /
assumed present.

Wy. / hst / in / nusahaˈaʔtanuhs̲t / 'when he got cold again
[lit. was made cold again]' (cf. Barbeau 1960:173).

084   PNI * { **hkw** } 'instrumental'

PNI * / (a)hkw /.

Tu. / (a)hkw / in / jə̃ʔnɛkaʔˈnahkhw̲aʔ / 'lighter [lit. one uses it to make a fire]'
(cf. Rudes 1999:608).

Mo. / (a)hkw / in / jũtekaʔˈtahkhw̲aʔ / 'matches, a lighter, flint
[lit. one uses it to make a fire]' (cf. Maracle 1990:20).

Oe. / (a)hkw / in / jũtekaʔˈtakhw̲aʔ / 'she or someone uses it to make a fire'
(cf. Michelson & Doxtator 2002:157).

Oo. / (a)hkw / in / ũtekáʔˈtakhw̲aʔ / 'matches, kindling, lighter, stove
[lit. one uses it to make a fire]' (cf. Woodbury 2003:837).

Ca. / hkw / in / ehˈjatõhkhw̲aʔ / 'pencil [lit. one uses it to write]'
(cf. Froman et al. 2002:738).

Se. / (a)hkw / in / jenijɔ̃ˈtahkw̲aʔ / 'people use it for hanging'
(cf. Chafe 1967:24).

Hu. / (a)hkw / in / kwatõjehˈstahkhw̲aʔ / <k8atonïestaˈk8a>
'nous respirons par là' (MS 59:33).

Wy. / (a)hkw / in / hɔ̃tahsehˈtahkw̲aʔ / 'they use it to hide themselves there'
(cf. Barbeau 1960:306).

085   PI * { **kʷ** } 'reversive' (PNI lexically determined variant 1)

PI * / (a)kʷ /.

Ch. / (a)k / in / hìlàkíː / 'take it out of a container! [lit. un-put it in!]'
(Feeling & Pulte 1975:99).

PNI * / (a)kw / before vowels, * / (a)ko / elsewhere.

Tu. / (a)kw / in / raʔnə̃hˈnaːkw̲ahs / 'he exhumes it [lit. un-buries it]'
(cf. Rudes 1999:581).

Mo. / (a)kw / in / keʔskũˈtakw̲ahs / 'I draw something out of the fire
[lit. un-put it on the fire]' (cf. Maracle 1990:38).

Oe. / (a)kw / in / lonũwaloˈt̲a̲k̲w̲ʌ̃ / 'he has pulled the nails out
    [lit. un-stood-up the nails]' (cf. Michelson & Doxtator 2002:617).

Oo. / (a)kw / in / hateʔskṹˈt̲a̲:k̲w̲as / 'he is taking it out of the oven
    [lit. un-putting it on the fire]' (cf. Woodbury 2003:128).

Ca. / ko / in / ẽtshatshaˈtõ:k̲o̲ʔ / 'you will unearth it [lit. un-bury it]'
    (cf. Froman et al. 2002:353).

Se. / ko / in / sehotɔ̃:k̲o̲h / 'open the door! [lit. un-shut the door!]'
    (cf. Chafe 1967:24).

Hu. / (a)w / in / taxitõnjoˈt̲a̲w̲aʔs / < Ta̗itonni8ta8as > 'arrache moy ce clou
    [lit. un-stand-up the nail for me!]' (MS 59:201), loss of * / k /
    anomalous.

Wy. / (a)w / in / sahɔ̃kjaʔˈtɔ̃t̲a̲w̲aʔ / 'they unfastened the body
    [lit. un-attached the body]' (cf. Barbeau 1960:293).

[086] PNI * { **hsj** } 'reversive' (lexically determined variant 2)
    PNI * / (a)hsj / before vowels, * / (a)hsi / elsewhere.
    Tu. / hsj / in / rahˈtrə̃h̲s̲j̲ə̃hs / 'he unties it' (cf. Rudes 1999:668).
    Mo. / hsj / in / khehneˈɹʌ̃h̲s̲j̲ũhs / 'I untie someone' (cf. Maracle 1990:134).
    Oe. / (a)hsi / in / waʔkahˈkwa̲h̲s̲iʔ / 'I took the covers off [lit. un-covered]'
        (cf. Michelson & Doxtator 2002:63).
    Oo. / (a)hsj / in / tekaǽhˈta̲h̲s̲jũs / 'I take my shoes off [lit. un-shoe myself]'
        (cf. Woodbury 2003:74).
    Ca. / (a)hsi / in / ẽsathɹõˈnja̲h̲s̲iʔ / 'you will take your clothes off [lit. un-dress]'
        (cf. Froman et al. 2002:737).
    Se. / hs / in / tewakɛ̃:hsoˈweh̲s̲ɔ̃:h / 'I've uncovered my feet' (cf. Chafe 1967:23).

[087] PNI * { **ʔ** } 'inchoative'
    PNI * / (a)ʔ /.
    Tu. / ʔ / in / rohnaˈta:wə̃ʔθ / 'he becomes warm' (cf. Rudes 1999:670).
    Mo. / (a)ʔ / in / waˈtje:s̲a̲ʔs / 'it becomes easy, opportune'
        (cf. Maracle 1990:100).
    Oe. / (a)ʔ / in / waʔohˈtsî:kl̲a̲neʔ / 'it got cloudy, suddenly there were clouds'
        (cf. Michelson & Doxtator 2002:83).
    Oo. / (a)ʔ / in / aṹˈt̲a̲ʔih / 'it has become attached, it has grown onto it'
        (cf. Woodbury 2003:836).
    Ca. / ʔ / in / aˈkowanh̲e̲ʔ / 'it became big' (cf. Froman et al. 2002:737).

Se. / ʔ / in / aˈkjɛ̃:ʔɔ̃h / 'I've gotten hurt' (cf. Chafe 1967:23).

Hu. / (a)ʔ / in / ehʃihnaxɛ̃ɹaˈtaʔhaʔ / < echindaˏenrataha >

       'ta peau deviendra blanche' (MS 59:68), / ʔ / assumed present.

Wy. / (a)ʔ / in / jaˈkje:saʔs / 'it gets easy' (cf. Barbeau 1960:284).

⁰⁸⁸ PI * { **ts** } 'dative-benefactive' (PNI lexically determined variant 1)

PI * / ts /.

Ch. / s / in / hɨ̀:wìhsìhsɨ́: / 'plant for him!' (Cook 1979:139).

PNI * / ts /, * / (h)ts /, * / (ah)ts /, * / (ʔ)ts /, * / (aʔ)ts /.

Tu. / (ah)θ / in / waʔakoʔnə̃nˈhoʔkthahθ / 'one's time came to an end

       [lit. life ended on one]' (cf. Rudes 1999:476).

Mo. / (h)s / in / ʌ̃hihˈja:tũhseʔ / 'I'll write for him'

       (cf. Deering & Delisle 1976:428).

Oe. / (aʔ)s / in / nakũjatje:ˈlâ:seʔ / 'I should do it for you'

       (cf. Michelson & Doxtator 2002:305).

Oo. / (aʔ)s / in / shakotáˈtjaʔsek / 'he speaks for them' (cf. Woodbury 2003:86).

Ca. / (ah)s / in / haʔhohaˈhoʔkthahs / 'he died [lit. the road ended on him]'

       (cf. Froman et al. 2002:738).

Se. / (ʔ)s / in / ˈwa:khni:nɔ̃ʔs / 'he bought it for me' (cf. Chafe 1967:24).

Hu. / (ʔ)s / in / taxetsaˈɹohoʔs / < taˏetsarohos > 'donne moy a petuner'

       (MS 59:160), / ʔ / assumed present.

Wy. / (aʔ)s / in / awajatɹi:ʒeˈrihaʔs / 'I would believe it

       [lit. the matter would be right to me]' (cf. Barbeau 1960:264).

⁰⁸⁹ PNI * { **ẽ** } 'dative-benefactive' (lexically determined variant 2)

PNI * / ẽ /.

Tu. / ɔ̃ / in / ə̃hskwanə̃hkʷaʔˈtʃrə̃:tjɔ̃ʔ / 'you must make medicine for me'

       (cf. Rudes 1999:173).

Mo. / ʌ̃ / in / ʌ̃hshakohtahˈkũnjʌ̃ʔ / 'he'll make shoes for her'

       (cf. Deering & Delisle 1976:430).

Oe. / ʌ̃ / in / waʔkũjahˈsehtʌ̃ʔ / 'I hid it from you'

       (cf. Michelson & Doxtator 2002:69).

Oo. / ẽ / in / waʔkũjatjaʔtáhˈtũʔtẽʔ / 'I hid from you' (cf. Woodbury 2003:90).

Ca. / ẽ / in / ahõwatinõhˈsõnjẽʔ / 'they built him a house'

       (cf. Froman et al. 2002:547).

Se. / ɛ̃ / in / oʔˈkɔ̃ihsa:kɛ̃ʔ / 'I looked for it for you' (cf. Chafe 1967:25).

Hu. / ẽ / in / eshõˈxjõnjẽʔ / <eson̩onnien> 'il nous mettra' (MS 59:184).

Wy. / ẽ̃ / in / eskejaˈʒaʔsẽ̃ʔ / 'you will pay me' (cf. Barbeau 1960:105).

⁰⁹⁰ PNI * { **ni** } 'dative-benefactive' (lexically determined variant 3)

PNI * / ni /, * / (a)ni /, * / (ẽ)ni /.

Tu. / (a)ti / in / naʔrihwaksaˈʔa:tih / 'one damns another
 [lit. spoils the matter for another]' (cf. Rudes 1999:571).

Mo. / ni / in / ɹihjaˈtũ:nihs / 'I write for him' (cf. Deering & Delisle 1976:428).

Oe. / (ʎ̃)ni / in / jũkʷanitjohkũnjʎ̃:ˈniheʔ / 'she's forming a group for me'
 (cf. Michelson & Doxtator 2002:109).

Oo. / (ẽ)ni / in / hotateʔskũtẽ́ˈnih / 'he has fried it for himself'
 (cf. Woodbury 2003:82).

Ca. / (a)ni / in / skekẽhẽʔˈta:nih / 'you are sick of me'
 (cf. Froman et al. 2002:11).

Se. / ni / in / hakhjatõ:ˈni:h / 'he has written it for me' (cf. Chafe 1967:25).

Hu. / (ẽ)ni / in / axahsõtawaʔˈsẽ:nihk / <a̩asonta8asennik>
 'la nuit me semble courte' (MS 59:1).

Wy. / (a)ni / in / teõihˈkwa:nih / 'she takes them away from us'
 (cf. Barbeau 1960:178).

⁰⁹¹ PNI * { **n** } 'dislocative' (lexically determined variant 1)

PNI * / n /, * / (h)n /, * / (ah)n /, * / (ʔ)n /, * / (aʔ)n /.

Tu. / (h)t / in / jɛwiraˈjə̃htɛʔ / 'she is going to have a baby' (cf. Rudes 1999:33).

Mo. / (aʔ)n / in / ɹothsaʔahˈtâ:nũ / 'he has gone to burn it'
 (cf. Deering & Delisle 1976:448).

Oe. / (aʔ)n / in / waʔkataˈtjâ:naʔ / 'I'm going there to speak'
 (cf. Michelson & Doxtator 2002:145).

Oo. / (ah)n / in / hata·ˈtjahneʔs / 'he goes to talk' (cf. Woodbury 2003:86).

Ca. / (ʔ)n / in / ẽjõtaˈwẽʔnaʔ / 'she will go swimming'
 (cf. Froman et al. 2002:738).

Se. / (ʔ)n / in / ha:neˈkeæʔneʔs / 'he goes drinking' (cf. Chafe 1967:25).

Hu. / (aʔ)n / in / sakõhʃoˈtaʔna / <Sakonchi8tanda> 'vas inviter' (MS 59:70),
 / ʔ / assumed present.

Wy. / (a:)n / in / sahatẽ̃:ninõhˈsta:naʔ / 'he went to trade again'
 (cf. Barbeau 1960:223).

092 PNI * { **h** } 'dislocative' (lexically determined variant 2)

PNI * / h /.

Tu. / h / in / wɛwahˈknə̃h̲ɛʔ / 'it was going and coming' (cf. Rudes 1999:19).

Mo. / h / in / ɹotoˈɹath̲ũ / 'he has gone to hunt' (cf. Deering & Delisle 1976:447).

Oe. / h / in / wakatlohˈlokh̲ũ / 'I have gone there to watch'
    (cf. Michelson & Doxtator 2002:240).

Oo. / h / in / tewakaǽhˈtath̲ũh / 'I have gone somewhere to run'
    (cf. Woodbury 2003:75).

Ca. / h / in / sihˈsa:kh̲ah / 'go and look for it' (cf. Froman et al. 2002:738).

Se. / h / in / ˈhoihsakh̲ɔ̃:h / 'he's gone looking for it' (cf. Chafe 1967:25).

Hu. / h / in / taxeʔnhataʔeʔsẽ́ˈnih̲a / < ta̤ennhataesenniha >
    'vas bucher pr. moy' (MS 59:3).

Wy. / h / in / ahatiʔˈʒaʔk̲aʔ / 'they went out hunting' (cf. Barbeau 1960:112).

093 PNI * { **ts** } 'dislocative' (lexically determined variant 3)

PNI * / ts /, * / (h)ts /, * / (ah)ts /, * / (ʔ)ts /, * / (aʔ)ts /.

Tu. / θ / in / rə̃ʔˈnhɛːk̲θ̲ɛʔ / 'he is going to play a game' (cf. Rudes 1999:24).

Mo. / (ʔ)s / in / ɹojoʔtʌ̃ʔˈs̲ũhneʔ / 'he had gone to work'
    (cf. Deering & Delisle 1976:449).

Oe. / (h)s / in / waʔkatliˈjoh̲saʔ / 'I'm going to go there and fight'
    (cf. Michelson & Doxtator 2002:240).

Ca. / (ah)s / in / haˈjẽthw̲ahseʔ / 'he is going to plant'
    (cf. Froman et al. 2002:738).

Se. / (ah)s / in / waːjɛ̃́ˈthw̲ahsaʔ / 'he went planting' (cf. Chafe 1967:25).

094 PNI * { **tsɹ** } 'dislocative' (lexically determined variant 4)

PNI * / tsɹ /, * / (h)tsɹ /, * / (ʔ)tsɹ /;

Tu. / (h)θr / in / kiheˈjə̃h̲θ̲rɛʔ / 'I am going to die' (cf. Rudes 1999:28).

Mo. / seɹ / in / tsheʔˈnhâːse̲ɹ̲ũ / 'you have gone to hire him'
    (cf. Deering & Delisle 1976:448).

Oe. / (h)sl / in / tehashʌ̃ˈtho̲hs̲lehseʔ / 'he goes around crying'
    (cf. Michelson & Doxtator 2002:120).

Oo. / (h)sR / in / tẽkatawɛ̃́ːˈje̲hs̲æːʔ / 'I am going to take a walk'
    (cf. Woodbury 2003:100).

Ca. / (ʔ)tsɹ / in / sẽˈtaʔts̲ɹ̲ah / 'you go to sleep', Lower Ca. / sẽˈtaʔt̲ɹ̲ah /
    (cf. Froman et al. 2002:738).

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Se. / sR / in / ɛ̃katɛ̃ˈnɔ̃ʔɔ̃shæʔ / 'I'll go and watch over it' (cf. Chafe 1967:25).

Hu. / (h)ʃr / in / satsihstahˈɹehʃɹah / <Satsistarecha> 'vas attiser le feu'
      (MS 59:138), preconsonantal / h / assumed present, / ɹ / has become
      / h / in Rock dialect.

Wy. / (ʔ)ʃɹ / in / hehˈsehskjɔ̃ʔʃɹah / 'you go to make love to him'
      (cf. Barbeau 1960:78).

⁰⁹⁵ PNI * { ɹ } 'dislocative' (lexically determined variant 5, limited to Iroquoia)
PNI * / ɹ /, * / (h)ɹ /, * / (ʔ)ɹ /.

Mo. / (ʔ)ɹ / in / ɹohniˈnû̃ːɹũ / 'he has gone to buy'
      (cf. Deering & Delisle 1976:447).

Oo. / (h)R / in / tẽkatataːˈwihæːʔ / 'I will go to trade' (cf. Woodbury 2003:81).

Se. / (h)R / in / hohˈkiʔwaːɔ̃h / 'he has gone on the warpath'
      (cf. Chafe 1967:25).

⁰⁹⁶ PNI * { njõ: } 'distributive' (lexically determined variant 1)
PNI * / (a)njõ: /.

Tu. / (a)tjõ̃ / in / wahratoˈraːtjõ̃ːʔ / 'he swam all over the place'
      (cf. Rudes 1999:69).

Mo. / (a)njũ / in / kaˈthstanjũhs / 'I use various things'
      (cf. Maracle 1990:37).

Oe. / (a)njũ / in / kahsehˈtanjũheʔ / 'I'm hiding things here and there'
      (cf. Michelson & Doxtator 2002:69).

Oo. / njũ / in / otaʔaǽˈteːnjũʔ / 'cobwebs [lit. several webs existing]'
      (cf. Woodbury 2003:101).

Ca. / njõ / in / ohnaˈwaotõnjõʔ / 'springs [lit. several springs standing]'
      (cf. Froman et al. 2002:738).

Se. / njõ̃ / in / kateːnjõ̃ʔ / 'things are in place [lit. it exists severally]'
      (cf. Chafe 1967:24).

Hu. / njõ / in / texanõhʃaʔˈʃɹõnjõʔ / <te‿annonchiachonnion>
      'Maison a pl. étages' (MS 59:2).

Wy. / njõ̃ / hatiʔʒaˈkõnjõ̃ʔ / 'they shot several times' (cf. Barbeau 1960:306).

⁰⁹⁷ PNI * { nõ: } 'distributive' (lexically determined variant 2)
PNI * / nõ: /, * / (h)nõ: /, * / (ah)nõ: /, * / (ʔ)nõ: /, * / (aʔ)nõ: /;
Tu. / (ah)nõ̃ː / in / waʔkajɛʔtiˈkʷahnõ̃ːʔ / 'they sewed (several garments)'

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(cf. Rudes 1999:21).

Ca. / (h)nõ / in / ka'haʔtõhnõ̱ʔ / 'a clothesline [lit. several things drying]'
    (cf. Froman et al. 2002:738).

Se. / (h)nɔ̃ / in / ha:wi:nɔ̱̃h / 'he's carrying things' (cf. Chafe 1967:24).

Hu. / (aʔ)nõ / in / hajẽhwi'taʔnõ̱hk / <haïenh8itannonk> 'il ē a toute main'
    (MS 59:80), / ʔ / assumed present.

Wy. / (aʔ)nɔ̃ / in / hɔ̃waɛh'taʔnɔ̱̃ / 'they hit him all over' (cf. Barbeau 1960:168).

098   PNI * { **hõ:** } 'distributive' (lexically determined variant 3)

PNI * / (a)hõ: /.

Tu. / hə̃: / in / wahrato'ra:thə̱̃:ʔ / 'he hunted several' (cf. Rudes 1999:16).

Mo. / hũ / in / khsa'ʔahthṵ̃hs / 'I do many things' (cf. Maracle 1990:50).

Oe. / hũ / in / wahalũʔ'tathṵ̃ʔ / 'he shot several'
    (cf. Michelson & Doxtator 2002:100).

Oo. / hũ / in / tejakotawɛ̃́:'jehṵ̃ʔ / 'they are traveling in various places'
    (cf. Woodbury 2003:100).

Se. / hɔ̃ / in / 'haihsakhɔ̱̃h / 'he's looking for several things,
    looking in several places' (cf. Chafe 1967:24).

Hu. / (a)hõ: / in { -njaʔwaẖõ:- } 'throw up all over', cf. <Tontagandia8ahon>
    'Multip. plus.rs vomir ou vomir plus.rs ch' (MS 59:97), long vowel
    assumed present.

099   PNI * { **õ:** } 'distributive' (lexically determined variant 4)

PNI * / õ: /.

Mo. / ũ / in / jokah'ɹũ:tṵ̃ʔ / 'it has holes in it [lit. several holes attached]'
    (cf. Maracle 1990:129).

Oe. / ũ / in / tewahũh'tũ:tṵ̃: / 'it has ears [lit. ears attached]'
    (cf. Michelson & Doxtator 2002:86).

Oo. / ũ / in / konɛ́̃hsa'jẽ:tṵ̃ʔ / 'they have several houses'
    (cf. Woodbury 2003:728).

Ca. / õ / in / akhnõh'so:tõ̱ʔ / 'I have several houses'
    (cf. Froman et al. 2002:738).

Se. / ɔ̃ / in / ka'tsi:otɔ̱̃ʔ / 'things are blocked up' (cf. Chafe 1967:24).

Hu. / õ: / in { -niotõ̱:- } 'several attached', cf. <gandi8ton> 'Multip. plus.rs. ch.
    etre fichées en q.l.' (MS 59:102), long vowel assumed present.

PNI * { ɹõ: } 'distributive' (lexically determined variant 5)

PNI * / (a)ɹõ: /.

Tu. / rə̃: / in / wahratiˈjə̃ʔkhrə̃:ʔ / 'he shot several (arrows)'
      (cf. Rudes 1999:212).

Oo. / (a)hẽ: / in / ẽkaháʔˈtahẽ:k / '[several things] will be dry'
      (cf. Woodbury 2003:495).

Se. / (a)ɔ̃ / in / hatijẽˈthwakwaɔ̃h / 'they (masc. pl.) are harvesting things'
      (cf. Chafe 1967:24).

PNI * { ɹjõ: } 'distributive' (lexically determined variant 6)

PNI * / (a)ɹjõ: /.

Oe. / (a)ljũ / in / waˈtaliʔ / 'several of something are inside of something'
      (cf. Michelson & Doxtator 2002:132).

Oo. / (a)jũ / in / tẽhathnaʔnetaːˈjũʔ / 'he will put on several layers of clothes'
      (cf. Woodbury 2003:285).

Se. / (a)njɔ̃ / in / wataːnjɔ̃ʔ / '[several] things inside' (cf. Chafe 1967:40).

Hu. / (a)jõ: / in { -atajõ:- } 'several inside', cf. < Ataïon > 'Multip. praecedentis
      [q.c. etre dedans]' (MS 59:19), long vowel assumed present.

PNI * { tsõ: } 'distributive' (lexically determined variant 7)

PNI * / tsõ: /, * / (h)tsõ: /, * / (ʔ)tsõ: /.

Tu. / θə̃: / in / wahrə̃ʔˈnhɛːkʷθə̃:ʔ / 'he played games (at different times
      or in different locations)' (cf. Rudes 1999:25).

Se. / (ʔ)sɔ̃: / in / oʔˈkaʔseʔsɔ̃:ʔ / 'several animals hauled it, or it hauled several
      things' (cf. Chafe 1967:24).

Hu. / (ʔ)sõ: / in { -atjeʔsõ:- } 'throw several', cf. < Atieson > 'Multip. jetter
      plus.rs ch.' (MS 59:28), long vowel and / ʔ / assumed present.

PNI * { tsɹõ: } 'distributive' (lexically determined variant 8)

PNI * / tsɹõ: /, * / (h)tsɹõ: /, * / (ʔ)tsɹõ: /.

Tu. / θrə̃ / in / joˈrhə̃ʔθrə̃h / 'days [lit. it several times becomes day]'
      (cf. Rudes 1999:28).

Mo. / (h)seɹũ / in / jeˈkhrehseɹũhs / 'I poke, push at something intermittantly'
      (cf. Maracle 1990:14).

Oe. / (h)slũ / in / kkalhaˈthohslũheʔ / 'I'm turning over several things'
      (cf. Michelson & Doxtator 2002:458).

Oo. / (h)sẽ: / in / tejotóˈwẽ<u>hsẽ:ʔ</u> / 'it is split into several pieces, it is splintered'
    (cf. Woodbury 2003:168).

Se. / sjɔ̃ / in / ˈoetkɛ̃ʔ<u>sjɔ̃ʔ</u> / 'things have spoiled' (cf. Chafe 1967:24).

Hu. / (h)ʃɹõ: / in { -atathɹeh<u>ʃɹõ:-</u> } 'several to push against each other',
    cf. <K8atatrechon> 'Multip. Recip. plus.rs. S'entrepousser' (MS 59:138),
    preconsonantal / h / and long vowel assumed present, / ɹ / has become
    / h / in Rock dialect.

104   PNI * { **tjeʔ** } 'progressive'

PNI * / (a)tjeʔ /.

Tu. / (a)ʔnjɛʔ / in / tjahwaʔohnə̃ˈha:ʔ<u>njɛʔ</u> / 'so it went along disappearing'
    (cf. Rudes 1999:21).

Mo. / (a)tjeʔ / in / wakeʔnjaʔkʌ̃ˈh<u>atjeʔ</u> / 'I am escaping, fleeing, running away'
    (cf. Maracle 1990:104).

Oe. / (a)tiʔ / in / jũkwanaklakwʌ̃ˈh<u>atiʔ</u> / 'we're moving around'
    (cf. Michelson & Doxtator 2002:101).

Oo. / (a)tjeʔ / in / swakataʔkaíˈt<u>a:tjeʔ</u> / 'I am recovering'
    (cf. Woodbury 2003:103).

Ca. / (a)tjeʔ / in / saihwahsɹõniˈh<u>a:tjeʔ</u> / 'you are making up the rules
    as you go along' (cf. Froman et al. 2002:51).

Se. / tjeʔ / in / hoetkɛ̃ˈʔɔ̃:<u>tjeʔ</u> / 'he's getting progressively uglier'
    (cf. Chafe 1967:28).

Hu. / tjeʔ / in / ekwahˈsõ<u>tjeʔ</u> / <ek8asontie> 'nous marcherons toute la nuit'
    (MS 59:17), / ʔ / assumed present.

Wy. / (a)kjeʔ / in / hutiʔnɹaˈwɛ̃h<u>akjeʔ</u> / 'they went dancing along'
    (cf. Barbeau 1960:75).

105   PNI * { **hs** } 'present suffix' (lexically determined variant 1)

PNI * / ahs / after a resonant consonant, * / hs / elsewhere.

Tu. / hs / in / ˈwaθnə̃<u>hs</u> / 'it runs dry' (cf. Rudes 1999:52).

Mo. / as / in / ˈkhɹe:n<u>ahs</u> / 'I cut, incise, slash, I make a cut, incision'
    (cf. Maracle 1990:50).

Oe. / s / in / ˈtjê:lek<u>s</u> / 'she's pushing it this way'
    (cf. Michelson & Doxtator 2002:374).

AOo. / ahʃ / in / ˈkhɹe:n<u>ahʃ</u> / <krenach> 'je coupe' (Shea 1860:99).

Oo. / as / in / ˈkhé:n<u>as</u> / 'I cut' (cf. Woodbury 2003:507).

Ca. / hs / in / hanjo<u>hs</u> / 'he kills s.t.' (cf. Froman et al. 2002:173).

Se. / as / in / kekw<u>as</u> / 'I pick it' (cf. Chafe 1967:12).

Hu. / ʃ / in / ʃeh'skẽ:nah<u>ʃ</u> / <chieskendach> 'tu es un Mangeur de Morts'
       (MS 59:148).

Wy. / s / in / keaʔ'tihʃah<u>s</u> / 'I look for one' (cf. Barbeau 1960:225).

106   PNI * { **ts** } 'present suffix' (lexically determined variant 2)

PNI * / ts /.

Tu. / θ / in / 'raʔθkoʔ<u>θ</u> / 'he drowns' (cf. Rudes 1999:577).

Mo. / s / in / 'kê:skoʔ<u>s</u> / 'I drown, fall into the water' (cf. Maracle 1990:38).

Oe. / s / in / 'kê:skoʔ<u>s</u> / 'I keep drowning' (cf. Michelson & Doxtator 2002:869).

AOo. / s / in <gnonh8es> / 'knũhweʔ<u>s</u> / 'J'aime' (Shea 1860:16).

Oo. / s / in / 'knűhweʔ<u>s</u> / 'I like it' (cf. Woodbury 2003:730).

Ca. / s / in / hẽ'natẽnhaʔ<u>s</u> / 'they hire it' (cf. Froman et al. 2002:156).

Se. / s / in / 'i:keʔ<u>s</u> / 'I'm walking around' (cf. Chafe 1967:48).

Hu. / s / in / i'wa:xẽʔ<u>s</u> / <i8a͵ens> '[q.c. bon ou mauv. m'arrive]' (MS 59:167).

Wy. / s / in / ha'tẽtaʔ<u>s</u> / 'he hires' (cf. Barbeau 1960:224).

107   PNI * { **haʔ** } 'present suffix' (lexically determined variant 3)

PNI * / haʔ /.

Tu. / haʔ / in / rajɛ'θaʔt<u>haʔ</u> / 'he curses' (cf. Rudes 1999:571).

Mo. / haʔ / in / khe'jeht<u>haʔ</u> / 'I wake someone up' (cf. Maracle 1990:47).

Oe. / haʔ / in / jũh'lũk<u>haʔ</u> / 'she speaks or understands the language'
       (cf. Michelson & Doxtator 2002:66).

Oo. / haʔ / in / tehá'hit<u>haʔ</u> / 'he smashes it, he breaks things up'
       (cf. Woodbury 2003:523).

Ca. / haʔ / in / ka'hõ:k<u>haʔ</u> / 'I understand a language'
       (cf. Froman et al. 2002:152).

Se. / haʔ / in / wahsa:<u>haʔ</u> / 'it begins' (cf. Chafe 1967:12).

Hu. / haʔ / in / teʔʃah'ɹõk<u>haʔ</u> / <te chia'ronχa> 'tu n'obeïs point' (MS 59:13),
       / ʔ / assumed present.

Wy. / haʔ / in / ha:'ɹõk<u>aʔ</u> / 'he hears' (cf. Barbeau 1960:154).

108   PNI * { **h** } 'present suffix' (lexically determined variant 4)

PNI * / h /.

Tu. / h / in / rahka'ɹə̃:ti<u>h</u> / 'he chips it, he makes chips' (cf. Rudes 1999:172).

Mo. / Ø / word-finally in / ɹathe'ɹũ:ni / 'he is making a basket'
(cf. Deering & Delisle 1976:443).

Oe. / heʔ / in / kũ:'niheʔ / 'I'm making it' (cf. Michelson & Doxtator 2002:756).

Oo. / k / in / 'khní:nũk / 'I am a buyer, I buy' (cf. Woodbury 2003:538).

Ca. / h / in / 'kõ:nih / 'I make, earn' (cf. Froman et al. 2002:191).

Se. / h / in / je'sheʔɔ̃:nih / 'she makes the dough' (cf. Chafe 1967:12).

Hu. / hk / in / xõatehaʔ'sẽ:nihk / <ˌonatehasennik> 'jay honte pr. toy'
(MS 59:22), / h / assumed present.

109   PNI * { **hsk** } 'imperfective suffix' (cf. Cherokee imperfective verbs in { hsk })
PNI * / hsk /.

OMo. / hsk / in / 'jahtɔ̃ʔ shakohse'ɹũ:nihsk / <Ja'ten Sagoseronnisk>
'il ne les accode point d'habits' (MS 58:10).

Mo. / hs / in / kathe'ɹũ:nihs / 'I make baskets' (cf. Maracle 1990:123).

Ca. / hs / in / 'kõ:nihs / 'I make, earn' (cf. Froman et al. 2002:191).

110   PNI * { **kʷ** } 'past habitual suffix'
PNI * / kʷ / or * / kʷVʔ /.

Mo. / kʷeʔ / in / ɹath'sokwahskʷeʔ / 'he used to smoke'
(cf. Deering & Delisle 1976:359).

Oe. / kʷeʔ / in / wakʌ̃:'lehkʷeʔ / 'it was scarce'
(cf. Michelson & Doxtator 2002:90).

Oo. / kʷaʔ / in / shakohka:hǽʔ'sehkʷaʔ / 'he used to be jealous of her'
(cf. Woodbury 2003:228).

Se. / kʷaʔ / in / ha'nɔ̃eʔskʷaʔ / 'he used to like it' (cf. Chafe 1967:28).

Hu. / kʷaʔ / in / aʔtjõxwẽ'ɹẽ:tẽhskʷaʔ / <ation8enrentensk8a>
'il nous manquoit qlq. nous etions moins ql. ne falloit' (MS 59:170),
/ ʔ / assumed present.

Wy. / kʷaʔ / in / jeʔehtiʃa'keʔskʷaʔ / 'I used to hunt for clawmarks of the bear'
(cf. Barbeau 1960:235).

111   PNI * { **ʔ** } 'punctual suffix' (lexically determined variant 1)
PNI * / ʔ / in modal verbs, * / h / in imperative verbs.

Tu. / ʔ / in / waʔ'kjɛ:nɔ̃:ʔ / 'I held it' (cf. Rudes 1999:503); / Ø / word-finally in
/ 'tʃe:nɔ̃: / 'hold it!' (cf. Rudes 1999:503).

Mo. / ʔ / in / ʌ̃ha'nohaɹeʔ / 'he will wash' (cf. Deering & Delisle 1976:447);

/ Ø / word-finally in / seˈnohare / 'wash!'

(cf. Deering & Delisle 1976:447).

Oe. / ʔ / in / waʔkahˈtsjohaleʔ / 'I washed my hands'

(cf. Michelson & Doxtator 2002:84); / Ø / word-finally in / sahˈtsjohale /
'Wash your hands!' (cf. Michelson & Doxtator 2002:84).

Oo. / ʔ / in / waʔkéˈktũʔ / 'I examined it' (cf. Woodbury 2003:663); / h / in
/ seˈktũh / 'Check it out!' (cf. Woodbury 2003:663).

Ca. / ʔ / in / ẽhˈshe:tẽ:ʔ / 'you will pity her' (cf. Froman et al. 2002:487); / Ø /
word-finally in / tahˈski:tẽ: / 'pity me' (cf. Froman et al. 2002:487).

Se. / ʔ / in / ɛ̃sni:kɛ̃ʔ / 'you'll see it' (cf. Chafe 1967:17); / h / in / ha:kɛ̃h /
'let him see it!' (cf. Chafe 1967:12).

Hu. / ʔ / in / aʔthaɹihnaʔˈne:tẽʔ / < aθaɹindandeten > 'il a redit deux fois
la m. ch.' (MS 59:86), / ʔ / assumed present; / h / in / taxɹihwaˈwahtẽh /
< Taɹrih8awaʻten > 'abbrége moy cette affaire' (MS 59:1), / h / assumed
present.

Wy. / ʔ / in / e:ʒa:ˈʒuʔ / 'he will kill you' (cf. Barbeau 1960:82).

¹¹² PNI * { ẽʔ } 'punctual suffix' (lexically determined variant 2)

PNI * / ẽʔ / in modal verbs, * / ẽh / in imperative verbs.

Mo. / ʌ̃ʔ / in / ʌ̃jũteʔˈnjɐ̃:tʌ̃ʔ / 'she will try' (cf. Deering & Delisle 1976:456);
/ ʌ̃ / in / sateʔˈnjʌ̃:tʌ̃ / 'try it!' (cf. Deering & Delisle 1976:500).

Oe. / ɐ̃ʔ / in / waʔkenjũːˈtʌ̂: / 'I suspended it'

(cf. Michelson & Doxtator 2002:630); / ɐ̃ / in / satkɐ̃hanjũːˈtɐ̃ /
'Put on an apron!' (cf. Michelson & Doxtator 2002:251).

Oo. / ẽʔ / in / ẽhahsoˈtsjo:tẽʔ / 'he will pile it up' (cf. Woodbury 2003:559);
/ ẽh / in / soːˈtsjo:tẽh / 'Pile it up!' (cf. Woodbury 2003:559).

Ca. / ẽʔ / in / ẽhsnaʔˈtso:tẽʔ / 'you will boil it' (cf. Froman et al. 2002:535);
/ ẽh / in setsihˈsto:tẽh / 'turn on the light' (cf. Froman et al. 2002:535).

Se. / ɛ̃ʔ / in / ɛ̃snijõ̃ːˈtɛ̃ʔ / 'you will hang it' (cf. Chafe 1967:15); / ɛ̃h / in
/ snijõ̃ːtɛ̃h / 'hang it up!' (cf. Chafe 1967:12).

Hu. / ẽʔ / in / aʔshõxwaxõɹeˈsõ:tẽʔ / < ason̨8aɹonresonten > '[Dieu] nous a fait
des mains' (MS 59:71), / ʔ / assumed present; / ẽh / in / tiseʔnahˈʃo:tẽh /
< ti sendachi8ten > 'tire ta langue' (MS 59:85), / h / assumed present.

Wy. / ɛ̃ʔ / in / tahatiˈɹõ:tɛ̃ʔ / 'he pulled it' (cf. Barbeau 1960:158).

113   PNI * { **Ø** } 'punctual suffix' (lexically determined variant 3)

PNI * / Ø / in both modal and imperative verbs.

Tu. / Ø / word-finally in / ə̃ʔˈnjɛtʃnə̃ht / 'one will get down there'
        (cf. Rudes 1999:6).

OMo. / Ø / word-finally in / wahsɹihˈwahstoht / <8asrih8asθot>
        'tu amoindris l'affaire' (Bruyas 1863:102).

Mo. / eʔ / in / ãhaˈtoːɹat<u>eʔ</u> / 'he will hunt' (cf. Deering & Delisle 1976:447);
        / Ø / word-finally in / saˈtoːɹat / 'hunt!' (cf. Deering & Delisle 1976:447).

Oe. / eʔ / in / waʔkeʔˈnetskah̋t<u>eʔ</u> / 'I loosened it'
        (cf. Michelson & Doxtator 2002:852); / Ø / word-finally in / seʔˈnetskat /
        'loosen it!' (cf. Michelson & Doxtator 2002:852).

Oo. / Ø / word-finally in / aːháːˈkaːjaʔk / 'he would pay'
        (cf. Woodbury 2003:444).

Ca. / Ø / word-finally in / ẽhˈsehsthoʔtɹẽht / 'you will pluck feathers'
        (cf. Froman et al. 2002:481).

Se. / Ø / word-finally in / sɔ̃ʔneːk / 'move out of the way!'
        (cf. Chafe 1967:13).

Hu. / Ø / word-finally in / tiˈsaʔehst / <ti saest> 'perce cela' (MS 59:3).

Wy. / Ø / word-finally in / naʔˈjɔ̃ːnɔ̃t / 'that I gave to you'
        (cf. Barbeau 1960:124).

114   PNI * { **n** } 'punctual suffix' (lexically determined variant 4)

PNI * / n / in both modal and imperative verbs.

Tu. / Ø / word-finally in / waʔˈkhɛnhaʔ / 'I hired him' (cf. Rudes 1999:595).

OMo. / n / in / ãkaɹihwaˈtoːkʌ̃ʔ<u>n</u> / <egarih8atogenn> 'Cela se vérifiera'
        (Bruyas 1863:104).

Mo. / neʔ / in / wahaˈɹaːtaʔ<u>neʔ</u> / 'he stepped on it'
        (cf. Deering & Delisle 1976:446); / n / in / seˈraːtaʔ<u>n</u> / 'step on it!'
        (cf. Deering & Delisle 1976:446).

Oe. / neʔ / in / ˈwâːtsha<u>neʔ</u> / 'you finished it'
        (cf. Michelson & Doxtator 2002:400); / n / in / ˈitsha<u>n</u> / 'Finish it!'
        (cf. Michelson & Doxtator 2002:400).

Oo. / nhaʔ / in / ẽshũtateːjẽ̋ˈtaʔ<u>nhaʔ</u> / 'they will get prepared again'
        (cf. Woodbury 2003:81); / nhah / in / sasatateːjẽ̋ˈtaʔ<u>nhah</u> /
        'Prepare yourself again!' (cf. Woodbury 2003:81).

Ca. / Ø / word-finally in / aʔˈohtaʔ / 'it got full, finished eating'

(cf. Froman et al. 2002:389).

Se. / t / in / oʔjɔ̃ːsheʔt̲ / 'it became long' (cf. Chafe 1967:24).

Hu. / haʔ / in / ewatjeˈsaʔha̲ʔ / <e8atiesaha> 'cela deviendra facile'
(MS 59:27), / ʔ / assumed present; / hah / in / satsaˈxẽʔhah / 'go out!',
cf. <Satsaˌenha> 'Sors' (MS 59:39), final / h / assumed present.

115 PNI * { õ̲h } 'perfect suffix' (lexically determined variant 1)

PNI * / õh /.

Tu. / ə̃ / in / joʔnahˈθɛhnə̲̃ / 'it is occult [lit. has been hidden]'
(cf. Rudes 1999:24).

Mo. / ũ / in / ɹotoˈɹaːt̲ũ̲ / 'he has hunted' (cf. Deering & Delisle 1976:447).

Oe. / ũ / in / lotolaːˈt̲ũ̲ / 'he has hunted' (cf. Michelson & Doxtator 2002:255).

Oo. / ũh / in / hawẽhéˈjũ̲h̲ / 'he is dead' (cf. Woodbury 2003:592).

Ca. / õh / in / kanaʔnaˈwẽht̲õ̲h̲ / 'it has melted; it is soaked'
(cf. Froman et al. 2002:198).

Se. / ɔ̃h / in / hajaːsɔ̲̃h̲ / 'he's called, his name is' (cf. Chafe 1967:12).

Hu. / õh / in / tehojaxẽˈheːjõ̲ːh̲ / <tehoïaˌenheon> 'il a les bons morts
de fatigue' (MS 59:79), long vowel and / h / assumed present.

116 PNI * { ẽ̲h } 'perfect suffix' (lexically determined variant 2)

PNI * / ẽh /.

Tu. / ə̃ / in / tjoˈjeːrə̲̃ / 'it happened' (cf. Rudes 1999:504).

Mo. / ʌ̃ / in / tehoɹihˈwahkʷʌ̲̃ / 'he has sung' (cf. Deering & Delisle 1976:449).

Oe. / ʌ̃ / in / tewakahˈkokwʌ̲̃ / 'I have searched for it'
(cf. Michelson & Doxtator 2002:62).

Oo. / ẽh / in / akɛ́ːˈnihẽ̲h̲ / 'I have borrowed it' (cf. Woodbury 2003:406).

Ca. / ẽh / in / oˈtahsokwẽ̲h̲ / 'it is faded' (391).

Se. / ɛ̃h / in / hokwɛ̲̃h̲ / 'he's picked it' (cf. Chafe 1967:12).

Hu. / ẽh / in / ohahˈʃɹahkʷẽ̲h̲ / <ohachak8an> 'Le feu a pris' (MS 59:72),
/ h / assumed present, / r / has become / h / in Rock dialect.

Wy. / ɛ̃h / in / huˈtiʔnɹawẽ̲h̲ / 'they were dancing' (cf. Barbeau 1960:74).

117 PNI * { Ø } 'perfect suffix' (lexically determined variant 3)

PNI * / Ø /.

Tu. / Ø / word-finally in / joʔˈnhahnə̃ːt / 'it has a limb or branch'
(cf. Rudes 1999:168).

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OMo. / Ø / word-finally in / joˈɹahkot / <jorak8t> 'il fait chaud'
    (Bruyas 1863:86).

Mo. / (eʔ) / in / joˈɹahkot<u>eʔ</u> / 'it is sunny' (cf. Maracle 1990:20).

Oe. / (eʔ) / in / lanawiːˈlot<u>eʔ</u> / 'he has a tooth, he has teeth'
    (cf. Michelson & Doxtator 2002:557).

Oo. / (aʔ) / in / óhˈnjoːt<u>aʔ</u> / 'it is protruding from the ground,
    it is growing out of the ground' (cf. Woodbury 2003:543).

Ca. / Ø / word-finally in / oˈkwaõt / 'it has a lump; a bulge'
    (cf. Froman et al. 2002:190).

Se. / Ø / word-finally in / kaniːjõːt / 'it's hanging, it's been hung'
    (cf. Chafe 1967:12).

Hu. / Ø / word-finally in / ˈiːwaːt / <i8at> 'il y a q.c. dedans' (MS 59:19).

Wy. / Ø / word-finally in / tsuˈnɛ̃hstat / '[it is] one grain' (cf. Barbeau 1960:90).

[118]   PNI * { **eʔ** } 'perfect suffix' (lexically determined variant 4)

    PNI * / eʔ /.

    Tu. / ɛʔ / in / johˈstoːr<u>ɛʔ</u> / 'it is fast' (cf. Rudes 1999:583).

    Mo. / eʔ / in / johˈsnoːɹ<u>eʔ</u> / 'it is fast, quick, quickly' (cf. Maracle 1990:19).

    Oe. / eʔ / in / jakohˈkatst<u>eʔ</u> / 'she's tough' (cf. Michelson & Doxtator 2002:62).

    Oo. / eʔ / in / hóhˈkast<u>eʔ</u> / 'he is tough' (cf. Woodbury 2003:228).

    Ca. / eʔ / in / ohˈsnoːw<u>eʔ</u> / 'it is fast, quick' (cf. Froman et al. 2002:114).

    Se. / eʔ / in / haʔhaːst<u>eʔ</u> / 'he's strong' (cf. Chafe 1967:12).

    Hu. / eʔ / in / otenɛ̃haˈxaʔt<u>eʔ</u> / <otennenhaˌate> 'il y a bcp. de bled'
        (MS 59:65), / ʔ / assumed present.

    Wy. / eʔ / in / uhstuːˈɹ<u>eʔ</u> / 'it is quick' (cf. Barbeau 1960:285).

[119]   PNI * { **ih** } 'perfect suffix' (lexically determined variant 5)

    PNI * / ih /.

    Tu. / i / in / rohə̃ʔˈnə̃ːt<u>iː</u> / 'he made a clearing' (cf. Rudes 1999:172).

    Oo. / ih / in / honáˈtkathw<u>ih</u> / 'they have looked at it, they saw it'
        (cf. Woodbury 2003:267).

    Ca. / i / in / akaːˈthɹoːw<u>iː</u> / 'I've told' (cf. Froman et al. 2002:741).

    Hu. / ih / in / otahaˈweːx<u>ih</u> / <otahaha8eˌi> 'le Chemin ē boûché' (MS 59:126),
        / h / assumed present.

    Wy. / ih / in / hutɛ̃ːniˈnɔ̃hst<u>ih</u> / 'he has sold it to him' (cf. Barbeau 1960:264).

120   PNI * { **n** } 'past perfect suffix'

PNI * / n / or * / nVʔ /.

Mo. / neʔ / in / ɹotoɹaˈthũh<u>neʔ</u> / 'he had gone to hunt'
        (cf. Deering & Delisle 1976:447).

Oe. / neʔ / in / loleʔsÃ̃ːˈh<u>nê</u> / 'he used to be fat'
        (cf. Michelson & Doxtator 2002:99).

Oo. / naʔ / in / hatowǽˈtih<u>naʔ</u> / 'he had been hunting'
        (cf. Woodbury 2003:167).

Ca. / neːʔ / in / akathɹoˈwih<u>neːʔ</u> / 'I'd told' (cf. Froman et al. 2002:741).

Se. / nɔ̃ʔ / in / haˈjasɔ̃ː<u>nɔ̃ʔ</u> / 'it was his name, he was called' (cf. Chafe 1967:28).

Hu. / nɛ̃ʔ / in / naõxaɹahˈskʷɛ̃h<u>nɛ̃ʔ</u> / < d'aon͵arask8annen >
        'le dessein que javois de partir' (MS 59:5), / ʔ / assumed present.

Wy. / nɛ̃ʔ / in / hunatɹiˈʒuː<u>nɛ̃ʔ</u> / 'they had fought' (cf. Barbeau 1960:292).

121   PNI * { **nskõːh** } 'facilitative suffix'

PNI * / nskõːh /.

Tu. / θkɜ̃ː / in / jawɜ̃ʔtahkraʔˈnih<u>θkɜ̃ː</u> / 'inflammable
        [lit. the flame stands up easily]' (cf. Rudes 1999:601).

Mo. / tskũ / in / tewakenakʷaˈɹa<u>tskũ</u> / 'I get out of breath easily'
        (cf. Maracle 1990:95).

Oe. / tskʷɑ̃̃ / 'facilitative' (cf. Michelson & Doxtator 2002:739),
        shape anomalous.

Oo. / tskũ / 'facilitative suffix' (cf. Woodbury 2003:822).

Ca. / hskõ / in / sɛ̃ˈniha<u>hskõ</u>ː / 'you are a habitual borrower'
        (cf. Froman et al. 2002:738).

Se. / skɔ̃ːh / in / onɔ̃ʔnɔ̃ˈwɛ̃<u>skɔ̃ːh</u> / 'it melts easily' (cf. Chafe 1967:27).

Hu. / skõːh / in / tesaɹahtaˈtha<u>skõːh</u> / < te saraˈtaθaskon >
        'tu es un gr. coureur' (MS 59:11), long vowel and / h / assumed present.

Wy. / skɔ̃h / in / najeˈɹih<u>skɔ̃h</u> / 'that I am always willing'
        (cf. Barbeau 1960:285).

122   PNI * { **k** } 'modalizer suffix'

PNI * / k /, * / (aː)k /, * / (eː)k /.

Tu. / (aː)k / in / thaʔθaʔtikɜ̃hˈrɜ̃ːʔna<u>ː</u><u>k</u> / 'be calm!' (cf. Rudes 1999:560).

OMo. / (e)k / in / ɑ̃johˈsnoːɹ<u>ek</u> / < Ejosnoreg > 'ce sera bien viste'
        (Bruyas 1863:99).

Mo. / (a)k / in / ʌ̃hoˈjə̃:t<u>ake</u>ʔ / 'he will have it' (cf. Deering & Delisle 1976:444).

Oe. / (a)k / in / ʌ̃kaʔslehtiˈjoh<u>ake</u>ʔ / 'it will be a good car'
     (cf. Michelson & Doxtator 2002:441).

Oo. / k / in / ẽhohkáˈste<u>k</u> / 'he will be tough' (cf. Woodbury 2003:228).

Ca. / (a:)k / in / ẽkathɹoˈwih<u>a:k</u> / 'I will be telling' (cf. Froman et al. 2002:741).

Se. / (e:)k / in / ɛ̃ˈwɔ̃kathɔ̃:t<u>e:k</u> / 'I'll continue to be listening'
     (cf. Chafe 1967:28).

Hu. / k / in / etsikwahwatsiɹaˈwe:xih<u>k</u> / <etsik8ah8atsira8e̯ik>
     'nous nous retrouverons avec nos Parents' (MS 59:78).

Wy. / (a)h / in / ewateˈjahst<u>ah</u> / 'it will be boiled down' (cf. Barbeau 1960:124).

123   PNI * { **aʔ** } 'noun suffix'

PNI * / aʔ /.

Tu. / aʔ / in / oˈtʃkjɛrh<u>aʔ</u> / 'beech' (cf. Rudes 1999:553).

Mo. / aʔ / in / kaˈkũhs<u>aʔ</u> / 'mask, face' (cf. Maracle 1990:28).

Oe. / aʔ / in / ohˈsî:t<u>aʔ</u> / 'foot' (cf. Michelson & Doxtator 2002:71).

Oo. / aʔ / in / óhˈna:w<u>aʔ</u> / 'current, rapids' (cf. Woodbury 2003:525).

Ca. / aʔ / in / kaˈkõhs<u>aʔ</u> / 'mask' (cf. Froman et al. 2002:194).

Se. / aʔ / in / oˈnjɛ̃:t<u>aʔ</u> / 'shin' (cf. Chafe 1967:74).

Hu. / aʔ / in / xaˈnõhʃ<u>aʔ</u> / <gannonchia> 'Cabane' (MS 59:116),
     / ʔ / assumed present.

Wy. / aʔ / in / jaʔˈnɔ̃hʃ<u>aʔ</u> / 'bag' (cf. Barbeau 1960:274).

124   PNI * { **õweh** } 'authenticative suffix'

PNI * / õweh /.

Tu. / ə̃wɛ / in / ə̃kʷɛˈh<u>ə̃:wɛ</u> / 'Indian, Tuscarora [lit. original person]'
     (cf. Rudes 1999:158).

Mo. / ũwe / in / ahtahkʷaˈʔ<u>ũ:we</u> / 'moccasin [lit. original shoe]'
     (cf. Maracle 1990:2).

Oe. / ũwe / in / ojũʔkʷaʔ<u>ũ:ˈwe</u> / 'Indian tobacco, sacred tobacco
     [lit. original tobacco]' (cf. Michelson & Doxtator 2002:648).

Oo. / ũweh / in / ahtahkʷáˈʔ<u>ũ:weh</u> / 'moccasin' (cf. Woodbury 2003:220).

Ca. / õweh / in / õkʷeˈh<u>õ:weh</u> / 'First Nations, Indian people
     [lit. original person]' (cf. Froman et al. 2002:607).

Se. / ɔ̃weh / in / ɔ̃ˈkʷeʔ<u>ɔ̃:weh</u> / 'native person, Indian [lit. original person]'
     (cf. Chafe 1967:77).

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PNI * { **ha:ʔ** } 'characterizer suffix'

PNI * / ha:ʔ /.

Tu. / ha:ʔ / in / ohahaʔˈkjɛ<u>ha:ʔ</u> / 'plantain [lit. 'the one that is on the path]'
(cf. Rudes 1999:11).

Mo. / ha / in / ahsũˈthʌ̃k<u>ha</u> / 'the night time star, the moon
[lit. the midnight one]' (cf. Maracle 1990:2).

Oe. / ha / in / kalhaˈkũ<u>ha</u> / 'hawk [lit. the one in the forest]'
(cf. Michelson & Doxtator 2002:457).

Oo. / haʔ / in / onũtaʔkeˈ<u>haʔ</u> / 'Onondaga [lit. the one at the hill]'
(cf. Woodbury 2003:761).

Ca. / ha:ʔ / in / ne<u>ha:ʔ</u> /, / ke<u>ha:ʔ</u> /, / k<u>ha:ʔ</u> / 'customary suffixes'
(cf. Froman et al. 2002:714).

Se. / ha:ʔ / in / okeoʔˈtsaʔke:<u>aʔ</u> / 'green smoke [lit. the one on the grass]'
(cf. Chafe 1967:29).

PNI * { **kẽh** } 'decessive suffix'

PNI * / kẽh / or * / kẽhVH /.

Tu. / kə̃hɛʔ / in / rohrjahsoˈt<u>kə̃hɛʔ</u> / 'forefathers [lit. deceased grandfather]'
(cf. Rudes 1999:586).

Mo. / kʌ̃ha / in / tjeˈɹk<u>ʌ̃ha</u> / 'the late Peter' (cf. Deering & Delisle 1976:121).

Oe. / kʌ̃ / in / aksoˈt<u>kʌ̃</u> / 'my late grandmother'
(cf. Michelson & Doxtator 2002:474).

Oo. / kẽhæʔ / 'decessive clitic' (cf. Woodbury 2003:458).

Ca. / kẽhẽ:ʔ / 'decessive suffix' (cf. Froman et al. 2002:714).

Se. / kɛ̃:ɔ̃ʔ / in / haˈksot<u>kɛ̃:ɔ̃ʔ</u> / 'my deceased grandfather' (cf. Chafe 1967:29).

PNI * { **tsih** } 'intensifier suffix'

PNI * / tsih /.

Tu. / tʃi / in / otokə̃ˈʔə̃ht<u>ʃi</u> / 'really' (cf. Rudes 1999:635).

Mo. / tsi / in / eˈsô:<u>tsi</u> / 'too many, too much' (cf. Maracle 1990:81).

Oe. / tsiʔ / in / ˈsô:<u>tsiʔ</u> / 'too much' (cf. Michelson & Doxtator 2002:668).

Oo. / tsihwẽh / in / tjohnawatétsˈ<u>tsihwẽh</u> / 'it is an extra strong current'
(cf. Woodbury 2003:525).

Ca. / tsih / in / skẽ:nõˈ<u>tsih</u> kẽh / 'are you really well?'
(cf. Froman et al. 2002:738).

Se. / tsi:wɛ̃h / in / saˈthɔ̃tehtsi:wɛ̃h / 'you are listening carefully'
      (cf. Chafe 1967:25).

128   PNI * { **keh** } 'locative suffix'

PNI * / keh /.

Tu. / kjɛ / in / aˈthoʔkjɛ / 'north [lit. at the cold]' (cf. Rudes 1999:618).

Mo. / ke / in / kanaˈktâ:ke / 'on a bed, at a place' (cf. Maracle 1990:170).

Oe. / ke / in / kalũhˈjâ:ke / 'sky, in the sky, heaven [lit. at the sky]'
      (cf. Michelson & Doxtator 2002:459).

Oo. / keh / in / onṹ:ˈtaʔkeh / 'Onondaga territory [lit. at the hill]'
      (cf. Woodbury 2003:761).

Ca. / keh / in / kahˈnawaʔkeh / 'Caughnawaga [lit. at the rapids]'
      (cf. Froman et al. 2002:623).

Se. / keh / in / hohso:tkeh / 'where his grandparents are [lit. at his grandfather]'
      (cf. Chafe 1967:32).

Hu. / xeh / in / xaɹõhˈjaʔxeh / < ˌaronhiaˌe > 'dans le Ciel' (MS 59:125),
      / h / assumed present.

Wy. / jeh / in / aˈthuʔjeh / 'north [lit. at the cold]' (cf. Barbeau 1960:69).

129   PNI * { **ɹonõʔ** } 'populative suffix' (lexically determined variant 1)

PNI * / ɹonõʔ /.

Tu. / ronɔ̃ʔ / in / ohwɛnaʔkjɛhˈro:nɔ̃ʔ / 'islander
      [lit. person or people at the island]' (cf. Rudes 1999:603).

Mo. / ɹonũʔ / in / kaɹhakũhˈɹo:nũʔ / 'a forest dweller,
      someone that dwells in the forest' (cf. Maracle 1990:178).

Oe. / lonũʔ / in / latinataʔkehˈlo:nṹ: / 'city people [lit. people at the city]'
      (cf. Michelson & Doxtator 2002:511).

Oo. / hẽnũʔ / in / skẽnẽtṹˈhẽ:nũʔ / 'Deer Clan [lit. people of the deer]'
      (cf. Woodbury 2003:783).

Ca. / honõʔ / in / kahnawakeˈho:nõʔ / 'Caughnawagan
      [lit. people at the rapids]' (cf. Froman et al. 2002:607).

Se. / honɔ̃ʔ / in / oʔsoæˈko:onɔ̃ʔ / 'person from Pinewoods
      [lit. Pinewoods person]' (cf. Chafe 1967:29).

Hu. / ɹonõʔ / in / wẽnaˈtɹo:nõʔ / < 8endatronnon > 'les hurons' (MS 59:154),
      / ʔ / assumed present.

Wy. / ɹunɔ̃ʔ / in / wataˈju:ɹu:nɔ̃ʔ / 'underground-dwellers (Cherokees)'

(cf. Barbeau 1960:301).

130 PNI * { **ka:ʔ** } 'populative suffix' (lexically determined variant 2)

PNI * / (a)ka:ʔ /.

Tu. / (a)ka:ʔ / in / wahkʷɛθaʔθkjɛˈh<u>a:ka:ʔ</u> / 'the St. Regis tribe
　　　　 [lit. people at the great partridge]' (cf. Rudes 1999:20).

Mo. / (a)kaʔ / in / onʌ̃hjoteˈʔ<u>a:kaʔ</u> / 'the Oneida Nation
　　　　 [lit. people of the standing stone]' (cf. Maracle 1990:70).

Oe. / (a)kaʔ / in / onũtaʔkeh<u>a:ˈkâ:</u> / 'Onondaga [lit. people at the hill]'
　　　　 (cf. Michelson & Doxtator 2002:641).

Oo. / kaʔ / in / onũtaʔkéˈ<u>kaʔ</u> / 'Onondaga, Onondaga people'
　　　　 (cf. Woodbury 2003:761).

Ca. / ka:ʔ / in / onõtoˈwaʔ<u>ka:ʔ</u> / 'Seneca [lit. people of the big hill]'
　　　　 (cf. Froman et al. 2002:609).

Se. / ka:ʔ / in / oˈnõtaʔke:<u>ka:ʔ</u> / 'the Onondaga [lit. people at the hill]'
　　　　 (cf. Chafe 1967:29).

131   PNI * { **-ah-** }, * { **-(a)hah-** } 'path, road, trail'

Tu. { -ahah- } in ⁄ oˈhahɛh ⁄ 'aisle, journey, lobby, path, road, track'
      (cf. Rudes 1999:8).

La. * { -ah- } in < Addé > 'Ilz appellent le chemin' (Biggar 1924:244).

OMo. { -ah- } in ⁄ ˈjohateʔ ⁄ < Johate > 'il y a un chemin' (Bruyas 1863:22).

Mo. { -ahah- } in ⁄ oˈhahaʔ ⁄ 'road, trail, path, way' (cf. Maracle 1990:60).

Oe. { -ahah- } in ⁄ oˈhahaʔ ⁄ 'road' (cf. Michelson & Doxtator 2002:356).

Oo. { -ah- } in ⁄ óˈhaːteʔ ⁄ '(it is a) road' (cf. Woodbury 2003:216); { -ahah- } in
      ⁄ ohaˈhaʔkeh ⁄ 'on the road' (cf. Woodbury 2003:216).

Ca. { -ahah- } in ⁄ oˈhahaʔ ⁄ 'road' (cf. Froman et al. 2002:270).

Se. { -ah- } in ⁄ oːateʔ ⁄ 'road, trail, path, furrow, row of corn kernels'
      (cf. Chafe 1967:51).

Hu. { -ahah- } in ⁄ aˈhahaʔ ⁄ < ahaha > 'ē via' (MS 59:3).

Wy. { -ahah- } in ⁄ huhaˈhɔ̃kjeʔ ⁄ 'he has come along the road'
      (cf. Barbeau 1960:267).

132   PNI * { **-(a)hetkẽʔ** } 'be bad, be ugly, be useless'

Mo. { -hetkʌ̃ʔ } in ⁄ kaˈhetkʌ̃ʔ ⁄ 'it is ugly, hideous, unpleasant'
      (cf. Maracle 1990:25).

Oe. { -hetkʌ̃ʔ } in ⁄ laˈhetkʌ̃ʔ ⁄ 'he's ugly' (cf. Michelson & Doxtator 2002:367).

Oo. { -ahetkẽʔ } in ⁄ wáˈhetkẽʔ ⁄ 'it is bad' (cf. Woodbury 2003:226).

Ca. { -hetkẽʔ } in ⁄ eˈheːtkẽʔ ⁄ 'she is ugly, unruly' (cf. Froman et al. 2002:350).

Se. { -hetkɛ̃ʔ } in ⁄ khetkɛ̃ʔ ⁄ 'I'm bad, ugly' (cf. Chafe 1967:54).

Hu. { -hekẽʔ }, cf. < gahéken > 'paresseux, lasche' (MS 59:74),
      ⁄ ʔ ⁄ assumed present.

133   PNI * { **-ahjoʔtsihs** }, * { **-oʔtsihst-** } 'be salty, be sour'

Tu. { -oʔtʃihst- } in ⁄ nɛjoʔˈtʃisnɛʔ ⁄ 'it is sour' (cf. Rudes 1999:650).

Mo { -ahjoʔtsihs } in ⁄ tejohˈjô:tsihs ⁄ 'salty, it is salty' (cf. Maracle 1990:83).

Oe. { -ahjoʔtsis } in ⁄ tjohˈjô:tsis ⁄ 'salt' (cf. Michelson & Doxtator 2002:423).

Oo. { -ahjoʔtsis } in ⁄ tejóhˈjoʔtsis ⁄ 'it is bitter, it is acid, it is sour'
      (cf. Woodbury 2003:586).

Ca. { -ahjoʔtsihs } in ⁄ teˈjohjoʔtsihs ⁄ 'it is sour; salty water'

(cf. Froman et al. 2002:306).

Se. { -ahjoʔtsis } in / teˈjoːjoʔtsis / 'it's sour' (cf. Chafe 1967:58).

Hu. { -oʔtsihst- } in / aoʔˈtsihsteʔ / <aotsiste> 'cela ē aigre' (MS 59:199), / ʔ / and / h / assumed present.

134   PNI * { **-ahkaɹ-** } 'bark, wood, wood chips'

Tu. { -ahkar- } in / ˈohkarɛh / 'green bark, slice, timber, wood, yoke' (cf. Rudes 1999:18).

Mo. { -ahkaɹ- } in / ohˈkaːɹaʔ / 'wood chips, wood shavings' (cf. Maracle 1990:61).

Oe. { -ahkal- } in / ohkaːˈlâ: / 'wood chip' (cf. Michelson & Doxtator 2002:62).

Oo. { -ahkaR- } in / óhˈkaːæʔ / 'bark, wood chips' (cf. Woodbury 2003:227).

Se. { -ahkaR- } in / ohkaːaʔ / 'chip' (cf. Chafe 1967:37).

Hu. { -ahkaɹ- } in / ohˈkaːɹaʔ / <oˈkara> 'bois' (MS 59:5).

Wy. { -ahkaɹ- } in / kjuhkaˈɹaːteʔ / '(there is) wood' (cf. Barbeau 1960:146).

[cf. Mithun 1984b:271, Michelson 1988:178]

135   PNI * { **-ahnshẽ:h** } 'be ten'

Tu. { -ahθhə̃: } in / ˈwahθhə̃: / 'ten' (cf. Rudes 1999:27).

No. * { -ahshẽ:h } in <Washa> 'Ten' (cf. Rudes 1981a:47).

Su. * { -ahshẽ:h } in <Wásha> '10' (cf. Mithun 1981a:23).

La. <Assem> 'Dix' (Biggar 1924:241).

Mo. { -ahshʌ̃ } in / teˈwahshʌ̃ / 'twenty' (cf. Maracle 1990:23), with duplicative prefix.

Oe. { -ashʌ̃ } in / teˈwashʌ̃ / 'twenty' (cf. Michelson & Doxtator 2002:689), with duplicative prefix.

Oo. { -ashẽh } in / wáˈshẽh / 'ten' (cf. Woodbury 2003:252).

Ca. { -ahshẽ: } in / teˈwahshẽ: / 'twenty' (cf. Froman et al. 2002:605), with duplicative prefix.

Se. { -ashẽ:h } in / washẽ:h / 'ten' (cf. Chafe 1967:40).

Hu. { -ahsẽ:h } in / ˈahshẽ:h / <Aˈsen> 'Dix' (MS 59:15), postconsonantal and final / h / and long vowel assumed present.

Wy. / ahˈsẽh / 'ten' (cf. Barbeau 1960:102).

[cf. Lounsbury 1978:339]

PNI * { -(**a**)**hõht**- } 'ear'

Tu. { -hə̃hn- } in / oˈhə̃hnɛh / 'ear' (cf. Rudes 1999:202).

No. * { -hõhˀt- } in <Suntunke> 'The ears' (cf. Rudes 1981a:46).

La. * { -ahõht- } in <Ahontascon> 'Les oreilles' (Biggar 1924:241).

Mo. { -ahũht- } in / oˈhũhtaʔ / 'an ear, the outer ear' (cf. Maracle 1990:243).

Oe. { -ahũht- } in / oˈhũhtaʔ / 'ear' (cf. Michelson & Doxtator 2002:86).

Oo. { -ahũht- } in / óˈhũhtaʔ / 'ear' (cf. Woodbury 2003:565).

Ca. { -ahõht- } in / oˈhõhtaʔ / 'ear' (cf. Froman et al. 2002:99).

Se. { -aɔ̃ht- } in / ˈoɔ̃htaʔ / 'ear' (cf. Chafe 1967:39).

Hu. { -ahõht- } in / aˈhõhtaʔ / <Ahonta> 'oreille' (MS 59:4), preconsonantal
        / h / assumed present.

Wy. { -ahɔ̃ht- } in / tewahɔ̃hˈteːtsih / 'it has long ears' (cf. Barbeau 1960:273).

[cf. Mithun 1981b:239]

137   PNI * { -(**a**)**hɹaːt**- } 'count'

Tu. { -hraːt- } in / ˈwaʔkhraːt / 'I counted' (cf. Rudes 1999:211).

Mo. { -ahɹat- } in / ˈkâːɹaths / 'I lay down, I count' (cf. Maracle 1990:24).

Hu. { -ahɹaːt- }, cf. <Aˈrati> 'Comter, nombrer' (MS 59:12),
        long vowel assumed present.

138   PNI * { -**ahɹõk**- } 'hear, speak a language, understand'

Su. * { -ahɹõk- } in <Zwróncka> 'forstår' (cf. Mithun 1981a:23).

Mo. { -ahɹũk- } in / kahˈɹũkhaʔ / 'I understand, know,
        am able to speak a language' (cf. Maracle 1990:26).

Oe. { -ahlũk- } in / jũhˈlũkhaʔ / 'she speaks or understands the language'
        (cf. Michelson & Doxtator 2002:66).

Oo. { -ahẽːk- } in / háˈhẽːkhaʔ / 'he understands, he hears'
        (cf. Woodbury 2003:227).

Ca. { -ahõk- } in / kaˈhõːkhaʔ / 'I understand (a language)'
        (cf. Froman et al. 2002:152).

Se. { -aɔ̃ːk- } in / kaːɔ̃khaʔ / 'I hear it, understand it' (cf. Chafe 1967:39).

Hu. { -ahɹõK- }, cf. <Aˈron̯en> 'entendre, obeir, repondre' (MS 59:13).

Wy. { -aːɹɔ̃K- } in / eɹiːwaːˈɹɔ̃kaʔ / 'I hear a story' (cf. Barbeau 1960:283),
        / aʔˈhaːrɔ̃ / 'he heard' (cf. Barbeau 1960:200).

[cf. Mithun 1981a:3]

139   PI * { -a:hs- }, * { -a:hsiʔt- } 'foot'

Ch. { -à:hs- } in { -á:hsù:hkàl- } 'claw' (cf. Feeling & Pulte 1975:179), { -à:hsìht- }
        in / ù:là:sihtế:nî / 'his foot' (cf. Feeling & Pulte 1975:172), with apparent
        exchange of / h / and / ʔ /.

PNI * { -ahs- }, * { -ahsiʔt- } 'foot'.

Tu. { -ahs- } in / ˈkahsɛh / 'my foot' (cf. Rudes 1999:29).

No. * { -ahs- } in < Saseeke > 'The foot' (cf. Rudes 1981a:46).

La. * { -ahʃiʔt- } in < Ouchidascon > 'Les piedz' (Biggar 1924:242).

Mo. { -ahsiʔt- } in / ohˈsî:taʔ / 'foot' (cf. Maracle 1990:64).

Oe. { -ahsiʔt- } in / ohˈsî:taʔ / 'foot' (cf. Michelson & Doxtator 2002:71).

Oo. { -ahsiʔt- } in / ohˈsiʔtaʔ / 'foot, hoof' (cf. Woodbury 2003:238).

Ca. { -ahsiʔt- } in / ohˈsiʔtaʔ / 'feet' (cf. Froman et al. 2002:125).

Se. { -ahsiʔt- } in / kahˈsiʔtaʔ / 'my foot' (cf. Chafe 1967:38).

Hu. { -ahʃiʔt- } in / ahˈʃiʔtaʔ / < Achita > 'Pied' (MS 59:3),
        / h / and / ʔ / assumed present.

[cf. Lounsbury 1978:342, Mithun 1979:183, Rudes 1995:45]

140   PNI * { ahsẽh } 'three'

Tu. / ˈahsə̃ / 'three' (cf. Rudes 1999:30).

No. < Arsa > 'Three' (cf. Rudes 1981a:47).

La. < Asche > 'Trois' (Biggar 1924:241).

Su. < Áxe > '3' (cf. Mithun 1981a:23).

Mo. / ˈahsã̃ / 'three' (cf. Maracle 1990:2).

Oe. / ˈahsã̃ / 'three' (cf. Michelson & Doxtator 2002:69).

Oo. / ˈáhsẽh / 'three' (cf. Woodbury 2003:236).

Ca. / ahˈsẽh / 'three' (cf. Froman et al. 2002:605).

Se. / sẽh / 'three' (cf. Chafe 1967:79).

Hu. / ˈahʃẽhk / < Achink > 'Trois' (MS 59:2), reflexes of * / h / and penultimate
        accent assumed present, idiosyncratic orthographic < in > perhaps by
        analogy with French < cinq > 'five'.

Wy. / ahˈʃẽhk / 'three' (cf. Barbeau 1960:72).

[cf. Mithun 1979:185, Lounsbury 1978:339]

141   PMO * { ahsɹije̠ʔ } 'string'

Mo. / ahseˈɹi:jeʔ / 'string, thread, rope, cable' (cf. Maracle 1990:2).

Oe. / ahsliˈjê: / 'string, thread, yarn' (cf. Michelson & Doxtator 2002:73).

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[cf. Mithun 1981:276, Rudes 1995:55]

142   PNI * { -ahtahkʷ- }, * { ahtaʔ } 'shoe'
       Tu. { -ahnahkʷ- } in / ohˈnahkʷaʔ / 'Indian shoe, moccasin' (cf. Rudes 1999:20).
       No. * { -ahˀtahkʷ- } in <Yuhtaquaahkum> 'A shoemaker' (cf. Rudes 1981a:46).
       La. <Atha> 'Des soulliers' (Biggar 1924:242).
       Mo. / ˈahtaʔ / 'footwear, shoes' (cf. Maracle 1990:2).
       Oe. / ˈahtaʔ / 'shoe' (cf. Michelson & Doxtator 2002:76).
       Oo. { -ahtahkʷ- } in / áhˈtahkʷaʔ / 'shoe' (cf. Woodbury 2003:219).
       Ca. { -ahtahkʷ- } in / ahˈtahkʷaʔ / 'shoes' (cf. Froman et al. 2002:289).
       Se. { -ahtahkʷ- } in / ahˈtahkʷaʔ / 'shoe' (cf. Chafe 1967:38).
       [cf. Mithun 1979:185, Mithun 1981a:3, Mithun 1984b:276]

143   PNI * { -ahtjawẽɹeʔ } 'be forbidden, be prohibited, be strict, be taboo'
       Mo. { -ahtjawʌ̃ɹeʔ } in / wahtjaˈwʌ̃ːɹeʔ / 'it is forbidden, prohibited'
              (cf. Maracle 1990:110).
       Oe. { -ahtjawʌ̃leʔ } in / jakohtjawʌ̃ːˈlê: / 'she's self-disciplined, she's trict with
              herself' (cf. Michelson & Doxtator 2002:85).
       Oo. { -ahtjawæeʔ } in / ohtjáˈwæeʔ / 'it is forbidden' (cf. Woodbury 2003:226),
              change of vowel anomalous, cf. reflex of PNI * { -hẽɹeht- } 'shout'.
       Se. { -ahtjaweeʔ } in / wahtjaweːeʔ / 'it's taboo' (cf. Chafe 1967:38).
       Hu. { -ahtjawẽɹeʔ }, cf. <Atia8enre> 'etre defendu, elicite' (MS 59:26),
              preconsonantal / h / and final / ʔ / assumed present.

144   PNI * { -ahtkaʔw- } 'abandon, give up, leave behind, let go, quit, release'
       Mo. { -ahtkaʔw- } in / kahˈtkâ:wahs / 'I let go, release, quit, desist, I resign,
              abdicate, abandon' (cf. Maracle 1990:35).
       Oo. { -atkaʔw- } in / hóˈtkaʔwih / 'he has left it behind, he has let it go'
              (cf. Woodbury 2003:269).
       Ca. { -ahtkaʔw- } in / sahtkaʔs / 'you forfeit, you let go of things all the time'
              (cf. Froman et al. 2002:415).
       Se. { -atkaʔw- } in / aˈkatkaʔwɛ̃h / 'I've provided it' (cf. Chafe 1967:43).
       Hu. { -ahkaʔw- }, cf. <Aˈka8an> 'cesser, laisser, abandonner q.c. or qlq.'
              (MS 59:5), / ʔ / assumed present.
       Wy. { -ahkaʔw- } in / eˈhɔ̃hkaʔ / 'they will give up' (cf. Barbeau 1960:292).

PNI * { -**ahtõ**- }, * { -**ahtõʔ**- } 'disappear, vanish'

Tu. { -ahnə̃- } in / ˈwahnə̃h / 'it disappears' (cf. Rudes 1999:20).

Mo. { -ahtũʔ- } in / johˈtû̃:ʔũ / 'it has disappeared, vanished, is lost'
   (cf. Maracle 1990:292), with inchoative.

Oe. { -ahtũʔ- } in / johˈtû̃:ũ / 'it has vanished'
   (cf. Michelson & Doxtator 2002:84), with inchoative.

Oo. { -ahtũ- } in / ˈwáhtũk / 'it disappears, it is easy to lose'
   (cf. Woodbury 2003:224).

Ca. { -ahtõ- } in / wahtõhs / 'it disappears' (cf. Froman et al. 2002:89).

Se. { -ahtɔ̃ʔ- } in / ohˈtɔ̃ʔɔ̃h / 'it's lost' (cf. Chafe 1967:38), with inchoative.

Hu. { -ahtõ- }, cf. < Aˈton > 'etre perdu, égarer, oublié, effacé' (MS 59:31).

PNI * { -**ahtseht**- } 'hide'

Tu. { -ahθɛht- } in / kahˈθɛhtaʔ / 'I am hiding it' (cf. Rudes 1999:24).

Mo. { -ahseht- } in / kahˈsehtaʔ / 'I hide something, I assassinate'
   (cf. Maracle 1990:26).

Oe. { -ahseht- } in / kahˈsetaʔ / 'I keep hiding things'
   (cf. Michelson & Doxtator 2002:68).

Oo. { -ahseht- } in / óhˈsehtih / 'she is hiding it, it is hidden'
   (cf. Woodbury 2003:235).

Ca. { -ahseht- } in / kahˈsehtaʔ / 'I hide s.t.' (cf. Froman et al. 2002:155).

Se. { -ahseht- } in / aˈkahsehtɔ̃h / 'I've hidden it' (cf. Chafe 1967:38).

Hu. { -ahseht- }, cf. < Aseˈti > 'cacher, dissimuler, déguizer' (MS 59:15), first
   / h / assumed present.

Wy. { -ahseht- } in / ehʃaˈtahseht / 'you will hide' (cf. Barbeau 1960:302).

PNI * { -**ahtskehnh**- } 'argue for, compete for, contend for, fight for'

Tu. { -ahθkjɛnh- } in / rahˈθkjɛnhaʔ / 'he is fighting for it, he is competing for it'
   (cf. Rudes 1999:27).

Mo. { -ahskehnh- } in / kahˈskehnhahs / 'I argue for, strive for, contend;
   I am a rival for' (cf. Maracle 1990:27).

Oe. { -askenh- } in / kaˈskenhas / 'I try to take something away from someone,
   I'm greedy' (cf. Michelson & Doxtator 2002:121).

Oo. { -askehnh- } in / hû́ˈskehnhas / 'they contend for it'
   (cf. Woodbury 2003:249).

148   PNI * { **ahtsõh** }, * { **atsõh** } 'not yet, still'

Tu. / ˈaθɔ̃ theʔ / 'not yet' (cf. Rudes 1999:50).

Oe. / ˈahsũ / 'not yet' (cf. Michelson & Doxtator 2002:75).

Oo. / ˈáhsũh / 'again, more, yet, still' (cf. Woodbury 2003:241).

Ca. / ahsõh / 'still, yet, some more' (cf. Froman et al. 2002:674).

Hu. / ˈahsõh / < aˈson > 'encore' (MS 59:111),

          final / h / and penultimate accent assumed present.

Wy. / sɔ̃h / 'still' (cf. Barbeau 1960:288).

149   PI * { -**ahtsõ:h**- } 'night'

Ch. { -àhsɑ̃̀:h- } in / ùhsɑ̃́:ʔî: / 'night' (cf. Feeling & Pulte 1975:180),

          / sù:hsɑ̃́:hìtɑ̃́ / 'overnight' (cf. Feeling & Pulte 1975:155).

PNI * { -ahtsõh- }, * { -ahtsõt- } 'darkness, night'.

Tu. { -ahθɔ̃ʔn- } in / θwahˈθɔ̃:ʔna:t / 'night' (cf. Rudes 1999:618).

No. * { -ahsõʔt- } in < Asunta > 'Night-time' (cf. Rudes 1981a:47).

La. * { -ahsõh- } in < Assomaha > 'La lune' (BG244).

Mo. { -ahsũt- } in / ahˈsũ:taʔ / 'night' (cf. Maracle 1990:2).

Oe. { -ahsũt- } in / swahsũ:ˈtat / 'one night' (cf. Michelson & Doxtator 2002:75).

Oo. { -ahsũt- } in / áhˈsũ:taʔ / 'darkness, shadow' (cf. Woodbury 2003:239).

Ca. { -ahsõh- } in / ahˈsõheh / 'night' (cf. Froman et al. 2002:603).

Se. { -ahsɔ̃t- } in / wahsɔ̃tateʔ / 'night (is present)' (cf. Chafe 1967:38).

Hu. { -ahsõt- } in / ahˈsõ:taʔ / < Asonta > 'nuit' (MS 59:17),

          / h / assumed present.

Wy. { -ahsɔ̃t- } in / ahˈsɔ̃tɛ̃haɔ̃ʔ / 'all night' (cf. Barbeau 1960:277).

[cf. Rudes 1995:41]

150   PNI * { -**ahtsõtɹ**- } 'connect, fasten, join together'

Tu. { -ahθɔ̃ʔr- } in / nɔ̃hrahˈθɔ̃ʔreʔ / 'he will fasten it end-to-end, he will splint it'
          (cf. Rudes 1999:322).

Mo. { -ahsũteɹ- } in / kahsũˈteɹhaʔ / 'I join something
          to another of the same type' (cf. Maracle 1990:27).

Oe. { -ahsũtl- } in / waʔtkahˈsũtlɑ̃ʔ / 'I connected it'
          (cf. Michelson & Doxtator 2002:76).

Oo. { -ahsũtR- } in / tehóhˈsũ:tæ:ʔ / 'he has joined them together'
          (cf. Woodbury 2003:240).

Ca. { -ahsõtɹ- } in / tɛ̃ˈsahsõtɹɛ̃ʔ / 'you will join two things together'

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(cf. Froman et al. 2002:171).

151   PNI * { **-akanst-** }, * { **-anst-** }, * { **-kanst-** } 'be durable, be hard, be strong'
Tu. { -akaθn- } in / waˈka:θnɛʔ / 'it is hard, it is strong' (cf. Rudes 1999:51).
No. { -akasʔt- } in <Wokoste> 'Hard', <Wakaste> 'Strong'
        (cf. Rudes 1981a:47).
Mo. { -atst- } in / waˈkatsteʔ / 'I am strong, durable, solid, firm'
        (cf. Maracle 1990:104).
Oe. { -akatst- } in / jakaũnhaˈkatsteʔ / 'she's durable, her life is everlasting'
        (cf. Michelson & Doxtator 2002:755).
Oo. { -kast- } in / skaɛ́taˈkastaʔ / 'ironwood' (cf. Woodbury 2003:780).
Ca. { -kahst- } in / saˈtahkahsthaʔ / 'you do endure' (cf. Froman et al. 2002:104).
Se. { -kast- } in / ɔ̃ˈkekastɛ̃h / 'it lasted me a long time' (cf. Chafe 1967:64).
Hu. { -axast- }, cf. <ga˳aste> 'etre fort, ferme' (MS 59:64).

152   PNI * { **-ake:h** }, * { **-ke:h** } 'be a number, be an amount, be that many'
Tu. { -akjɛ: } in / nɛkanə̃hˈsa:kjɛ: / 'there are two houses' (cf. Rudes 1999:37).
Mo. { -ke } in / tekaˈnũhsake / 'two houses' (cf. Maracle 1990:174).
Oe. { -ke } in / tewatoˈkwâ:tslake / 'two spoons, two spoonfuls'
        (cf. Michelson & Doxtator 2002:467).
Oo. { -keh } in / tekanṹhsaˈkeh / 'two houses' (cf. Woodbury 2003:452).
Ca. { -ake: } in / nikanaʔˈtsa:ke: / 'an amount of pails'
        (cf. Froman et al. 2002:403).
Se. { -ake:h } in / wa:ke:h / 'it's (composed of) separate entities'
        (cf. Chafe 1967:39).
Hu. { -Ke:h }, cf. <ga˳e> 'etre tel nomb. de ch. ou Psonn.' (MS 59:65),
        / h / assumed present.
Wy. { -Keh } in / iˈwɛ̃:tajeh / 'days' (cf. Barbeau 1960:180).

153   PNI * { **-aksɛ̃:h** } 'be bad'
Tu. { -aksə̃: } in / ˈwa:ksə̃: / 'it is bad' (cf. Rudes 1999:40).
No. * { -aksɛ̃:h } in <Dodoitchewakeraksa> 'Unhappy' (cf. Rudes 1981a:47).
Su. * { -aks- } in <Serwquácksi> 'Tu ast ond' (cf. Mithun 1981a:23).
Mo. { -aksʌ̃ } in / joʔˈtaksʌ̃ / 'it is bad, mean, badly done, in a bad, poor state'
        (cf. Maracle 1990:17).
Oe. { -aksʌ̃ } in / wahsũˈtaksʌ̃ / 'it's a bad night'

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(cf. Michelson & Doxtator 2002:92).

Oo. { -aksẽh } in / skẽ́hˈnaksẽh / 'fox' (cf. Woodbury 2003:782).

Hu. { -ahʃẽ:h }, cf. <gachen> 'laid, mauv. meprisable' (MS 59:44),
        long vowel and / h / assumed present.

154   PNI * { **-anstaɹ-** } 'cry'

Tu. { -aθnar- } in / nɛˈka:θnar / 'I am crying' (cf. Rudes 1999:52).

Mo. { -atstaɹ- } in / kaˈtstaɹhaʔ / 'I weep, cry, shed tears' (cf. Maracle 1990:34).

Ca. { -ahstaR- } in / kahˈsta:haʔ / 'I am crying' (cf. Froman et al. 2002:76).

Se. { -astaR- } in / jõsta:haʔ / 'she's crying' (cf. Chafe 1967:40).

Hu. { -astaɹ- }, cf. <Astaron> 'pleurer pr. qlq Mort' (MS 59:18).

155   PNI * { **ansteh** } 'outdoors, outside'

Tu. / ˈaθnɛh / 'outside' (cf. Rudes 1999:52),
        unexpected absence of penultimate lengthening.

Mo. / ˈatste / 'outside' (cf. Maracle 1990:375).

Oe. / ˈatsteʔ / 'outside' (cf. Michelson & Doxtator 2002:270).

Oo. / ˈásteh / 'outdoors' (cf. Woodbury 2003:248).

Ca. / ahsteh / 'outside' (cf. Froman et al. 2002:221).

Se. / asteh / 'outside, outdoors' (cf. Chafe 1967:40).

Hu. / ˈasteh / <Aste> 'dehors' (MS 59:19), / h / assumed present.

Wy. / ˈasteh / 'outside' (cf. Barbeau 1960:244).

156   PI * { **-aɹa:hsu-** } 'shoe'

Ch. { -àlã:sŭ:l- } in / àlã:sŭ:lṍ: / 'shoe' (cf. Feeling & Pulte 1975:38),
        consiting of semireflexive { -àr- }, { -à:hs- } 'foot', and the element
        { -ù:l- } 'cover', common to other items worn, e.g. 'gloves', 'pants',
        'saddle', etc.

PNI * { -aɹahso- } 'shoe'.

Tu. { -arahso- } in / oˈrahsoʔ / 'shoe' (cf. Rudes 1999:645).

Hu. { -aɹahʃ- } in / aˈɹahʃoʔ / <Arachio> 'souliers' (MS 59:10),
        / h / assumed present.

[cf. Mithun 1984b:276, Rudes 1995:53,64]

157   PNI * { **-aɹaʔtse:ʔ** } 'be cousins'

Tu. { -araʔθɛʔ } in / roˈraʔθɛʔ / 'his cousin' (cf. Rudes 1999:47),

with unexpected loss of vowel length in final syllable.

Mo. { -aɹaʔseʔ } in ⁄ ũkjaɹaʔ'sê:haʔ ⁄ 'my cousin' (Deering & Delisle 1976:32).

Oe. { -alaʔseʔ } in ⁄ ũkja'lâ:seʔ ⁄ 'my cousin' (cf. Michelson & Doxtator 2002:98).

Oo. { -aæʔseʔ } in ⁄ ű'kjaæʔseʔ ⁄ 'we two are cousins, my cousin'
        (cf. Woodbury 2003:77).

Ca. { -aʔse:ʔ } in ⁄ õ'kjaʔse:ʔ ⁄ 'my cousin' (cf. Froman et al. 2002:610).

Se. { -æ:ʔse:ʔ } in ⁄ a'kjææʔse:ʔ ⁄ 'we are cousins' (cf. Chafe 1967:37).

Hu. { -aɹaʔse:ʔ }, cf. <Arase> 'Cousin' (MS 59:11),
        long vowel and reflexes of * ⁄ ʔ ⁄ assumed present.

Wy. { -aɹaʔseʔ } in ⁄ hɔ̃'ɹaʔseʔ ⁄ 'they are cousins' (cf. Barbeau 1960:100).

158   PI * { aɹeʔ } 'about, almost, approximately'

Ch. ⁄ àlɛ̋: ⁄ 'almost, and, but, or' (cf. Feeling & Pulte 1975:38).

PNI * ⁄ 'a:ɹeʔ ⁄ 'about, again, approximately'.

Tu. ⁄ 'a:rɛʔ ⁄ 'about, approximately' (cf. Rudes 1999:49).

Mo. ⁄ 'a:ɹeʔ ⁄ 'again, repeatedly' (cf. Maracle 1990:1).

Oe. ⁄ 'aleʔ ⁄ 'again' (cf. Michelson & Doxtator 2002:99).

Oo. ⁄ 'eʔ ⁄ 'again' (cf. Woodbury 2003:387).

Ca. ⁄ 'e:ʔ ⁄ 'again' (cf. Froman et al. 2002:676).

Se. ⁄ aeʔ ⁄ 'again' (cf. Chafe 1967:89).

Hu. ⁄ 'a:ɹeʔ ⁄ <are> 'iterum' (Fraser 1920:90),
        penultimate accent and ⁄ ʔ ⁄ assumed present.

[cf. Rudes 1995:36]

159   PNI * { -a:t } 'be inside, be one, be present, be within, exist'

Tu. { -a:t } in ⁄ 'i:wa:t ⁄ 'it (inanimate) is in' (cf. Rudes 1999:54).

Mo. { -at } in ⁄ sewato'kwâ:tsheɹat ⁄ 'one spoon, one spoonful'
        (cf. Maracle 1990:123).

Oe. { -at } in ⁄ swato'kwâ:tslat ⁄ 'one spoon, one spoonful'
        (cf. Michelson & Doxtator 2002:255).

Oo. { -at- } in ⁄ ɛ̋'wa:tak ⁄ 'it will be in it' (cf. Woodbury 2003:79).

Ca. { -a:t } in ⁄ 'i:wa:t ⁄ 'it is contained' (cf. Chafe 1967:67).

Se. { -a:t } in ⁄ i:wa:t ⁄ 'it's inside' (cf. Chafe 1967:40).

Hu. { -a:t }, cf. <At> 'q.c. etre dedans' (MS 59:19), long vowel assumed
        present.

Wy. { -at } in ⁄ 'skwɛ̃:tat ⁄ 'one day' (cf. Barbeau 1960:310).

160   PNI * { -**atati**- }, * { -**atatj**- } 'speak, talk'

Mo. { -atati- } in / kaˈta:tihs / 'I talk, I speak' (cf. Maracle 1990:31).

Oe. { -atati- } in / lataˈtiheʔ / 'he speaks' (cf. Michelson & Doxtator 2002:139).

Oo. { -atatj- } in / hatáˈtjahaʔ / 'he talks, he speaks, he is the speaker'
      (cf. Woodbury 2003:85).

Hu. { -atati- }, { -atatj- }, cf. < Atati > 'parler' (MS 59:22).

Wy. { -atakj- } in / tehaˈtakjah / 'he talks' (cf. Barbeau 1960:145).

161   PI * { -**atawẽ**- } 'bathe, swim'

Ch. { -àtàwò- } in / kàtàwó:ʔắ: / 'I'm bathing, I'm swimming'
      (cf. Feeling & Pulte 1975:8).

PNI * { -atawẽ- } 'swim, bathe'.

Tu. { -aʔnawə̃- } in / kaʔˈna:wə̃hs / 'I am swimming, I am bathing'
      (cf. Rudes 1999:81).

Mo. { -atawʌ̃- } in / kaˈta:wʌ̃hs / 'I swim, bathe, take a bath'
      (cf. Maracle 1990:31).

Oe. { -atawʌ̃- } in / kataˈwʌ̃heʔ / 'I'm taking a bath, I'm swimming'
      (cf. Michelson & Doxtator 2002:147).

Oo. { -atawẽ- } in / ũtáˈwẽhaʔ / 'she is swimming' (cf. Woodbury 2003:97).

Ca. { -atawẽ- } in / hoˈta:wẽh / 'he did swim' (cf. Froman et al. 2002:327).

Se. { -atawẽ- } in / hata:wẽh / 'he's bathing' (cf. Chafe 1967:41).

Hu. { -atawẽ- }, cf. < ata8an > 'Se Baigner' (MS 67:26).

[cf. Lounsbury 1978:342, Mithun 1979:185, Mithun 1984b:274,
      Rudes 1995:37]

162   PI * { -**atawẽ:hɹat**- } 'climb over, go over'

Ch. { -àtàwò:hìlàt- } 'climb over' (King 1975:179), cf. also { -àwò:hìlò- }
      'go over a hill' (King 1975:182).

PNI * { -atawẽhɹat- }, * { -awẽhɹat- } 'climb over, go over',
      the latter form occurring with incorporated nouns.

Mo. { -atawʌ̃hɹat- } in / kataˈwʌ̂:ɹaths / 'I go over something'
      (cf. Maracle 1990:351).

Oe. { -atawʌ̃hlat- } in / tekataˈwʌ̂:lats / 'I'm going over it (e.g. a fence)'
      (cf. Michelson & Doxtator 2002:148).

Oo. { -atawẽhæ:t- } in / thotawẽ́ˈhæ:tih / 'he has come climbing up and over'

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(cf. Woodbury 2003:98).

Se. { -atawɛ̃ɛ̃t- } in / oʔwataˈwɛ̃ːɛ̃t / 'it went up, climbed over'
(cf. Chafe 1967:45).

Hu. { -awɛ̃hɹat- }, cf. <A8enˈrati> 'passer par dessus q.c. ou qlq.' (MS 59:10).

[cf. Lounsbury 1978:342]

163   PI * { **-ateːhɛ̃ːh**- } 'be ashamed, be embarrassed'

Ch. { -àtèːhɔ̀ːh- } in / ã̀ːtèːhǒːhskã́ː / 'he's embarrassed'
(cf. Feeling & Pulte 1975:8).

PNI * { -atehɛ̃h- } 'be ashamed, be embarrassed'.

Mo. { -atehʌ̃h- } in / kaˈtehʌ̃hs / 'I am ashamed' (cf. Maracle 1990:32).

Oe. { -atehʌ̃h- } in / laˈtehʌ̃hseʔ / 'he feels ashamed'
(cf. Michelson & Doxtator 2002:155).

Oo. { -atehɛ̃h- } in / káˈtehɛ̃hs / 'I feel ashamed' (cf. Woodbury 2003:113).

Ca. { -atehɛ̃h- } in / kaˈtehɛ̃hs / 'I am embarrassed, ashamed'
(cf. Froman et al. 2002:463).

Se. { -ateɛ̃h- } in / haˈteɛ̃s / 'he gets embarrassed' (cf. Chafe 1967:41).

Hu. { -atehɛ̃h- }, cf. <Atehendi> 'avoir honte' (MS 59:22).

Wy. { -atehɛ̃h } in / aʔˈhatehɛ̃h / 'he was ashamed' (cf. Barbeau 1960:253).

164   PNI * { **-atek**- } 'be burning, burn'

Tu. { -aʔnɛk- } in / waˈʔoːʔnɛk / 'it burned' (cf. Rudes 1999:525).

Mo. { -atek- } in / joˈtekhaʔ / 'it is burning, in flames, on fire'
(cf. Maracle 1990:21).

Oe. { -atek- } in / ə̃joˈtekeʔ / 'it will burn' (cf. Michelson & Doxtator 2002:156).

Oo. { -atek- } in / óˈtekhaʔ / 'it burns' (cf. Woodbury 2003:116).

Ca. { -atek- } in / oˈteːkhaʔ / 'fire; it is burning (cf. Froman et al. 2002:42).

Se. { -atek- } in / oteːkhaʔ / 'it's burning' (cf. Chafe 1967:41).

Hu. { -ateK- }, cf. <Ate̯en> 'brusler, y avoir du feu' (MS 59:22).

Wy. { -ateK- } in / uˈwaʔtaːte / 'she was burnt' (cf. Barbeau 1960:161).

165   PNI * { **-atekaʔt**- } 'burn, cause to burn, light a fire'

Tu. { -aʔnɛkaʔt- } in / roʔnɛˈkaʔthaʔ / 'he lights it' (cf. Rudes 1999:525).

Mo. { -atekaʔt- } in / kateˈkâːthaʔ / 'I make a fire, light a fire, I light up my pipe'
(cf. Maracle 1990:32).

Oe. { -atekaʔt- } in / ajũteːˈkâːteʔ / 'she would make a fire'

(cf. Michelson & Doxtator 2002:156).

Oo. { -ateka?t- } in / káˈteka?tha? / 'I light fires' (cf. Woodbury 2003:112).

Ca. { -ateka?t- } in / õˈtek?atha? / 's.o. burns up s.t.' (cf. Froman et al. 2002:42).

Se. { -ateka?t- } in / akateˈka?tɔ̃h / 'I've made a fire' (cf. Chafe 1967:41).

Hu. { -atexa?t- }, cf. < Ate˳ati > 'fe. du feu, brusler q.c.' (MS 59:22),
   / ? / assumed present.

Wy. { -ateja?t- } in / a?jɔ̃ˈwaa?tateːja?t / 'they burned her body'
   (cf. Barbeau 1960:157).

166   PNI * { **-ateka?tahkw-** } 'use to light a fire'

Tu. { -a?nɛka?nahkw- } in / jɔ̃?nɛka?ˈnahkhwa? / 'lighter, match'
   (cf. Rudes 1999:526).

Mo. { -ateka?tahkw- } in / jũteka?ˈtahkhwa? / 'matches, a lighter, flint'
   (cf. Maracle 1990:20).

Oe. { -ateka?tahkw- } in / jũteka?ˈtakhwa? / 'she or someone uses it
   to make a fire' (cf. Michelson & Doxtator 2002:157).

Oo. { -ateka?tahkw- } in / hateká?ˈtakhwa? / 'he lights fires with it'
   (cf. Woodbury 2003:111).

Ca. { -ateka?tahkw- } in / õteka?ˈtahkhwa? / 'fire-making tool; matches'
   (cf. Froman et al. 2002:194).

Se. { -ateka?tahkw- } in / jɔ̃teka?ˈtahkwa? / 'fire-making tool'
   (cf. Chafe 1967:41).

Hu. { -atexa?tahkw- } in / õtexa?ˈtahkhwa? / < onte˳ataˈk8a > 'batefeu'
   (MS 59:22), / ? / and / h / assumed present.

167   PNI * { **-atetsjẽ?t-** } 'be a doctor, cure, heal'

Mo. { -atetsjʌ̃?t- } in / raˈtetsjʌ̃?ths / 'a doctor, healer' (cf. Maracle 1990:340).

Oe. { -atetsjʌ̃?t- } in / wa?shakoˈtetsjʌ̃hte? / 'he doctored her,
   he treated her for an illness' (cf. Michelson & Doxtator 2002:167).

Oo. { -atetsjẽ?t- } in / háˈteːtsjẽ?ts / '(he is a) healer, (he is a) doctor'
   (cf. Woodbury 2003:116).

Ca. { -atetsẽ?t- } in / haˈteːtsẽ?s / 'he is a doctor' (cf. Froman et al. 2002:93).

Hu. { -atetsẽ?t- }, cf. < Atetsenti > 'etre Medecin' (MS 59:161),
   / ? / assumed present.

Wy. { -atetsɛ̃?t- } in / hɔ̃ˈtetsɛ̃?s / 'they are doctors' (cf. Barbeau 1960:279).

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PNI * { **-atẽnaʔtshɹ-** } 'food taken along, provisions'

    Tu. { -aʔnə̃tahtʃr- } in / oʔnə̃ˈtahtʃrɛh / 'provisions' (cf. Rudes 1999:92),
        final cluster anomalous.

    Mo. { -atʌnaʔtsheɹ- } in / atʌ̃ˈnâ:tsheɹaʔ / 'food, groceries, provisions'
        (cf. Maracle 1990:5).

    Oe. { -atʌnaʔtsl- } in / atʌ̃ˈnâ:tsliʔ / 'groceries, lunch'
        (cf. Michelson & Doxtator 2002:182).

    Oo. { -atẽnaʔtshR- } in / atẽ́ˈnaʔtshæʔ / 'groceries' (cf. Woodbury 2003:139).

    Ca. { -atẽnaʔtshɹ- } in / aˈtẽnʔatshɹaʔ / 'lunch; groceries'
        (cf. Froman et al. 2002:142).

    Se. { -atẽnɔ̃ʔshR- } in / aˈtẽnɔʔshæʔ / 'food, lunch' (cf. Chafe 1967:42).

    Hu. { -atẽnaʔʃhɹ- } in / atẽˈnaʔʃhɹaʔ / <Atendacha> 'Provisions, vivres,
        viatique' (MS 59:23), / ʔ / assumed present, / ɹ / lost in Rock dialect.

    Wy. { -atẽnaʔʃɹ- } in / tahɔ̃tẽˈnaʔʃɹahʃaht / 'their food ran out'
        (cf. Barbeau 1960:295).

169 PNI * { **-athahjõni:h** } 'be a member of the Wolf Clan' (limited to Iroquoia)

    Oe. { -athahjũni } in / othahjũ̃ˈni / 'wolf' (cf. Michelson & Doxtator 2002:697).

    Oo. { -athahjũnih } in / akathahjṹˈnih / 'I am a member of the Wolf Clan'
        (cf. Woodbury 2003:283).

    Ca. { -athahjõni: } in / hothahˈjõ·ni: / '(he is) Wolf clan'
        (cf. Froman et al. 2002:609).

170 PNI * { **-athoɹ-** }, * { **athoʔ** } 'be cold, be cold out, cold'

    Tu. / ˈa:thoʔ / 'cold' (cf. Rudes 1999:59).

    No. * { -athoɹ- } in <Watorae> 'Cold' (cf. Rudes 1981a:47).

    La. <Athau> 'Froyt' (Biggar 1924:244).

    Mo. { -athoɹ- } in / joˈtho:ɹeʔ / 'it is cold (weather)' (cf. Maracle 1990:333).

    Oe. { -athol- } in / jothoːˈlê: / 'it's cold' (cf. Michelson & Doxtator 2002:197).

    Oo. { -athoR- } in / óˈtho:weʔ / 'it is cold [of weather or temperature in a room]'
        (cf. Woodbury 2003:287).

    Ca. { -athoR- } in / oˈtho:weʔ / 'it is cold' (cf. Froman et al. 2002:60).

    Se. { -athoR- } in / otho:weʔ / 'it's cold' (cf. Chafe 1967:42).

    Hu. / ˈathoʔ / <Aθo> 'froid' (MS 59:30),
        penultimate accent and / ʔ / assumed present.

    Wy. { atuʔ } in / aˈtuʔjeh / 'north [lit. at the cold]' (cf. Barbeau 1960:69).

171   PI * { -**athõ:**- } 'hear'

    Ch. { -àthⰅ̃:k- } in ∕ hàthⰅ̃:kⰅ̃:kɑ̃: ∕ 'hear it!' (cf. Feeling & Pulte 1975:61).

    PNI * { -athõt- }, * { -athõta:t- } 'agree, consent, hear, listen, pay attention'.

    Tu. { -athə̃hna:t- } in ∕ raˈthə̃hna:tʃ ∕ 'he listens' (cf. Rudes 1999:58),

          partially reshaped by analogy with { -hə̃hn- } 'ear'.

    No. * { -aʔthõta:ʔt- } in ＜Satuntatag＞ 'To listen' (cf. Rudes 1981a:48).

    Mo. { -athũtat- } in ∕ kaˈthũ:taths ∕ 'I listen, consent, obey, hearken to'

          (cf. Maracle 1990:33).

    Oe. { -athũtat- } in ∕ kathũ:ˈtats ∕ 'I agree to it'

          (cf. Michelson & Doxtator 2002:198).

    Oo. { -athũtat- } in ∕ háˈthũ:tats ∕ 'he pays attention' (cf. Woodbury 2003:291).

    Ca. { -athõta:t- } in ∕ ẽˈkathõ:ta:t ∕ 'I will consent' (cf. Froman et al. 2002:419).

    Se. { -athɔ̃t- } in ∕ aˈkathɔ̃:teʔ ∕ 'I've heard it' (cf. Chafe 1967:42).

172   PNI * { -**athsinh**- }, * { -**athsinhatshɹ**- } 'garter' (limited to Iroquoia)

    Mo. { -athsinh- } in ∕ aˈthsinhaʔ ∕ 'a garter' (cf. Maracle 1990:6).

    Oe. { -atshinh- } in ∕ aˈtshinhaʔ ∕ 'garter' (cf. Michelson & Doxtator 2002:265).

    Ca. { -atshinhahsth- } in ∕ oˈtshinhahsthaʔ ∕ 'garters'

          (cf. Froman et al. 2002:132), final cluster remade.

    Se. { -atshihashR- } in ∕ aˈtshihashæʔ ∕ 'garters' (cf. Chafe 1967:44).

173   PNI * { -**aths?aht**- } 'be burnt, be consumed, be used up, burn, use oneself up'

    Tu. { -atʃʔahn- } in ∕ watʃˈʔahnə̃ ∕ 'it drips' (cf. Rudes 1999:7).

    Mo. { -athsaʔaht- } in ∕ wathsaˈʔahtũ ∕ 'it is burnt' (cf. Maracle 1990:110).

    Oe. { -atshaʔaht- } in ∕ katshaˈʔathaʔ ∕ 'I'm burning it'

          (cf. Michelson & Doxtator 2002:262).

    Oo. { -ats?aht- } in ∕ watsˈʔathaʔ ∕ 'it gets used up' (cf. Woodbury 2003:305).

    Ca. { -ats?aht- } in ∕ hawathneˈkats?aht ∕ 'water is all gone'

          (cf. Froman et al. 2002:356).

174   PNI * { -**ati**- }, * { -**atj**- }, * { -**õti**- }, * { -**õtj**- } 'abandon, throw, throw out'

    Tu. { -aʔni- } in ∕ wahˈro:ʔniʔ ∕ 'he threw' (cf. Rudes 1999:420);

          { -ə̃ʔnj- } in ∕ roʔˈtə̃:ʔnjə̃hs ∕ 'he shoots arrows' (cf. Rudes 1999:94).

    Mo. { -atj- } in ∕ jewaˈkatjehs ∕ 'I throw away, throw out, get rid of'

(cf. Maracle 1990:15); { -ũtj- } in / jekheja?ˈtũtjes /
'I throw, put someone out' (cf. Maracle 1990:14).

Oe. { -atj- } in / jewaˈkatjehse? / 'I'm throwing it'
(cf. Michelson & Doxtator 2002:295); { -ũti- } in / ʌ̃tisa?kʌ̃hlũːˈtî /
'you will throw dirt' (cf. Michelson & Doxtator 2002:295).

Oo. { -atj- } in / áˈkaːtjũh / 'I've thrown it out' (cf. Woodbury 2003:188); { -ũti- }
in / wa?akohnéːˈkũːti? / 'she threw out the water'
(cf. Woodbury 2003:188).

Ca. { -ati- } in / he?ˈsaːtih / 'throw it away from me'
(cf. Froman et al. 2002:338); { -õti- } in / sẽniːˈtskɹõːtih / 'spit'
(cf. Froman et al. 2002:309).

Se. { -atj- } in / hewakatjɔ̃ːh / 'I've thrown it' (cf. Chafe 1967:44); { -ɔ̃ti- } in
/ waotwijɔ̃ːti? / 'he abandoned his children' (cf. Chafe 1967:78).

Hu. { -ati- }, { -atj- }, cf. <Ation> 'jetter, laisser, abandonner q.c.' (MS 59:28);
{ -õti- }, { -õtj- }, cf. <Ontion> 'laisser, abandonner, rejetter qlq. ou q.c.'
(MS 59:194).

Wy. { -ati- } in / haˈhuːti? / 'he threw it' (cf. Barbeau 1960:250); { -ɔ̃ti- } in
/ a?sajuwa?ˈtɔ̃ti? / 'he threw them out' (cf. Barbeau 1960:244).

175 PNI * { **-atiɹõːt-** } 'draw, pull, stretch'
Mo. { -atiɹũt- } in / watiˈɹũtha? / 'it is stretchy, it pulls' (cf. Maracle 1990:110).
Oe. { -atilũt- } in / tekatiˈlũtha? / 'I'm stretching it'
(cf. Michelson & Doxtator 2002:205).
Oo. { -atijẽt- } in / tkatíˈjẽtha? / 'I pull it toward me' (cf. Woodbury 2003:157).
Ca. { -atijõːt- } in / tejoːˈtiːjõːt / 'it is stretched' (cf. Froman et al. 2002:319).
Se. { -atijɔːt- } in / tejotiːjɔ̃ːt / 'it's stretched' (cf. Chafe 1967:43).
Hu. { -atiɹõːt- }, cf. <Atiront> 'tirer, attirer a soy' (MS 59:29),
long vowel assumed present.
Wy. { -atiɹɔ̃t- } in / tahatiɹɔ̃ːtɛ̃? / 'he drew it' (cf. Barbeau 1960:233).
[cf. Michelson 1988:173]

176 PNI * { **-atja?tawi?t-** } 'get dressed, put on' (limited to Iroquoia)
Mo. { -atja?tawi?t- } in / katja?taˈwîːtha? / 'I put on my coat, shirt, dress,
I get dressed' (cf. Maracle 1990:152).
Oe. { -atja?tawi?t- } in / katja?taˈwîːtha? / 'I'm putting on a dress, shirt, jacket,
coat, or blouse' (cf. Michelson & Doxtator 2002:301).

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Oo. { -atjaʔtawiʔt- } in / ẽka:tjáʔtaˈwiʔtaʔ / 'I will put on my clothes'
  (cf. Woodbury 2003:194).

Ca. { -atjaʔtawiʔt- } in / satjaʔtaˈwiʔthaʔ / 'you are always putting it on'
  (cf. Froman et al. 2002:589).

Se. { -atjaʔtawiʔt- } in / atjaʔtaˈwiʔshæʔ / 'smock' (cf. Chafe 1967:45).

177 PMO * { **-atjenawahst-** } 'harbour, hold back, keep'

Mo. { -atjenawahst- } in / wakatjenaˈwahstũ / 'I am harbouring,
  holding something back' (cf. Maracle 1990:103).

Oe. { -atjenawast- } in / latjenaˈwastaʔ / 'he's holding onto it, he's keeping or
  preserving it, he's using it up' (cf. Michelson & Doxtator 2002:307).

178 PNI * { **-atjets-** } 'be cheap, be easy, be profligate, squander'

Tu. { -aʔnjeθ- } in / raʔnjeˈθaʔthaʔ / 'he is profligate, he squanders'
  (cf. Rudes 1999:104), with causative.

Mo. { -atjes- } in / waˈtje:sã̃ / 'it is easy' (cf. Maracle 1990:110).

Oe. { -atjes- } in / watje:ˈsã̃ / 'it's cheap' (cf. Michelson & Doxtator 2002:308).

Oo. { -atjehs- } in / watjehˈsaʔkeh / 'it is easy' (cf. Woodbury 2003:203).

Ca. { -atjes- } in / waˈtje:sẽh / 'it is easy', Lower Ca. / waˈkje:sẽh /
  (cf. Froman et al. 2002:594).

Hu. { -atjes- }, cf. <Atiesen> 'q.c. etre possib, facile' (MS 59:59).

Wy. { -akjes- } in / aˈkje:saʔs / 'it gets easy' (cf. Barbeau 1960:284),
  with inchoative.

179 PI * { **-atkahthw-** } 'look at'

Ch. { -àkàhth- } in / kàkã̀:thǒ:hstíː / 'I'm looking at it'
  (cf. Feeling & Pulte 1975:36).

PNI * { -atkahtho- }, * { -atkahthw- } 'look at'.

Tu. { -atkahtho- } in / raˈtkahthohs / 'he looks' (cf. Rudes 1999:62).

La. * { -atkahthw- } in <Quatgathoma> 'Regardez moy' (Biggar 1924:243).

Mo. { -atkahtho- } in / kaˈtkahthohs / 'I look, I see' (cf. Maracle 1990:35).

Oe. { -atkatho- } in / wakaˈtkathũ / 'I have seen it'
  (cf. Michelson & Doxtator 2002:213).

Oo. { -atkathw- } in / káˈtkathwas / 'I look at it' (cf. Woodbury 2003:267).

Ca. { -atkahtho- } in / hẽˈtshahtkahtoʔ / 'you will look back'
  (cf. Froman et al. 2002:415).

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Hu. { -akahkw- }, cf. < Aka'k8i > 'Regarder' (MS 59:4).

Wy. { -akahkw- } in / ɔ̃'kahkwaʔ / 'someone looked' (cf. Barbeau 1960:233).

[cf. Mithun 1981b:237]

180 PNI * { -**atkɛ̃htsɹ**- } 'purulence, pus'

Tu. { -atkə̃hθr- } in / o'tkə̃hθrɛh / 'purulence, pus, rot, slime'
      (cf. Rudes 1999:64).

Se. { -atkɛ̃hsR- } in / o'tkɛ̃hsæʔ / 'pus' (cf. Chafe 1967:43).

Hu. { -akɛ̃hʃɹ- } in / o'kɛ̃hʃɹaʔ / < Okencha > 'pourriture' (MS 59:6),
      / h / assumed present, / ɹ / has become / h / in Rock dialect.

181 PNI * { -**atkõʔ** } 'be a sorceror, be a spirit, have inherent power'

Tu. { -atkə̃ʔ } in / 'otkə̃ʔ / 'inherent power' (cf. Rudes 1999:64).

No. * { -aˀtkõʔ } in < Otkum > 'Devil' (cf. Rudes 1981a:46).

Mo. { -atkũʔ } in / 'otkũʔ / 'spirit' (cf. Maracle 1990:396).

Oe. { -atkũʔ } in / 'otkũʔ / 'snake' (cf. Michelson & Doxtator 2002:221).

Oo. { -atkũʔ } in / ó'natkũʔ / 'witches' (cf. Woodbury 2003:276).

Ca. { -atkõʔ } in / kotkõʔ / 'she is a witch' (cf. Froman et al. 2002:416).

Se. { -atkɔ̃ʔ } in / otkɔ̃ʔ / 'evil power' (cf. Chafe 1967:43).

Hu. { -akiʔ }, cf. < Aki > 'Ange ou Démon. hōe qui excéde en b. ou en mal'
      (MS 59:7), final vowel altered, / ʔ / assumed present.

Wy. { -akiʔ } in / hu'kiʔ / 'he is a witch' (cf. Barbeau 1960:179).

[cf. Mithun 1984b:278, Rudes 1995:48]

182 PNI * { **atokɛ̃ʔ** } 'axe'

Tu. / aʔ'noːkə̃ʔ / 'ax' (cf. Rudes 1999:99).

Su. < Adwgen > 'Axe' (cf. Mithun 1981a:23).

La. < Addogué > 'Ung achot' (Biggar 1924:243).

Mo. / a'toːkʌ̃ʔ / 'an axe' (cf. Maracle 1990:7).

Oe. / atoːˈkʌ̃̂ː / 'axe' (cf. Michelson & Doxtator 2002:253).

Ca. / a'toːkɛ̃ʔ / 'an axe; a tomahawk' (cf. Froman et al. 2002:397).

Se. / atoːkɛ̃ʔ / 'ax' (cf. Chafe 1967:43).

Hu. / a'toːxɛ̃ʔ / < atoˌen > 'hache' (Fraser 1920:445),
      penultimate accent and final / ʔ / assumed present.

Wy. / a'tuːjɛ̃ʔ / 'axe' (cf. Barbeau 1960:239).

[cf. Mithun 1979:181, Mithun 1981a:3, Mithun 1984b:277]

183   PNI * { **-atokw-** }, * { **-atokwaʔtsh.ɹ-** } 'spoon' (limited to Iroquoia)

Mo. { -atokw- } in ∕ aˈtokwaʔ ∕ 'a spoon, ladle' (cf. Maracle 1990:7);
        { -atokwaʔtsheɹ- } in ∕ watokwaʔtsheˈɹiːjo ∕ 'a good, useful spoon'
        (cf. Maracle 1990:123).

Oe. ∕ aˈtokwaʔt ∕ 'spoon' (cf. Michelson & Doxtator 2002:255); { -atokwaʔtsl- }
        in ∕ swatoˈkwâːtslat ∕ 'one spoon, one spoonful'
        (cf. Michelson & Doxtator 2002:255).

Oo. { -atokwaʔtshR- } in ∕ akatóˈkwaʔtshæʔ ∕ 'my spoon'
        (cf. Woodbury 2003:165).

Se. { -atokwaʔshR- } in ∕ aˈtokwaʔshæʔ ∕ 'spoon, ladle' (cf. Chafe 1967:75).

[cf. Mithun 1984b:277]

184   PNI * { **-atoɹaːt-** } 'hunt'

Tu. { -atoraːt- } in ∕ raˈtuːraːtʃ ∕ 'he hunts' (cf. Rudes 1999:68),
        probably a borrowed word.

Mo. { -atoɹat- } in ∕ kaˈtoːɹaths ∕ 'I hunt, I am hunting, I am a hunter'
        (cf. Maracle 1990:36).

Oe. { -atolat- } in ∕ latoːˈlats ∕ 'he's hunting'
        (cf. Michelson & Doxtator 2002:255).

Oo. { -atowæt- } in ∕ káˈtoːwæts ∕ 'I hunt' (cf. Woodbury 2003:167).

Ca. { -atowaːt- } in ∕ haˈtoːwaːs ∕ 'he is a hunter' (cf. Froman et al. 2002:398).

Se. { -atowæːt- } in ∕ hatoːwæːs ∕ 'he hunts, hunter' (cf. Chafe 1967:43).

[cf. Mithun 1984b:269, Michelson 1988:173]

185   PI * { **-atõːɹ-** } 'breathe'

Ch. { -àtʌ̃ːl- } 'breathe' (King 1975:182).

PNI * { -atõɹi- }, * { -atõɹj- } 'breathe'.

Tu. { -aʔnə̃rj- } in ∕ kaʔˈnə̃ːrjə̃hs ∕ 'I breathe' (cf. Rudes 1999:91).

No. * { -aˀtõɹj- } in < Untures > 'The breath' (cf. Rudes 1981a:46).

OMo. { -atũɹj- }, cf. < Atonrion > 'respirer' (Bruyas 1863:40).

Oe. { -atũlj- } in ∕ kaˈtũljehseʔ ∕ 'I'm breathing'
        (cf. Michelson & Doxtator 2002:284).

Oo. { -atũːj- } in ∕ sáˈtũːjeʔs ∕ 'you are breathing' (cf. Woodbury 2003:182).

Ca. { -atõnj- } in ∕ saˈtõːnjeʔs ∕ 'you are breathing' (cf. Froman et al. 2002:400).

Se. { -atõnj- } in ∕ hatõːnjeʔs ∕ 'he breathes' (cf. Chafe 1967:44).

Hu. { -atõj- }, cf. ＜Atonïon＞ 'Respirer' (MS 59:33).

[cf. Michelson 1988:181]

186   PNI * { **-atõtaɹikt-** } 'laugh, laugh out loud' (limited to Iroquoia)

Mo. { -atũtaɹikt- } in ∕ tekatũtaˈɹiktha? ∕ 'I laugh loudly at the top of my voice,
        I guffaw' (cf. Maracle 1990:86).

Oo. { -atũ:taikt- } in ∕ tejũtṹˈtaiktha? ∕ 'she laughs, she snickers'
        (cf. Woodbury 2003:172), long ∕ ũ: ∕ anomalous.

Se. { -atõ̃taikt- } in ∕ o?thatõ̃ta:ik ∕ 'he guffawed' (cf. Chafe 1967:44).

187   PNI * { **-atɹa?-** } 'meet, meet by chance'

Mo. { -ateɹa?- } in ∕ teˈkateɹa?s ∕ 'I meet up with something'
        (cf. Maracle 1990:369).

Oe. { -atla?- } in ∕ wa?tjaˈkjatlane? ∕ 'we two (excl.) met'
        (cf. Michelson & Doxtator 2002:227).

Oo. { -atæ:?- } in ∕ téˈtja:tæ:?s ∕ 'we two (incl.) meet' (cf. Woodbury 2003:108).

Ca. { -atɹa?- } in ∕ aˈtkaõ:tɹa? ∕ 'they met' (cf. Froman et al. 2002:400).

Se. { -atæ?- } in ∕ o?thja:tæ?t ∕ 'they (du.) met' (cf. Chafe 1967:47).

Hu. { -atɹa?- }, cf. ＜K8atrandi＞ '2 ou Pl. se rencontrer en chemin' (MS 59:135).

Wy. { -atɹa?- } in ∕ tusa:ʒaˈtɹaha? ∕ 'they two met again' (cf. Barbeau 1960:162).

188   PNI * { **-atɹe-** } 'grandchild, have as grandchild'

Tu. { -a?rɛ- } in ∕ ˈkʷa:?rɛh ∕ 'my grandchild, my grandniece, my grandnephew,
        my great grandchild (direct address)' (cf. Rudes 1999:106).

Mo. { -ateɹe- } in ∕ ˈkʷateɹe ∕ 'grandchild! (term of affection)'
        (cf. Maracle 1990:57).

Oe. { -atle- } in ∕ khejaˈtleha ∕ 'my granddaughter, I have her as a grandchild'
        (cf. Michelson & Doxtator 2002:230).

Oo. { -ate:- } in ∕ khéˈja:te:? ∕ 'my granddaughter' (cf. Woodbury 2003:124).

Ca. { -atɹe- } in ∕ kheˈja:tre? ∕ 'my granddaughter' (cf. Froman et al. 2002:590).

Se. { -ate- } in ∕ kheja:te? ∕ 'my granddaughter' (cf. Chafe 1967:41).

Hu. { -atɹe- }, cf. ＜Atrea＞ 'etre Gr. pere ou Gr. Mére par sa fille' (MS 59:36).

Wy. { -atɹe- } in ∕ uˈtɹe?a ∕ 'her grandchild' (cf. Barbeau 1960:101).

189   PI * { **-atse:?** } 'be green, be new'

Ch. ∕ àtsɛ́:hî ∕ 'green, new' (King 1975:181), ∕ ìtsɛ́:?î: ∕ 'green, new'

(cf. Feeling & Pulte 1975:132).

PNI * / ˈaːtseːʔ / 'green, new'.

Tu. / ˈaːθɛːʔ / 'new, green, raw, unripe' (cf. Rudes 1999:50).

No. <Osae> 'Young' (cf. Rudes 1981a:47).

Mo. / ˈaːseʔ / 'new, fresh' (cf. Maracle 1990:1).

Oe. / aˈsê: / 'it's new' (cf. Michelson & Doxtator 2002:117).

Oo. / ahˈseʔ / 'it is new' (cf. Woodbury 2003:233).

Ca. / ˈaːseːʔ / 'it is fresh, new' (cf. Froman et al. 2002:410).

Se. { -aseːʔ } in / ˈwaːseːʔ / 'it's new' (cf. Chafe 1967:45).

Hu. / ˈaːseːʔ / cf. <Ase> 'neuf, recent, frais' (MS 59:14), long vowel and / ʔ /
   assumed present.

[cf. Mithun 1979:184, Rudes 1995:50]

190   PNI * { -atshẽnõni- } 'be glad, be happy'

Tu. { -atʃhə̃nə̃ti- } in / waˈʔə̃tʃhə̃ˈnə̃:tiʔ / 'one was happy' (cf. Rudes 1999:4).

No. * { -atshẽnõtiːh } in <Thatchanunte> 'Happy' (cf. Rudes 1981a:47).

Mo. { -atshʌ̃nũni } in / wakatshʌ̃ˈnũːni / 'I am happy' (cf. Maracle 1990:104).

Oe. { -atshanũni } in / wakatshanũːˈni / 'I'm happy'
   (cf. Michelson & Doxtator 2002:260), with change of / ʌ̃ / to / a /.

Oo. { -atshẽnũnih } in / akatshẽnṹˈnih / 'I am glad' (cf. Woodbury 2003:302).

Ca. { -atshẽnõni: } in / akatshẽˈnõːni: / 'I am glad, happy'
   (cf. Froman et al. 2002:148).

191   PNI * { -atst- }, * { -atstathẽ- } 'dry out, dry up, evaporate, run dry'

Tu. { -aθn- } in / ˈwaθnə̃hs / 'it runs dry, it evaporates' (cf. Rudes 1999:52).

Mo. { -ahst- } in / ˈwahstehs / 'it dries up' (cf. Maracle 1990:342).

Oe. { -astathʌ } in / joˈstathʌ / 'it's dry' (cf. Michelson & Doxtator 2002:122).

Oo. { -ast- } in / óˈsteh / 'it is dried up, it is evaporated'
   (cf. Woodbury 2003:248).

Ca. { -ahst- } in / ohˈstehstõh / 'it has evaporated; it is all dried up'
   (cf. Froman et al. 2002:108).

Se. { -ast- } in / osteːh / 'it's evaporated' (cf. Chafe 1967:40).

Hu. { -stathẽ- }, cf. <gastaθen> 'etre Sec' (MS 59:152),
   lack of initial / a / anomalous.

Wy. { -statɛ̃- } in / naˈʔustatɛ̃ʔ / 'when it was dry' (cf. Barbeau 1960:284).

192   PNI * { **-atwẽteht-** } 'abandon, lend, let go, spare' (limited to Iroquoia)

Mo. { -atewᴧ̃teht- } in / katewᴧ̃ˈtehtha? / 'I abandon, reject, denounce,
        I leave behind, speak poorly of' (cf. Maracle 1990:33).

Oe. { -atwᴧ̃teht- } in / wakatwᴧ̃ˈtehtũ / 'I have spared some'
        (cf. Michelson & Doxtator 2002:292).

Oo. { -atwẽteht- } in / katwẽ́ˈtetha? / 'I share it, I let go of it'
        (cf. Woodbury 2003:184).

Ca. { -atwẽteht- } in / saˈtwẽtehtha? / 'you forfeit things all the time'
        (cf. Froman et al. 2002:126).

Se. { -atwẽteht- } in / o?katwẽːtet / 'I lent it' (cf. Chafe 1967:44).

193   PNI * { **-at?ẽhɹ-** } 'fence, palisade'

Mo. { -atᴧ̃?ᴧ̃hɹ- } in / atᴧ̃ˈ?ᴧ̃̂ːɹa? / 'a fence, palisade' (cf. Maracle 1990:5).

Oe. { -atə̃?ə̃hl- } in / atə̃ˈ?ə̃̂ːla? / 'fence' (cf. Michelson & Doxtator 2002:186).

Oo. { -at?ẽhR- } in / wat?ẽ́ˈhæːte? / 'fence [standing]' (cf. Woodbury 2003:862).

Hu. { -at?ẽhɹ- } in / at'?ẽhɹa? / < Atenˤra > 'Palissade, Fort' (MS 59:24),
        / ? / assumed present.

194   PNI * { **-awẽh** } 'belong to, own, possess'

Tu. { -awə̃h } in / ro?ˈnaːwə̃h / 'he possesses it' (cf. Rudes 1999:81).

Mo. { -awᴧ̃ } in / aˈkʷaːwᴧ̃ / 'it is mine' (cf. Maracle 1990:369).

Oe. { -awᴧ̃ } in / akʷaːˈwᴧ̃ / 'mine' (cf. Michelson & Doxtator 2002:311).

Oo. { -awẽh } in / áˈkaːwẽh / 'it's mine, I own it' (cf. Woodbury 2003:309).

Ca. { -awẽh } in / aˈkaːwẽh / 'it is mine' (cf. Froman et al. 2002:421).

Se. { -awẽh } in / akaːwẽh / 'it belongs to me' (cf. Chafe 1967:45).

Hu. { -wẽh }, cf. < ga8an > 'avoir en propre, a soy' (MS 59:123),
        final / h / assumed present, lack of initial / a / anomalous.

Wy. { -wẽh } in / saˈnẽhstawẽh / 'the seeds you have' (cf. Barbeau 1960:182).

195   PNI * { **-awẽɹi-** }, * { **-awẽɹj-** } 'stir'

Tu. { -awə̃ri- } in / nɛkaˈwə̃ːrih / 'I stir it' (cf. Rudes 1999:74).

Mo. { -awᴧ̃ɹj- } in / tekaˈwᴧ̃ɹjehs / 'I stir up, trouble something,
        change something, alter something, stir a liquid' (cf. Maracle 1990:87).

Oe. { -awᴧ̃lj- } in / tekaˈwᴧ̃ljehse? / 'I'm stirring it'
        (cf. Michelson & Doxtator 2002:311).

Oo. { -awẽːj- } in / tejṹːˈwẽːjek / 'she stirs it' (cf. Woodbury 2003:311).

Ca. { -awẽnj- } in / teˈkawẽnjeh / 'I stir all the time'
      (cf. Froman et al. 2002:422).

Se. { -awẽnj- } in / tejõwẽnjeh / 'she stirs it' (cf. Chafe 1967:45).

[cf. Michelson 1988:181]

196   PI * { **awẽʔ** } 'water'

Ch. / àmá̃: / 'water' (cf. Feeling & Pulte 1975:43).

PNI * / ˈaːwẽʔ / 'water'.

Tu. / ˈaːwõ̃ʔ / 'water' (cf. Rudes 1999:75).

No. <Auwa> 'Water' (cf. Rudes 1981a:46).

La. <Ame> 'Eaue' (Biggar 1924:242).

Mo. { awʌ̃ʔ } in / aˈwʌ̂:ke / 'on the water' (cf. Maracle 1990:115).

Oe. { awʌ̃ʔ } in / aˈwʌ̂:ke / 'in the water' (cf. Michelson & Doxtator 2002:311).

Oo. { awẽʔ- } in / áˈwẽʔkeh / 'on the surface of the water'
      (cf. Woodbury 2003:312).

Hu. / ˈaːwẽʔ / <a8en> 'de leau' (MS 59:127),
      penultimate accent and / ʔ / assumed present.

Wy. { wẽ̃ʔ- } in / ˈwẽ̃ʔjeh / 'on the water' (cf. Barbeau 1960:269),
      with loss of initial vowel.

[cf. Mithun 1979:186, Mithun 1984b:274, Rudes 1995:56]

197   PNI * { **-aʔ-** }, * { **-aʔaːh** } 'be small'

Tu. { -aʔ- } in / tiwaʔθˈʔah / 'it is small' (cf. Rudes 1999:110).

Mo. { -aʔa } in / niˈwâːʔa / 'it is small' (cf. Maracle 1990:393).

Oe. { -aʔ } in / kʌ̃ʔ niˈwâː / 'it (n.) is small' (cf. Michelson & Doxtator 2002:313).

Oo. { -aʔah } in / niwáˈʔah / 'it is small' (cf. Woodbury 2003:313).

Ca. { -aʔ } in / niːwaʔ /, { -aːʔah } in / niˈwaːʔah / 'it is small'
      (cf. Froman et al. 2002:388).

Se. { -aʔaːh } in / niˈwaʔaːh / 'it's small' (cf. Chafe 1967:46).

198   PNI * { **-aʔaɹ-** } 'lace, net, netting, web' (limited to Iroquoia)

Mo. { -aʔaɹ- } in / ˈâːʔaɹeʔ / 'a net, netting, lace' (cf. Maracle 1990:114).

Oe. { -aʔal- } in / ˈôːaleʔ / 'net, lace, screen'
      (cf. Michelson & Doxtator 2002:314).

Oo. { -aʔaR- } in / óˈʔaːæʔ / 'veil, net, netting, lace' (cf. Woodbury 2003:314).

Ca. { -aʔaR- } in / oˈtaʔaõt / 'a web; a net' (cf. Froman et al. 2002:424).

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Se. { -aʔaR- } in / oˈtaʔææʔ / 'veil, netting' (cf. Chafe 1967:46).

199   PNI * { -aʔawj - } 'dew'
Tu. { -aʔawj- } in / uˈʔaːwjɛh / 'dew' (cf. Rudes 1999:520).
Mo. { -aʔawej- } in / joʔaˈweːjã̃ʔ / 'dew, there is dew on the ground'
        (cf. Maracle 1990:17).
Oe. { -aʔawj- } in / joˈʔawi / 'dew' (cf. Michelson & Doxtator 2002:835).
Oo. { -aʔaːj- } in / óˈʔaːjeʔ / 'dew' (cf. Woodbury 2003:314).
Ca. { -aʔawaj- } in / oʔˈawajeʔ / 'dew on s.t.' (cf. Froman et al. 2002:388).
Se. { -aʔaj- } in / oʔaːjeʔ / 'dew' (cf. Chafe 1967:90).
Hu. { -aʔaj- } in / oˈʔajaʔ / < o aia > 'Roseé' (MS 67:174), / ʔ / assumed present.

200   PNI * { -aʔe- } 'strike'
Tu. { -aʔe- } in / ˈraʔehs / 'he strikes' (cf. Rudes 1999:268).
Mo. { -aʔe- } in / jehwihstaˈʔeksthaʔ / 'bell' (cf. Maracle 1990:324),
        with causative.
Oe. { -aʔe- } in / wahahˈwâːekeʔ / 'he struck it, he batted it'
        (cf. Michelson & Doxtator 2002:414).
Oo. { -aʔe- } in / waʔkũnjẽtáˈʔeːkwaʔ / 'I hit your leg' (cf. Woodbury 2003:574).
Ca. { -aʔe- } in / kahˈwihstʔaehs / 'clock' (cf. Froman et al. 2002:57).
Se. { -aʔe- } in / ɛ̃jetshiˈnɔ̃ʔtsaʔes / 'they'll strike the drum for you'
        (cf. Chafe 1967:90).
Hu. { -aʔe- }, cf. < Aë > 'frapper sur ou contre q.c.' (MS 59:3),
        / ʔ / assumed present.

201   PNI * { -aʔkaɹaʔ- }, * { -aʔkɹaʔ- } 'become dark, become night'
La. < Aiagla > 'Nuyt' (Biggar 1924:80).
Mo. { -aʔkaɹaʔ- } in / ˈjôːkaɹaʔs / 'it becomes dark' (cf. Maracle 1990:18).
Oe. { -aʔkalaʔ- } in / joʔkaˈlâːũ / 'it's dark, it's evening or night'
        (cf. Michelson & Doxtator 2002:315).
Oo. { -aʔkaː ʔ- } in / tjóʔˈkaːʔih / 'it has gotten dark' (cf. Woodbury 2003:318).
Hu. { -aʔxɹaʔ- }, cf. < Aˌrandi > 'faire nuit' (MS 59:11), / ʔ / assumed present.
Wy. { -aʔɹaʔ- } in / saˈuʔɹaʔ / 'it became night again' (cf. Barbeau 1960:88).
[cf. Mithun 1981b:241]

202 PNI * { -aʔkɹ- } 'snow, snowflake' (limited to Iroquoia)

Mo. { -aʔkeɹ- } in / ˈ ô:keɹaʔ / 'a snowflake, snowflakes' (cf. Maracle 1990:59).

Oe. { -aʔkl- } in / ˈô:klaʔ / 'snowflake' (cf. Michelson & Doxtator 2002:317).

Oo. { -aʔkR- } in / ˈóʔkæ:ʔ / 'snow' (cf. Woodbury 2003:316).

Ca. { -aʔkɹ- } in / oʔkɹaʔ / 'snow; a snowflake' (cf. Froman et al. 2002:303).

Se. { -aʔkR- } in / oʔkæʔ / 'snow, snowflake' (cf. Chafe 1967:90).

[cf. Michelson 1988:180]

203 PNI * { -aʔnowaɹ- }, * { -ʔnowaɹ- } 'turtle' (limited to Iroquoia)

Mo. { -aʔnowaɹ- } in / aʔˈno:waɹaʔ / 'turtle, tortoise' (cf. Maracle 1990:1).

Oe. / aʔno:ˈwal / 'turtle' (cf. Michelson & Doxtator 2002:319).

Oo. { -ʔnowaR- } in / haʔˈno:wa:ʔ / 'turtle, member of the turtle clan'
        (cf. Woodbury 2003:964).

Ca. { -nowa- } in / hanowaheˈtkẽ:sʔah / 'a mischevious turtle, a mud turtle'
        (cf. Froman et al. 2002:349).

Se. { -ʔnowaR- } in / haʔno:wa:h / 'turtle' (cf. Chafe 1967:91).

[cf. Mithun 1984b:267]

204 PNI * { -aʔtaɹihẽ:h } 'be hot, be warm'

Tu. { -aʔnarihə̃: } in / joʔnaˈrihə̃: / 'it is warm' (cf. Rudes 1999:80).

No. * { -aʔˀtaɹihẽ:h } in < Tariha > 'Hot' (cf. Rudes 1981a:47).

La. * { -aʔtaihẽ:h } in < Odaian > 'Chault' (Biggar 1924:245).

Mo. { -aʔtaɹihʌ̃ } in / joʔtaˈɹihʌ̃ / 'it is hot, warm' (cf. Maracle 1990:17).

Oe. { -aʔtalihʌ̃ } in / joʔtaˈlihʌ̃ / 'it's hot' (cf. Michelson & Doxtator 2002:326).

Oo. { -aʔtaihẽh } in / óʔˈtaihẽh / 'it is hot' (cf. Woodbury 2003:314).

Ca. { -aʔtaihẽ: } in / oʔˈtaihẽ: / 'it is hot' (cf. Froman et al. 2002:425).

Se. { -aʔtaiɛ̃:h } in / oʔˈtaiɛ̃:h / 'it's hot' (cf. Chafe 1967:46).

Hu. { -aʔtaɹihẽ:h } in / oʔtaˈɹihẽ:h / < Otarihen > 'cela ē chaud' (MS 59:21),
        long vowel, / ʔ / and final / h / assumed present.

Wy. { -aʔtaɹihẽ̄h } in / kwaaʔtaʔˈtaɹihẽ̄h / 'her body there is warm'
        (cf. Barbeau 1960:173).

[cf. Mithun 1979:183, Mithun 1981b:239, Michelson 1988:175]

205 PNI * { -aʔtaɹihẽhsɹ- } 'heat, sweat'

Tu. { -aʔnarihə̃hstr- } in / oʔnariˈhə̃hstrɛh / 'heat' (cf. Rudes 1999:80).

Mo. { -aʔtaɹihʌ̃hseɹ- } in / oʔtaɹiˈhʌ̃hseɹaʔ / 'heat, warmth'

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(cf. Maracle 1990:143).

Se. { -aʔtaiɛ̃shR- } in / oʔtaiˈɛ̃shæʔ / 'sweat' (cf. Chafe 1967:46).

Hu. { -aʔtaɹihẽhʃɹ- } in / oʔtaɹiˈhẽhʃɹaʔ / <Otarihencha> 'sueur' (MS 59:21),
/ ʔ / and preconsonantal / h / assumed present, / ɹ / has become / h / in
Rock dialect.

206   PNI * { **-aʔtsɹ-** } 'axe'

Tu. { -aʔθr- } in / ˈoʔθrɛh / 'adze, ax, hatchet, tomahawk' (cf. Rudes 1999:111).

Mo. { -aʔseɹ- } in / ˈô:seɹaʔ / 'an axe, hatchet' (cf. Maracle 1990:60).

Hu. { -aʔʃɹ- } in / ˈaʔʃɹaʔ / <Acha> 'hache' (MS 59:2), / ʔ / assumed present,
/ ɹ / has become / h / in Rock dialect.

Wy. { -aʔʃɹ- } in / naˈhuʔʃɹõ̃taʔs / 'now he put his axe by the fire'
(cf. Barbeau 1960:239).

207   PNI * { **-aʔtsw-** } 'be extinguished, fire to go out'

Tu. { -aʔθw- } in / ˈθwaʔθwaʔθ / 'it is extinguished' (cf. Rudes 1999:112).

Oe. { -aʔsw- } in / ˈò:swɲ̃ʔ / 'coal' (cf. Michelson & Doxtator 2002:325).

Oo. { -aʔsw- } in / óʔˈswaʔih / '[the fire] is extinguished'
(cf. Woodbury 2003:323).

Hu. { -aʔskw- }, cf. <Ask8an> 'le feu s'eteindre' (MS 59:16),
/ ʔ / assumed present.

208   PNI * { **-aʔtswaht-** } 'extinguish, put out a fire'

Tu. { -aʔθwaht- } in / raʔˈθwahthaʔ / 'he extinguishes it' (cf. Rudes 1999:112).

Oe. { -aʔswaht- } in / kaʔˈswathaʔ / 'I put out fires, I turn off the lights'
(cf. Michelson & Doxtator 2002:324).

Oo. { -aʔswaht- } in / káʔˈswathaʔ / 'I put out fires' (cf. Woodbury 2003:323).

Ca. { -aʔswaht- } in / waʔˈswahtõh / 'it is extinguished'
(cf. Froman et al. 2002:111).

Se. { -aʔswaht- } in / aˈkaʔswahtõ̃h / 'I've put out the fire' (cf. Chafe 1967:46).

Hu. { -aʔskwaht- }, cf. <Ask8aʿti> 'eteindre le feu' (MS 59:16),
/ ʔ / assumed present.

209   PI * { **-e-** } 'come, go, go on foot, walk'

Ch. { -è- } in / ké:kɑ̃́: / 'I'm going' (cf. Feeling & Pulte 1975:89).

PNI * { -e- } 'walk, go on foot'.

Tu. { -ɛ- } in / ˈiːkjɛʔ / 'I am walking' (cf. Rudes 1999:139); / ˈiθhrɛʔθ /
    'he returned' (cf. Rudes 1999:139).

La. { -e- } in < Canada undagueny > 'D'où venez vous?' (Biggar 1924:245).

Mo. { -e- } in / ˈiːkeʔ / 'I walk, I am in motion' (cf. Maracle 1990:9).

Oe. { -e- } in / iːˈkê: / 'I'm walking' (cf. Michelson & Doxtator 2002:327).

Oo. { -e- } in / ˈiheʔ / 'he is walking (cf. Woodbury 2003:372).

Ca. { -e- } in / ˈitsheʔs / 'you wander (all the time), you are over there'
    (cf. Froman et al. 2002:431).

Se. { -e- } in / iːkeʔ / 'I'm walking' (cf. Chafe 1967:48).

Hu. { -e- }, cf. < Ennon > 'verba Motūs' (MS 59:170).

Wy. { -e- } in / ˈhesteh / 'you two go!' (cf. Barbeau 1960:84).

[cf. Mithun 1981b:233, Rudes 1995:46]

210   PNI * { -ehjahɹ- } 'remember'

Tu. { -ɛhjahr- } in / θahrɛhˈjahraʔ / 'he remembered' (cf. Rudes 1999:141).

Mo. { -ehjahɹ- } in / kehˈjâːɹaʔs / 'I remember, have memory of'
    (cf. Maracle 1990:38).

Oe. { -ehjahl- } in / ˈkêːjaleʔ / 'I remember' (cf. Michelson & Doxtator 2002:331).

Hu. { -ehjahɹ- }, cf. < Ehiarandi > 'Se Souvenir' (MS 59:165),
    second / h / assumed present.

Wy. { -eːʒaːɹ- } in / usajeːˈʒaːɹahaʔ / 'I remembered back'
    (cf. Barbeau 1960:281).

211   PI * { -eːɹ- } 'believe, think'

Ch. { -èːl- } in / kèːlíʔa̋ː / 'I think so' (cf. Feeling & Pulte 1975:90).

PNI * { -eɹ- } 'think, want'.

Tu. { -ɛr- } in / ˈsɛrhaʔ / 'you are thinking, you are wanting'
    (cf. Rudes 1999:143).

Mo. { -ehɹ- } in / ˈiːkehɹeʔ / 'I think of, have an opinion of; I want to'
    (cf. Maracle 1990:9), where / h / has metathesized from aspectual suffix.

Oe. { -el- } in / iːˈkelheʔ / 'I want' (cf. Michelson & Doxtator 2002:335).

Oo. { -eR- } in / naˈjeʔ ˈkeːheʔ / 'that's what I want, that's what I assume
    [will happen]' (cf. Woodbury 2003:374).

Ca. { -eR- } in / iheː / 'he wants' (cf. Froman et al. 2002:336).

Se. { -eR- } in / iːkeːh / 'I think, believe' (cf. Chafe 1967:48).

Hu. { -eɹ- }, cf. < Eri > 'penser, vouloir, craindre' (MS 59:172).

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Wy. { -eR- } in / i'we:heʔ / 'she thinks' (cf. Barbeau 1960:67).

[cf. Rudes 1995:37]

212   PNI * { **-eɹjahs-** } 'heart'

Tu. { -ɛrjahs- } in / awɛ'rjahsɛh / 'heart' (cf. Rudes 1999:144).

Mo. { -eɹjahs- } in / awe'ɹjahsaʔ / 'heart, heart-shaped' (cf. Maracle 1990:8).

Oe. { -eljahs- } in / jakaweljahsi'jo / 'she has good in her heart'
        (cf. Michelson & Doxtator 2002:336).

Oo. { -e:jahs- } in / awe:'jahsaʔ / 'heart' (cf. Woodbury 2003:386).

Ca. { -ẽjõhs- } in / a'wẽjõhsaʔ / 'heart' (cf. Froman et al. 2002:152),
        vowels anomalous, / nj / expected in place of / j /.

Se. { -ẽnjahs- } in / a'wẽnjahsaʔ / 'heart' (cf. Chafe 1967:50),
        nasal / ẽ / anomalous.

Hu. { -ejahʃ- } in / e'jahʃaʔ / <Eiacha> 'le coeur' (MS 59:165),
        / h / assumed present.

213   PNI * { **etsoʔ** }, * { **itsoʔ** }, * { **itswaʔ** } 'a lot, much'

Mo. / 'e:soʔ / 'many, much, a lot of' (cf. Maracle 1990:8).

Oe. / e:'sô: / 'lots, many' (cf. Michelson & Doxtator 2002:340).

Oo. / 'ihswaʔ / 'much, lots' (cf. Woodbury 2003:599).

Ca. / i:soʔ / 'much, many, lots' (cf. Froman et al. 2002:686).

Se. { -esoʔ } in / we:soʔ / 'it's a lot' (cf. Chafe 1967:49).

214   PNI * { **eʔnkẽh** }, * { **heʔnkẽh** } 'above, high, over'

Tu. / 'hɛʔtkǝh / 'high, on top, publicly' (cf. Rudes 1999:201)

Mo. / 'ê:nekʌ̃ / 'up, overhead, over, above, west' (cf. Maracle 1990:8).

Oe. / 'ê:nik / 'up, above, upstairs, over' (cf. Michelson & Doxtator 2002:337).

Oo. / 'heʔtkẽh / 'above' (cf. Woodbury 2003:511).

Ca. / he:tkẽh / 'up, above' (cf. Froman et al. 2002:683).

Se. / hetkẽh / 'up in the air' (cf. Chafe 1967:53).

215   PNI * { **-ẽh-** } 'flower' (limited to Iroquoia)

OMo. { -ʌ̃h- } in / a'wʌ̃haʔ / <A8enha> 'fleur' (cf. Bruyas 1863:24).

Oo. { -ẽh- } in / á'wẽhaʔ / 'flower' (cf. Woodbury 2003:395).

Ca. { -ẽh- } in / a'wẽhẽʔ / 'flower' (cf. Froman et al. 2002:123).

Se. { -ẽH- } in / a'wẽɔ̃ʔ / 'flower' (cf. Chafe 1967:50).

216   PNI * { -ē̃hnitsɹ- } 'day' (limited to Iroquoia)

Mo. { -ʌ̃hniseɹ- } in / ʌ̃h'niseɹaʔ / 'day, time of daylight' (cf. Maracle 1990:127).

Oe. { -ʌ̃hnisl- } in / awʌ̃h'nislaʔ / 'day' (cf. Michelson & Doxtator 2002:346).

Oo. { -ē̃hnihsR- } in / akḗh'nihsæːʔ / 'my season, my day'
         (cf. Woodbury 2003:397).

Ca. { -ē̃hnihsɹ- } in / wē̃hnih'sɹiːjoː / 'nice day' (cf. Froman et al. 2002:80),
         probably a borrowed root.

Se. { -ɛ̃ːnishR- } in / ɛ̃ː'nishæʔ / 'day' (cf. Chafe 1967:49).

217   PNI * { -ē̃hwatɛ̃ʔ }, * { -jē̃hwatɛ̃ʔ } 'be uncle to, have as nephew or niece'

Tu. { -jə̃hwaʔnə̃ʔ } in / kə̃jə̃h'waʔnə̃ʔ / 'my nephew' (cf. Rudes 1999:155).

La. <Yuadin> 'Mon nepveu' (Biggar 1924:246).

Mo. { -ũhwatʌ̃ʔ- } in / ɹijũhwa'tʌ̂ːʔa / 'my nephew' (cf. Maracle 1990:78),
         PMO change of * / ẽ / to / ũ / anomalous.

Oe. { -ũhwatʌ̃ʔ- } in / lijũhwa'tʌ̃ha / 'my nephew'
         (cf. Michelson & Doxtator 2002:748).

Oo. { -ē̃hwatɛ̃ʔ- } in / hejḗh'waːtɛ̃ʔ / 'my nephew' (cf. Woodbury 2003:400).

Ca. { -ē̃hwatɛ̃ʔ } in / kakhejõh'waːtɛ̃ʔ / 'my brother's children;
         my nieces and nephews' (cf. Froman et al. 2002:616).

Se. { -jɛ̃ːwõtɛ̃ʔ } in / hõ'wõjɛ̃ːwõːtɛ̃ʔ / 'their nephew' (cf. Chafe 1967:51).

Hu. { -ē̃hwatɛ̃ʔ- } in / shõxwē̃h'waːtɛ̃ʔ / <Son�も enh8aten>
         'Cest ne. oncle Maternel' (MS 59:179), / ʔ / assumed present.

Wy. { -ɛ̃ːwatɛ̃ʔ- } in / tawɛ̃ːwa'tɛ̃ʔah / 'his nephew' (cf. Barbeau 1960:205).

218   PNI * { -ē̃nakɹaːt- } 'be born, establish oneself'

Mo. { -ʌ̃nakeɹat- } in / kʌ̃'nakeɹaths / 'I am born, come into the world,
         establish myself, start living in an area' (cf. Maracle 1990:41).

Oe. { -anaklat- } in / wakanakla'tũ / 'I was born'
         (cf. Michelson & Doxtator 2002:101), with change of / ə̃ / to / a /.

Oo. { -ē̃nakæːt- } in / honá'kæːtih / 'he has been born' (cf. Woodbury 2003:402).

Ca. { -ē̃nakɹaːt- } in / akēna'kɹaːtõh / 'I was born' (cf. Froman et al. 2002:35).

Se. { -ɛ̃nõkæːt- } in / waɛ̃nõkæːt / 'he was born' (cf. Chafe 1967:72).

Hu. { -ē̃naxɹaːt- }, cf. <Enda˛rati> 'S'habituer' (MS 62:53),
         long vowel assumed present.

PNI * { -ẽt- } 'day'

Tu. { -ə̃ʔn- } in / aˈwə̃:ʔnɛh / 'day, daytime' (cf. Rudes 1999:167).

No. * { -ẽt- } in < Antyeke > 'Day-time' (cf. Rudes 1981a:47).

Mo. { -ʌ̃t- } in / ˈʌ̃:taʔ / 'day, festival, occasion, holiday' (cf. Maracle 1990:8).

Oe. { -ʌ̃t- } in / swʌ̃:ˈtat / 'one week' (cf. Michelson & Doxtator 2002:349).

Oo. { -ẽt- } in / wé̃ˈta:teʔ / '(it is a) day' (cf. Woodbury 2003:390).

Ca. { -ẽt- } in / ẽˈtehkha:ʔ / 'day kind (things used during the day)'
        (cf. Froman et al. 2002:80).

Se. { -ɛ̃t- } in / tawɛ̃tɔ̃:tiʔ / 'daybreak' (cf. Chafe 1967:50).

Hu. { -ẽt- } in / ˈskwẽ:ta:t / < Sk8entat > 'un seul jour' (MS 59:171).

Wy. { -ɛ̃t- } in / ˈskwɛ̃:tat / 'one day' (cf. Barbeau 1960:310).

PNI * { -ẽtaʔ- } 'be finished, be over, be prepared, be ready, come to an end'

Mo. { -ʌ̃taʔ- } in / wə̃ˈtʌ̃:taʔs / 'the holiday, festival ends, comes to an end'
        (cf. Maracle 1990:125).

Oe. { -ʌ̃taʔ- } in / kewjʌ̃nʌ̃:ˈtâ:seʔ / 'I'm getting something ready'
        (cf. Michelson & Doxtator 2002:777).

Oo. { -ẽtaʔ- } in / gaíhˈwẽ:taʔs / 'the matter is ending' (cf. Woodbury 2003:627).

Ca. { -ẽtaʔ- } in / ẽkaːˈkhwẽ:taʔ / 'it is going to finish eating'
        (cf. Froman et al. 2002:504).

Se. { -ɛ̃taʔ- } in / akekhwɛ̃ˈtaʔɔ̃h / 'I've finished eating' (cf. Chafe 1967:50).

Hu. { -ẽtaʔ- }, cf. < Entandi > 'finir, Suzer, se terminer' (MS 59:172).

PI * { -ẽʔ- } 'drop, fall'

Ch. { -òh- } in / kòʔòhská: / 'I'm falling' (cf. Feeling & Pulte 1975:121),
        / kàtóhská: / 'it (a flexible object) is falling from a hanging position'
        (cf. Feeling & Pulte 1975:93).

PNI * { -ẽʔ- }' drop, fall, happen'; * { -aʔtsẽʔ- } 'drop, fall' when an incorporated
        noun is absent.

Tu. { -aʔθə̃ʔ- } in / waʔˈkaʔθə̃ht / 'I dropped it' (cf. Rudes 1999:148).

Mo. { -aʔsʌ̃ʔ- } in / teˈwahsʌ̃ʔs / 'it falls off something' (cf. Maracle 1990:93).

Oe. { -aʔsʌ̃ʔ- } in / ˈwâ:sʌ̃hseʔ / 'it falls' (cf. Michelson & Doxtator 2002:321).

Oo. { -aʔsẽʔ- } in / ˈtwáʔsẽʔs / 'it falls, it drops down' (cf. Woodbury 2003:321).

Ca. { -ẽʔ- } in / niˈja:wẽʔs / 'how it happens' (cf. Froman et al. 2002:148).

Se. { -aʔsɛ̃ʔ- } in / waʔsɛ̃ʔs / 'it falls' (cf. Chafe 1967:46).

Hu. { -ẽʔ- }, cf. < Endi > 'q.c. bon ou mauv. arriver a qlq.' (MS 59:167);

{ -aʔsẽ- }, cf. <Asendi> 'tomber' (MS 59:15), / ʔ / assumed present.

[cf. Lounsbury 1978:342]

222   PNI * { **ẽʔtɹõʔ** }, * { **waʔtɹõh** }, * { **waʔtɹõʔ** } 'nine'

Tu. / ˈwaʔrɐ̃ʔ / 'nine (obsolete)' (cf. Rudes 1999:479).

Su. <Wáderom> '9' (cf. Mithun 1981a:23).

La. <Wadellon> 'Neuf' (Biggar 1924:241).

Oe. / ˈwâːtlũ / 'nine' (cf. Michelson & Doxtator 2002:766).

Oo. / ˈwáʔtẽːh / 'nine' (cf. Woodbury 2003:863).

Hu. / ˈẽʔtɹõʔ / <entron> '9' (MS 66:133),
      penultimate accent and / ʔ / assumed present.

Wy. / ɛ̃ʔˈtɹõʔ / 'nine' (cf. Barbeau 1960:304).

[cf. Lounsbury 1978:339, Mithun 1981b:240, Michelson 1988:180]

223   PNI * { **-hahsɹ-** } 'council fire, flame, torch'

Mo. { -hahseɹ- } in / oˈhahseɹaʔ / 'a light, lamp, candle, torch'
      (cf. Maracle 1990:60).

Oo. { -hahsR- } in / káˈhahsæːʔ / 'torch, flame' (cf. Woodbury 2003:488).

Ca. { -hahsɹ- } in / ahẽnathahˈsɹõːtẽʔ / 'they (m.) carried a torch, lantern,
      flashlight' (cf. Froman et al. 2002:460).

Se. { -HashR- } in / ˈkaashæʔ / 'flame, torch' (cf. Chafe 1967:51).

Hu. { -hahʃɹ- } in / xaˈhahʃɹaʔ / <gahacha> 'Flamme. figurate, douleur, fiévre'
      (MS 59:72), preconsonantal / h / assumed present, / ɹ / has become
      / h / in Rock dialect.

224   PNI * { **-heɹ-** } 'cornstalk, grass'

Tu. { -hɛr- } in / oˈhɛːrɛh / 'green, grass' (cf. Rudes 1999:199).

No. * { -heɹ- } in <Oherag> 'Grass' (cf. Rudes 1981a:47).

Mo. { -heɹ- } in / ˈoheɹeʔ / 'a corn stalk' (cf. Maracle 1990:60).

Oe. { -hel- } in / ˈoheliʔ / 'cornstalk' (cf. Michelson & Doxtator 2002:366).

Oo. { -heR- } in / oˈheːjæʔ / 'corn stalk' (cf. Woodbury 2003:504).

Ca. { -heR- } in / oˈheːjaʔ / 'a corn stalk' (cf. Froman et al. 2002:70).

Se. { -HeR- } in / oeæʔ / 'cornstalk' (cf. Chafe 1967:48).

Hu. { -heɹ- } in / oˈheːɹaʔ / <ohera> 'Canne, tuyau de bled, chaume'
      (MS 59:75).

Wy. { -heɹ- } in / ajeheˈɹuːwaʔ / 'I would cut the stalks' (cf. Barbeau 1960:59).

225   PNI * { **-hẽɹeht-** } 'shout, yell'

Tu. { -hə̃rɛhθ } in / raˈhə̃ːrɛhθ / 'he shouts, he is shouting' (cf. Rudes 1999:203).

Mo. { -hʌ̃ɹeht- } in / tewakhʌ̃ˈɹehthaʔ / 'I shout' (cf. Maracle 1990:391).

Oe. { -hʌ̃leht- } in / tewakhʌ̃ˈlethaʔ / 'I'm yelling'
        (cf. Michelson & Doxtator 2002:369).

Oo. { -hẽeht- } in / tewáˈkhẽethaʔ / 'I am yelling' (cf. Woodbury 2003:514).

Se. { -heeht- } in / tewaˈkheehtɔ̃h / 'I've shouted' (cf. Chafe 1967:52).

Hu. { -hẽɹeht- }, cf. <Kahenreˈti> 'fe. un gr. cry' (MS 59:74).

Wy. { -hẽɹeht- } in / aʔˈtuhẽɹeht / 'he gave a yell' (cf. Barbeau 1960:233).

[cf. Michelson 1988:175]

226   PNI * { **-hẽt-** } 'clearing, field, meadow'

Tu. { -hə̃ʔn- } in / oˈhə̃ʔnɛh / 'clearing, field, grassy plot, meadow, pasture,
        sward' (cf. Rudes 1999:16).

Mo. { -hʌ̃t- } in / kaˈhʌ̃ːtaʔ / 'a meadow, prarie, grassland' (cf. Maracle 1990:25).

Oe. { -hʌ̃t- } in / kahʌ̃ˈtâːke / 'in the fields or garden'
        (cf. Michelson & Doxtator 2002:370).

Oo. { -hẽt- } in / kahẽ́ˈtaʔkeh / 'on the field, on the clearing'
        (cf. Woodbury 2003:513).

Ca. { -hẽt- } in / kaˈhẽtaẽʔ / 'meadow; pasture; field'
        (cf. Froman et al. 2002:118).

Hu. { -hẽt- } in / ohẽˈtaʔxehk / <ohenta̗ek> 'Bluets' (MS 59:74),
        literally 'the field ones'.

227   PNI * { **-hjatõ-** } 'mark, write'

Mo. { -hjatũ- } in / ˈkhjaːtũhs / 'I write, am writing, I mark down, record'
        (cf. Maracle 1990:50).

Oe. { -hjatũ- } in / khjaˈtũheʔ / 'I'm writing'
        (cf. Michelson & Doxtator 2002:418).

Oo. { -hjatũ- } in / ẽháhˈjaːtũʔ / 'he will write' (cf. Woodbury 2003:584).

Ca. { -hjatõ- } in / ehˈjaːtõh / 'she writes' (cf. Froman et al. 2002:375).

Se. { -Hjatɔ̃- } in / akhjaːtɔ̃ʔ / 'I've written it' (cf. Chafe 1967:58).

Hu. { -hjatõ- }, cf. <gahiaton> 'Ecrire' (MS 59:75).

Wy. { -ːʒatɔ̃- } in / ehˈʃeːʒatɔ̃ʔ / 'you will mark' (cf. Barbeau 1960:124).

228   PNI * { -hjatõhsɹ- } 'book, something marked, something written'
        Tu. { -hjatə̃hstr- } in / ohjaˈtə̃hstrɛh / 'book, card, newspaper, paper'
                (cf. Rudes 1999:244), a borrowed word.
        Mo. { -hjatũhseɹ- } in / kahjaˈtũhseɹaʔ / 'book, paper, written material, writing,
                script' (cf. Maracle 1990:25).
        Oe. { -hjatũhsl- } in / kahjaˈtũhslaʔ / 'paper, book, letter'
                (cf. Michelson & Doxtator 2002:419).
        Oo. { -hjatũhsR- } in / kahjáˈtũhsæ:ʔ / 'book, paper, magazine'
                (cf. Woodbury 2003:584).
        Ca. { -hjatõhsɹ- } in / ohjatõhˈsɹõ:tõʔ / 'book' (cf. Froman et al. 2002:35),
                perhaps a borrowed word.
        Se. { -Hjatõ̃shR- } in / ka:ˈjatõ̃shæʔ / 'paper, book, curtain' (cf. Chafe 1967:58).
        Hu. { -hjatõhʃɹ- } in / xahjaˈtõhʃɹaʔ / <gahiatoncha> 'Ecriture' (MS 59:75),
                preconsonantal / h / assumed present, / ɹ / has become / h / in
                Rock dialect.

229   PI * { -hkaɹ- } 'claw'
        Ch. { -á:hsù:hkàl- } in / ú:hsùhkàlhǽ:ʔî: / 'his claw'
                (cf. Feeling & Pulte 1975:179), cf. { -atá:hsù:hkàl- } 'cut one's nails'
                (King 1975:178), the first element is likely a reflex of PI * { -a:hs- } 'foot'.
        PNI * { -ihkaɹ- } 'claw; tail'.
        Tu. { -tʃihskə̃hkar- } in / otʃihˈskə̃hkarɛh / 'claw' (cf. Rudes 1999:564).
        Se. { -ihkaR- } in / kẽhka:aʔ / 'tail' (cf. Chafe 1967:59).

230   PNI * { -hnaw- } 'current, moving water, rapids'
        Tu. * { -htaw- } in / ˈohtawɛh / 'current of water, stream of water, rain shower'
                (cf. Rudes 1999:235).
        Mo. { -hnaw- } in / ohˈna:waʔ / 'current, rapids, waterfalls, cascade'
                (cf. Maracle 1990:61).
        Oe. { -hnaw- } in / johna:ˈwes / '(it's) a stream of water'
                (cf. Michelson & Doxtator 2002:384).
        Oo. { -hnaw- } in / óhˈna:waʔ / 'rapids, current' (cf. Woodbury 2003:525).
        Ca. { -hnaw- } in / ohnawaˈta:se: / 'whirlpool' (cf. Froman et al. 2002:509).
        Se. { -Hnõ̃w- } in / o:nõ̃wõ̃ta:se:h / 'whirlpool' (cf. Chafe 1967:55).
        [cf. Mithun 1984b:275]

PI * { -**hnẽ:**- } 'arm, shoulder'

Ch. { -hnò:- } in / khànò:kế: / 'arm, wing' (cf. Feeling & Pulte 1975:141).

PNI * { -hnẽ- }, * { -hnẽhts- } 'arm, shoulder'.

Tu. { -hnə̃- } in / oh'nə̃hstɛh / 'armful' (cf. Rudes 1999:548),

       where { -hst- } is a reflex of a PNI nominalizer sequence * { -hsr- };

       Tu. / oh'nə̃hwɛh / 'upper shoulder' (cf. Rudes 1999:208).

Mo. { -hnʌ̃hs- } in / oh'nʌ̃hsaʔ / 'shoulder' (cf. Maracle 1990:62).

Oe. { -hnʌ̃hs- } in / oh'nʌ̃hsaʔ / 'shoulder' (cf. Michelson & Doxtator 2002:389).

Oo. { -hnẽhs- } in / óh'nẽhsaʔ / 'shoulder' (cf. Woodbury 2003:532).

Ca. { -hnẽhs- } in / oh'nẽhsaʔ / 'shoulder' (cf. Froman et al. 2002:290).

Se. { -hnẽ̃hs- } in / khnẽ̃h'saʔkeh / '(on) my shoulder' (cf. Chafe 1967:54).

Hu. { -hnẽhs- } in / xah'nẽhsaʔ / < gannensa > 'Bras' (MS 59:110),

       preconsonantal / h / assumed present.

[cf. Rudes 1995:36]

PNI * { -**hnhaʔ**- } 'command, employ, hire'

Tu. { -nhaʔ- } in / ə̃'jɛnhaʔ / 'one will be employed' (cf. Rudes 1999:372).

Mo. { -hnhaʔ- } in / 'kehnhaʔs / 'I command, have in service, I hire,

       employ, delegate' (cf. Maracle 1990:39).

Oe. { -nhaʔ- } in / sha'konhahseʔ / 'he hires her or them'

       (cf. Michelson & Doxtator 2002:584).

Oo. { -hnhaʔ- } in / shṹ'kwahnhaʔs / 'he hires us' (cf. Woodbury 2003:534).

Ca. { -nhaʔ- } in / ẽh'she:nhaʔ / 'you will command, hire her'

       (cf. Froman et al. 2002:156).

Se. { -haʔ- } in / wa'ʔɔ̃kehaʔt / 'they hired me' (cf. Chafe 1967:52).

Wy. { -taʔ- } in / sahu'tahaʔ / 'he hired again' (cf. Barbeau 1960:228).

PNI * { -**hnhoh**- }, * { -**hnhohw**- } 'door'

Mo. { -hnhoh- } in / kah'nhohaʔ / 'a door, doorway' (cf. Maracle 1990:25).

Oe. { -nhoh- } in / ka'nhohaʔ / 'door' (cf. Michelson & Doxtator 2002:586).

Oo. { -hnhohw- } in / káh'nhohwaʔ / 'door' (cf. Woodbury 2003:536).

Ca. { -nhoh- } in / kan'hohaʔ / 'door' (cf. Froman et al. 2002:94).

Se. { -hoH- } in / ka'hoaʔ / 'door' (cf. Chafe 1967:55).

Hu. { -hnhohw- } in / xah'nhohwaʔ / < gandh8a > 'Porte' (MS 59:96),

       preconsonantal / h / assumed present.

Wy. { -tu:w- } in / jatu:'waʔ / 'door' (cf. Barbeau 1960:245).

PNI * { **-hnhotõ-** } 'close a door, door to be closed'

La. * { -hnhotõ- } in <Asnodyan> 'Fermez la porte' (Biggar 1924:245).

Mo. { -hnhotũ- } in / keh'nho:tũhs / 'I close the door, I close, imprison,
        shut something in' (cf. Maracle 1990:39).

Oe. { -nhotũ- } in / kenho:'tũheʔ / 'I'm closing the door'
        (cf. Michelson & Doxtator 2002:587).

Oo. { -hnhotũ- } in / éh'nho:tũk / 'she locks the door, she closes the door'
        (cf. Woodbury 2003:535).

Se. { -hotɔ̃- } in / kaho:tɔ̃ʔ / 'the door is closed' (cf. Chafe 1967:84).

Hu. { -hnhotõ- }, cf. <gandhoton> 'fermer la P[orte].' (MS 59:96).

PNI * { **-hnh(o/õ)hskʷ(a/e)ɹõ:t** } 'have jowls protruding' [→ cattle, cow]'

Mo. { -hnhõhskʷaɹũt- } in / tjohnhõhskʷa'ɹũthne / 'a cowbarn, a cattle shed,
        a stable' (cf. Maracle 1990:97).

Oe. { -nhũskʷalũt } in / tjo'nhũskʷalũt / 'cow'
        (cf. Michelson & Doxtator 2002:746).

Oo. { -hnhoskʷaẽ:t } in / tjoh'nhoskʷaẽ:t / 'cow' (cf. Woodbury 2003:370).

Ca. { -nhohskʷaõ:t } in / tjo'nhohskʷaõ:t / 'cow' (cf. Froman et al. 2002:73).

Se. { -Hoskʷaɔ̃t } in / 'tjo:skʷaɔ̃t / 'cow' (cf. Chafe 1967:75).

Wy. { -tɔ̃hskʷeɹɔ̃t } in / kju'tɔ̃hskʷeɹɔ̃t / 'cattle' (cf. Barbeau 1960:270).

PNI * { **-hnhõtho-** }, * { **-hnhõthw-** } 'feed, put in the mouth'

Tu. { -nhɔ̃tho- } in / ratinhsa'nhɔ̃:thohs / 'he poisons it, he gives it poison'
        (cf. Rudes 1999:372).

Mo. { -hnhũtho- } in / kheh'nhũthohs / 'I put something in someone's mouth'
        (cf. Maracle 1990:187).

Oo. { -nhũthw- } in / ũkéh'nhũthwas / 'she feeds me' (cf. Woodbury 2003:537).

Hu. { -hnhõkhw- }, cf. <gannhonk8i> 'mettre d. la b. a qlq.' (MS 59:113),
        preconsonantal / h / assumed present.

PNI * { **-hni.ɹ-** } 'be durable, be hard, be solid, be strong'

Tu. { -htir- } in / joh'ti:rɔ̃ / 'it is hard, it is durable, it is solid'
        (cf. Rudes 1999:236).

Mo. { -hni.ɹ- } in / joh'ni:ɹũ / 'it is hard, durable, solid, firm, strong, workable,
        authentic, legal' (cf. Maracle 1990:18).

Oe. { -hnil- } in / johniːˈlũ / 'it's hard, it's solid'
(cf. Michelson & Doxtator 2002:390).

Oo. { -hniR- } in / ohˈniːh / 'it is hard, sturdy, solid' (cf. Woodbury 2003:538).

Ca. { -hniR- } in / ohˈniːjõh / 'it is hard' (cf. Froman et al. 2002:148).

Se. { -HniR- } in / oːniːjõh / 'it's solid' (cf. Chafe 1967:54).

Hu. { -hniɹ- }, cf. < gaˈndiri > 'etre dur, fort, stable' (MS 59:102).

238   PNI * { -**hnitsh**- } 'thigh'

No. * { -htitʃh- } in < Otitchag > 'The thigh' (cf. Rudes 1981a:46).

Mo. { -hnitsh- } in / ohˈnitshaʔ / 'thigh' (cf. Maracle 1990:63).

Oe. { -hnitsh- } in / ohˈnitshaʔ / 'thigh' (cf. Michelson & Doxtator 2002:393).

Oo. { -hnitsh- } in / óhˈnitshaʔ / 'thigh' (cf. Woodbury 2003:540).

239   PI * { -**hnj**- } 'neck, throat'

Ch. { -hj- } in / àhjàtsʌ̃́htîː / 'harness, collar, necklace' (King 1975:174),
/ àːhjàtlʌ̃́ːtîː / 'necktie' (cf. Feeling & Pulte 1975:27), the sequence that
follows is possibly cognate with PNI * { -hnjaʔts- }, perhaps Pre-Cherokee
* { -hjaʔtsl- } 'neck'.

PNI * { -hnj- }, * { -hnjaʔts- } 'neck, throat'.

Mo. { -hnjaʔs- } in / ohˈnjâːsaʔ / 'throat, front of the neck' (cf. Maracle 1990:62).

Oe. { -hnjaʔs- } in / ohˈnjâːsaʔ / 'nape of the neck, collar'
(cf. Michelson & Doxtator 2002:394).

Oo. { -hnjaʔs- } in / óhˈnjaʔsaʔ / 'neck, throat' (cf. Woodbury 2003:541).

Ca. { -hnj- } in / ohnjaʔ / 'neck, throat' (cf. Froman et al. 2002:209), { -hnjaʔs- }
in / ohnˈjaʔsaʔ / 'neck' (cf. Froman et al. 2002:209).

Se. { -Hnjaʔs- } in / oːˈnjaʔsaʔ / 'neck, throat' (cf. Chafe 1967:55).

Hu. { -hnjaʔs- } in / xahˈnjaʔsaʔ / < gaˈndiasa > 'Collum' (MS 59:97),
/ ʔ / assumed present.

240   PNI * { -**hnɹ**- } 'tie'

Tu. { -htr- } in / wahˈrahtrə̃ːʔ / 'he tied it' (cf. Rudes 1999:258).

Mo. { -hneɹ- } in / ˈikhneɹʌ̃khs / 'I tie, attach to, link to, harness to,
connect to something' (cf. Maracle 1990:15).

Oo. { -hR- } in / ẽˈkhẽːkaʔ / 'I will tie it' (cf. Woodbury 2003:515).

Hu. { -hnɹ- }, cf. < gannren > 'lier, ligare' (MS 59:122),
preconsonantal / h / assumed present.

Wy. { -Hnɹ- } in / aʔˈjeːnɹɛ̃ / 'I tied it' (cf. Barbeau 1960:159).
[cf. Rudes 1995:38]

241   PNI * { **-hohsɹ-** }, * { **-hotsɹ-** } 'basswood'
Tu. { -hohstr- } in / oˈhohstrɛh / 'basswood' (cf. Rudes 1999:238).
Mo. { -hoseɹ- } in / oˈhoseɹaʔ / 'basswood' (cf. Maracle 1990:323).
Oe. { -hosel- } in / ohoːˈselaʔ / 'basswood' (cf. Michelson & Doxtator 2002:634),
        presence of / e / anomalous.
Oo. { -hohsR- } in / oˈhóhsæːʔ / 'basswood tree' (cf. Woodbury 2003:546).
Ca. { -hotsɹ- } in / oˈhoːtsɹaʔ / 'basswood', Lower Ca. / oˈhoːtraʔ /
        (cf. Froman et al. 2002:24).
Se. { -HosR- } in / oːosæʔ / 'basswood' (cf. Chafe 1967:55).
[cf. Mithun 1984b:270]

242   PNI * { **-hɹahkʷ-** } 'bread'
La. * { -hɹahkʷ- } in < Carraconny > 'Pain' (Biggar 1924:242).
Oo. { -hæːhkʷ- } in / óˈhæːhkʷaʔ / 'bread' (cf. Woodbury 2003:500),
        / ehæːhkū́ˈnjahaʔ / 'she is a baker' (cf. Woodbury 2003:499).
Se. { -Hæhkʷ- } in / ˈoæhkʷaʔ / 'bread' (cf. Chafe 1967:52).
[cf. Lounsbury 1978:340, Mithun 1981b:240]

243   PNI * { **-hɹaʔt-** } 'feather'
Tu. { -hraʔn- } in / ohˈraʔnɛh / 'feather' (cf. Rudes 1999:211).
Mo. { -hɹaʔt- } in / ohˈɹâːtaʔ / 'the feather stripped from the sides of a quill
        to feather an arrow' (cf. Maracle 1990:63).
Oo. { -hæʔt- } in / óˈhæʔtaʔ / 'feather' (cf. Woodbury 2003:502).
Ca. { -haʔt- } in / oˈhaʔtaʔ / 'quill; plume; feather' (cf. Froman et al. 2002:116).
Se. { -Hæʔt- } in / ˈoæʔtaʔ / 'feather' (cf. Chafe 1967:52).
[cf. Mithun 1984b:269]

244   PNI * { **-hɹen-** } 'cut'
Tu. { -hrɛn- } in / ˈθhrɛːn / 'cut it!' (cf. Rudes 1999:212).
No. * { -(aʔtaʔt)hɹeːn- } in < Untatɹen > 'To cut' (cf. Rudes 1981a:48).
Mo. { -hɹen- } in / ˈkhɹeːnahs / 'I cut, incise, slash, I make a cut, incision'
        (cf. Maracle 1990:50).
Oe. { -hlen- } in / khleːˈnas / 'I'm cutting into it'

(cf. Michelson & Doxtator 2002:375).

Oo. { -hen- } in / ˈkheːnas / 'I cut' (cf. Woodbury 2003:507).

Ca. { -h.ɹeːn- } in / ˈẽkhreːʔ / 'I will cut it' (cf. Froman et al. 2002:78).

Se. { -Heːn- } in / akheːnɛ̃h / 'I'm cutting it' (cf. Chafe 1967:53), / oʔˈkatatheːʔ / 'I cut myself' (cf. Chafe 1967:53); with reflexive.

Hu. { -h.ɹeːn- }, cf. <gaˈrennen> 'couper, incizer, Scarifier' (MS 59:140), long vowel assumed present.

245   PNI * { **-h.ɹjenẽʔ-** }, * { **-ʔɹhjenẽʔ-** } 'fall, fall over'

Tu. { -hrjɛnə̃ʔ- } in / ˈrahrjɛnə̃ʔθ / 'he breaks down, he topples over' (cf. Rudes 1999:216).

Mo. { -h.ɹjenʌ̃ʔ- } in / kahˈɹjeːnʌ̃ʔs / 'it falls in, crumbles, it falls over' (cf. Maracle 1990:26).

Oe. { -ʔlhenjʌ̃ʔ- } in / joʔlheˈnjʌ̂ːũ / 'it has fallen over' (cf. Michelson & Doxtator 2002:849), with metathesis of / j /.

Oo. { -ʔhjenẽʔ- } in / haːkaʔhjéˈnẽhtaʔ / 'it ought to get knocked over there' (cf. Woodbury 2003:950), with causative.

Se. { -ʔhnjenɛ̃ʔ- } in / oʔˈkaʔhnjeːnɛ̃ʔt / 'it fell' (cf. Chafe 1967:90).

246   PNI * { **-h.ɹoːɹi-** }, * { **-h.ɹoːɹj-** } 'tell' (limited to Iroquoia)

Mo. { -h.ɹoːɹi- } in / ˈkh.ɹoːɹihs / 'I tell' (cf. Maracle 1990:50).

Oe. { -hloli- } in / kũhloːˈliheʔ / 'I keep telling you' (cf. Michelson & Doxtator 2002:379).

Oo. { -hoːj- } in / hathoːˈjahaʔ / 'he tells' (cf. Woodbury 2003:289), with semireflexive.

Ca. { -HRowi- } in / sheˈhoːwih / 'tell her!' (cf. Froman et al. 2002:333).

Se. { -HRowi- } in / oʔˈkheːowiʔ / 'I told them' (cf. Chafe 1967:58).

247   PNI * { **-hsẽn-** } 'name, reputation'

Tu. { -hsə̃n- } in / ohˈsə̄ːnɛh / 'name' (cf. Rudes 1999:219), probably a borrowed word.

Mo. { -hsʌ̃n- } in / ohˈsʌ̃ːnaʔ / 'name, signature, reputation' (cf. Maracle 1990:64).

Oe. { -hsʌ̃n- } in / sahsʌ̃ːˈnâː / 'your name' (cf. Michelson & Doxtator 2002:402).

Oo. { -hsẽn- } in / káhˈsẽːnaʔ / 'name' (cf. Woodbury 2003:553).

Ca. { -hsẽn- } in / kahˈsẽːnaʔ / 'a name' (cf. Froman et al. 2002:208).

Se. { -hsɛ̃n- } in / aˈkehsɛ̃ːnɔ̃ʔ / 'my name' (cf. Chafe 1967:56).

Hu. { -hʃɛ̃n- } in / xahˈʃɛ̃ːnaʔ / <gachienda> 'nom, Personne Csiderab'
      (MS 59:47), preconsonantal / h / assumed present.

248   PNI * { -hsheʔɹ- }, { -hsheʔɹh- } 'dough' (limited to Iroquoia)

Mo. { -hsheʔɹh- } in / ohˈshêːɹhaʔ / 'dough, leaven, a thick liquid'
      (cf. Maracle 1990:64).

Oe. { -sheʔlh- } in / oˈshêːlhaʔ / 'dough, paste, cream'
      (cf. Michelson & Doxtator 2002:656).

Oo. { -sheʔR- } in / óˈsheʔæʔ / 'dough' (cf. Woodbury 2003:792).

Ca. { -hsheʔR- } in / ohˈsheʔaʔ / 'dough' (cf. Froman et al. 2002:94).

Se. { -sheʔR- } in / oˈsheʔæʔ / 'dough' (cf. Chafe 1967:79).

[cf. Mithun 1984b:273]

249   PNI * { -hshõw- } 'depression, depth, hole, hollow.

Tu. { -hshə̃w- } in / ohˈshə̃ːwɛh / 'depth, hollow' (cf. Rudes 1999:222).

Mo. { -hshũw- } in / ohˈshũːwaʔ / 'hole, pit' (cf. Maracle 1990:64).

Oe { -shũw- } in / oshũːˈwakũ / 'in the hole'
      (cf. Michelson & Doxtator 2002:661).

Oo. { -shũw- } in / óˈshũːwaʔ / 'hollow, depression' (cf. Woodbury 2003:794).

Hu. { -hʃhõw- } in / ohˈʃhõːwaʔ / <ochon8a> 'trou' (Fraser 1920:446),
      preconsonantal / h / assumed present.

250   PNI * { -hshwahɛ̃- }, * { -hshwɛ̃- } 'detest, dislike, hate'

Mo. { -hswʌ̃- } in / ˈikhswʌ̃hs / 'I detest, dislike, hate, find distasteful'
      (cf. Maracle 1990:16).

Oe. { -shwʌ̃- } in / waʔˈkheshwʌ̃ʔ / 'I dislike her'
      (cf. Michelson & Doxtator 2002:663).

Oo. { -shwahɛ̃- } in / háˈshwahɛ̃hs / 'he disapproves of it, he dislikes it'
      (cf. Woodbury 2003:795).

Ca. { -hswahɛ̃- } in / kõhˈswahɛ̃hs / 'I hate you' (cf. Froman et al. 2002:149).

Se. { -swaɛ̃- } in / keˈswaːɛ̃s / 'I don't like it' (cf. Chafe 1967:81).

Hu. { -hskhwahɛ̃- }, cf. <gask8ahendi> 'haïr q.c. ou qlq' (MS 59:150),
      preconsonantal / h / assumed present.

Wy. { -hskwahɛ̃- } in / hɔ̃wahˈskwahɛ̃ʔ / 'they disliked him'
      (cf. Barbeau 1960:248).

251 PNI * { -**hsinko?t**- } 'ankle, knee'

La. * { -hʃinko?t- } in < Agochinegodascon > 'Les genoilz' (Biggar 1924:242).

Mo. { -hsineko?t- } in / ohsineˈkô:ta? / 'the ankle' (cf. Maracle 1990:65).

Oe. { -hsiniko?t- } in / ohsiniˈkô:ta? / 'ankle'
(cf. Michelson & Doxtator 2002:404).

Hu. { -hʃinxo?t- } in / ohʃiˈnxo?ta? / < ochingota > 'genouil' (MS 59:48),
/ ? / assumed present.

[cf. Lounsbury 1978:340]

252 PI * { -**hskanẽ**- } 'slow'

Ch. * { -hskànò- } in / ù:hskànő:lî: / 'slow' (cf. Feeling & Pulte 1975:179),
with unidentified suffix.

PNI * { -hskanẽ- }, * { -hskẽnõ- } 'for free, slow, peace, peacful'.

Tu. { -hskə̃nə̃? } in / ahˈskə̃:nə̃? / 'slowly' (cf. Rudes 1999:648).

Su. < schaeaenu > 'for intet' (cf. Mithun 1981a:23).

Mo. { -hskɅ̃nɅ̃- } in / skɅ̃nɅ̃ha?ˈshɅ̃:ha / 'slowly, quietly, softly'
(cf. Maracle 1990:81).

Oe. { -skanɅ̃- } in / oskanɅ̃?ˈshũha / 'slowly'
(cf. Michelson & Doxtator 2002:642).

Oo. { -skẽnõ?- } in / skẽnű?ˈah / 'slowly' (cf. Woodbury 2003:783).

Ca. / ˈskẽ:nõ? / 'peace' (cf. Rudes 1995:54).

Se. { -skẽnɔ̃- } in / skẽˈnɔ̃?ɔ̃:h / 'slowly' (cf. Chafe 1967:80).

Wy. { -hskẽnɔ̃- } in / skẽˈnɔ̃:nje? / 'peaceful' (cf. Barbeau 1960:101).

[cf. Mithun 1979:185, Rudes 1995:53]

253 PNI * { -**hska:ths** } 'be good' (limited to Iroquoia)

Mo. { -hskaths } in / ˈjohskaths / 'it is beautiful, attractive, handsome, desirable'
(cf. Maracle 1990:19).

Se. { -ska:s } in / oska:s / 'ref. to noise of pleasure made by woman
in copulation' (cf. Chafe 1967:80).

254 PNI * { -**hskẽnõtõ?** } 'deer'

La. < Asquenondo > 'De dains ilz dient que se sont moutons, & les appellent'
(Biggar 1924:244).

Mo. { -hskɅ̃nũtũ? } in / ohskɅ̃ˈnũ:tũ? / 'a deer, doe' (cf. Maracle 1990:65).

Oe. { -skʌ̃nũtũʔ } in / oskʌ̃nũˈtû: / 'deer' (cf. Michelson & Doxtator 2002:642).

Oo. / skẽnũˈtũʔ / 'deer' (cf. Woodbury 2003:783).

Hu. { -hskẽnõtõʔ } in / ohskẽˈnõ:tõʔ / <oskennonton> 'cerf, chevreuil'
      (MS 59:148), / h / and / ʔ / assumed present.

Wy. { -hskẽnɔ̃tɔ̃ʔ } in / uhskẽˈnɔ̃:tɔ̃ʔ / 'deer' (cf. Barbeau 1960:108).

255   PNI * { **-hskẽʔɹ-** } 'bone'; * { **-hskẽʔɹakeht-** } 'be a warrior', lit. 'carry the bone'

Tu. { -hskə̃ʔr- } in / ohˈskə̃ʔrɛh / 'bone, skeleton' (cf. Rudes 1999:225),
      / rohskə̃ʔraˈkjɛhnɛʔ / 'warrior' (cf. Rudes 1999:226).

Mo. { -hskʌ̃ʔɹ- } in / rohskʌ̃ʔɹaˈkehteʔ / 'warrior, male' (cf. Maracle 1990:78).

Oo. { -skẽʔR- } in / hoskẽ́ʔæˈkehtah / 'young man' (cf. Woodbury 2003:783).

Se. { -skẽʔR- } in / hoskẽʔɛ̃ˈkehtaʔ / 'warrior' (cf. Chafe 1967:80).

Hu. { -hskẽʔɹ- } in / sahskẽʔɹaˈxehteʔ / <Saskenraˌeˈte> 'tu es Soldat'
      (MS 59:149), preconsonantal / h / assumed present.

Wy. { -hskẽʔɹ- } in / tihskẽʔɹaˈjehtaʔ / 'warriors' (cf. Barbeau 1960:300).

[cf. Rudes 1995:38]

256   PI * { **-hskʷ-** } 'head'

Ch. { -hskʷ- } in / kàlĩ̀:skʷàlǔ:tíʔã̌: / 'I'm sticking my head out'
      (cf. Feeling & Pulte 1975:42), / tsĩ̀:skʷàlʌ̃́nìhã̌: / 'I'm hitting someone
      on the head' (cf. Feeling & Pulte 1975:53).

PNI * { -hskoʔt- }, with loss of rounding before * / o /.

Hu. { -hskoʔt- } in / ohˈskoʔtaʔ / <oskóta> 'caput' (MS 59:152),
      preconsonantal / h / and / ʔ / assumed present.

Wy. { -hskuʔt- } in / uhˈskuʔtaʔje / 'on its head' (cf. Barbeau 1960:273).

257   PNI * { **-hsnõhs-** }, * { **-hsnõʔ** } 'finger, hand'

No. * { -hsnõʔ } in <Gesnunke> 'Your hand' (cf. Rudes 1981a:46).

OMo. { -hsnũʔ } in / kahˈsnû:ke / <Gasnonge> 'doigt' (Bruyas 1863:99).

Mo. { -hsnũhs- } in / ohˈsnũhsaʔ / 'a hand, hands, finger, fingers'
      (cf. Maracle 1990:65).

Oe. { -shnũhs- } in / oˈshnũhsaʔ / 'hand, fingers'
      (cf. Michelson & Doxtator 2002:658).

258   PI * { **-hsnu:ɹiʔ** } 'be fast, be quick'

Ch. { -hsìnṹ:lĩ̀ } in / ù:hsìnṹ:lĩ̀: / 'quickly' (Mooney 1891:355).

PNI * { -hsnoɹeʔ } 'be fast, be quick'.

Tu. { -hstoɾeʔ } in / juhˈstoːɾɛʔ / 'it is fast' (cf. Rudes 1999:583).

Su. * { -hsnoɹeʔ } in < Zatznuri > 'War snaar' (cf. Mithun 1981a:23).

Mo. { -hsnoɹeʔ } in / johˈsnoːɹeʔ / 'it is fast, quick, quickly'
        (cf. Maracle 1990:19).

Oe. { -shnoleʔ } in / joshnoːˈlê: / 'it is fast' (cf. Michelson & Doxtator 2002:658).

Oo. { -snoweʔ } in / óˈsnoːweʔ / 'it is fast, it is swift' (cf. Woodbury 2003:797).

Ca. { -hsnoweʔ } in / ohˈsnoːweʔ / 'it is fast, quick' (cf. Froman et al. 2002:114).

Se. { -snoweʔ } in / osnoːweʔ / 'it's fast' (cf. Chafe 1967:40).

Hu. { -hstoɹeʔ }, cf. < gaˈstore > 'etre prompt, vit, expeditif' (MS 59:153),
        / ʔ / assumed present.

Wy. { -hstuɹeʔ } in / uhstuːˈɹeʔ / 'quickly' (cf. Barbeau 1960:285).

[cf. Mithun 1979:182, Rudes 1995:44]

259   PNI * { -**hsoːt** } 'be ancestor to, be grandparent to'

Tu. { -hsoːt } in / ˈaksoːt / 'my grandmother, my great grandmother,
        my female ancestor' (cf. Rudes 1999:231).

Mo. { -hsot- } in / aˈkhsotha / 'my grandmother' (cf. Maracle 1990:3).

Oe. { -hsot- } in / sahˈsotha / 'your grandmother'
        (cf. Michelson & Doxtator 2002:406).

Oo. { -hsot- } in / akshotaˈhah / 'my grandmother' (cf. Woodbury 2003:558).

Ca. { -hsoːt } in / õˈkehsoːt / 'my grandmother' (cf. Froman et al. 2002:140).

Se. { -hsoːt } in / aksoːt / 'my grandmother' (cf. Chafe 1967:57).

Hu. { -hʃoːt- }, cf. < gachiota > 'etre Grand P. ou gr. M. par la fille,
        av. pr. nepotes les Enf. de sa fille' (MS 59:48), long vowel and / h /
        assumed present.

Wy. { -hʃut- } in / uhʃuˈtaʔ / 'grandmother' (cf. Barbeau 1960:102).

260   PI * { -**hsɹõːn-** } 'build, make, prepare'

Ch. * { -hslʌ̃ːn- } in / hòːhlʌ̌ːnấ: / 'he's making it' (cf. Feeling & Pulte 1975:121).

PNI * { -hsɹõni- }, * { -hsɹõnj- }, * { -õni- }, * { -õnj- } 'prepare, make, create',
        the latter two forms generally occur with incorporated noun roots,
        but also occur independently in some languages.

Tu. { -hstrẽni- } in / raʔrihwahˈstrẽːnih / 'he amends it' (cf. Rudes 1999:230).

La. * { -õniːh } in < Carraconny > 'Pain' (Biggar 1924:242).

Mo. { -hseɹũni- } in / ikhseˈɹũːnihs / 'I adorn, decorate, attire, touch up, fix,

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accommodate' (cf. Maracle 1990:16); { -ũni- } in / ˈkũ:nis / 'I make, construct, fabricate, produce' (cf. Maracle 1990:55).

Oe. { -hslũni- } in / khehslũ:ˈniheʔ / 'I'm dressing her or them' (cf. Michelson & Doxtator 2002:406); { -ũni- } in / kũ:ˈniheʔ / 'I'm making it' (cf. Michelson & Doxtator 2002:756).

Oo. { -hsẽ:nj- } in / waʔkéhˈsẽ:njaʔ / 'I made it' (cf. Woodbury 2003:554); { -ũnj- } in / waʔkǽ:hˈkũ:njaʔ / 'I baked bread' (cf. Woodbury 2003:851).

Ca. { -hsɹõni- } in / ẽhsehˈsɹõ:niʔ / 'you will create, make s.t.' (cf. Froman et al. 2002:121); { -õni- } in / ˈkõ:nihs / 'I make, earn' (cf. Froman et al. 2002:191).

Se. { -sjõni- } in / aˈkesjõ:ni:h / 'I've made it, prepared it' (cf. Chafe 1967:81); { -õni- } in / jeˈsheʔõ:nih / 'she makes dough' (cf. Chafe 1967:77).

Hu. { -hʃɹõni- }, { -hʃɹõnj- }, cf. <gachondi> 'accomoder, ajuster, orner q.c.' (MS 59:49), preconsonantal / h / assumed present, / ɹ / has become / h / in Rock dialect; { -õni- }, { -õnj- }, cf. <Ondi> 'fe. q.c.' (MS 59:184).

Wy. { -hʃɹõnj- } in / aʔˈhatehʃɹõ:njaʔ / 'he got ready' (cf. Barbeau 1960:180); { -õnj- } in / hateʔˈnõnjah / 'he makes arrows' (cf. Barbeau 1960:201), { -õni- } in / utõtaˈɹõ:nih / 'she has made a lake' (cf. Barbeau 1960:103).

261   PNI * { -**hst**- } 'use'

Tu. { -hst- } in / ˈrahsthaʔ / 'he employs it, he uses it' (cf. Rudes 1999:255).

Mo. { -hst- } in / ˈikhsthaʔ / 'I serve, am useful for, am good for' (cf. Maracle 1990:16).

Oo. { -st- } in / háˈtisthaʔ / 'they use it, they are using it, they wear it' (cf. Woodbury 2003:798).

Ca. { -hst- } in / ehsthaʔ / 'she uses it; people use it' (cf. Froman et al. 2002:356).

Hu. { -hst- }, cf. <gaˈsti> 'se servir d'une Ch. pr. q. usage' (MS 59:153).

Wy. { -hst- } in / ˈehskwahst / 'you will use it' (cf. Barbeau 1960:154).

262   PNI * { -**hstahɹõw**- } 'marrow'

Tu. { -hsnahrõw- } in / ohsnahˈrõ:wɛh / 'glue, marrow, pith' (cf. Rudes 1999:228).

Mo. { -hstahɹũw- } in / ohstahˈɹũ:waʔ / 'marrow' (cf. Maracle 1990:65).

Oe. { -stahlũw- } in / otstahrũ:ˈwâ: / 'marrow'
      (cf. Michelson & Doxtator 2002:645).

Se. { -sta:ɔ̃w- } in / oˈsta:ɔ̃wɔ̃ʔ / 'marrow' (cf. Chafe 1967:80).

263   PI * { **-hsthwih** }, * { **-hstwih** } 'be little, be small'

Ch. { -hstì: } in / ùhstíː / 'little' (cf. Feeling & Pulte 1975:178).

PNI * { -ahsthw- }, * { -ahsto- }, * { -hsthwih }, * { -hstwih } 'shrink, be small'

Tu. { -ahsthw- } in / ˈwahsthə̃ / 'it is small' (cf. Rudes 1999:648).

Mo. { -ahsto- } in / ˈwahstohs / 'it shortens up, becomes smaller,
      decreased in size' (cf. Maracle 1990:101).

Oe. { -asto- } in / joˈstô:ũ / 'it has gotten smaller'
      (cf. Michelson & Doxtator 2002:123), with inchoative.

Oo. { -sthwih } in / ˈósthwih / 'it is less, it is smaller' (cf. Woodbury 2003:799).

Ca. { -ahsthw- } in / wahsthwahs / 'it shrinks' (cf. Froman et al. 2002:291).

Hu. { -hskwih }, cf. <gask8i> 'etre petit' (MS 59:51).

264   PNI * { **-hsw**- } 'back'

Tu. { -hsw- } in / ˈohswɛh / 'back, bust, lower back' (cf. Rudes 1999:233).

Mo. { -hsw- } in / ˈohswaʔ / 'the small of the back' (cf. Maracle 1990:65).

Oe. { -shw- } in / ˈoshwaʔ / 'back' (cf. Michelson & Doxtator 2002:662).

Ca. { -hsw- } in / ohˈswe:naʔ / 'upper back' (cf. Froman et al. 2002:19).

265   PNI * { **-hswẽʔkaɹ**- }, * { **-hwẽʔkaɹ**- }, * { **-hwẽʔkhaɹ**- } 'board, wood'

Tu. { -hwə̃ʔkhar- } in / ohˈwə̃ʔkharɛh / 'board, plank, timber, wood'
      (cf. Rudes 1999:243).

Mo. { -hswʌ̃ʔkaɹ- } in / ohˈswʌ̂:kaɹeʔ / 'lumber, boards, a chess board'
      (cf. Maracle 1990:66).

Oe. { -hsũʔkal- } in / ohˈsũ̂:kaleʔ / 'board' (cf. Michelson & Doxtator 2002:661),
      shift of / wʌ̃ / to / ũ / anomalous.

Oo. { -shwẽʔkaR- } in / óˈshwẽʔka:ʔ / 'board, flooring' (cf. Woodbury 2003:795).

Ca. { -hwẽʔkaR- } in / ohˈwẽʔka:ʔ / 'a splint; a wood chip'
      (cf. Froman et al. 2002:583).

Se. { -Hwɛ̃ʔkaR- } in / o:ˈwɛ̃ʔkææʔ / 'wood, splint' (cf. Chafe 1967:57).

266   PNI * { **-hsʔ**- }, * { **-ihsʔ**- } 'complete, exhaust, finish'

Tu. { -hsʔ- } in / ˈrahsʔahs / 'he exhausts it' (cf. Rudes 1999:256); { -ihsʔ- } in

/ ranə̃hˈsihsʔahs / 'he finishes the house' (cf. Rudes 1999:256).

Mo. { -hsaʔ- } in / ˈikhsaʔs / 'I create, achieve, arrive at, perfect, finish,
    complete' (cf. Maracle 1990:15); { -ihsaʔ- } in / kerihˈwihsaʔs /
    'I decree, order, decide' (cf. Maracle 1990:134).

Oe. { -hsaʔ- } in / ˈiksaʔas / 'I'm finishing it'
    (cf. Michelson & Doxtator 2002:400); { -isaʔ- } in / ʌ̃hanũhˈsisaneʔ /
    'he will finish building the house' (604), loss of / h / in incorporating
    form anomalous.

Oo. { -hsʔ- } in / kéhsˈʔas / 'I finish, I'm eating it all up'
    (cf. Woodbury 2003:561); { -ihsʔ- } in / waknṹhˈsihsʔaʔ /
    'I finished a house' (cf. Woodbury 2003:561).

Ca. { -ihsʔ- } in / õkwathẽˈtihsʔõh / 'we finished the field'
    (cf. Froman et al. 2002:119).

Se. { -sʔ- } in / heˈjosʔahtɔ̃h / 'it's all gone' (cf. Chafe 1967:56).

Hu. { -ihʃaʔ- }, cf. <ichai> 'achever, finir, conclurre' (MS 59:203),
    / h / and / ʔ / assumed present.

Wy. { -ihʃɛ̃ʔ } in / naˈhatekwihʃɛ̃ʔ / 'when he has eaten (cf. Barbeau 1960:116).

267   PNI * { -**htsiʔ** } 'have as older sibling, have as older maternal female cousin'

Tu. { -htʃiʔ } in / ˈaktʃiʔ / 'my older sister, my older maternal female cousin'
    (cf. Rudes 1999:195).

No. * { -htʃiʔ } in <ahkahchee> 'Sister' (cf. Rudes 1981a:48).

Mo. { -htsiʔ } in / aˈkhtsî:ʔa / 'my older sister' (Deering & Delisle 1976:31).

Oe. { -htsi- } in / aˈktsiha / 'my older sister, she's my older sister'
    (cf. Michelson & Doxtator 2002:729).

Oo. { -htsiʔ- } in / aktshíˈʔah / 'my older sibling, my older brother or sister'
    (cf. Woodbury 2003:562).

Ca. { -htsiʔ- } in / khehˈtsiʔah / 'my older sister' (cf. Froman et al. 2002:612).

Se. { -htsiʔ } in / hahtsiʔ / 'my older brother' (cf. Chafe 1967:54), / ahtsiʔ /
    'my older sister' (cf. Chafe 1967:54).

268   PI * { -**htsu:hw**- } 'colour, dye, paint'

Ch. { -hsù:hw- } in / hìhsǔ:hwǽ: / 'paint it!' (cf. Feeling & Pulte 1975:55).

PNI * { -ahtsoh- }, * { -ahtsohw- } 'colour, paint, dye',
    initial / a / anomalous, perhaps original.

Tu. { -ahθoh- } in / rahˈθohahs / 'he paints' (cf. Rudes 1999:28).

Mo. { -ahsoh- } in / ˈkahsohs / 'I dye something, I colour something'
  (cf. Maracle 1990:27).
Oe. { -ahsohw- } in / waˈhahsoweʔ / 'he coloured'
  (cf. Michelson & Doxtator 2002:74).
Oo. { -ahsohw- } in / akáhˈsohwih / 'I have painted it' (cf. Woodbury 2003:239).
Ca. { -ahsoh- } in / wahˈsohõːt / 'it is coloured, dyed' (cf. Froman et al. 2002:99).
Se. { -ahsoh- } in / aˈkahsoɔ̃h / 'I've painted it' (cf. Chafe 1967:38).
Hu. { -ahsohw- }, cf. <Asoh8i> 'Teindre' (MS 59:17),
  preconsonantal / h / assumed present.
[cf. Mithun 1984b:260, Rudes 1995:51]

269   PNI * { **-hwatsiɹ-** } 'family'
Tu. { -hwatʃir- } in / ohwaˈtʃiːrɛh / 'clan segment, extended family'
  (cf. Rudes 1999:240).
Mo. { -hwatsiɹ- } in / ohˈwaːtsiɹeʔ / 'a maternal family' (cf. Maracle 1990:66).
Oe. { -hwatsil- } in / kahwaːˈtsileʔ / 'family'
  (cf. Michelson & Doxtator 2002:413).
Oo. { -hwatsiR- } in / akhwáˈtsiːjæʔ / 'my family' (cf. Woodbury 2003:572).
Ca. { -hwatsiR- } in / swahwaːˈtsiːjaʔ / 'your (pl) families'
  (cf. Froman et al. 2002:114).
Se. { -HwatsiR- } in / khwatsiːjæʔ / 'my family' (cf. Chafe 1967:57).
Hu. { -hwatsiɹ- } in / xahwaˈtsiːɹaʔ / <gah8atsira> 'famille' (MS 59:78).
[cf. Mithun 1984b:278]

270   PNI * { **-hweʔnõniːh** } 'be round'
Tu. { -hwə̃hnə̃tiːh } in / thaʔnɛhwə̃hˈnə̃ːtiːh / 'it is round' (cf. Rudes 1999:438),
  / ə̃ / and / hn / anomalous.
No. * { -hweʔˀtõtiːh } in <Tatowetente> 'Round' (cf. Rudes 1981a:47).
Mo. { -hweʔnũni } in / tejothweʔˈnũːni / 'it is round, circular'
  (cf. Maracle 1990:83), with semireflexive.
Oe. { -hweʔnũni } in / tejothweʔnũːˈni / '(it's a) circle, it's round'
  (cf. Michelson & Doxtator 2002:201), with semireflexive.
Oo. { -hweʔnũnih } in / tejothweʔnṹˈnih / 'it is round, it is a circle'
  (cf. Woodbury 2003:294), with semireflexive.
Ca. { -hweʔnõni: } in / tejothweʔˈnõːni: / 'it is round'
  (cf. Froman et al. 2002:273), with semireflexive.

Se. { -Hweʔnɔni:h } in / teˈjothweʔnɔ:ni:h / 'it's round' (cf. Chafe 1967:57),
       with semireflexive.

Hu. { -hweʔnõni:h }, cf. <gah8ennondi> 'plier en rond. en rouleau' (MS 59:78),
       long vowel and final / h / assumed present.

271   PNI * { -**hwẽʔnst**- } 'foam'
Oe. { -hwʌ̃ʔtst- } in / ohˈwʌ̂:tstaʔ / 'foam' (cf. Michelson & Doxtator 2002:415).
Oo. { -hwẽʔst- } in / óhˈwẽʔstaʔ / 'foam, phlegm' (cf. Woodbury 2003:578).
Ca. { -hwẽʔst- } in / ohˈwẽʔstaʔ / 'foam' (cf. Froman et al. 2002:124).
Se. { -Hwẽ̃ʔst- } in / o:ˈwẽ̃ʔstaʔ / 'foam' (cf. Chafe 1967:57).
Hu. { -hwẽʔst- } in / kahˈwẽʔstaʔ / <gah8ensta> 'ecume, pustule' (MS 59:79),
       / ʔ / assumed present.
[cf. Mithun 1984b:275]

272   PNI * { -**hwihsh**- } 'force, strength'
Tu. { -hwihsh- } in / rathwihˈshɔ̃:tih / 'he forces it' (cf. Rudes 1999:60).
Mo. { -hwihsh- } in / ohˈwihshaʔ / 'energy of the body, vigour'
       (cf. Maracle 1990:66).
Oe. { -hwish- } in / tekhwishʌ̃heˈjũ̂:seʔ / 'I get tired'
       (cf. Michelson & Doxtator 2002:416).
Oo. { -hwish- } in / ˈkhẃisheʔ / 'I am strong, I am powerful'
       (cf. Woodbury 2003:581).
Se. { -hwihs- } in / o:ˈwihsaʔ / 'muscle' (cf. Chafe 1967:58),
       loss of second rather than first / h / of PNI cluster anomalous.
Hu. { -hwihʃh- } in / xahˈwihʃhaʔ / <gah8icha> 'force, robur' (MS 59:79),
       preconsonantal / h / assumed present.
Wy. { -:wihʃ- } in / ha:ˈwihʃaʔjeh / 'his strength' (cf. Barbeau 1960:141).

273   PI * { **hwihsk** } 'five'
Ch. / hìhskɨ́: / 'five' (cf. Feeling & Pulte 1975:129).
PNI * / ˈhwihsk / 'five'; Onondaga and Huron-Wyandot show reflexes of a form
       / ˈhwiks / 'five'.
Tu. / ˈwisk / 'five' (cf. Rudes 1999:585), with unexplained loss of second / h /.
No. <Whisk> 'Five' (cf. Rudes 1981a:47).
Su. <Wisck> '5' (cf. Mithun 1981a:23).
La. <Ouyscon> 'Cinq' (Biggar 1924:241).

Mo. / ˈwihsk / 'five' (cf. Maracle 1990:111).

Oe. / ˈwisk / 'five' (cf. Michelson & Doxtator 2002:774).

Oo. / ˈhwíks / 'five' (cf. Woodbury 2003:578).

Ca. / hwihs / 'five' (cf. Froman et al. 2002:605).

Se. / wis / 'five' (cf. Chafe 1967:85).

Hu. / ˈwihʃ / <8ich> 'Cinq' (MS 59:138), preconsonantal / h / assumed
         present.

Wy. / uˈwihʃ / 'five' (cf. Barbeau 1960:185).

[cf. Lounsbury 1978:339, Mithun 1979:183, Mithun 1981a:3, Rudes 1995:45]

274   PNI * { -**hwihst**- } 'metal, money'

Tu. { -hwihst- } in / ohˈwihstɛh / 'cash, metal, money' (cf. Rudes 1999:243),
         a borrowed word.

Mo. { -hwihst- } in / ohˈwihstaʔ / 'money, metal, bell, silver'
         (cf. Maracle 1990:66).

Oe. { -hwist- } in / ohˈwistaʔ / 'money, dollar'
         (cf. Michelson & Doxtator 2002:416).

Oo. { -hwist- } in / óhˈwistaʔ / 'money, metal object, bell'
         (cf. Woodbury 2003:579).

Ca. { -hwihst- } in / ohˈwihstaʔ / 'money' (cf. Froman et al. 2002:202).

Se. { -Hwist- } in / oːˈwistaʔ / 'money' (cf. Chafe 1967:58).

Wy. { -kwihst- } in / ajekwihˈstaːẽʔ / 'I have money' (cf. Barbeau 1960:280),
         / k / anomalous.

275   PI * { -**iː**- } 'be, be the one, exist'

Ch. { -ìː- } in / tsííːkî / 'who is' and / jìkíí / 'is not'
         (cf. Feeling & Pulte 1975:345).

PNI * { -iːh } 'be, exist'.

Tu. {-i-} in / ˈiːkə̃ː / 'it is' (cf. Rudes 1999:245).

La. * { -iːh } in <Yca> 'Quello; Celuy' (BR80).

Mo. { -i } in / ˈiːkʌ̃ / 'the one' (cf. Maracle 1990:40).

Oe. { -i } in / iˈkʌ̃ / 'really' (cf. Michelson & Doxtator 2002:425).

Oo. { -ih } in / íˈkẽh / 'it is' (cf. Woodbury 2003:588).

Se. { -iːh } in / teʔkɛ̃ːh / 'not much' (cf. Chafe 1967:58).

Hu. { -ih } in / ˈeːxẽhk / <e̜enk> 'sera' (MS 59:32), / h / assumed present.

Wy. { -ih } in / ˈteʔjɛ̃h / 'it is not' (cf. Barbeau 1960:269).

276   PNI * { **-ihej-** } 'be dead, die'

     Tu. { -ihej- } in ∕ ə̃ˈkihejʔ ∕ 'I will die' (cf. Rudes 1999:249).

     No. * { -ihej- } in ＜Anseehe＞ 'Death' (cf. Rudes 1981a:46).

     Mo. { -ihej- } in ∕ kiˈheːjũ̃hs ∕ 'I die, I pass away, I become dead'
         (cf. Maracle 1990:53).

     Oe. { -ihej- } in ∕ jaknʌ̃heːˈjũ ∕ 'we two have died'
         (cf. Michelson & Doxtator 2002:423).

     Oo. { -ihej- } in ∕ ẽkíˈheːjaʔ ∕ 'I will die' (cf. Woodbury 2003:592).

     Ca. { -ihej- } in ∕ kiˈheːjõhs ∕ 'I am dying' (cf. Froman et al. 2002:86).

     Se. { -iej- } in ∕ aˈkiːejɔ̃ːh ∕ 'I'm dead' (cf. Chafe 1967:59).

     Hu. { -iheJ- }, cf. ＜genheon＞ 'Mourir' (MS 59:174).

     Wy. { -iheJ- } in ∕ aʔˈjɛ̃he ∕ 'she died' (cf. Barbeau 1960:311).

277   PNI * { **-ihjaʔk-** }, * { **-jahjaʔk-** } 'cross over'

     Tu. { -ihjaʔk- } in ∕ wahˈrə̃hjaʔk ∕ 'he crossed over it' (cf. Rudes 1999:259).

     Mo. { -jahjaʔk- } in ∕ teˈkjâːjaʔkhs ∕ 'I cross over' (cf. Michelson 1973:121).

     Oe. { -jahjaʔk- } in ∕ tehojahˈjâːkũ ∕ 'he has gone across'
         (cf. Michelson & Doxtator 2002:780).

     Oo. { -jahjaʔk- } in ∕ teháˈjahjaʔks ∕ 'he crosses over' (cf. Woodbury 2003:876).

     Se. { -jaːjaʔk- } in ∕ tẽjakwaˈjaːjaʔk ∕ 'we'll cross it' (cf. Chafe 1967:86).

     Wy. { -JaːʒaʔK- } in ∕ sahiˈʒaːʒaʔ ∕ 'they crossed the field again'
         (cf. Barbeau 1960:215), ∕ tehstihˈtiːʒaʔ ∕ 'you cross a field'
         (cf. Barbeau 1960:183).

278   PNI * { **-ijhõh-** }, * { **-ijhõhw-** }, * { **-wjhõh-** } 'creek, river'

     Tu. { -jhə̃h- } in ∕ oˈjhə̃hɛh ∕ 'river' (cf. Rudes 1999:264).

     OMo. ∕ kaˈjhũhaʔ ∕ ＜Gaihonha＞ 'rivière' (Bruyas 1863:63, MS58:1098)

     Mo. { -hjũh- } in ∕ kahˈjũhaʔ ∕ 'a river, creek, stream' (cf. Maracle 1990:25).

     Oe. { -wjhũh- } in ∕ kaˈwjhũhaʔ ∕ 'river' (cf. Michelson & Doxtator 2002:778).

     Oo. { -ihjũhw- } in ∕ kɛ̃́hˈjũhwaʔ ∕ 'river' (cf. Woodbury 2003:631).

     Se. { -ihɔ̃H- } in ∕ kɛ̃hɔ̃ːteʔ ∕ 'a creek is there' (cf. Chafe 1967:59).

     [cf. Mithun 1984b:275]

279   PNI * { **-ijoːh** } 'be beautiful, be good, be great'

     Tu. { -ijoː } in ∕ ˈwiːjoː ∕ 'it is beautiful, it is great' (cf. Rudes 1999:265).

Mo. { -ijo } in / kanũhkʷaʔtsheˈɹiːjo / 'good medicine, a good remedy'
(cf. Maracle 1990:273).

Oe. { -ijo } in / kakhwiˈjo / 'good food' (cf. Michelson & Doxtator 2002:441).

Oo. { -ijoh } in / ohahíˈjoh / 'good road' (cf. Woodbury 2003:635).

Ca. { -ijoː } in / ohneːˈkiːjoː / 'good water' (cf. Froman et al. 2002:363).

Se. { -ijoːh } in / wiːjoːh / 'it's good' (cf. Chafe 1967:46).

Hu. { -ioːh }, cf. <ïo> 'beau, bon, grand' (MS 59:204),
long vowel and / h / assumed present.

280   PNI * { **-inkẽʔ-** } 'emerge, go out, put out'

Tu. { -itkə̃ʔ- } in / wɛˈkiːtkə̃ʔθ / 'it distills' (cf. Rudes 1999:263),
/ rawə̃ˈtiːtkə̃ʔθ / 'he speaks' (cf. Rudes 1999:263).

Mo. { -inekʌ̃ʔ- } in / kewʌ̃ˈninekʌ̃ʔs / 'I utter, make speeches'
(cf. Maracle 1990:153).

Oe. { -inikʌ̃ʔ- } in / waʔewʌ̃ˈninikʌ̃neʔ / 'she spoke out'
(cf. Michelson & Doxtator 2002:771).

Oo. { -itkẽʔ- } in / kaǽhˈkʷitkẽʔs / 'the sun rises, the moon rises'
(cf. Woodbury 2003:634).

Ca. { -itkẽʔ- } in / kawẽniˈtkẽʔõ̃ːʔ / 'a speech' (cf. Froman et al. 2002:584).

Se. { -itkɛ̃ʔ- } in / tjoæhkʷiˈtkɛ̃ʔõ̃h / 'the sun (or moon) has come out'
(cf. Chafe 1967:60).

Hu. { -inxẽʔ- }, cf. <ingendi> 'Sortir' (MS 59:203), / ʔ / assumed present.

281   PI * { **iːnõh** } 'far'

Ch. / íːnâ: / 'far' (cf. Feeling & Pulte 1975:133), for final vowel cf. / ìːnʌ̃̀ːhíː /
'too far' (cf. Feeling & Pulte 1975:133).

PNI * / ˈiːnõh / 'far'.

Tu. / ˈiːnə̃ / 'far' (cf. Rudes 1999:260).

Mo. / ˈiːnũ / 'far, distant, a long ways off' (cf. Maracle 1990:10).

Oe. / iˈnũ / 'it's far' (cf. Michelson & Doxtator 2002:426).

Oo. / ˈiːnũh / 'far' (cf. Woodbury 2003:633).

Ca. / ˈiːnõh / 'far' (cf. Froman et al. 2002:686).

[cf. Rudes 1995:44]

282   PNI * { **-inskaɹ-** } 'mattress, sheet, spread'

Tu. { -iθkar- } in / ˈuθkarɛh / 'sheet, spread' (cf. Rudes 1999:261).

Mo. { -itskaɹ- } in / ˈkʌtskaɹeʔ / 'a mattress, cover, sheet, mat, carpet, flooring'
(cf. Maracle 1990:43).

Oe. { -itskal- } in / waˈkitskalũʔ / 'I have put the sheet down'
(cf. Michelson & Doxtator 2002:434).

Ca. { -itskaR- } in / kẽtskaːʔ / 'mattress, sleeping mat'
(cf. Froman et al. 2002:195).

Se. { -iskaR- } in / kẽskaːaʔ / 'mat, something to sleep on' (cf. Chafe 1967:60).

283   PNI * { -inskoːt } 'be sitting, sit' (limited to Iroquoia)
Mo. { -itskot- } in / ˈkitskoteʔ / 'I am seated' (cf. Maracle 1990:53).
Oe. { -itskot- } in / ˈjetskoteʔ / 'she's sitting up'
(cf. Michelson & Doxtator 2002:434).
Ca. { -itskoːt } in / kitskoːt / 'I am sitting' (cf. Froman et al. 2002:295).

284   PNI * { -inskɹ- } 'saliva, spit, spittle'
Tu. { -iθkr- } in / ˈoθkrɛh / 'spittle' (cf. Rudes 1999:412),
unexpected lack of penultimate lengthening.
Mo. { -itskeɹ- } in / ˈotskeɹiʔ / 'spit, spittle, saliva' (cf. Maracle 1990:76).
Oe. { -itskl- } in / ˈotsklaʔ / 'spit, spittle, saliva'
(cf. Michelson & Doxtator 2002:434).
Oo. { -itskR- } in / ˈótskæːʔ / 'saliva' (cf. Woodbury 2003:635).
Ca. { -itskɹ- } in / ˈotskɹaʔ / 'saliva, spit, sputum' (cf. Froman et al. 2002:276).
Se. { -iskR- } in / oskæʔ / 'saliva' (cf. Chafe 1967:60).
Hu. { -iskɹ- } in / oˈskɹoːtaʔ / < oskrota > 'Crachat' (MS 59:154).

285   PNI * { -inst- } 'fish scale'
Tu. { -iθn- } in / ˈoːθnɛh / 'fishscales' (cf. Mithun 1984b:275).
Mo. { -itst- } in / ˈjotstaɹeʔ / 'it has scales on it' (cf. Maracle 1990:22).
Oe. { -itst- } in / ʌkitstalũːˈkô: / 'I will remove the fish scales'
(cf. Woodbury 2003:437).
Oo. { -ist- } in / ˈkẽstaːʔ / 'it has scales, it has a scab' (cf. Woodbury 2003:633).
Ca. { -ihst- } in / ohstaːʔ / 'a scale (of a fish)' (cf. Froman et al. 2002:279).
Se. { -ist- } in / ostaʔ / 'scales' (cf. Chafe 1967:60).
[cf. Mithun 1984b:275]

286 PNI * { -instẽh.ɹ- }, * { -nstẽh.ɹ- } 'cliff, rock, rock bank'

Tu. { -itʃtə̃hr- } in / oˈtʃtə̃hrɛh / 'stone', / joˈtʃtə̃hrɛh / 'cliff on land or in water'
        (cf. Rudes 1999:136), probably a borrowed root.

Mo. { -itstʌ̃h.ɹ- } in / oˈtstʌ̃̂ːɹaʔ / 'a rock, boulder, stone' (cf. Maracle 1990:76).

Oe. { -itstʌ̃hl- } in / oˈtstʌ̃̂ːlaʔ / 'rock, mountain, outcropping'
        (cf. Michelson & Doxtator 2002:437).

Oo. { -stẽhR- } in / óˈstẽhæʔ / 'rock' (cf. Woodbury 2003:777).

Se. { -stɛ̃ːR- } in / oˈstɛ̃ːɛ̃ʔ / 'cliff' (cf. Chafe 1967:81).

287 PNI * { -itaʔw- }, * { -itʔo- } 'sleep'

Tu. { -itʔo- } in / waˈkiːtʔohs / 'I am sleeping' (cf. Rudes 1999:264).

No. * { -iˀtaʔw- } or * { -iˀtʔo- } in < Kentus > 'Sleep' (cf. Rudes 1981a:48).

La. * { -itaʔw- } in < Quasigno agnydahoa > 'Allons nous coucher'
        (Biggar 1924:243).

Mo. { -itaʔw- } in / waˈkiːtaʔs / 'I am asleep' (cf. Maracle 1990:107).

Oe. { -itaʔw- } in / ũkiˈtaweʔ / 'I fell asleep'
        (cf. Michelson & Doxtator 2002:430).

Oo. { -itaʔw- } in / kóˈtaʔwih / 'she is asleep' (cf. Woodbury 2003:589).

Ca. { -itaʔw- } in / sõˈkiːtaʔ / 'I went back to sleep' (cf. Froman et al. 2002:298).

Se. { -itaʔw- } in / ɔ̃kiːtaʔ / 'I went to sleep' (cf. Chafe 1967:60).

Hu. { -itaʔw- }, cf. < genta8i > 'dormir' (MS 59:176), / ʔ / assumed present.

Wy. { -itaʔw- } in / huˈtaʔwih / 'he is sleeping' (cf. Barbeau 1960:170).

288 PNI * { -itjohkʷ- } 'crowd, group'

Tu. { -iʔnjohkʷ- } in / oʔˈnjohkʷɛh / 'army, body, company, class, group, league,
        organization, troop' (cf. Rudes 1999:269).

Mo. { -itjohkʷ- } in / kʌ̃ˈtjohkʷaʔ / 'a band, assembly, company, collection,
        group' (cf. Maracle 1990:43).

Oe. { -itjohkʷ- } in / kʌ̃ˈtjohkʷaʔ / 'group, crowd'
        (cf. Michelson & Doxtator 2002:439).

Oo. { -itjohkʷ- } in / ké̃ˈtjohkʷaʔ / 'crowd, group' (cf. Woodbury 2003:591).

Ca. { -itjohkʷ- } in / skẽˈtjohkʷaːt / 'one crowd; one body',
        Lower Ca. / skẽˈkjohkʷaːt / (cf. Froman et al. 2002:488).

Se. { -itjohkʷ- } in / kɛ̃ˈtjohkʷaʔ / 'crowd' (cf. Chafe 1967:60).

Hu. { -itjohkʷ- } in / xẽˈtjohkʷaʔ / < gentiok8a > 'Troupe assemblée'
        (MS 59:177), preconsonantal / h / assumed present.

490

Wy. { -ikjuhkʷ- } in / huˈkjuhkʷaʔ / 'his crowd' (cf. Barbeau 1960:294).

289 PNI * { **iːts** } 'you'

Tu. / ˈiːθ / 'you, the two of you, you all' (cf. Rudes 1999:261).

Su. <Hiss> 'Du' (cf. Mithun 1981a:23).

Mo. / ˈiːseʔ / 'you, yourself' (cf. Maracle 1990:10).

Oe. / iˈsêː / 'you' (cf. Michelson & Doxtator 2002:427).

Oo. / ˈís / 'you' (cf. Woodbury 2003:633).

Ca. / iːs / 'you' (cf. Froman et al. 2002:686)

Se. / iːs / 'you' (cf. Chafe 1967:90).

Hu. / ˈiːsa / <isa> 'tu' (MS 59:18), final / a / anomalous.

290 PNI * { **-iʔaːk-** }, * { **-iʔjaːk-** }, * { **-ʔjaːk-** } 'shoot'

Tu. { -iʔak- } in / waˈktiʔak / 'I shot it' (cf. Rudes 1999:267).

No. * { -(aˀtaˀt)ʔjaːk- } in <Untatchag> 'To shoot' (cf. Rudes 1981a:48).

Mo. { -iʔjaʔk- } in / ˈkîːjaʔkhs / 'I shoot a bow, I discharge arrows'
        (cf. Maracle 1990:52).

Ca. { -ʔjaːK- } in / haˈtijʔaːs / 'they (m) are shooting'
        (cf. Froman et al. 2002:289).

Se. { -iʔjaːK- } in / ˈtsiʔjaːk / 'shoot it!' (cf. Chafe 1967:61).

Hu. { -iʔjaːK- } or { -ʔjaːK- }, cf. <gaiaᵢi> 'tirer fuzil' (MS 59:40),
        long vowel and / ʔ / assumed present.

Wy. { -iʔʒaK- } / ˈtsiʔʒah / 'shoot!' (cf. Barbeau 1960:70).

291 PNI * { **-iʔtaɹ-** }, * { **-ʔtaɹ-** } 'clan, clay, hearth'

Mo. { -iʔtaɹ- } in / oʔˈtaːɹaʔ / 'clay, clan, tribe, chimney, pottery, crockery'
        (cf. Maracle 1990:59).

Oe. { -iʔtal- } in / niwakiʔtaˈlôːtɑ̃ / 'it's my clan'
        (cf. Michelson & Doxtator 2002:443).

Oo. { -ʔtaR- } in / óʔˈtaːæʔ / 'mud, clay, mortar' (cf. Woodbury 2003:943).

Ca. { -iʔtaR- } in / oʔtaːʔ / 'clay; mud; mortar' (cf. Froman et al. 2002:56).

Se. { -ʔtaR- } in / kaʔtaːaʔ / 'chimney, fireplace' (cf. Chafe 1967:93).

Hu. { -ʔtaɹ- } in / oʔˈtaːɹaʔ / <otara> 'terre, fange' (MS 59:155),
        / ʔ / assumed present.

Wy. { -ʔtaɹ- } in / hutiʔtaˈɹaːẽʔ / 'they have a clan' (cf. Barbeau 1960:100).

[cf. Mithun 1984b:278]

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292   PNI * { **-iʔtɹõ̃-** } 'abide, dwell, reside, sit'

    Tu. { -iʔrə̃- } in / ˈrə̃ʔrə̃ʔ / 'he abides, he is placed, he is seated, he remains'
        (cf. Rudes 1999:270).

    Mo. { -iʔteɹũ̃- } in / ˈkî:teɹũ̃ʔ / 'I reside, live, stay somewhere, I am present'
        (cf. Maracle 1990:52).

    Oe. { -iʔtlũ̃- } in / ˈkî:tlũ̃ʔ / 'I'm sitting, I'm at home'
        (cf. Michelson & Doxtator 2002:444).

    Oo. { -iʔtẽ:- } in / ˈkə́ʔtẽ:ʔ / 'it is sitting [there], it is in place'
        (cf. Woodbury 2003:640).

    Ca. { -iʔtɹõ̃- } in / haˈtiʔtɹõ̃ʔ / 'they (m) are at home'
        (cf. Froman et al. 2002:487).

    Se. { -iʔtjɔ̃- } in / kiʔtjɔ̃ʔ / 'I'm settled, I dwell' (cf. Chafe 1967:61).

    Hu. { -iʔtɹõ̃- }, cf. <gentron> 'etre en q. lieu' (MS 59:178),
        / ʔ / assumed present.

    Wy. { -iʔtɹɔ̃- } in / tiˈhɛ̃ʔtɹɔ̃ʔ / 'there he sits' (cf. Barbeau 1960:275).

293   PNI * { **-jakẽ̃ʔ-** } 'exit, go out, leave'

    Tu. { -jakə̃ʔ- } in / ˈkja:kə̃ʔθ / 'I go out' (cf. Rudes 1999:494).

    Mo. { -jakʌ̃ʔ- } in / ˈkja:kʌ̃ʔs / 'I exit, leave a building, place'
        (cf. Maracle 1990:52).

    Oe. { -jakʌ̃ʔ- } in / waʔkja:ˈkʌ̃neʔ / 'I went out'
        (cf. Michelson & Doxtator 2002:782).

    Oo. { -jakẽ̃ʔ- } in / háˈja:kẽ̃ʔs / 'he goes out' (cf. Woodbury 2003:873).

    Ca. { -jakẽ̃ʔ- } in / ˈkja:kẽ̃ʔs / 'I am going out' (cf. Froman et al. 2002:591).

    Se. { -jakɛ̃ʔ- } in / hewakjaˈkɛ̃ʔɔ̃h / 'I've gone out' (cf. Chafe 1967:85).

    Hu. { -Jaxẽ̃ʔ- }, cf. <gaa̗endi> 'Sortir' (MS 59:39).

    Wy. { -Jajɛ̃ʔ- } in / etiʒaˈjɛ̃haʔ / 'we went out' (cf. Barbeau 1960:186).

294   PNI * { **-jan-** } 'footprint, gait, track'

    Tu. { -jat- } in / oˈja:tɛh / 'gait' (cf. Rudes 1999:497).

    Mo. { -jan- } in / oˈja:naʔ / 'track, pace, path, couple, pair' (cf. Maracle 1990:66).

    Oe. { -jan- } in / oja:ˈnâ: / 'track' (cf. Michelson & Doxtator 2002:785).

    Oo. { -jan- } in / káˈja:na:ʔ / '(it is a) footprint, (it is a) track'
        (cf. Woodbury 2003:877).

    Ca. { -jan- } in / oˈja:naʔ / 'a tire; its track; anything that leaves tracks'

(cf. Froman et al. 2002:591).

Se. { -jan- } in ⁄ oˈjaːnɔ̃ʔ ⁄ 'footprint, track, tire' (cf. Chafe 1967:86).

295   PNI * { **-janɹ-** } 'be a chief, be good, be lawful, be proper' (limited to Iroquoia)

Mo. { -janeɹ- } in ⁄ joˈjaneɹeʔ ⁄ 'it is good, righteous, proper'
    (cf. Maracle 1990:19).

Oe. { -janl- } in ⁄ joˈjanleʔ ⁄ 'it's good' (cf. Michelson & Doxtator 2002:7687).

Oo. { -janR- } in ⁄ óˈjaːneːʔ ⁄ 'it is good' (cf. Woodbury 2003:879).

Ca. { -janɹ- } in ⁄ oˈjaːnɹeʔ ⁄ 'it is nice, good, beautiful'
    (cf. Froman et al. 2002:592).

Se. { -janR- } in ⁄ hojaːneːh ⁄ '(he's a) chief' (cf. Chafe 1967:86).

296   PNI * { **-janɹehsɹ-** }, * { **-janrẽhsɹ-** } 'law'

Tu. { -janrɔ̃hstr- } in ⁄ ojaˈnrɔ̃hstrɛh ⁄ 'institutes, law, statute'
    (cf. Rudes 1999:496), probably a borrowed word.

Mo. { -janeɹʌ̃hseɹ- } in ⁄ kajaneˈɹʌ̃hseɹaʔ ⁄ 'the law' (cf. Maracle 1990:27).

Oe. { -janlʌ̃hsl- } in ⁄ kajaˈnlʌ̃hslaʔ ⁄ 'law' (cf. Michelson & Doxtator 2002:787).

Oo. { -janẽːhsR- } in ⁄ kajáːˈnẽːhsæːʔ ⁄ 'law' (cf. Woodbury 2003:879).

Ca. { -janɹẽhsr- } in ⁄ kaˈjanɹẽhsraʔ ⁄ 'rights; laws; code'
    (cf. Froman et al. 2002:647).

Se. { -janeshR- } in ⁄ kaˈjaneshæʔ ⁄ 'law' (cf. Chafe 1967:86).

297   PNI * { **-jaʔk-** } 'break, cut'

Tu. { -jaʔk- } in ⁄ ˈiːkjaʔks ⁄ 'I am breaking it' (cf. Rudes 1999:497),
    ⁄ nɔ̃ˈwaʔnjaʔk ⁄ 'it will break in two' (cf. Rudes 1999:558);
    with semireflexive and duplicative.

Mo. { -jaʔk- } in ⁄ ˈikjaʔkhs ⁄ 'I cut up, cut off, through, across, I break up, off'
    (cf. Maracle 1990:16).

Oe { -jaʔk- } in ⁄ ˈihsjaʔks ⁄ 'you're cutting it'
    (cf. Michelson & Doxtator 2002:790), ⁄ teˈwatjaʔks ⁄ 'it breaks'
    (cf. Michelson & Doxtator 2002:297); with semireflexive and duplicative.

Oo. { -jaʔk- } in ⁄ ˈháːjaʔks ⁄ 'he cuts it off, he breaks it off'
    (cf. Woodbury 2003:902).

Ca. { -jaʔk- } in ⁄ teˈkajẽtjaʔs ⁄ 'it cuts wood' (cf. Froman et al. 2002:38).

Se. { -jaʔk- } in ⁄ aˈkjaʔkɔ̃h ⁄ 'I've broken it' (cf. Chafe 1967:86).

Hu. { -JaʔK- }, cf. <gaaˌi> 'couper, rompre, casser' (MS 59:40),

/ ʔ / assumed present.

Wy. { -JaʔK- } in / ehˈʃɹɔ̃ːkjaʔ / 'you will cut down the tree'
    (cf. Barbeau 1960:204).

298   PNI * { **-jaʔt-** } 'being, body, carcass, corpse, person'

Tu. { -jaʔn- } in / oˈjaʔnɛh / 'carcass, corpse, dead body' (cf. Rudes 1999:499).

Mo. { -jaʔt- } in / oˈjâːtaʔ / 'body, being, person' (cf. Maracle 1990:66).

Oe. { -jaʔt- } in / oˈjâːtaʔ / 'body, blouse, shirt'
    (cf. Michelson & Doxtator 2002:792).

Oo. { -jaʔt- } in / óˈjaʔtaʔ / 'body' (cf. Woodbury 2003:882).

Ca. { -jaʔt- } in / oˈjaʔtaʔ / 'body' (cf. Froman et al. 2002:34).

Se. { -jaʔt- } in / kaˈjaʔtaʔ / 'body, doll' (cf. Chafe 1967:86).

Hu. { -Jaʔt- } in / xaˈaʔtaʔ / < gaata > 'chose vivante' (MS 59:42),
    / ʔ / assumed present.

Wy. { -Jaʔt- } in / jaˈaʔtajɛ̃htsih / 'old woman' (cf. Barbeau 1960:163).

299   PI * { **-je-** } 'wake up'

Ch. { -jè- } in / hìjèːkíˑ / 'wake up!' (cf. Feeling & Pulte 1975:63).

PNI * { -je- } 'wake up, be awake'.

Tu. { -jɛ- } in / raˈjɛhwat / 'he is awake, he is aware, he is an early riser'
    (cf. Rudes 1999:503).

Mo. { -je- } in / ˈikjeʔs / 'I wake up' (cf. Maracle 1990:16), with inchoative.

Oe. { -je- } in / waˈkjêːũ / 'I'm awake' (cf. Michelson & Doxtator 2002:806),
    with inchoative.

Oo. { -je- } in / ˈhaːjes / 'he is waking up' (cf. Woodbury 2003:905).

Ca. { -je- } in / ˈiːtseh / 'wake up' (cf. Froman et al. 2002:360).

Hu. { -Je- }, cf. < gaë > 'séveiller, etre éveillé' (MS 59:50).

Wy. { -Je- } in / ehaːˈeʔ / 'he will wake up' (cf. Barbeau 1960:208).

300   PNI * { **-jehst-** } 'add, contribute, mix'

Mo. { -jehst- } in / ˈkjehsthaʔ / 'I add to, contribute, join, I mix into something'
    (cf. Maracle 1990:53).

Oe. { -jest- } in / teˈkjestaʔ / 'I'm adding it in, I'm mixing it'
    (cf. Michelson & Doxtator 2002:818).

Oo. { -jest- } in / teháˈjesthaʔ / 'he mixes' (cf. Woodbury 2003:913).

Ca. { -jehst- } in / tɛ̃hsjehs / 'you will mix them all together'

(cf. Froman et al. 2002:201).

Se. { -jest- } in / twaˈkjestɔ̃h / 'I've given, contributed' (cf. Chafe 1967:87).

Hu. { -Jehst- }, cf. <gaesti> 'amasser, assembler' (MS 59:59),
        preconsonantal / h / assumed present.

301   PNI * { **-jena-** }, * { **-jenaw-** }, 'capture, catch, grab'

Tu. { -jenɔ̃- } in / ɔ̃hraˈjeːnɔ̃ːʔ / 'he will capture it' (cf. Rudes 1999:503),
        remade from perfective base.

Mo. { -jena- } in / ˈkjeːnahs / 'I receive, accept, catch, I take'
        (cf. Maracle 1990:53).

Oe. { -jena- } in / tekjeːˈnas / 'I'm catching it'
        (cf. Michelson & Doxtator 2002:814).

Oo. { -jena- } in / hajéˈnaũs / 'he grabs, he catches, he accepts'
        (cf. Woodbury 2003:910).

Ca. { -jena- } in / ˈkjeːnahs / 'I catch it' (cf. Froman et al. 2002:594).

Se. { -jenɔ̃- } in / akjeːnɔ̃ʔ / 'I've grabbed it' (cf. Chafe 1967:87).

Hu. { -Jena- }, cf. <gaendaon> 'prendre' (MS 59:52).

Wy. { -Jena- } in / aʔhuweˈnaːɔ̃ʔ / 'he was caught' (cf. Barbeau 1960:196).

302   PNI * { **-jeɹ-** } 'act, do, happen to'

Tu. { -jɛr- } in / ˈkjɛrhaʔ / 'I am doing it' (cf. Rudes 1999:504).

Mo. { -jeɹ- } in / niˈkjeɹhaʔ / 'I act upon something' (cf. Maracle 1990:317).

Oe. { -jel- } in / niˈkjelhaʔ / 'the way I'm doing it'
        (cf. Michelson & Doxtator 2002:809).

Oo. { -jeR- } in / niháːˈtjeːhaʔ / 'how he acts, what he does'
        (cf. Woodbury 2003:199), with semireflexive.

Ca. { -jeR- } in / niˈjoːjɛ̃ / 'what it is doing' (cf. Froman et al. 2002:93).

Se. { -jeR- } in / niwakjeːɛ̃h / 'how I have done it, what I have done'
        (cf. Chafe 1967:87).

Hu. { -Jeɹ- }, cf. <gaeren> 'faire q.c. agir, soccuper' (MS 59:55).

Wy. { -Jeɹ- } in / saˈeːɹɛ̃h / 'it happened to you' (cf. Barbeau 1960:163).

303   PNI * { **-jeɹi-** } 'be complete, be just, be perfect, be right'

Tu. { -jɛri- } in / tkaˈjɛːriʔ / 'it is complete, it is fit, it is just, it is perfect'
        (cf. Rudes 1999:506).

Mo. { -jeɹi- } in / tkaˈjeːɹi / 'it is right, proper' (cf. Maracle 1990:206).

Oe. { -jeri- } in / tkaje:ˈlî̃ / 'it's right' (cf. Michelson & Doxtator 2002:812).

Oo. { -jei- } in / tkáˈje:iʔ / 'it is right' (cf. Woodbury 2003:909).

Ca. { -jei- } in / tka:ˈjei: / 'it is right, correct' (cf. Froman et al. 2002:268).

Se. { -jei- } in / tkaje:iʔ / 'it's right, in fact, really' (cf. Chafe 1967:87).

Hu. { -Jeɹi- }, cf. <gaerihen> 'etre Droit, egal, uni' (MS 59:56).

304   PI * { **-je:ɹõʔ-** } 'body'

Ch. { -jè:lʌ̃ʔ- } in / àjè:lʌ̃:ʔî̃ / 'his body' (cf. Feeling & Pulte 1975:63).

PNI * { -jeɹõʔ }, * { -jeɹõʔt- } 'body, corpse, flesh'.

Tu. { -jɛrə̃ʔ } in / ˈkjɛ:rə̃ʔ / 'my flesh' (cf. Rudes 1999:504).

Mo. { -jeɹũʔt- } in / ojeˈɹũ̂:taʔ / 'the physical structure of the body, a body,
       a dead body' (cf. Maracle 1990:66).

Oe. { -jelũʔt- } in / ojeˈlũ̂:taʔ / 'corpse, body, figure'
       (cf. Michelson & Doxtator 2002:814).

AOo. { -jerũʔ } in / kjeˈrũʔkeh / 'mon Corps' (Shea 1860:36).

Oo. { -jeẽʔt- } in / ojéˈẽʔtaʔ / 'body, corpse' (cf. Woodbury 2003:907).

Ca. { -jõʔt- } in / oˈjõʔtaʔ / 'a dead body; a cadaver' (cf. Froman et al. 2002:44).

Hu. { -Jeɹõʔ } in / xaˈe:ɹõʔ / <gaeron> 'Corpus' (MS 59:57),
       / ʔ / assumed present.

Wy. { -Jeɹɔ̃ʔ } in / skwaeˈɹɔ̃ʔje / 'your flesh' (cf. Barbeau 1960:95).

[cf. Rudes 1995:38].

305   PI * { **-je:ts-** } 'smile'

Ch. { -jè:ts- } 'smile' (King 1975:224).

PNI * { -jetshõ- } 'laugh, smile', perhaps with distributive { -hõ- }.

Mo. { -jehshũ- } in / waˈkjehshũ / 'I laugh, am laughing' (cf. Maracle 1990:108).

Oe. { -jeshũ- } in / waˈkjeshũheʔ / 'I'm smiling'
       (cf. Michelson & Doxtator 2002:818).

Hu. { -jeshõ- }, cf. <gaeson> 'rire, badiner, f[air]e le jovial, etre de bel humor'
       (MS 59:59), postconsonantal / h / assumed present.

306   PNI * { **-jẽ-** } 'be situated, exist, have, put down, set down, sit down'

Tu. { -jə̃- } in / ˈro:jə̃ʔ / 'he has' (cf. Rudes 1999:512).

Su. * { -jẽ- } in <Gáije> 'Har tu' (cf. Mithun 1981a:23).

Mo. { -jʌ̃- } in / ˈikjʌ̃hs / 'I set, lay, put something down' (cf. Maracle 1990:16).

Oe. { -jʌ̃- } in / ˈlotjʌ̃ʔ / 'he has sat down' (cf. Michelson & Doxtator 2002:308),

with semireflexive.

Oo. { -jẽ- } in / háˈjẽhaʔ / 'he sets it down' (cf. Woodbury 2003:915).

Ca. { -jẽ- } in / ˈkaːjẽʔ / 'it is lying on the ground' (cf. Froman et al. 2002:595).

Se. { -jẽ- } in / akjɛ̃ʔ / 'I have it, I've put it down' (cf. Chafe 1967:87).

Hu. { -Jẽ- }, cf. <gaen> 'y avoir q.c. en q.l; mettre q.c. en q.l.' (MS 59:51).

Wy. { -Jẽ- } in / ajekwihˈstaːɛ̃ʔ / 'I have money' (cf. Barbeau 1960:280).

[cf. Mithun 1979:185, Mithun 1981a:3]

307   PNI * { **-jẽht-** } 'hit, strike'

Mo. { -jʌ̃ht- } in / jekaˈjʌ̃hthaʔ / 'it strikes, hits at' (cf. Maracle 1990:13).

Oe. { -jʌ̃ht- } in / wahoːˈjʌ̃hteʔ / 'he hit him with it'
       (cf. Michelson & Doxtator 2002:825).

Oo. { -jẽht- } in / háˈjẽthaʔ / 'he hits it' (cf. Woodbury 2003:927).

Se. { -jẽht- } in / aˈkjẽhtɔ̃h / 'I've hit it, it's hit me' (cf. Chafe 1967:87).

Hu. { -Jẽht- }, cf. <gaenˈti> 'frapper qlq.' (MS 59:54).

Wy. { -Jẽht- } in / sajuˈwẽhtih / 'he has hit someone' (cf. Barbeau 1960:73).

308   PNI * { **-jẽt-** } 'firewood, wood' (limited to Iroquoia)

Mo. { -jʌ̃t- } in / ˈoːjʌ̃teʔ / 'firewood, wood for fuel' (cf. Maracle 1990:59).

Oe. { -jʌ̃t- } in / oːˈjʌ̃teʔ / 'wood' (cf. Michelson & Doxtator 2002:826).

Oo. { -jẽt- } in / óˈjẽːtaʔ / 'wood' (cf. Woodbury 2003:919).

Ca. { -jẽt- } in / oˈjẽːtaʔ / 'wood; firewood' (cf. Froman et al. 2002:596).

Se. { -jẽt- } in / ojẽːtaʔ / 'wood, firewood' (cf. Chafe 1967:88).

309   PNI * { **-jẽtaʔ-** } 'accumulate, beget, get, obtain'

Tu. { -jə̃ʔna?- } in / raˈjə̃ːʔnaʔθ / 'he begets' (cf. Rudes 1999:512).

Mo. { -jʌ̃taʔ- } in / kajʌ̃ˈtâːʔũ / 'property' (cf. Maracle 1990:27).

Oe. { -jʌ̃taʔ- } in / wakjʌ̃ːˈtâːseʔ / 'I keep getting it, I keep obtaining it'
       (cf. Michelson & Doxtator 2002:827).

Oo. { -jẽtaʔ- } in / kajẽːˈtaʔih / 'it has been accumulated'
       (cf. Woodbury 2003:920).

Ca. { -jẽtaʔ- } in / ẽsaˈjẽːtaʔ / 'you will acquire, obtain'
       (cf. Froman et al. 2002:596).

Se. { -jẽtaʔ- } in / ɔ̃kjẽːtaʔt / 'I (just) obtained it' (cf. Chafe 1967:87).

Hu. { -Jẽtaʔ- }, cf. <gaentandi> 'y av. q.c. ou qlq. de plus, de trop, de Reste'
       (MS 59:52), / ʔ / assumed present.

310   PNI * { **-jẽteɹ-** } 'know'

Tu. { -jə̃ʔnɛr- } in / kjə̃ʔˈnɛːrih / 'I know' (cf. Rudes 1999:518).

Mo. { -jʌ̃teɹ- } in / khejʌ̃ˈteːɹi / 'I know someone' (cf. Maracle 1990:207).

Oe. { -jʌ̃tel- } in / jũkhijʌ̃teˈli / 'they know of us'
        (cf. Michelson & Doxtator 2002:830).

Oo. { -jẽteR- } in / etshijẽˈteːih / 'you (cf. Rudes 1981a:n-singular) know them'
        (cf. Woodbury 2003:921).

Se. { -jẽteR- } in / kjẽteːih / 'I know it' (cf. Chafe 1967:88).

Hu. { -Jẽteɹ- }, cf. <gaenteri> 'connoitre q.c. ou qlq. y etre accoutumé par
        usage, experience' (MS 59:54).

Wy. { -Jẽteɹ- } in / teʔʒɛ̃ˈteːɹih / 'I don't know' (cf. Barbeau 1960:127).

311   PNI * { **-jẽtho-** }, * { **-jẽthw-** } 'plant, sow'

Tu. { -jə̃tho- } in / raˈjə̃ːthohs / 'he is planting' (cf. Rudes 1999:515).

Mo. { -jʌ̃tho- } in / ˈkjʌ̃thohs / 'I plant, sow' (cf. Maracle 1990:53).

Oe. { -jʌ̃tho- } in / latiˈjʌ̃thos / 'they (m.) plant'
        (cf. Michelson & Doxtator 2002:830).

Oo. { -jẽthw- } in / ˈkjẽ́thwas / 'I plant' (cf. Woodbury 2003:928).

Ca. { -jẽthw- } in / kaˈjẽːthwahs / 'it is planted' (cf. Froman et al. 2002:597).

Se. { -jẽtho- } in / oʔˈkjẽːthoʔ / 'I planted it' (cf. Chafe 1967:88).

Hu. { -Jẽkhw- }, cf. <gaenχ8i> 'fe. un champ, y travailler' (MS 59:53).

Wy. { -Jẽkw- } in / ɔ̃iˈʒẽkwih / 'we have planted it' (cf. Barbeau 1960:198).

[cf. Mithun 1984b:272]

312   PNI * { **-jẽtsɹ-** } 'flay, skin'

Tu. { -jə̃θr- } in / raˈjə̃ːθrɛhs / 'he flays' (cf. Rudes 1999:511).

Mo. { -jʌ̃seɹ- } in / ˈkjʌ̃seɹũhs / 'I skin something, I take the skin off something'
        (cf. Maracle 1990:53).

Oe. { -jʌ̃sl- } in / shakoˈjʌ̃slũs / 'he's skinning them'
        (cf. Michelson & Doxtator 2002:826).

Oo. { -jẽshR- } in / háˈjẽshæːs / 'he skins it' (cf. Woodbury 2003:927),
        appearance of / h / anomalous.

Ca. { -jẽs- } in / ˈsjẽːsehs / 'you skin animals all the time'
        (cf. Froman et al. 2002:597), probably a borrowed root.

Se. { -jẽsR- } in / aˈkjẽːsjɔ̃ːh / 'I've skinned it' (cf. Chafe 1967:88).

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Hu. { -Jẽʃɹ- }, cf. <gaenchon> 'écorcher' (MS 59:52),

　　　/ ɹ / has become / h / in Rock dialect.

Wy. { -Jɛ̃ʃɹ- } in / eh'skjẽ:ʃɹaʔ / 'you will skin me' (cf. Barbeau 1960:215).

³¹³　PNI * { **-jẽʔ-** } 'have as child'

Mo. { -jʌ̃ʔ- } in / khe'jʌ̂:ʔa / 'my daughter' (cf. Maracle 1990:47).

Oe. { -jʌ̃ʔ- } in / khe'jʌ̃ha / 'my daughter' (cf. Michelson & Doxtator 2002:823).

Hu. { -Jẽʔ- }, cf. <gaen> 'avoir pr. fils; ou fille' (MS 59:51),

　　　/ ʔ / assumed present.

Wy. { -Jɔ̃ʔ- } in / aju'wɛ̃ʔah / 'her child' (cf. Barbeau 1960:125).

³¹⁴　PNI * { **-jẽʔkʷ-** } 'smoke, tobacco'

Tu. { -jɔ̃ʔkʷ- } in / o'jɔ̃ʔkʷɛh / 'smoke' (cf. Rudes 1999:517).

Su. * { -jẽʔkʷ- } in <Ojeengqua> 'Toback' (cf. Mithun 1981a:23).

Mo. { -jʌ̃ʔkʷ- } in / o'jʌ̂:kʷaʔ / 'tobacco, cigarette' (cf. Maracle 1990:66).

Oe. { -jũʔkʷ- } in / o'jũ:kʷaʔ / 'tobacco' (cf. Michelson & Doxtator 2002:845),

　　　/ ũ / anomalous.

Oo. { -jẽʔkʷ- } in / ó'jẽʔkʷaʔ / 'tobacco' (cf. Woodbury 2003:930).

Ca. { -jẽʔkʷ- } in / o'jẽʔkʷaʔ / 'tobacco; cigarettes' (cf. Froman et al. 2002:597).

Se. { -jɛ̃ʔkʷ- } in / o'jɛ̃ʔkʷaʔ / 'tobacco' (cf. Chafe 1967:88).

Hu. { -Jẽʔxʷ- } in / o'ẽʔxʷaʔ / <oen̩8a> 'Tabac' (MS 59:54),

　　　/ ʔ / assumed present.

[cf. Mithun 1979:185, Mithun 1984b:274]

³¹⁵　PI * { **-jõ-** } 'enter'

Ch. { -jʌ̃- } in / ã:jʌ̂:híhấ: / 'he's entering it' (cf. Feeling & Pulte 1975:65).

PNI * { -jõ- } 'arrive, enter, return'

Tu. { -jɔ̃- } in / 'θhra:jɔ̃ʔ / 'he reenters' (cf. Rudes 1999:508).

OMo. { -jũ- }, cf. <Gaion> 'entrer' (Bruyas 1863:63).

Oo. { -jũ- } in / ho'jũh / 'he has arrived, he is here' (cf. Woodbury 2003:936).

Ca. { -jõ- } in / 'sha:jõʔ / 'he returned' (cf. Froman et al. 2002:267).

Se. { -jõ- } in / a'kjõ:h / 'I've arrived' (cf. Chafe 1967:89).

Hu. { -Jõ- }, cf. <gaon> 'arriver en q.l. y entrer' (MS 59:122).

Wy. { -Jɔ̃- } in / teʔsu:'wɔ̃h / 'he has not returned' (cf. Barbeau 1960:272),

　　　/ uta'ʒaʔkjɔ̃ʔ / 'I am bringing [the dog] in' (cf. Barbeau 1960:230).

[cf. Rudes 1995:43]

³¹⁶ PI * { **-k-** } 'eat'

Ch. { -k- } in / tsìkíʔǽ: / 'I'm eating it' (cf. Feeling & Pulte 1975:16).

PNI * { -k- }, * { -a:k- }, * { -e:k- } 'eat'.

Tu. { -k- } in / joˈtʃiʔra:ks / 'one eats embers' (cf. Rudes 1999:275).

Mo. { -k- } in / ˈi:kekhs / 'I eat something' (cf. Maracle 1990:15).

Oe. { -k- } in / i:ˈkeks / 'I'm eating' (cf. Michelson & Doxtator 2002:447).

Oo. { -k- } in / ˈéːjek / 'she will eat' (cf. Woodbury 2003:381).

Ca. { -k- } in / ˈẽ:ke:k / 'I will eat' (cf. Froman et al. 2002:441).

Se. { -k- } in / ake:kɔ̃h / 'I've eaten it' (cf. Chafe 1967:63).

Hu. { -K- }, cf. <ga̧i> 'manger' (MS 59:70).

³¹⁷ PI * { **kahna:wẽ:h** } 'butterfly'

Ch. / khàmà:mǽ: / 'butterfly' (cf. Feeling & Pulte 1975:138),
    / n / assimilated, / h / metathesized.

PNI * / kahˈna:wẽh / 'butterfly'.

Mo. / tsiʔktsiˈnâ:nawʌ̃ / 'butterfly' (cf. Maracle 1990:99),
    reshaped, lit. 'the wet fly'.

Oe. / kana:ˈwʌ̃ / 'butterfly' (cf. Michelson & Doxtator 2002:461).

Oo. / háˈna:wẽh / 'butterfly, moth' (cf. Woodbury 2003:488),
    with unusual 3SGM:3 pronominal prefix / ha /,
    here taken to reflect original presence of / h /.

Ca. / tsiʔtaˈna:wẽ: / 'butterfly' (cf. Froman et al. 2002:44),
    reshaped, lit. 'the wet bird'.

Se. / oˈtsiʔtanɔ̃:wẽ:ʔ / 'butterfly (cf. Chafe 1967:63), reshaped, lit. 'the wet bird'.

[cf. Mithun 1984b:268, Rudes 1995:39]

³¹⁸ PNI * { **-kahnɹ-** } 'look at' (limited to Iroquoia)

Mo. { -kahneɹ- } in / teˈkkâ:neɹeʔ / 'I look at something, I envisage,
    I am an eye-witness' (cf. Maracle 1990:91).

Oe. { -kahnl- } in / teˈkkâ:nleʔ / 'I'm looking at it, I'm fixing my sight on it'
    (cf. Michelson & Doxtator 2002:452).

Se. { -ka:nR- } in / teˈkeka:ne:ʔ / 'I'm looking at it' (cf. Chafe 1967:64).

³¹⁹ PNI * { **-kahɹ-** } 'eye'

Tu. { -kahr- } in / oˈkahrɛh / 'eye, glasses, spectacles' (cf. Rudes 1999:277).

Mo. { -kahɹ- } in / oˈkâːɹaʔ / 'eye, view, look' (cf. Maracle 1990:66).

Oe. { -kahl- } in / oˈkâːlaʔ / 'eye' (cf. Michelson & Doxtator 2002:449).

Oo. { -kahR- } in / óˈkahæʔ / 'eye' (cf. Woodbury 2003:428).

Ca. { -kahR- } in / oˈkahaʔ / 'eye' (cf. Froman et al. 2002:111).

Se. { -kaHR- } in / kaˈkaaʔ / 'its eye' (cf. Chafe 1967:63).

Hu. { -Kahɹ- } in / oˈxahɹaʔ / < oˌara > 'oeil' (MS 59:63), / h / assumed present.

Wy. { -Kaːɹ- } in / haʔkwakaːˈɹiːʒɛ̃ʔ / 'she opened her eyes'
    (cf. Barbeau 1960:167).

[cf. Mithun 1979:182]

320   PNI * { **kajeɹih** } 'four'

Su. < Kajére > '4' (cf. Mithun 1981a:23).

Mo. / kaˈjeːɹi / 'four' (cf. Maracle 1990:27).

Oe. { kajelih } in / kajelihaˈtṹːthne / 'fourth'
    (cf. Michelson & Doxtator 2002:464).

Oo. / kaˈjeːih / 'four' (cf. Woodbury 2003:445).

Ca. / ˈkeiː / 'four' (cf. Froman et al. 2002:605), form anomalous,
    cf. reflex of PNI * { -jeɹi- }.

Se. / keːih / 'four' (cf. Chafe 1967:65), form anomalous,
    cf. reflex of PNI * { -jeɹi- }.

[cf. Lounsbury 1961:13]

321   PI * { **-kajõ-** } 'be old'

Ch. { -kàjɹ̃̀- } in / àkàjɹ̃̋ːlî / 'old (inanimate)' (cf. Feeling & Pulte 1975:16).

PNI * { -akajõːʔ }, * { -kajõh } 'be old (of objects)'.

Tu. { -akajɘ̃ːʔ } in / waˈkaːjɘ̃ːʔ / 'it is old' (cf. Rudes 1999:620).

Mo. / aˈkaːjũ / 'it is old, old' (cf. Maracle 1990:3).

Oe. / akaːˈjũ / 'it's old' (cf. Michelson & Doxtator 2002:90).

Oo. { -kajũh } in / óˈkaːjũh / 'it is old' (cf. Woodbury 2003:447).

Ca. { -kajõh } in / oˈkaːjõh / 'it is old' (cf. Froman et al. 2002:217).

Se. { -akajɔ̃h } in / wakaːjɔ̃h / 'it's old' (cf. Chafe 1967:39).

Hu. { -xaõ- }, cf. < gaˌaon > 'vieux' (MS 59:62).

[cf. Rudes 1995:51]

322   PNI * { **kankaʔ** } 'anywhere, somewhere' (limited to Iroquoia)

Mo. { kanekaʔ } in / ˈjah ˈkanekaʔ / 'not anywhere, nowhere'

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(cf. Maracle 1990:373).

Oe. / ˈkanikeʔ / 'wherever' (cf. Michelson & Doxtator 2002:461),
    change of / a / to / e / anomalous.

Se. { katkaʔ } in / kaˈtkaʔhɔ̃h / 'somewhere, anywhere' (cf. Chafe 1967:64).

323   PI * { **kanõːnowẽʔ** } 'pipe'

Ch. / kànλ̃ːnòwa̋ː / 'pipe' (cf. Feeling & Pulte 1975:114).

PNI * { kanõnawẽʔ }, * { -nõnawẽʔt- } 'pipe'.

Tu. { -nə̃tawə̃- } in / kanə̃tawə̃ˈtjaːnə̃ / 'pipe' (cf. Rudes 1995:52).

Su. < Chanoona > 'Tobakspipa' (cf. Mithun 1981a:23).

Mo. / kaˈnũːnawʌ̃ʔ / 'pipe, calumet' (cf. Maracle 1990:29).

Oe. / kanũːˈnawʌ̃ʔ / 'pipe' (Mithun 1984:276).

Oo. / kanűnaˈwẽʔtaʔ / 'pipe' (cf. Woodbury 2003:731),
    an incorporating form that has become the independent form.

Hu. / xaˈnõnawẽʔ / < gannonda8an > 'Calumet, Pipe' (MS 59:117),
    / ʔ / assumed present.

[cf. Mithun 1981a:3, Mithun 1984b:276, Rudes 1995:52]

324   PI * { **-kaɹ-** } 'bite'

Ch. { -hskàl- } in / hìhskàla̋ː / 'bite it!' (cf. Feeling & Pulte 1975:50);
    first element { -hs- } anomalous.

PNI * { -kaɹi- }, * { -kaɹj- } 'bite, devour'.

Tu. { -karj- } in / raˈkaːrjahs / 'he devours it' (cf. Rudes 1999:574).

Mo. { -kaɹj- } in / ˈkkaɹjahs / 'I bite, pillage, devastate, cause havoc'
    (cf. Maracle 1990:54).

Oe. { -kali- } in / wahũwakaːˈlìː / 'she bit him'
    (cf. Michelson & Doxtator 2002:459).

Ca. { -kai- } in / ẽsaˈkaiːʔ / 'you will bite s.o., s.t.' (cf. Froman et al. 2002:31).

Se. { -kanj- } in / akekanjas / 'it bites me' (cf. Chafe 1967:64).

325   PNI * { **-kaɹ-** } 'account, price, story'

Tu. { -kar- } in / ˈoːkarɛh / 'cost, debt, expense, price' (cf. Rudes 1999:279).

Mo. { -kaɹ- } in / oˈkaːɹaʔ / 'story, tale, debt, arrears' (cf. Maracle 1990:67).

Oe. { -kar- } in / okaːˈlâː / 'story' (cf. Michelson & Doxtator 2002:454).

Oo. { -kaR- } in / káˈkaːæʔ / 'story' (cf. Woodbury 2003:423).

Ca. { -ʔkaR- } in / oʔkaːʔ / 'a parable; a tale; a story; a legend'

(cf. Froman et al. 2002:318), glottal stop anomalous.

Se. { -kaR- } in / kaka:æʔ / 'story' (cf. Chafe 1967:63).

326 PNI * { -kaɹhateni- }, * { -kaɹhatenj- } 'roll, turn around' (limited to Iroquoia)

Mo. { -kaɹhatenj- } in / kkaɹhaˈtenjehs / 'I turn upside down, empty out, pour out, turn around' (cf. Maracle 1990:54).

Oe. { -kalhatenj- } in / tekkalhaˈtenjehseʔ / 'I'm turning it around' (cf. Michelson & Doxtator 2002:457).

Oo. { -ka:hateni- } in / tẽhka:háˈte:niʔ / 'I will turn it around' (cf. Woodbury 2003:430).

Ca. { -kahateni- } in / tesatkaha:ˈte:nih / 'turn around' (cf. Froman et al. 2002:348).

Se. { -kahatenj- } in / ˈwa:kahatenjaʔt / 'he rolled it' (cf. Chafe 1967:64).

327 PNI * { -kaɹhatho- }, * { -kaɹhathw- } 'invert, roll over, turn over'

Tu. { -karhatho- } in / rakaˈrha:thohs / 'he turns it over, he inverts it' (cf. Rudes 1999:282).

Mo. { -kaɹhatho- } in / kkaˈɹhathohs / 'I turn it over, upside down' (cf. Maracle 1990:54).

Oe. { -kalhatho- } in / kkaˈlhathos / 'I'm plowing' (cf. Michelson & Doxtator 2002:458).

Oo. { -ka:hathw- } in / haká:ˈhathwas / 'he turns it over' (cf. Woodbury 2003:432).

Ca. { -kahatho- } in / saˈtkahathoh / 'roll over' (cf. Froman et al. 2002:348).

Se. { -kahatho- } in / oʔˈkekaha:thoʔ / 'I turned it inside out' (cf. Chafe 1967:64).
[cf. Michelson 1988:181]

328 PNI * { kaɹhit }, * { keɹhit }, * { keɹhiʔ }, * { kɹahe:t }, * { kɹahit } 'tree'

Tu. / ˈkjɛrhiʔ / 'standing tree, the tree' (cf. Rudes 1999:318).

No. < Geree > 'A Tree' (cf. Rudes 1981a:47).

Mo. / keˈɹhi:teʔ / 'a tree, a fruit tree' (cf. Maracle 1990:44).

Oe. / ˈkelhiteʔ / 'forest, trees' (cf. Michelson & Doxtator 2002:470).

Ca. / kɹahe:t / 'living tree' (cf. Froman et al. 2002:346).

Se. / kæ:it / 'tree' (cf. Chafe 1967:47), from a form * / krahit /.

Hu. / ˈxaɹhit / < garhit > 'y avoir un arb. fruitier' (MS 59:142).

Wy. / tiˈjaɹhiʔ / 'a tree stands here' (cf. Barbeau 1960:223).

329   PNI * { **katsih** } 'come here!'

Tu. / ˈkaːtʃi / 'come!' (cf. Rudes 1999:275).

Su. <Kaatzie> 'Kom hijt' (cf. Mithun 1981a:23).

Mo. / ˈkaːts / 'come here!' (Deering & Delisle 1976:43).

Oe. / kaˈats / 'Come here!' (cf. Michelson & Doxtator 2002:448),
       doubled vowel anomalous.

Ca. / ˈkaːtsih / 'come here' (cf. Froman et al. 2002:62).

Se. / kaːtsih / 'come here!' (cf. Chafe 1967:64).

[cf. Mithun 1981a:3]

330   PI * { -**kaweː-** } 'paddle, row'

Ch. { -kàwèː- } in / hìːkàwěːhíː / 'row! paddle!' (cf. Feeling & Pulte 1975:94).

PNI * { -kaweː- } 'row, paddle'.

Mo. { -kawe- } in / ˈkkaːwes / 'I paddle' (cf. Maracle 1990:53).

Oe. { -kawe- } in / jekaweʔˈtakhwaʔ / 'oar' (cf. Michelson & Doxtator 2002:808).

Oo. { -kawe- } in / hkáˈwek / 'I paddle' (cf. Woodbury 2003:442).

Ca. { -kaweː } in / ẽhˈsekaweːʔ / 'you will row' (cf. Froman et al. 2002:223).

Se. { -kaweː- } in / akekaweːh / 'I'm rowing' (cf. Chafe 1967:64).

Hu. { -xaweː- }, cf. <ga͜a8e> 'Ramer' (MS 59:62), long vowel assumed present.

[cf. Mithun 1984b:274]

331   PNI * { -**kensko**- }, * { -**kenskʷ**- } 'lift, raise'

Tu. { -kjɛθko- } in / waʔˈkkjɛːθkoʔ / 'I raised it up' (cf. Rudes 1999:291).

Mo. { -ketskʷ- } in / ˈkketskʷahs / 'I raise, lift up something that was lying down'
       (cf. Maracle 1990:54).

Oe. { -ketskʷ- } in / loˈketskʷʌ̃ / 'he has raised it upright'
       (cf. Michelson & Doxtator 2002:470).

Oo. { -ketskʷ- } in / taˈsketskʷah / 'Raise it up!' (cf. Woodbury 2003:456).

Ca. { -ketsko- } in / ẽhˈseketskoʔ / 'you will lift things up to a vertical position'
       (cf. Froman et al. 2002:255), { -ketskʷ- } in / seˈkeːtskʷahs /
       'you are lifting it to a vertical position' (cf. Froman et al. 2002:255).

Se. { -keskʷ- } in / hakeːskʷas / 'he lifts it' (cf. Chafe 1967:65).

332   PI * { -**kẽ**- }, * { -**kẽːh** } 'see'

Ch. { -kò- } in / tsìkòːwhthìhá̃ː / 'I see it' (cf. Feeling & Pulte 1975:18);

perfective { -kò:- } in / ṹ:kò:hɅ̃:ʔî: / 'he saw it'

(cf. Feeling & Pulte 1975:18).

PNI * { -kẽ- } 'see'; perfect * { -kẽ:h } 'have seen'.

Tu. { -kə̃- } in / ˈi:kkə̃h / 'I see it' (cf. Rudes 1999:293); / ˈro:kə̃: / 'he has seen it'

(cf. Rudes 1999:293).

Mo. { -kɅ̃- } in / ˈikkɅ̃hs / 'I see, perceive, have the ability to see'

(cf. Maracle 1990:16).

Oe. { -kɅ̃- } in / ˈikkɅ̃heʔ / 'I can see' (cf. Michelson & Doxtator 2002:473).

Oo. { -kẽ- } in / wáˈʔe:kẽʔ / 'she saw it' (cf. Woodbury 2003:456).

Ca. { -kẽ- } in / aˈha:kẽʔ / 'he saw' (cf. Froman et al. 2002:283).

Se. { -kɛ̃- } in / ake:kɛ̃:h / 'I've seen it' (cf. Chafe 1967:65), / ake:kɛ̃:h /

'I've seen it' (cf. Chafe 1967:65).

Hu. { -Kẽ- }, cf. < ga͜en > 'voir' (MS 59:65).

Wy. { -Kɛ̃- } in / aʔha:ˈjɛ̃ʔ / 'he saw' (cf. Barbeau 1960:53).

[cf. Lounsbury 1978:343, Rudes 1995:53]

333   PNI * { -**kẽhtsi**- } 'be old'

Ca. { -kẽhtsi- } in / eˈkẽhtsih / 'she is an old woman (referring to one's wife)'

(cf. Froman et al. 2002:450).

Se. { -kɛ̃htsi- } in / haˈkɛ̃htsih / 'old man' (cf. Chafe 1967:65).

Hu. { -Kẽhtsi- } in / xaaʔtaˈxẽhtsihk / 'old woman', cf. < Aataentsic >

(Thwaites 1896-1901, 10:125), preconsonantal / h / assumed present,

/ x / lost in Northern Bear dialect.

Wy. { -Kẽhtsi- } in / jaˈaʔtajẽhtsih / 'old woman' (cf. Barbeau 1960:163).

334   PNI * { -**kẽnh**- } 'summer'

Tu. { -kə̃nh- } in / kə̃ˈnhaʔkjɛ / '(in the) summer' (cf. Rudes 1999:297).

No. * { -kẽnh- } in < Genheke > 'Summer' (cf. Rudes 1981a:47).

Mo. { -akɅ̃nh- } in / aˈkɅ̃nheʔ / 'the summer season' (cf. Maracle 1990:3),

initial / a / of PMO anomalous.

Oe. { -akɅ̃nh- } in / swaˈkɅ̃nhat / 'one season'

(cf. Michelson & Doxtator 2002:90).

Oo. { -kẽhnh- } in / kakɛ́hˈnhaʔkeh / 'summer, warm weather'

(cf. Woodbury 2003:459), / h / anomalous.

Ca. { -kẽnh- } in / kẽnˈhehneh / 'summer' (cf. Froman et al. 2002:604).

Se. { -kɛ̃h- } in / kɛ̃ˈhe:neh / 'in the summer' (cf. Chafe 1967:65).

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Hu. { -xẽnh- } in ∕ xẽˈnheʔxeh ∕ <ˌennheˌe> 'été' (MS 59:32).

Wy. { -Kẽt- } in ∕ uˈjẽtẽhaɔ̃ʔ ∕ 'in the summer' (cf. Barbeau 1960:253).

335   PNI * { -kẽɹat } 'be white'

Tu. { -kɔ̃rat } in ∕ kanɔ̃haˈkɔ̃ːrat ∕ 'white corn, flour corn' (cf. Rudes 1999:354).

Mo. { -kʌɹat } in ∕ kaʔtaraˈkʌ̃ːɹat ∕ 'plaster, whitewash, clay, white earth'
        (cf. Maracle 1990:226).

Oe. { -kʌ̃lat- } in ∕ onahsakʌ̃ːˈlateʔ ∕ 'goose' (cf. Michelson & Doxtator 2002:640),
        possibly a borrowed word.

Oo. { -kẽæt- } in ∕ kanẽ́haˈkẽætah ∕ 'white corn' (cf. Woodbury 2003:457).

Se. { -kẽ̃ẽ̃t } in ∕ kakẽ̃ːẽ̃t ∕ 'it's white' (cf. Chafe 1967:65).

Hu. { -Kẽɹat }, cf. <gaˌenrat> 'etre blanc' (MS 59:68).

336   PNI * { -kẽtsɹ- } 'peel, scrape' (limited to Iroquoia)

Mo. { -kʌseɹ- } in ∕ teˈkkʌseɹũhs ∕ 'I scrape, scratch at, I scrape off, skin'
        (cf. Maracle 1990:91).

Oe. { -kʌsl- } in ∕ teˈkkʌslũs ∕ 'I'm peeling it'
        (cf. Michelson & Doxtator 2002:478).

Oo. { -kẽhsR- } in ∕ téhˈkẽhsæːs ∕ 'I scrape, I am scraping it off'
        (cf. Woodbury 2003:460).

Ca. { -kẽtsɹ- } in ∕ tẽsewiˈtsɹakẽtsɹõːʔ ∕ 'you will take the cream off,
        skim the milk', Lower Ca. ∕ tẽsewiˈtɹakẽtɹõːʔ ∕
        (cf. Froman et al. 2002:449).

Se. { -kẽsR- } in ∕ tewakekẽːsjõ̃ːh ∕ 'I've scraped it' (cf. Chafe 1967:66).

[cf. Michelson 1988:180]

337   PNI * { -kh- }, * { -khahsi- }, * { -khahsj- }, * { -khahsk- } 'divide, separate'

Tu. { -kh- } in ∕ nehˈraːkhahs ∕ 'he divides it' (cf. Rudes 1999:576).

Mo. { -khahsj- } in ∕ tekeˈkhahsjũhs ∕ 'I take apart, separate things joined
        together, I divide up' (cf. Maracle 1990:83).

Oe. { -khahsi- } in ∕ waʔtekeˈkhahsiʔ ∕ 'I divided it, I separated it in half'
        (cf. Michelson & Doxtator 2002:480).

Oo. { -kh- } in ∕ téˈkekhas ∕ 'I separate things' (cf. Woodbury 2003:664).

Ca. { -kh- } in ∕ teˈkakhahsõː ∕ 'division; it is separated'
        (cf. Froman et al. 2002:92).

Se. { -khahsi- } in ∕ oʔˈthakhahsiʔ ∕ 'he divided it in two' (cf. Chafe 1967:66).

Hu. { -khahsk- }, cf. <gaχaska8an> 'Séparer q.c. d'une autre' (MS 59:83),
        preconsonantal / h / assumed present.

Wy. { -kahsk- } in / aˈhatikahskaʔ / 'they are divided' (cf. Barbeau 1960:98).

338   PI * { **-khju:hs-** } 'elbow'

Ch. { -khìjù:hs- } in / àkhìjù:hskě: / 'elbow' (cf. Feeling & Pulte 1975:33).

PNI * { -khjohs- }, * { -hjohs- }, * { -hjoʔɹ- } 'elbow'.

Tu. { -hkjohs- } in / ohˈkjohsɛh / 'elbow' (cf. Rudes 1999:579),
        with apparent metathesis of the cluster * / kh /.

Mo. { -hjohs- } in / ohˈjohsaʔ / 'elbow, angle' (cf. Maracle 1990:61).

Oe. { -whjoʔlh- } in / oˈwhjô:lhaʔ / 'elbow' (cf. Michelson & Doxtator 2002:422),
        / w / anomalous.

Oo. { -hjoʔR- } in / óhˈjoʔæʔ / 'elbow' (cf. Woodbury 2003:586).

Ca. { -hjohs- } in / khjohˈsaʔkeh / 'on my elbow' (cf. Froman et al. 2002:102).

Se. { -hjostaR- } in / ka:ˈjostææʔ / 'elbow' (cf. Chafe 1967:58).

Hu. { -hjohʃ- } in / xahˈjohʃaʔ / <gahiochia> 'Le Coude' (MS 59:76),
        preconsonantal / h / assumed present.

[cf. Rudes 1995:43]

339   PNI * { **-khw-** } 'food, meal'

Tu. { -khw- } in / ˈokhwɛh / 'food, meal' (cf. Rudes 1999:300).

Mo. { -khw- } in / ˈkakhwaʔ / 'food, edibles, nourishment' (cf. Maracle 1990:28).

Oe. { -khw- } in / ˈkakhwaʔ / 'food' (cf. Michelson & Doxtator 2002:482).

Oo. { -khw- } in / ˈkakhwaʔ / 'food' (cf. Woodbury 2003:667).

Ca. { -khw- } in / kakhwaʔ / 'food' (cf. Froman et al. 2002:124).

Se. { -khw- } in / kakhwaʔ / 'food' (cf. Chafe 1967:66).

Hu. { -khw- } in / ˈxakhwaʔ / <ˌaχ8a> 'repas' (Fraser 1920:448).

Wy. { -kw- } in / ekjatekwihʃẽʔ / 'we will finish our meals'
        (cf. Barbeau 1960:227).

340   PI * { **kihɹjuʔkẽh** } 'chipmunk'

Ch. / khìjû:kǎ: / 'chipmunk' (cf. Feeling & Pulte 1975:144).

PNI * / tsihˈɹjoʔkẽh /, * { -hɹjoʔkẽh } 'chipmunk'.

Tu. / tʃohˈrjoʔkə̃ / 'chipmunk' (cf. Rudes 1999:563).

La. <Caioguen> 'Ung escureul' (Biggar 1924:243).

Mo. / ohˈɹjô:kⱥ̃ / 'chipmunk' (cf. Maracle 1990:63).

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Oe. / tsjoˈlhjohkʷaʔ / or / tsihˈljô·kʷə̃ / 'chipmunk'

  (cf. Michelson & Doxtator 2002:742), partially reshaped, cf. Seneca form.

Ca. / tsihˈnjoʔkẽːʔ / 'chipmunk' (cf. Froman et al. 2002:470).

Se. / tsiˈhoʔkʷaes / 'chipmunk' (cf. Chafe 1967:55), reshaped.

Hu. / ohˈjoʔxẽh / ⟨ohio͏̣en⟩ 'Escurieux' (MS 62:7),

  / ʔ / and / h / assumed present.

Wy. / uːˈʒuʔjẽh / 'ground squirrel' (cf. Barbeau 1960:148).

[cf. Mithun 1979:181, Mithun 1984b:265, Rudes 1995:40]

341 PI * { **kiːɹ** } 'dog'

Ch. / kìːlhíː / 'dog' (cf. Feeling & Pulte 1975:119).

PNI * / ˈtsiɹ / 'dog'.

Tu. / ˈtʃir / 'dog' (cf. Rudes 1999:576).

No. ⟨Cheer⟩ 'A dog' (cf. Rudes 1981a:46).

Oo. { -tsiR- } in / ˈtsíːhah / 'dog' (cf. Woodbury 2003:644).

Se. / tsiːjæh / 'dog' (cf. Chafe 1967:63).

[cf. Mithun 1984b:266]

342 PI * { **-kiʔɹh-** } 'hair'

Ch. { -kìʔlh- } in / kìʔlhǽː / 'loose hair' (cf. Feeling & Pulte 1975:119).

PNI * { -keʔɹh- } 'hair, messy hair'.

Tu. { -kjɛʔw- } in / oˈkjɛʔwɛh / 'hair' (cf. Rudes 1999:592),

  with unexplained change of / r / to / w /.

Mo. { -ʔkeɹh- } in / oʔˈkeɹhaʔ / 'uncombed, messy hair' (cf. Maracle 1990:58),

  with methathesis of glottal stop.

Ca. { -keʔ- } in / oˈkeʔaːʔ / 'hair, rag' (cf. Froman et al. 2002:145).

Se. { -keʔR- } in / aˈkekeʔæʔ / 'my hair' (cf. Chafe 1967:65).

[cf. Rudes 1995:47]

343 PI * { **koːhkaːʔ** } 'crow'

Ch. / khóːkǽː / 'crow' (cf. Feeling & Pulte 1975:145), with metathesis of / h /.

PNI * / kahkaːʔ /, * / kaʔkaːʔ / 'crow'.

Oe. / ˈkâːkaʔ / 'crow' (cf. Michelson & Doxtator 2002:453).

Oo. / ˈkahkah /, / kaʔˈkaʔ / 'crow' (cf. Woodbury 2003:448).

Ca. / kaʔkaːʔ / 'crow, raven' (cf. Froman et al. 2002:76).

Se. / ˈkaʔkaːʔ / 'crow *(Corvus brachyrynchos)*' (cf. Chafe 1967:65).

Wy. / jahˈkaʔ / 'crow' (cf. Barbeau 1960:198).

[cf. Mithun 1984b:261, Rudes 1995:41]

344   PI * { -**koʔtiʔ** } 'be a lot, be many, be much'

Ch. { -kɔ̀:tíˑ } in / ŭ:kɔ̀:tíˑ / 'much, a lot of' (cf. Feeling & Pulte 1975:164).

PNI * { -atkaʔteʔ } 'be much, be many, be often, be plentiful',
       * { -kaʔteʔ } 'have much'.

Tu. { -kaʔnɛʔ } in / waˈkkaʔnɛʔ / 'I have an abundance, I have much'
      (cf. Rudes 1999:284).

Mo. { -atkaʔteʔ } in / joˈtkâ:teʔ / 'it is often, frequent, often, frequently'
      (cf. Maracle 1990:21), with semireflexive.

Oe. { -atkaʔteʔ } in / joˈtkâ:teʔ / 'often' (cf. Michelson & Doxtator 2002:835),
      with semireflexive.

Oo. { -atkaʔteʔ } in / óˈtkaʔteʔ / 'it is plentiful, it is often'
      (cf. Woodbury 2003:269), with semireflexive.

Ca. { -atkaʔteʔ } in / nijonaˈtkaʔteʔ / 'there are so many'
      (cf. Froman et al. 2002:414), with semireflexive.

Se. { -atkaʔteʔ } in / ɔ̃ˈkwatkaʔteʔ / 'there are many of us' (cf. Chafe 1967:65),
      with semireflexive.

Hu. { -akaʔteʔ } in / honaˈkaʔteʔ / <hondakate> 'Sunt plures' (MS 59:5),
      / ʔ / assumed present.

Wy. { -Kaʔteʔ } in / utɹi:waˈjaʔteʔ / 'many stories, customs'
      (cf. Barbeau 1960:290).

[cf. Rudes 1995:36]

345   PI * { -**kõ:hs**- } 'face'

Ch. { -kɅ̃:hs- } in / kàkɅ̃:skʷóʔä̃ˑ / 'I'm washing my face'
      (cf. Feeling & Pulte 1975:19).

PNI { -kõhs- } 'face'.

Tu. { -kə̃hs- } in / oˈkə̃hsɛh / 'face' (cf. Rudes 1999:582).

Mo. { -kũhs- } in / kaˈkũhsaʔ / 'mask, face' (cf. Maracle 1990:28).

Oe. { -kũhs- } in / oˈkũhsaʔ / 'face, mask' (cf. Michelson & Doxtator 2002:492).

Oo. { -kũhs- } in / óˈkũhsaʔ / 'face, mask' (cf. Woodbury 2003:470).

Ca. { -kõhs- } in / oˈkõhsaʔ / 'face' (cf. Froman et al. 2002:112).

Se. { -kɔ̃hs- } in / kaˈkɔ̃hsaʔ / 'face' (cf. Chafe 1967:67).

Hu. { -Kõhʃ- } in / xaˈxõhʃaʔ / <gaˌonchia> 'visage' (MS 59:70),

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preconsonantal / h / assumed present.

Wy. { -Kɔ̃hʃ- } in / aʔjɔ̃jɔ̃hʃuˈɹɛ̃haʔ / 'I found your face' (cf. Barbeau 1960:178).

[cf. Mithun 1979:182]

346 PNI * { **kõteh** } 'eel'

Tu. / ˈkɔ̃:ʔnɛh / 'eel' (cf. Rudes 1999:268).

No. < Kunte > 'An Eel' (cf. Rudes 1981a:46).

Mo. { -kũten- } in / okũˈteːnaʔ / 'an eel' (cf. Maracle 1990:68).

Oo. { -kũten- } in / okűˈteːnaʔ / 'eel, eel clan' (cf. Woodbury 2003:749).

Ca. / ˈkõːteh / 'eel' (cf. Froman et al. 2002:102).

[cf. Mithun 1984b:275, Rudes 1995:43]

347 PNI * { **-kts-** } 'bowl, dish, plate'

Tu. { -kθ- } in / ˈukθɛh / 'cup, dish, plate, cymbal' (cf. Rudes 1999:285).

Mo. { -khs- } in / ˈkakhsaʔ / 'a plate, dish' (cf. Maracle 1990:28),

   / h / anomalous or perhaps original.

Oe. { -ks- } in / ˈkaksakũ / 'on the plate' (cf. Michelson & Doxtator 2002:448).

Oo. { -ks- } in / ˈkáksaʔ / 'dish' (cf. Woodbury 2003:669).

Ca. { -ks- } in / ˈskaksaːt / 'one dish' (cf. Froman et al. 2002:90).

Se. { -ks- } in / oksaʔ / 'dish' (cf. Chafe 1967:67).

Hu. { -hs- }, cf. < gasa > 'plat, Ecuélle, Cuiller' (MS 59:147),

   / h / assumed present.

Wy. { -hs- } in / sahˈsɔ̃:tih / 'throw the bowl' (cf. Barbeau 1960:181).

348 PI * { **kuːɹeh** } 'acorn, oak'

Ch. / kùːlɛ́ː / 'acorn' (cf. Feeling & Pulte 1975:125).

PNI * / ˈkoːɹeh / 'acorn, oak'.

Tu. / ˈkoːrɛh / 'acorn, black oak, beech, red oak' (cf. Rudes 1999:303).

No. < Coree > 'A red oak' (cf. Rudes 1981a:47).

Ca. / ˈkoːwih / 'red oak' (cf. Froman et al. 2002:215),

   from a proto-form * / ˈkoːɹih /.

Se. / okoːwæʔ / 'red oak, acorn' (cf. Chafe 1967:66),

   from a proto-form * / oˈkoːraʔ /.

[cf. Mithun 1984b:270, Rudes 1995:36]

349 PI * { -**kuwa**- }, * { -**kʷa**- } 'be big, be large'

Ch. { -kʷà- } in / ę́:kʷâ: / 'huge, large' (cf. Feeling & Pulte 1975:89).

PNI * { -kowa- } 'big', * { -kowanẽh } 'be big',
      * { -owanẽh } with incorporated nouns.

Tu. / ˈkʷa:nə̃ / 'a lot, great, many, much' (cf. Rudes 1999:305),
      loss of * / o / anomalous, possibly a borrowed word.

Su. <Koonæ> 'Stoor' (cf. Mithun 1981a:23).

La. * { -kowanẽh } in <Agouhanna> 'quant ilz le veullent appeller seigneur ilz
      l'appellent' (Biggar 1924:245).

Mo. { -kowanᾶ } in / kkoˈwa:nᾶ / 'I am big, large' (cf. Maracle 1990:54).

Oe. { -kʷanᾶ } in / lakʷa:ˈnᾶ / 'he's big' (cf. Michelson & Doxtator 2002:498),
      loss of * / o / anomalous.

Oo. { -kowanẽh } in / hkóˈwa:nẽh / 'I am big' (cf. Woodbury 2003:466);
      / hakó:ˈwa:nẽh / 'he is a chief' (cf. Woodbury 2003:466).

Ca. { -kowanẽh } in / kaˈkowanẽh / 'it is big' (cf. Froman et al. 2002:30).

Se. { -kowanɛ̃h } in / kakowanɛ̃h / 'it's big, important' (cf. Chafe 1967:66).

Hu. { -Kowanẽh }, cf. <ga̗8annen> 'etre aagé' (MS 59:72),
      / h / assumed present.

Wy. { -Kuwanɛ̃h } in / tajuˈwa:nɛ̃h / 'he is the eldest' (cf. Barbeau 1960:169).

[cf. Mithun 1979:183, Mithun 1981a:3, Rudes 1995:37]

350 PI * { -**kʷ**- } 'pick up'

Ch. { -kì- } in / hìkî: / 'pick it up!' (cf. Feeling & Pulte 1975:16).

PNI * { -ko- }, * { -kw- }, * { -kʷ- }, * { -hkw- } 'gather, lift, pick up, raise, take'.

Tu. { -kʷ- } in / ˈwa:kkʷə̃ / 'I have picked it up' (cf. Rudes 1999:626), { -hkw- }
      in / nɛhˈrahkwaʔ / 'he raises, lifts it' (cf. Rudes 1999:330);
      with duplicative.

Mo. { -hkw- } in / teˈkehkhwaʔ / 'I pick up, lift from the ground, bottom,
      lowest point' (cf. Maracle 1990:88); with duplicative.

Oe. { -hkw- } in / teˈkekhwaʔ / 'I pick it up'
      (cf. Michelson & Doxtator 2002:371); with duplicative.

Oo. { -kw- } in / ˈhá:kwas / 'he is getting it, he picks it, he gathers it,
      he accomplishes it' (cf. Woodbury 2003:474).

Ca. { -hkw- } in / atkehk / 'I picked s.t. up' (cf. Froman et al. 2002:232).

Se. { -hkw- } in / teˈwakehkwɛ̃h / 'I've lifted it' (cf. Chafe 1967:54); with
      duplicative.

Hu. { -hkw- }, cf. <ka'k8an> 'prendre, Saissir q.c, la ramasser, lenlever,
la Retirer chez soy, la Retenir' (MS 59:83).

Wy. { -hkw- } in / tewaˈjehkwɛ̃h / 'I have picked it up' (cf. Barbeau 1960:288);
with duplicative.

351 PNI * { -kʷeni- }, * { -kʷenj- } 'be able'

Tu. { -kʷenj- } in / joˈkʷɛːnjə̃ / 'it is able, it is possible' (cf. Rudes 1999:308).

Mo. { -kʷenj- } in / ˈkkʷenjehs / 'I am able to, capable of, I can, I dare to'
(cf. Maracle 1990:54).

Oe. { -kʷeni- } in / waʔekʷeːˈnî / 'she's able'
(cf. Michelson & Doxtator 2002:501).

Oo. { -kʷenj- } in / okʷéːˈnjũh / 'it is possible, it is a possibility'
(cf. Woodbury 2003:479).

Ca. { -kʷeni- } in / ẽhaːˈkʷeːniʔ / 'he can do it' (cf. Froman et al. 2002:1).

Se. { -kʷeni- } in / oʔkakʷeːniʔ / 'it was possible' (cf. Chafe 1967:68).

352 PI * { nV(H) } 'that, the, this'

Ch. / náː / 'that, those' (cf. Feeling & Pulte 1975:146).

PNI * / neʔ / 'that, that one, the, the one, this, this one'

Tu. / teʔ / 'what' (cf. Rudes 1999:436).

Mo. / neʔ / 'the, that' (cf. Maracle 1990:57).

Oe. { neʔ } in / neʔ ˈthôːneʔ / 'at that time' (cf. Michelson & Doxtator 2002:576).

Oo. / neʔ / 'nominal marker' (cf. Woodbury 2003:695).

Ca. / neʔ / 'that, the' (cf. Froman et al. 2002:687).

Se. / neʔ / 'it is, this is' (cf. Chafe 1967:68).

Hu. / neʔ / <de> '[the, that]' (MS 59:1), / ? / assumed present.

Wy. / neʔ / 'the' (cf. Barbeau 1960:105).

353 PNI * { -nahskʷ- } 'domestic animal, prisoner, slave'

Tu. { -tahskʷ- } in / oˈtahskʷɛh / 'domestic animal, pet, prisoner, slave'
(cf. Rudes 1999:425).

Mo. { -nahskʷ- } in / kaˈnahskʷaʔ / 'a domestic animal, a prisoner'
(cf. Maracle 1990:28).

Oe. { -naskʷ- } in / kanaskʷiːˈjo / 'it's a nice pet'
(cf. Michelson & Doxtator 2002:553).

Oo. { -naskʷ- } in / káˈnaskʷaʔ / 'domesticated animal' (cf. Woodbury 2003:679).

Ca. { -nahskʷ- } in / kaˈnahskʷaʔ / 'tame animal; pet; domestic animal'
     (cf. Froman et al. 2002:94).

Se. { -nɔ̃skʷ- } in / kanɔ̃:skʷaʔ / 'domestic animal' (cf. Chafe 1967:72),
     penultimate lengthening anomalous.

Hu. { -nahskʷ- } in / xaˈnahskʷaʔ / < gandask8a > 'Esclave, Captif,
     animal domestique' (MS 59:89), preconsonantal / h / assumed present.

Wy. { -nahskʷ- } in / hunahskʷaɛ̃ʔ / 'he has a slave' (cf. Barbeau 1960:210).

354 PI * { -nakɹ- } 'be autochthonous, dwell, reside'

Ch. { -nàkìl- } 'reside' (King 1975:200).

PNI * { -nakɹ- } 'dwell, live, occur in abundance, reside'.

Tu. { -takr- } in / jeˈta:krɛʔ / 'one resides' (cf. Rudes 1999:637).

Mo. { -nakeɹ- } in / keˈnakeɹeʔ / 'I live, exist at, am of the country of,
     I am common, occur in abundance' (cf. Maracle 1990:40).

Oe. { -nakl- } in / ˈknakleʔ / 'I live, I reside'
     (cf. Michelson & Doxtator 2002:550).

Oo. { -nakR- } in / hatíːˈnaːkeːʔ / 'they live [there]' (cf. Woodbury 2003:674).

Ca. { -nakɹ- } in / kaeːˈnakɹeʔ / 'where they (f/m) live; an area'
     (cf. Froman et al. 2002:506).

Se. { -nɔ̃kR- } in / hatinɔ̃keʔ / 'they dwell in a village' (cf. Chafe 1967:72).

Hu. { -naxɹ- }, cf. < ˌandaˌre > 'Habiter' (MS 67:110).

Wy. { -naɹ- } in / janaːˈɹeʔ / 'it lives' (cf. Barbeau 1960:118), / tatiˈnaːɹeʔ /
     'they live there' (cf. Barbeau 1960:270).

355 PNI * { -nakt- }, * { -nakʷt- } 'bed, place, room, space'

Tu. { -takʷn- } in / oˈtakʷnɛh / 'apartment, bed, position, room, space, stage'
     (cf. Rudes 1999:428), cluster / kʷt / anomalous, limited to roots
     { -akʷt- } 'be next to' and { -takʷn- } 'space, the latter perhaps a
     derivative of the former.

No. * { -tak(ʔt)- } in < Sattaak > 'A Bed' (cf. Rudes 1981a:47).

Mo. { -nakt- } in / kaˈnaktaʔ / 'a place, space, area, a bed' (cf. Maracle 1990:28).

Oe. { -nakt- } in / kaːˈnakteʔ / 'bed' (cf. Michelson & Doxtator 2002:551).

Oo. { -nakt- } in / káˈnaktaʔ / 'bed, seat, space' (cf. Woodbury 2003:677).

Ca. { -nakt- } in / kaˈnaːktaʔ / 'a bed, a seat' (cf. Froman et al. 2002:507).

Se. { -nɔkt- } in / onɔ̃:ktaʔ / 'space, room, area, time (for something), bed,
     State (of the U.S.)' (cf. Chafe 1967:72).

Hu. { -naht- } in / xaˈnahtaʔ / <gandaˈta> 'chambre, place a coucher, natte'
   (MS 59:90).

356   PNI * { **-nat-** } 'camp, city, settlement, town, village'
    Tu. { -taʔn- } in / oˈta:ʔnɛh / 'camp, city, settlement, village'
        (cf. Rudes 1999:430).
    Su. * { -nat- } in <Cannadago> 'city' (Alsop 1666:79).
    La. * { -nat- } in <Canada> 'Ilz appellent une ville' (Biggar 1924:245).
    Mo. { -nat- } in / kaˈna:taʔ / 'a town, village, city, a camp, an encampment'
        (cf. Maracle 1990:28).
    Oe. { -nat- } in / kanaˈtâ:ke / 'in town, at the town, to town'
        (cf. Michelson & Doxtator 2002:554).
    Oo. { -nat- } in / kanáˈ:taʔkeh / 'at the village, town, settlement'
        (cf. Woodbury 2003:672).
    Ca. { -nat- } in / kaˈna:taʔ / 'a town; a community' (cf. Froman et al. 2002:504).
    Se. { -nɔ̃t- } in / kanɔ̃takɔ̃:h / 'in the town' (cf. Chafe 1967:72).
    Hu. { -nat- } in / xaˈna:taʔ / <gandata> 'Bourg, vilage, ville' (MS 59:90).
    Wy. { -nat- } in / janataɛ̃ʔ / '[there is a] village' (cf. Barbeau 1960:220).
    [cf. Lounsbury 1978:340, Mithun 1979:186, Mithun 1981a:3,
        Mithun 1981b:238]

357   PNI * { **-natsj-** } 'grain, wheat'
    Mo. { -natsj- } in / oˈnatsjaʔ / 'wheat' (cf. Maracle 1990:68).
    Oo. { -natsj- } in / káˈna:tsjaʔ / 'grain' (cf. Woodbury 2003:677).
    Ca. { -nats- } in / kaˈnatsʔaehs / 'a grain threshing machine'
        (cf. Froman et al. 2002:507).
    Se. { -nɔ̃ts- } in / onɔ̃:tsaʔ / 'wheat' (cf. Chafe 1967:71).
    Hu. { -nats- } in / oˈnatsaʔ / <ondatsa> 'bled francois' (MS 59:90).
    [cf. Mithun 1984b:273]

358   PI * { **-nawẽ:h** } 'be melted, be warm, be wet'
    Ch. { -nàwò:h- } in / ã:kà:nàwò:hskấ: / 'it's getting warm'
        (cf. Feeling & Pulte 1975:15).
    PNI * { -nawẽ:h }, * { -naʔnawẽ:h } 'be warm, be wet, melt', the second form
        occurring when no incorporated noun is present.
    Tu. { -taʔtawẽ: } in / jotaˈʔta:wẽ: / 'humid; it is melted' (cf. Rudes 1999:428).

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Mo. { -naʔnawʌ̃ } in / joˈnâːnawʌ̃ / 'it is wet, soaked' (cf. Maracle 1990:20).

Oe. { -naʔnawʌ̃ } in / joˈnâːnawʌ̃ / 'it's wet'
(cf. Michelson & Doxtator 2002:562).

Oo. { -naʔnawẽh } in / onáʔnaˈwẽh / 'it is damp, it is wet'
(cf. Woodbury 2003:690).

Ca. { -naʔnawẽh- } in / onaʔnaˈwẽhtõh / 'it has been melted'
(cf. Froman et al. 2002:367), with causative.

Se. { -nɔ̃ʔnɔ̃wẽh } in / oˈnɔ̃ʔnɔ̃wẽːh / 'it has melted, soaked' (cf. Chafe 1967:73).

Hu. { -nawẽːh }, cf. <ganda8an> 'etre chaud, temperé' (MS 59:87),
long vowel and / h / assumed present.

Wy. { -nawẽ- } in / usahuaʔtaˈnaːwẽʔ / 'he became warm again'
(cf. Barbeau 1960:249), with inchoative.

[cf. Rudes 1995:49]

359   PNI * { **-naʔkaɹ-** } 'antler, horn'

Mo. { -naʔkaɹ- } in / oˈnâːkaɹaʔ / 'a horn, antler' (cf. Maracle 1990:68).

Oe. { -naʔkal- } in / oˈnâːkalaʔ / 'horn' (cf. Michelson & Doxtator 2002:559).

Oo. { -naʔkaR- } in / óˈnaʔkaːʔ / 'horn, antler' (cf. Woodbury 2003:685).

Ca. { -naʔkaR- } in / oˈnaʔkaːʔ / 'horns; antlers' (cf. Froman et al. 2002:505).

Se. { -nɔ̃ʔkaR- } in / oˈnɔ̃ʔkææʔ / 'horn' (cf. Chafe 1967:73).

Hu. { -naʔxaɹ- } in / xaˈnaʔxaɹaʔ / <gandaˌara> 'Corne' (MS 59:85),
/ ʔ / assumed present.

Wy. { -naʔɹ- } in / aʔhunaʔˈɹiːʒaʔ / 'he cut the horn' (cf. Barbeau 1960:263),
loss of / a / anomalous.

[cf. Michelson 1988:177]

360   PNI * { **-naʔkeɹ-** } 'imitate'

Tu. { -taʔkjɛr- } in / rotaʔˈkjɛːrɔ̃ / 'he followed an example, he imitated it'
(cf. Rudes 1999:170).

Mo. { -naʔkeɹ- } in / thaʔtenaʔkeˈɹahtũ / 'it is artifical, fake, phoney'
(cf. Maracle 1990:96), with causative.

Oe. { -naʔkel- } in / tekhenaʔkelaːˈniheʔ / 'I'm imitating her or someone'
(cf. Michelson & Doxtator 2002:560), with dative.

Oo. { -naʔkeR- } in / ẽjonáʔˈkeːẽʔ / 'it will pattern after it'
(cf. Woodbury 2003:687).

Ca. { -naʔkjeR- } in / ẽtisaˈnaʔkjẽːʔ / 'it will mock, imitate you'

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(cf. Froman et al. 2002:163), presence of / j / anomalous.

Se. { -nɔ̃ʔkeR- } in / waɔ̃wɔ̃ˈnɔ̃ʔkeːɛ̃ʔ / 'they imitated him' (cf. Chafe 1967:73),
   with dative.

Hu. { -naʔxeɹ- }, cf. < gandagerandi > 'imiter qlq.' (MS 59:85), with dative,
   / ʔ / assumed present.

[cf. Michelson 1988:174]

361 PNI * { **-naʔtaɹ-** } 'bread'

Tu. { -taʔnar- } in / oˈtaʔnarɛh / 'biscuit, bread, cake' (cf. Rudes 1999:431).

No. * { -taˀtaɹ- } in < Gotatera > 'Bread' (cf. Rudes 1981a:47).

Su. * { -naʔtaɹ- } in < Mnádra, Canadra > 'Brod' (cf. Mithun 1981a:23).

Mo. { -naʔtaɹ- } in / kaˈnâːtaɹũʔk / 'bread' (cf. Maracle 1990:28).

Oe. { -naʔtal- } in / kaˈnâːtalok / 'bread' (cf. Michelson & Doxtator 2002:564).

Se. { -nɔ̃ʔtaR- } in / oˈnɔ̃ʔtææʔ / 'lead, sinker, crock, type of bread'
   (cf. Chafe 1967:73).

Hu. { -naʔtaɹ- } in / xaˈnaʔtaɹaʔ / < gandatara > 'Pain' (MS 59:90),
   / ʔ / assumed present.

Wy. { -naʔtaɹ- } in / uˈnaʔtaɹaʔ / 'bread' (cf. Barbeau 1960:78).

[cf. Lounsbury 1978:340, Mithun 1979:181, Mithun 1984b:273]

362 PNI * { **-naʔtõhkʷ-** } 'call' (limited to Iroquoia)

Mo. { -naʔtũhkʷ- } in / khenaʔˈtũhkʷaʔ / 'I call someone by a name,
   I give a name to someone' (cf. Maracle 1990:48).

Oe. { -naʔtũhkʷ- } in / kũnaʔˈtũhkʷaʔ / 'I call you'
   (cf. Michelson & Doxtator 2002:570).

Oo. { -naʔtũhkʷ- } in / kanáʔˈtũhkʷih / 'it is named' (cf. Woodbury 2003:683).

363 PNI * { **-naʔtsj-** } 'cauldron, kettle, pail, pot'

Tu. { -naʔtʃ- } in / kaˈnaʔtʃaʔ / 'pail' (cf. Rudes 1999:321), a borrowed word.

Mo. { -naʔtsj- } in / kaˈnâːtsjaʔ / 'a pot, boiler, cauldron' (cf. Maracle 1990:28).

Oe. { -naʔtsj- } in / kanaʔˈtsjâːke / 'on the pail'
   (cf. Michelson & Doxtator 2002:568).

Oo. { -naʔtsj- } in / káˈnaʔtsjaʔ / 'bucket, pail, kettle' (cf. Woodbury 2003:688).

Ca. { -naʔts- } in / kaˈnaʔtsaʔ / 'a pail' (cf. Froman et al. 2002:506).

Se. { -nɔ̃ʔts- } in / kaˈnɔ̃ʔtsaʔ / 'pail, kettle, boiler' (cf. Chafe 1967:73).

Hu. { -naʔts- } in / xaˈnaʔtsaʔ / < gandatsa > 'Chaudiere' (MS 59:90),

/ ʔ / assumed present.

Wy. { -naʔts- } in / jaˈnaʔtsaʔ / 'kettle' (cf. Barbeau 1960:170).

[cf. Mithun 1984b:277]

364 PI * { **-neː-** } 'liquid'

Ch. { -nèː- } in / kànèːkíːʔa̋ː / 'he's picking up some liquid'
    (cf. Feeling & Pulte 1975:105) and / kànèːhwàhthíha̋ː /
    'he's finding some liquid' (cf. Feeling & Pulte 1975:106).

PNI * { -nehkʷ- }, * { -hnek- } 'liquid', the first meaning 'water' in Huron, the
    second 'liquid' in Susquehannock and the Five Nations languages.

Tu. { -hnɛk- } in / uhˈnɛːkjɛh / 'alcohol, liquor, juice, sap, water'
    (cf. Rudes 1999:207).

Su. * { -hnek- } in < Oneegha, Caneega > 'Watn' (cf. Mithun 1981a:23).

Mo. { -hnek- } in / ohˈneːkaʔ / 'water, liquid' (cf. Maracle 1990:61).

Oe. { -hnek- } in / ohneːˈkâː / 'liquid, liquor'
    (cf. Michelson & Doxtator 2002:386).

Oo. { -hnek- } in / óhˈneːkaʔ / 'liquid, water, alcohol' (cf. Woodbury 2003:526).

Ca. { -hnek- } in / ohneːˈkiːjo: / 'good water' (cf. Froman et al. 2002:363).

Se. { -hnek- } in / oːneːkaʔ / 'whiskey' (cf. Chafe 1967:54).

Hu. { -nehkʷ- }, cf. < gandek8a > 'Eau, aqua' (MS 59:92), / h / assumed present.

Wy. { -nehkʷ- } in / jaˈnehkʷatẽtsih / 'the water is that deep, thick'
    (cf. Barbeau 1960:269).

[cf. Cook 1979:186]

365 PI * { **-neːhst-** }, * { **-neːhstwaɹ** } 'ice'

Ch. { -nèːhstàl- } in / ùːnĕːstála̋ː / 'ice' (cf. Feeling & Pulte 1975:127),
    / kànĕːstálàtìʔa̋ː / 'it's freezing' (cf. Feeling & Pulte 1975:107) and
    / hìnèːstàlàta̋ː / 'freeze!' (cf. Feeling & Pulte 1975:107).

PNI * { -nehsto- }, * { -nehstwar- } 'ice'.

OOo. { -nehʃt- } in / óˈnehʃtoh / 'Congelé' (Shea 1859:35).

Se. { -nest- } in / oˈnestoh / 'it is frozen' (cf. Chafe 1967:68).

Hu. { -nehst- }, cf. < gandestonti > 'fe. geler' (MS 59:95), / h / assumed present;
    { -nehskʷaɹ- } in / xaˈnehskʷaɹaʔ / < gandesk8ara > 'Glace' (MS 62:45),
    / h / assumed present.

[cf. Rudes 1995:48]

366   PI * { -**nẽh-** } 'corn, grain, kernel'

    Ch. { -nòh- } in / kànòhě:nâ: / 'rice' (King 1975:192), / kànòhě:nî: /
        'hominy grits' (King 1975:193), both meaning literally 'long grain'.

    PNI * { -nẽh- }, * { -nẽhst- } 'corn, grain, kernel, seed'.

    Tu. { -nə̃h- } in / oˈnə̃hɛh / 'corn (Zea mays)' (cf. Rudes 1999:351).

    No. * { -nẽh- } in < ohnehahk > 'Corn, maize' (cf. Rudes 1981a:48).

    Su. * { -nẽhst- } in < Onaesta > 'Sod eller Magiiz' (cf. Mithun 1981a:23).

    Mo. { -nʌ̃h- } in / ˈka:nʌ̃h / 'seed, seeds (for planting, sowing)
        (cf. Maracle 1990:24).

    Oe. { -nʌ̃h- } in / ka:ˈnʌ̃heʔ / 'seed, pit (of a fruit), grain, oats'
        (cf. Michelson & Doxtator 2002:576).

    Oo. { -nẽh- } in / óˈnẽhaʔ / 'corn' (cf. Woodbury 2003:698).

    Ca. { -nẽh- } in / oˈnẽhẽ:ʔ / 'corn' (cf. Froman et al. 2002:70).

    Se. { -nẽh- } in / oˈnẽɔ̃ʔ / 'corn, corn kernel' (cf. Chafe 1967:69).

    Hu. { -nẽh- } in / oˈnẽhaʔ / < onnenha > 'bled' (MS 59:32).

    Wy. { -nẽh- } in / uˈnẽhaʔ / 'corn' (cf. Barbeau 1960:59).

    [cf. Mithun 1979:184, Mithun 1984b:272]

367   PI * { **nẽh** } 'now'

    Ch. { -nò- } in / nǒ:kʷʌ̃́: / 'now' (cf. Feeling & Pulte 1975:148), final syllable
        / -kʷʌ̃́: / meaning 'only, just'.

    PNI * / ˈo:nẽ / 'now'.

    Tu. / ˈo:nə̃ / 'at this time, at that time, now, when' (cf. Rudes 1999:469).

    Su. < Hoona > 'nu' (cf. Mithun 1981a:23).

    Mo. / ˈo:nʌ̃ / 'now, already, goodbye' (cf. Maracle 1990:56).

    Oe. / oˈnʌ̃ / 'now, then' (cf. Michelson & Doxtator 2002:640).

    Oo. / ˈó:nẽh / 'now' (cf. Woodbury 2003:761).

    Ca. / ˈo:nẽh / 'now' (cf. Froman et al. 2002:691).

    Se. / o:nẽh / 'now, at the time' (cf. Chafe 1967:92).

    Hu. / ˈo:nẽh / < onnen > '[maintenant]' (MS 59:57), / h / assumed present.

    Wy. / uˈnẽh / 'now' (cf. Barbeau 1960:103).

    [cf. Mithun 1979:184, Mithun 1981a:3, Rudes 1995:50]

368   PI * { -**nẽ:hskʷ-** } 'steal'

    Ch. { -nò:hsk- } in / kànò:hskí:ʔʌ̃́: / 'he's stealing it'
        (cf. Feeling & Pulte 1975:110).

PNI * { -nẽhsko- }, * { -nẽhskʷ- } 'steal'.

Tu. { -nə̃hskʷ- } in / raˈnə̃hskʷahs / 'he steals' (cf. Rudes 1999:362).

Mo. { -nʌ̃hskʷ- } in / keˈnʌ̃hskʷahs / 'I steal, rob, I am a thief, robber'
        (cf. Maracle 1990:40).

Oe. { -nʌ̃skʷ- } in / ˈknʌ̃skʷas / 'I steal' (cf. Michelson & Doxtator 2002:578).

Oo. { -nẽskʷ- } in / hatíˈnẽskʷas / 'they steal' (cf. Woodbury 2003:701).

Ca. { -nẽhsko- } in / ẽhˈsnẽhskoʔ / 'you will steal s.t.'
        (cf. Froman et al. 2002:315).

Se. { -nɔ̃skʷ- } in / haˈnɔ̃skʷas / 'he steals, thief' (cf. Chafe 1967:72),
        change of vowel anomalous.

Wy. { -nẽhskʷ- } in / aʔhaˈnẽhskʷaʔ / 'he stole' (cf. Barbeau 1960:271).

[cf. Rudes 1995:54]

369   PI * { -nẽ:j- } 'sand; stone'

Ch. { -nò:j- } in / nò:jǎ: / 'sand' (cf. Feeling & Pulte 1975:148).

PNI * { -nẽj- } 'stone'.

OMo. { -nʌ̃j- } in / oˈnʌ̃:jaʔ / <Onnenja> 'pierre' (Bruyas 1863:71).

Oe. { -nʌ̃j- } in / onʌ̃:ˈjâ: / 'stone' (cf. Michelson & Doxtator 2002:583).

Oo. { -nẽj- } in / óˈnẽ:jaʔ / 'stone' (cf. Woodbury 2003:704).

370   PNI * { -nẽtsh- } 'arm'

Tu. { -nə̃tʃh- } in / oˈnə̃tʃhɛh / 'arm, sleeve' (cf. Rudes 1999:350).

No. * { -nẽtʃh- } in <ohnunchahk> 'Arm' (cf. Rudes 1981a:48).

Mo. { -nʌ̃tsh- } in / oˈnʌ̃tshaʔ / 'an arm, forearm' (cf. Maracle 1990:70).

Oe. { -nʌ̃tsh- } in / oˈnʌ̃tshaʔ / 'arm' (cf. Michelson & Doxtator 2002:580).

Oo. { -nẽtsh- } in / óˈnẽtshaʔ / 'arm' (cf. Woodbury 2003:702).

Ca. { -nẽtsh- } in / oˈnẽ:tshaʔ / 'arm' (cf. Froman et al. 2002:14).

Se. { -nẽsh- } in / haˈnẽ:shaʔ / 'his arm' (cf. Chafe 1967:69).

Hu. { -nẽsh- }, cf. <gannensa> 'Bras' (MS 59:110), / h / assumed present.

371   PNI * { -niʔ- } 'be stingy' (limited to Iroquoia)

Mo. { -niʔ- } in / wakeˈnî:ʔũ / 'I am stingy, a miser, avaricious'
        (cf. Maracle 1990:104).

Oe. { -niʔ- } in / waˈknî:ũ / 'I'm stingy' (cf. Michelson & Doxtator 2002:594).

Oo. { -niʔ- } in / hóˈniʔũk / 'he is stingy, he is cheap' (cf. Woodbury 2003:714).

Ca. { -niʔ- } in / koˈniʔõh / 'she is stingy' (cf. Froman et al. 2002:522).

³⁷² PNI * { **-njaːk-** } 'marry'

Tu. { -tjaːk- } in / kaˈtjaːkə̃ / 'husband, spouse, wife' (cf. Rudes 1999:457),
/ ə̃jə̃ˈktiːtjaːk / 'the two of us will marry one another'
(cf. Rudes 1999:457).

Mo. { -njak- } in / wakeˈnjaːkũ / 'I am married' (cf. Maracle 1990:105).

Oe. { -njak- } in / ˈlonjaks / 'he's getting married'
(cf. Michelson & Doxtator 2002:621).

Oo. { -njak- } in / hóˈtiːnjaks / 'they are marrying' (cf. Woodbury 2003:740).

Ca. { -njaːk- } in / aˈkeːnjaːs / 'I am getting married right now'
(cf. Froman et al. 2002:531).

Se. { -njaːk- } in / waotinjaːk / 'they got married' (cf. Chafe 1967:74).

Hu. { -njaːK- }, cf. < gandia̬i > 'Se Marier' (MS 59:96),
long vowel assumed present.

Wy. { -njaːK- } in / ajeˈnjaːih / 'I am married' (cf. Barbeau 1960:67),
/ sahuˈnjakaʔ / 'he married again' (cf. Barbeau 1960:135).

[cf. Mithun 1984b:278]

³⁷³ PNI * { **-njaɹ-** } 'neck'

Mo. { -njaɹ- } in / oˈnjaːɹaʔ / 'the nape of the neck, collar' (cf. Maracle 1990:71).

Oe. { -njal- } in / onjaːˈlâ: / 'neck' (cf. Michelson & Doxtator 2002:621).

Oo. { -njaR- } in / óˈnjaːæʔ / 'neck' (cf. Woodbury 2003:739).

Ca. { -njaR- } in / athõwaˈnjaohaːk / 's.o' squeezed his neck'
(cf. Froman et al. 2002:532).

Se. { -njaR- } in / onjaːaʔ / 'neck, collar' (cf. Chafe 1967:73).

³⁷⁴ PNI * { **-njataɹ-** } 'lake'

Tu. { -njatar- } in / oˈnjaːtarɛh / 'lake, sea' (cf. Rudes 1999:376),
a borrowed word.

Mo. { -njataɹ- } in / kaˈnjaːtaɹeʔ / 'a lake, bay, sea, ocean' (cf. Maracle 1990:29).

Oe. { -njatal- } in / kanjataˈlâːke / 'lake' (cf. Michelson & Doxtator 2002:621).

Oo. { -njataR- } in / kanjáˈːtaːʔkeh / 'on the lake, at the ocean'
(cf. Woodbury 2003:739).

Ca. { -njataR- } in / kanjaˈtaːʔkeh / 'to, at, on the lake'
(cf. Froman et al. 2002:176).

Se. { -njotaR- } in / kanjotaeʔ / 'lake' (cf. Chafe 1967:74),

change of vowel anomalous.

[cf. Lounsbury 1961:13, Mithun 1984b:274]

375   PNI * { -nkoʔɹ- }, * { -nkoʔɹh- } 'wampum'

Su. * { -nkoʔɹ(h)- } in < Ahghââra > 'Ur the Barbarers penningar'
       (cf. Mithun 1981a:23).

Mo. { -nekoʔɹh- } in / oneˈkôːɹhaʔ / 'a wampum string' (cf. Maracle 1990:409).

Oe. { -nikoʔlh- } in / oniˈkôːlhaʔ / 'wampum'
       (cf. Michelson & Doxtator 2002:641).

Oo. { -tkoʔR- } in / óˈtkoʔæʔ / 'wampum' (cf. Woodbury 2003:807).

Se. { -tkoʔR- } in / oˈtkoʔæʔ / 'wampum' (cf. Chafe 1967:83).

[cf. Lounsbury 1978:340, Mithun 1981b:242]

376   PNI * { -nkõ- }, * { -nkʷẽhs- } 'blood'

Tu. { -tkə̃- } in / ˈkaːtkə̃ʔ / 'blood, gore' (cf. Rudes 1999:449).

No. * { -tkõ- } in < Gatkum > 'Blood' (cf. Rudes 1981a:46).

Mo. { -nekʷɅ̃hs- } in / oneˈkʷɅ̃hsaʔ / 'blood' (cf. Maracle 1990:69).

Oe. { -nikʷɅ̃hs- } in / oniˈkʷɅ̃hsaʔ / 'blood' (cf. Michelson & Doxtator 2002:591).

Oo. { -tkʷẽhs- } in / óˈtkʷẽhsaʔ / 'blood' (cf. Woodbury 2003:808).

Ca. { -tkʷẽhs- } in / katkʷẽhsaˈnahnõh / 'pure-bred' (cf. Froman et al. 1967:575).

Se. { -tkʷɛ̃hs- } in / aˈketkʷɛ̃hsaʔ / 'my blood' (cf. Chafe 1967:83).

Hu. { -nxõ- } in / ˈxanxõh / < ˌangon > 'Sang' (MS 59:108).

Wy. { -njə̃- } in / jaˈnjə̃h / 'blood' (cf. Barbeau 1960:283).

[cf. Lounsbury 1978:340]

377   PNI * { -nkʷẽhtaɹ- } 'red' (limited to Iroquoia)

Mo. { -nekʷɅ̃htaɹ- } in / oneˈkʷɅ̃htaɹaʔ / 'red' (cf. Maracle 1990:69).

Oe. { -nikʷɅ̃htal- } in / jũtnikʷɅ̃htaˈlalhos / 'she puts on lipstick'
       (cf. Michelson & Doxtator 2002:247).

Oo. { -tkʷẽhtaR- } in / óˈtkʷẽhtaːʔ / 'red' (cf. Woodbury 2003:807).

Se. { -tkʷɛ̃htaR- } in / oˈtkʷɛ̃htæætsih / 'dark red' (cf. Chafe 1867:83).

378   PNI * { -nkʷẽʔ- } 'begin to snow'

Tu. { -tkʷə̃ʔ- } in / waʔˈkaːtkwə̃ʔ / 'it began to snow' (cf. Rudes 2002:191).

Hu. { -nxʷẽʔ- }, cf. < ˌang8endi > 'neger, faire de la nege' (Fraser 1920:300),
       / ʔ / assumed present.

[cf. Rudes 2002:191]

379   PNI * { **-no:h** } 'be cold'
Mo. { -no } in / joh'nekano / 'the water is cold' (cf. Maracle 1990:238).
Oo. { -noh } in / ohnéka'noh / 'cold water' (cf. Woodbury 2003:691).
Ca. { -no: } in / o'wa:no: / 'it is a cold wind' (cf. Froman et al. 2002:60).
Se. { -no:h } in / ohsə̃tano:h / 'cold night' (cf. Chafe 1967:73).
Hu. { -nohst- }, cf. <gand8sti> 'avoir, sentir du froid' (MS 59:106),
        causative form, / h / assumed present.
Wy. { -nuhst- } in / aʔha'aʔtanuhst / 'he was cold' (cf. Barbeau 1960:249),
        causative form.

380   PNI * { **-noʔts-** }, * { **-noʔtsj-** } 'tooth'
Tu. { -toʔθ- } in / o'toʔθɛh / 'tooth' (cf. Rudes 1999:177).
No. * { -toʔs- } in <Otosag> 'The teeth' (cf. Rudes 1981a:46).
Mo. { -noʔtsj- } in / ka'nô:tsjaʔ / 'a stake, a spike, a tooth, teeth'
        (cf. Maracle 1990:174).
Oo. { -noʔtsj- } in / knóʔ'tsjaʔkeh / 'my tooth' (cf. Woodbury 2003:718).
Ca. { -noʔts- } in / o'noʔtsaʔ / 'tooth' (cf. Froman et al. 2002:523).
Se. { -noʔts- } in / o'noʔtsaʔ / 'tooth' (cf. Chafe 1967:70).

381   PNI * { **-nõhkʷ-** }, * { **-nõhkʷaʔt-** }, * { **-nõhkʷaʔtshɹ-** } 'medicine'
Tu. { -nə̄hkʷaʔt } in / jo'nə̄hkʷaʔt / 'anodyne, antidote, drug, medicine'
        (cf. Rudes 1999:356).
Mo. { -nũhkʷ- } in / o'nũhkʷaʔ / 'medicine, remedy, a herbal infusion medicine'
        (cf. Maracle 1990:72).
Oe. { -nũhkʷaʔt } in / o'nũhkʷaʔt / 'medicine, pepper'
        (cf. Michelson & Doxtator 2002:600).
Oo. { -nṹhkʷaʔtshR- } in / onṹh'kʷaʔtshæʔ / 'medicine'
        (cf. Woodbury 2003:726).
Se. { -nə̃hkʷaʔshR- } in / o'nə̃hkʷaʔshæʔ / 'medicine' (cf. Chafe 1967:71).
Hu. { -nõhkʷaʔt } in / ẽ'nõhkʷaʔt / <Ennonk8at> 'ame, Médecine'
        (MS 59:170), / h / and / ʔ / assumed present.
Wy. { -nə̃hkʷaʔt } in / 'nə̃hkʷaʔt / 'medicine' (cf. Barbeau 1960:132).
[cf. Mithun 1984b:278, Rudes 1995:49]

PI * { -**nõhs**- } 'house'

Ch. { -nə̀hs- } in ⁄ kànhsù:kàhlɁ̃́:ʔî: ⁄ 'wall' (King 1975:193), ⁄ khànɁ̃́:sù:lɁ̃́:ʔî: ⁄
    'room' (cf. Feeling & Pulte 1975:142), ⁄ h ⁄ in second form likely
    metathesized, literal meaning of word perhaps 'the house is divided',
    cf. ⁄ ã:jâ:tòhlɁ̃́:ʔî: ⁄ 'portion, chapter, share' (cf. King 1975:182,
    Feeling & Pulte 1975:63).

PNI * { -nõhs- } 'house'.

Tu. { -nə̃hs- } in ⁄ oˈnə̃hsɛh ⁄ 'cage, cottage, house, hut, umbrella'
    (cf. Rudes 1999:357), ⁄ nɛkanə̃hˈsa:kjɛ ⁄ 'there are two houses'
    (cf. Rudes 1999:37), ⁄ kaˈnə̃hso:t ⁄ 'the house stands'
    (cf. Rudes 1999:472).

No. * { -nõhs- } in ＜Onushag＞ 'A House' (cf. Rudes 1981a:47).

La. * { -nõʃ- } in ＜Canocha＞ 'Une maison' (Biggar 1924:245).

Mo. { -nũhs- } in ⁄ kaˈnũhsaʔ ⁄ 'house, dwelling, residence, home, hut, cabin,
    lair' (cf. Maracle 1990:30), ⁄ tekaˈnũhsake ⁄ 'two houses'
    (cf. Maracle 1990:174), ⁄ raoˈnũhsaʔ ⁄ 'his house'
    (cf. Deering & Delisle 1976:198), ⁄ kaˈnũhsoteʔ ⁄
    'a house is standing there' (cf. Deering & Delisle 1976:500).

Oe. { -nũhs- } in ⁄ kaˈnũhsaʔ ⁄ 'house, building'
    (cf. Michelson & Doxtator 2002:602), ⁄ laoˈnũhsaʔ ⁄ 'his house'
    (cf. Michelson & Doxtator 2002:602).

Oo. { -nũhs- } in ⁄ kanɁ̃́hˈsaʔkeh ⁄ 'at the house' (cf. Woodbury 2003:726).

Ca. { -nõhs- } in ⁄ kaˈnõhsaʔ ⁄ 'house' (cf. Froman et al. 2002:159).

Se. { -nɔ̃hs- } in ⁄ kaˈnɔ̃hso:t ⁄ 'house' (cf. Chafe 1967:71).

Hu. { -nõhʃ- } in ⁄ xaˈnõhʃaʔ ⁄ ＜gannoncha＞ 'Cabane' (MS 59:116),
    preconsonantal ⁄ h ⁄ assumed present.

Wy. { -nɔ̃hʃ- } in ⁄ jaˈnɔ̃hʃaʔ ⁄ 'house' (cf. Barbeau 1960:171).

[cf. Mithun 1979:183, Mithun 1981a:3, Rudes 1995:52]

PNI * { -**nõhwakt**- } 'be painful, be sore, hurt'

Tu. { -nə̃hwakn- } in ⁄ jonə̃hˈwa:knɛʔ ⁄ 'it is painful' (cf. Rudes 1999:365).

Mo. { -nũhwakt- } in ⁄ joˈnũ̂:wakteʔ ⁄ 'it is sore, sensitive, painful'
    (cf. Maracle 1990:293).

Oe. { -nũhwakt- } in ⁄ jonũhˈwakteʔ ⁄ 'it hurts'
    (cf. Michelson & Doxtator 2002:607).

Oo. { -nũhwakt- } in ⁄ onɁ̃́hˈwakteʔ ⁄ 'it hurts' (cf. Woodbury 2003:730).

Ca. { -nõhõkt- } in ∕ oˈnohõkteʔ ∕ 'it is painful' (cf. Froman et al. 2002:223),
  borrowed from Seneca.

Se. { -nɔ̃ɔ̃kt- } in ∕ oˈnɔ̃ɔ̃kteʔ ∕ 'it's sore' (cf. Chafe 1967:72).

Hu. { -nõhwaht- }, cf. <gannonh8aˈti> 'etre pris de mal, sentir du mal'
  (MS 59:118).

384   PNI * { **-nõhweʔ-** } 'admire, like'

Mo. { -nũhweʔ- } in ∕ keˈnũ̂:weʔs ∕ 'I like, admire' (cf. Maracle 1990:42).

Oe. { -nũhweʔ- } in ∕ ˈknũ̂:wehseʔ ∕ 'I like it'
  (cf. Michelson & Doxtator 2002:607).

Oo. { -nũhweʔ- } in ∕ ˈknṹhweʔs ∕ 'I like it' (cf. Woodbury 2003:730).

Ca. { -nõhweʔ- } in ∕ eˈnõhweʔs ∕ 'she likes it' (cf. Froman et al. 2002:529).

Se. { -nɔ̃eʔ- } in ∕ haˈnɔ̃eʔs ∕ 'he likes it' (cf. Chafe 1967:71).

Hu. { -nõhweʔ- }, cf. <gannonh8endi> 'aimer q.c. ou qlq.' (MS 59:118).

Wy. { -nɔ̃:weʔ- } in ∕ teʔhuˈnɔ̃:weʔs ∕ 'he does not like him'
  (cf. Barbeau 1960:135).

385   PNI * { **-nõt-** } 'hill, mountain'

Tu. { -nə̃ʔn- } in ∕ oˈnə̃:ʔnɛh ∕ 'hill, mountain' (cf. Rudes 1999:368).

No. * { -nõ̌ʔt- } in <Yenuntenunte> 'a mountain' (cf. Rudes 1981a:46),
  <newntehs> 'Mountain' (cf. Rudes 1981a:48).

Mo. { -nũt- } in ∕ oˈnũ:taʔ ∕ 'mountain, hill' (cf. Maracle 1990:72).

Oe. { -nũt- } in ∕ jonũ:ˈtê: ∕ '(it's) a little hill, a little mound'
  (cf. Michelson & Doxtator 2002:613).

Oo. { -nũt- } in ∕ onṹ:ˈtaʔkeh ∕ 'on the hill' (cf. Woodbury 2003:719).

Ca. { -nõt- } in ∕ onõtaˈhõ:njõʔ ∕ 'hills' (cf. Froman et al. 2002:525).

Se. { -nɔ̃t- } in ∕ oˈnɔ̃taʔkeh ∕ 'on the hill, Onondaga Reservation'
  (cf. Chafe 1967:72).

Hu. { -nõt- } in ∕ oˈnõ:taʔ ∕ <Onnonta> 'Montagne' (MS 59:120).

Wy. { -nɔ̃t- } in ∕ kjuˈnɔ̃:tut ∕ 'the hill sticks up there' (cf. Barbeau 1960:306).

386   PNI * { **-nõtaɹ-** } 'corn soup, hominy' (limited to Iroquoia)

Mo. { -nũtaɹ- } in ∕ oˈnũtaɹaʔ ∕ 'soup' (cf. Maracle 1990:72).

Oe. { -nũtal- } in ∕ onũ:ˈtalaʔ ∕ 'thick soup, mush'
  (cf. Michelson & Doxtator 2002:641).

Oo. { -nũtaR- } in ∕ óˈnũ:ta:ʔ ∕ 'thick soup, cracked corn soup'

(cf. Woodbury 2003:720).

Se. { -nõ̃taR- } in / onõ̃tææʔ / 'hominy' (cf. Chafe 1967:72).

387 PI * { **-nõ:tsi:-** } 'brain, head'

Ch. { -nǍ:tsí:- } in / ù:nǍ:tsí:tǎ́ː / 'brain' (cf. Feeling & Pulte 1975:177).

PNI * { -nõtsi- }, { -nõtsihst- } 'brain, head'.

La. * { -nõtsi } in < Aggonozy > 'La teste' (Biggar 1924:241).

Mo. { -nũtsi } in / oˈnũ:tsi / 'head' (cf. Maracle 1990:72).

Oe. { -nũtsi } in / onũ:ˈtsi / 'head, cabbage' (cf. Michelson & Doxtator 2002:615).

Hu. { -nõtsihst- }, cf. < gannontsistia̤i > 'Couper la Tête a qlq.' (MS 59:121),
       preconsonantal / h / assumed present.

Wy. { -nõ̃tsihst- } in / a:runõ̃ˈtsihskjaʔ / 'he would cut his head off'
       (cf. Barbeau 1960:182).

[cf. Rudes 1995:47]

388 PI * { **-nõʔt-** } 'breast, milk'

Ch. { -nǍ:t- } in / ù:nǍ:tíː / 'milk' (cf. Feeling & Pulte 1975:177).

PNI * { -nõʔt- } 'milk, breast'.

Mo. { -nũʔt- } in / oˈnũ̂:taʔ / 'milk, breast' (cf. Maracle 1990:72).

Oe. { -nũʔt- } in / oˈnũ̂:taʔ / 'milk, breast' (cf. Michelson & Doxtator 2002:618).

389 PNI * { **-nɹahs-** } 'fungus, mushroom'

Tu. { -trahs- } in / oˈtrahsɛh / 'fungus, mushroom' (cf. Rudes 1999:452).

OMo. { -neɹahs- } in / oneˈɹahsaʔ / < Onnerasa > 'tondre champignons'
       (Bruyas 1863:72).

Oe. { -nlahs- } in / oˈnlahsaʔ / 'comb of a rooster'
       (cf. Michelson & Doxtator 2002:641).

Oo. { -næ:hs- } in / káˈnæ:hsaks / 'mud turtle' (cf. Woodbury 2003:439).

Ca. { -nɛ̃hs- } in / oˈnɛ̃hsaʔ / 'fungus, also visor, comb of a fowl'
       (cf. Chafe 1967:69).

Hu. { -nɹahʃ- } in / oˈnɹahʃaʔ / < Onnrachia > 'Champignon' (MS 59:121),
       / h / assumed present.

390 PNI * { **-nɹaht-** } 'leaf'

Tu. { -trahn- } in / oˈtrahnɛh / 'plant, sprout; leaf (archaic)'
       (cf. Rudes 1999:452).

Mo. { -neɹaht- } in / ˈoneɹahteʔ / 'a leaf, leaves, foliage' (cf. Maracle 1990:231).

Oe. { -nlaht- } in / ˈonlahteʔ / 'leaf' (cf. Michelson & Doxtator 2002:594).

Oo. { -næːht- } in / óˈnæːhtaʔ / 'leaf, leafy vegetable' (cf. Woodbury 2003:693).

Ca. { -nɹaht- } in / oˈnɹahtaʔ / 'leaf' (cf. Froman et al. 2002:179).

Se. { -nɛ̃ht- } in / oˈnɛ̃htaʔ / 'leaf' (cf. Chafe 1967:69).

Hu. { -nɹaht- } in / oˈnɹahtaʔ / < Onnrata > 'feuille' (MS 59:121),
　　　 / h / assumed present.

Wy. { -nɹaht- } in / nɹahˈtaʔjeh / 'on the leaves' (cf. Barbeau 1960:112).

[cf. Michelson 1988:180]

391　PI * { **-nsteːɹ-** } 'get involved, help'

Ch. { -hstèːl- } in / hìːhstĕːlæ̃́ː / 'help him!' (cf. Feeling & Pulte 1975:47).

PNI * { -ansteɹihst- } 'get involved with, become involved with, manage,
　　　 look after', with addition of causative; initial / a / anomalous,
　　　 perhaps original.

Mo. { -atsteɹihst- } in / katsteˈɹihsthaʔ / 'I get involved with, am busy with,
　　　 I meddle, govern, rule' (cf. Maracle 1990:37).

Oe. { -atstelist- } in / katsteˈlistaʔ / 'I look after things'
　　　 (cf. Michelson & Doxtator 2002:269).

Se. { -asteist- } in / akaˈsteistɔ̃h / 'I've managed, arranged it' (cf. Chafe 1967:40).

392　PI * { **-nuːɹ-** } 'corn husk'

Ch. { -nùːl- } in / kànŭːlæ̃́ː / 'grass, weed' (cf. Feeling & Pulte 1975:112),
　　　 { -nùːlàkí- } 'shuck corn' (King 1975:202).

PNI * { -noɹ- } 'corn husk'.

Tu. { -tor- } in / oˈtoːrɛh / 'chaff, cornhusk, husk, stalk' (cf. Rudes 1999:454).

Mo. { -noɹ- } in / tkaˈnoːɹaʔ / 'cornhusk mattress' (cf. Maracle 1990:98).

Oe. { -nol- } in / onoːˈlâ: / 'mat, cornhusk mat or rug'
　　　 (cf. Michelson & Doxtator 2002:597).

Se. { -now- } in / hatinowiːjaʔs / 'they're husking corn' (cf. Chafe 1967:70).

[cf. Mithun 1984b:272, Rudes 1995:48]

393　PI * { **-nuːɹõ-** } 'be difficult, be unable to, fail to do'

Ch. { -nùːlæ̃̀hæ̃̀- } 'fail, be unable to' (King 1975:202).

PNI * { -noɹõ- } 'be unable to, fail to do, find difficult; be dear, be expensive,
　　　 be valuable'.

Tu. { -torə̃- } in / raˈtoːrə̃h / 'he fails to do it' (cf. Rudes 1999:582),
/ kaˈnoːrə̃ʔ / 'it is expensive' (cf. Rudes 1999:581).

Mo. { -noɹũ- } in / kaˈnoːɹũʔ / 'it is dear, expensive, costly, precious, valuable,
hard to come by' (cf. Maracle 1990:29).

Oe. { -nolũ- } in / ũknoːˈlû̃ː / 'I got stuck, I couldn't quite make it,
it got me down' (cf. Michelson & Doxtator 2002:598), / kanoːˈlû̃ː /
'it's expensive' (cf. Michelson & Doxtator 2002:598).

Oo. { -nowẽ- } in / hóˈnoːwẽk / 'he fails' (cf. Woodbury 2003:716),
/ káˈnoːwẽʔ / 'it is valuable' (cf. Woodbury 2003:716).

Ca. { -nõːʔ } in / ẽˈwaːkhnõːʔ / 'I will fail' (cf. Froman et al. 2002:525),
/ kanõːʔ / 'it is expensive, dear, precious' (cf. Froman et al. 2002:525).

Se. { -noõ̃- } in / kanoːõ̃ʔ / 'it's difficult, expensive' (cf. Chafe 1967:70).

Hu. { -noɹõ- }, cf. < gandóron > 'trouver q.c. ou qlq. difficile' (MS 59:104).

Wy. { -nuɹõ- } in / teʔjaˈnuːɹõh / 'it is not difficult' (cf. Barbeau 1960:284).

[cf. Michelson 1988:173]

394   PNI * { **-ohsɹ-** } 'winter, year'

Tu. { -ohstr- } in / aˈwohstrɛh / 'year' (cf. Rudes 1999:465).

No. * { -ohsɹ- } in < Goshera > 'Winter' (cf. Rudes 1981a:47).

Mo. { -ohseɹ- } in / ˈohseɹaʔ / 'winter, year' (cf. Maracle 1990:64).

Oe. { -ohsl- } in / ohslaːˈsê: / 'it's a new year'
(cf. Michelson & Doxtator 2002:634).

Oo. { -ohsR- } in / kóhˈsæːʔkeh / 'winter' (cf. Woodbury 2003:755).

Ca. { -ohsɹ- } in / kohˈsɹehneh / 'winter time' (cf. Froman et al. 2002:604).

Se. { -osR- } in / koˈsheːneh / 'in the winter' (cf. Chafe 1967:75).

Hu. { -ohʃɹ- } in / ˈohʃɹaʔ / < Ocha > 'hyver' (MS 59:181), preconsonantal / h /
assumed present, / ɹ / has become / h / in Rock dialect.

Wy. { -uhʃɹ- } in / ˈjuhʃɹat / 'this winter' (cf. Barbeau 1960:221).

395   PNI * { **-ojʔaːk-** } 'throw' (limited to Iroquoia)

Mo. { -ojaʔk- } in / jaʔteˈkojaʔkhs / 'I hit the target, I hit the mark'
(cf. Maracle 1990:11).

Oe. { -ojaʔak- } in / tũtahˈlojaʔakeʔ / 'he threw it this way'
(cf. Michelson & Doxtator 2002:647).

Ca. { -ojʔaːk- } in / tewateˈtsihstojʔaːs / 'static' (cf. Froman et al. 2002:539).

Se. { -oʔjaːk- } in / tẽjakjaˈtwẽnoʔjaːk / 'we'll throw in a word'

(cf. Chafe 1967:76).

396 PNI * { **-oɹẽ-** } 'split'
Tu. { -orə̃- } in / nɛhˈroːrə̃hs / 'he splits it' (cf. Rudes 1999:471).
Mo. { -oɹʌ̃- } in / teˈkoːɹʌ̃hs / 'I split, cut, saw lengthwise' (cf. Maracle 1990:91).
Oe. { -olʌ̃- } in / tekoːˈlʌ̃s / 'I'm splitting it' (cf. Michelson & Doxtator 2002:638).
Oo. { -owẽ- } in / tẽjóˈtoːwẽh / 'it is cracked, it is split' (cf. Woodbury 2003:168).
Ca. { -owẽ- } in / aˈtkoːwẽːʔ / 'I split it open' (cf. Froman et al. 2002:541).
Se. { -owẽ- } in / tewakoːwɛ̃ʔ / 'I've split it' (cf. Chafe 1967:76).
Hu. { -oɹẽ- }, cf. <Oren> 'fendre en deux, q.c. Se fendre' (MS 59:196).
Wy. { -uɹẽ- } in / aʔkɔ̃ˈwaaʔtuɹɛ̃ʔ / 'they split her open' (cf. Barbeau 1960:157).
[cf. Michelson 1988:173]

397 PNI * { **-oːt** } 'be, be standing, exist, stand upright'
Tu. { -oːt } in / kaˈnə̃hsoːt / 'the house stands' (cf. Rudes 1999:472).
Mo. { -ot- } in / joˈɹahkoteʔ / 'it is sunny' (cf. Maracle 1990:20).
Oe. { -ot- } in / kaˈnũhsoteʔ / '(it's a) house'
        (cf. Michelson & Doxtator 2002:605).
Oo. { -ot- } in / óhˈnjoːtaʔ / 'it is protruding from the ground,
        it is growing out of the ground' (cf. Woodbury 2003:543).
Ca. { -oːt } in / tkaˈnə̃hsoːt / 'a house is over there' (cf. Froman et al. 2002:535).
Se. { -oːt } in / waʔɛ̃ːnoːt / 'a post standing upright' (cf. Chafe 1967:55).
Hu. { -oːt }, cf. <8t> 'etre au dessus, paroitre, au dehors, au debout'
        (MS 59:200), long vowel assumed present.
Wy. { -ut } in / kjuˈnɔ̃ːtut / 'the hill sticks up there' (cf. Barbeau 1960:306).

398 PNI * { **-oʔkt-** } 'be at the end, end'
Tu. { -oʔkt } in / ˈjoːʔnoʔkt / 'it came to an end, the end' (cf. Rudes 1999:474),
        with semireflexive.
Mo. { -oʔkt- } in / ˈjoːtoʔkteʔ / ' it comes to an end, it is finished, at an end'
        (cf. Maracle 1990:18), with semireflexive.
Oe. { -oʔkt- } in / wakoʔˈktâːũ / 'I have finished it'
        (cf. Michelson & Doxtator 2002:648).
Oo. { -oʔkt- } in / ẽwɛ̃́ˈtoʔktẽʔ / 'it will be the end of the day'
        (cf. Woodbury 2003:772).
Ca. { -oʔkt- } in / heˈjothahoʔk / 'the end of the trail, path, row'

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(cf. Froman et al. 2002:539).

Se. { -oʔkt- } in / oːtoʔk / 'it's at the end' (cf. Chafe 1967:76), with semireflexive.

399 PNI * { **-oʔkʷaːt-** } 'dig' (limited to Iroquoia)

Mo. { -oʔkʷat- } in / ˈkôːkʷaths / 'I dig a hole, I dig into something'
   (cf. Maracle 1990:55).

Oe. { -oʔkʷat- } in / katathnaʔˈtslôːkʷats / 'I'm digging around in my pocket'
   (cf. Michelson & Doxtator 2002:138).

Oo. { -oʔkʷat- } in / óʔˈkʷaːtih / 'it is dug' (cf. Woodbury 2003:771).

Ca. { -oʔkʷaːt- } in / oʔkʷaːs / 'it digs' (cf. Froman et al. 2002:538).

Se. { -oʔkʷaːt- } in / oʔˈkoʔkʷaːt / 'I dug' (cf. Chafe 1967:76).

400 PI * { **-oʔnj-** } 'hand'

Ch. { -oʔj- } in / ùwðːjéːnî / 'his hand' (cf. Feeling & Pulte 1975:185),
   { -ðʔjéːnî: } 'hand' (King 1975:204).

PNI * { -aʔnj- }, * { -ʔnj- } 'hand, finger'.

La. * { -ʔnj- } in <Aignoascon> 'Les mains' (Biggar 1924:242).

Mo. { -aʔnj- } in / ˈaʔnjaʔ / 'hand, inside of the hand' (cf. Maracle 1990:1).

Oe. { -aʔnj- } in / aʔnjaːˈnawʌ̃ʔ / 'glove, mitten'
   (cf. Michelson & Doxtator 2002:320).

Ca. { -ʔnj- } in / oʔnjaʔ / 'fingers' (cf. Froman et al. 2002:119).

Se. { -ʔnj- } in / keʔnjaʔ / 'my finger, my hand' (cf. Chafe 1967:92).

Hu. { -ʔnj- } in / ˈxaʔnjaʔ / <gandia> 'Doigt, Bague' (MS 59:96),
   / ʔ / assumed present.

Wy. { -ʔnj- } in / haʔˈnjaʔje / 'on his finger' (cf. Barbeau 1960:237).

[cf. Mithun 1981b:234]

401 PNI * { **-oʔtẽːh** } 'be of a kind, be of a sort'

Mo. { -oʔtʌ̃ } in / shaʔtewʌ̃seˈɹôːtʌ̃ / 'it is the same colour'
   (cf. Maracle 1990:316).

Oe. { -oʔtʌ̃ } in / niwakiʔtaˈlôːtʌ̃ / 'it's my clan'
   (cf. Michelson & Doxtator 2002:443).

Oo. { -oʔtẽh } in / hihohsẽnóʔˈtẽh / 'what his name is' (cf. Woodbury 2003:769).

Ca. { -oʔtẽː } in / nikaẽˈnoʔtẽː / 'a type of song' (cf. Froman et al. 2002:536).

Se. { -oʔtẽːh } in / nikaẽ̃ˈnoʔtẽːh / 'the kind of song it is' (cf. Chafe 1967:76).

Hu. { -oʔtẽːh }, cf. <8ten> 'etre de telle maniere, figure, humeur &c.'

(MS 59:202), / ʔ / assumed present.

Wy. { -uʔtɛ̃h } in / hutiʔtaɹuʔtɛ̃h / 'they are that kind of clan'
      (cf. Barbeau 1960:243).

402   PNI * { -õhwɛ̃tsj- } 'earth, land, world'

Mo. { -ũhwʌ̃tsj- } in / ũhˈwʌ̃tsjaʔ / 'earth, land, ground, terrestrial, nation,
      world' (cf. Maracle 1990:70).

Oe. { -ũhwʌ̃tsj- } in / ũhˈwʌ̃tsjaʔ / 'land, ground'
      (cf. Michelson & Doxtator 2002:749).

Oo. { -ũhwɛ̃tsj- } in / ṹhˈwɛ̃:tsjaʔ / 'the earth, the land'
      (cf. Woodbury 2003:844).

Ca. { -õhwɛ̃ts- } in / otõhwɛ̃ˈtsa:teʔ / 'country' (cf. Froman et al. 2002:548).

Se. { -ɔ̃ɛ̃ts- } in / jɔ̃ɛ̃tsateʔ / 'the earth (is present)' (cf. Chafe 1967:77).

Hu. { -õhwɛ̃ts- } in / õhˈwɛ̃tsaʔ / < Onh8entsa > 'le Monde, la Terre'
      (MS 59:188).

Wy. { -ɔ̃:wɛ̃ts- } in / aɔ̃:wɛ̃ˈtsaʔjeh / 'on the land' (cf. Barbeau 1960:288),
      / iʒɔ̃:wɛ̃ˈtsuʔtɛ̃h / 'that kind of land' (cf. Barbeau 1960:270).

403   PI * { -õ:ku:h- } 'go beyond, go through, leak, pass through, penetrate, reach'

Ch. { -ʌ̃:kù:h- } in / kʌ̃:kŭ:hskʌ̃́: / 'it's leaking' (cf. Feeling & Pulte 1975:126).

PNI * { -õkoh- } 'go through, pass through, reach',
      more often * { -õkoht- }, with causative.

Tu. { -ə̃koht- } in / rə̃ˈkohthaʔ / 'he sifts it' (cf. Rudes 1999:156),
      / wɛhraʔnə̃ˈkohthaʔ / 'he goes beyond' (Rudes 1999:490),
      with semireflexive.

Mo. { -ũkoh- } in / teˈkũ:kohs / 'I touch, reach something by throwing'
      (cf. Maracle 1990:91).

Oe. { -ũkoht- } in / tejũˈkothaʔ / 'it's coming through (e.g. water is coming
      through a hole in the roof)' (cf. Michelson & Doxtator 2002:751).

Oo. { -ũkoht- } in / aṹˈkohtih / 'it is too much, it has gone beyond it'
      (cf. Woodbury 2003:839).

Ca. { -õkoht- } in / tehˈsõ:koht / 'filter it, strain it' (cf. Froman et al. 2002:544).

Se. { -ɔ̃koht- } in / aˈkɔ̃kohtɔ̃h / 'I've put it through an opening'
      (cf. Chafe 1967:77).

Hu. { -õxoh- }, cf. < On̩o > 'penetrer, passer au Travers' (MS 59:188),
      / h / assumed present.

[cf. Rudes 1995:46]

404   PI * { **-õ:ku:hst-** } 'sift'

Ch. { -ƛ̃:kù:hst- } in / kƛ̃:kǔ:hstíhɑ̃́: / 'he's sifting it'
       (cf. Feeling & Pulte 1975:126).

PNI * { -õkohst- } 'sift'.

Tu. { -ə̃kohst- } in / kə̃ˈkohstha? / 'sifter' (cf. Rudes 1999:646).

[cf. Rudes 1995:46]

405   PNI * { **-õkʷeh** }, * { **-õkʷehsɹ-** }, * { **-õkʷe?t-** } 'be a person, human being'

Tu. / ˈə̃:kʷɛh / 'human being' (cf. Rudes 1999:156); { -ə̃kʷɛhstr- } in
      / awə̃ˈkʷɛhstrɛh / 'person' (cf. Rudes 1999:158).

OMo. / ˈũ:kʷe / < Ong8e > 'homme', { -ũkʷehser- } in / hũkʷehseˈri:jo /
      < Hong8eserio > 'bel homme', { -ũkʷe?t- } in / hũkʷe?ˈtaksə̃ /
      < Hong8etaksen > 'laid homme' (Bruyas 1863:119).

Mo. / ˈũ:kʷe / 'a person, human being' (cf. Maracle 1990:68); { -ũkʷe?t- } in
      / ũkʷe?taˈkʷe:kũ / 'national' (cf. Maracle 1990:262).

Oe. / ũ:ˈkʷe / 'person' (cf. Michelson & Doxtator 2002:752); { -ũkʷe?t- } in
      / akũˈkʷê:ta? / 'my relative' (cf. Michelson & Doxtator 2002:753).

Oo. / ˈṹ:kʷeh / 'person' (cf. Woodbury 2003:841); { -ũkʷe?t- } in / sṹˈkʷe?ta? /
      'your people, your relatives' (cf. Woodbury 2003:842).

Ca. / ˈõ:kʷeh / 'a person; a human' (cf. Froman et al. 2002:544).

Se. / ɔ̃:kʷeh / 'person' (cf. Chafe 1967:77); { -ɔ̃kʷe?t- } in / hɛ̃ˈnɔ̃kʷe?ta:se:? /
      'young people' (cf. Chafe 1967:77).

Hu. { -õxʷeh }, cf. < On̩8e > 'etre homme' (MS 59:187), / h / assumed present.

Wy. { -ɔ̃weh } in / ajɔ̃:ˈweh / 'she is a person' (cf. Barbeau 1960:279).

[cf. Mithun 1979:184, Mithun 1984b:260, Rudes 1995:48]

406   PI * { **-õ:nh-** } 'be alive, life, live'

Ch. { -ƛ̃:hn- } in / kƛ̃:hnɑ̃́: / 'he is alive' (cf. Feeling & Pulte 1975:126).

PNI * { -õnh- } 'be alive, live.

Tu. { -ə̃nh- } in / ˈrə̃nhɛ? / 'he is alive' (cf. Rudes 1999:162).

Mo. { -ũnh- } in / ˈkũnhe? / 'I live, exist, survive' (cf. Maracle 1990:55).

Oe. { -ũnh- } in / ˈkũnhe? / 'I'm alive, I live'
      (cf. Michelson & Doxtator 2002:755).

Oo. { -ũnh- } in / ˈkṹnhe? / 'I am alive' (cf. Woodbury 2003:849).

Ca. { -õnh- } in / aˈkõːnheʔ / 'she is alive' (cf. Froman et al. 2002:546).

Se. { -ɔ̃h- } in / kɔ̃heʔ / 'I'm alive' (cf. Chafe 1967:77).

Hu. { -õnh- }, cf. <Onnhe> 'vivre' (MS 59:189).

Wy. { -ɔ̃t- } in / ihˈʃɔ̃ːteʔ / 'your life' (cf. Barbeau 1960:178).

[cf. Rudes 1995:36]

407   PNI * { **-õnoːt-** } 'rain'

Tu. { -ə̃toːt- } in / ˈwə̃ːtoːtʃ / 'it rains' (cf. Rudes 1999:177).

No. * { -õtoːtʃ } in <Yountouch> 'Rain' (cf. Rudes 1981a:46).

La. * { -õno(t)- } in <Onnoscon> 'Pluye' (BR81), with facilitative.

Hu. { -õnoːt- }, cf. <Ond8ti> 'pleuvoir, fe. de la pluye' (MS 59:186),
        long vowel assumed present.

Wy. { -ɔ̃nut- } in / aʔɔ̃ˈnut / 'it is raining' (cf. Barbeau 1960:124).

408   PI * { **-õːt-** } 'pot'

Ch. { -ʌ̃ːt- } in / tèːkʌ̃́ːtĭːjéʔã́ː / 'I'm washing dishes' (cf. Feeling & Pulte 1975:78),
        / ʌ̃̌ːtɪ́ː / 'pot' (Mooney 1900:544).

PNI * / ˈõːtaʔ /, * / ˈõːtak / 'pot', origin of / k / unclear.

Su. * { -õtak } in <Ow̃ntack> 'Grnta/Kittil' (cf. Mithun 1981a:23).

La. * { -õt- } in <Undaccon> 'Ung pot de terre' (Biggar 1924:245).

Mo. / ˈũːtaʔ / 'pot, pail' (cf. Maracle 1990:73).

Oe. / ũːˈtak / 'pail, a big pail with a handle, kettle'
        (cf. Michelson & Doxtator 2002:759).

[cf. Mithun 1984b:276]

409   PI * { **-õːt-** } 'put into the fire'

Ch. { -ʌ̃ːt- } in / kʌ̃ːthʌ̃́hskʌ̃́ː / 'he's putting it into a fire'
        (cf. Feeling & Pulte 1975:128).

PNI * { -õt- } 'put into fire'.

Tu. { -ə̃t- } in / ranə̃ˈhə̃ːthohs / 'he puts the corn in the fire'
        (cf. Rudes 1999:168).

Mo. { -ũt- } in / ˈkũthaʔ / 'I put over the fire' (cf. Maracle 1990:55).

Se. { -ɔ̃t- } in / oʔkɔ̃ːtɛ̃ʔ / 'I put it in the oven' (cf. Chafe 1967:78).

410   PNI * { **-õːt** } 'be attached, have as a body part'

Tu. { -ə̃t } in / raˈtaʔrə̃ːt / 'he has a head' (cf. Rudes 1999:168).

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Mo. { -ũt- } in / ˈkjâːtũteʔ / 'I have a body, I am mortal' (cf. Maracle 1990:52).

Oe. { -ũt- } in / johnaʔˈtatslũteʔ / 'it has a pocket'

(cf. Michelson & Doxtator 2002:386).

Oo. { -ũt- } in / áˈũːtaʔ / it is attached, it has something attached to it'

(cf. Woodbury 2003:855).

Ca. { -õːt } in / tejonʔaˈkaõːt / 'sheep; lams; elk [lit. it has horns]'

(cf. Froman et al. 2002:505).

Se. { -ɔ̃ːt } in / aˈwɛ̃ːɔ̃ːt / 'there's a flower on it' (cf. Chafe 1967:78).

Hu. { -õːt }, cf. <Ont> 'etre, y avoir' (MS 59:192), long vowel assumed present.

Wy. { -ɔ̃t } in / teʔhaˈnɔ̃ːtɔ̃t / 'he has no legs' (cf. Barbeau 1960:199).

411   PI * { -**õːtakʷ**- } 'remove from the fire'

Ch. { -ƛ̃ːtàkì- } 'take off fire' (King 1975:221).

PNI * { -õtako- }, * { -õtakw- } 'remove from fire'.

Tu. { -ə̃ʔnakw- } in / jakə̃ˈʔnaːkwahs / 'one took it out of the fire'

(cf. Rudes 1999:168).

Mo. { -ũtakw- } in / kũˈtakwahs / 'I remove something from the fire'

(cf. Maracle 1990:19).

Se. { -ɔ̃takw- } in / koˈthæhkɔ̃taːkwɛ̃h / 'she has taken the bread out of the oven'

(cf. Chafe 1967:78).

412   PI * { -**õːtaɹiʔ** } 'be a lake, lake'

Ch. / ƛ̃ːtàlíː / 'pond, lake' (cf. Feeling & Pulte 1975:186).

PNI * { -õtaɹ- } 'lake', * { -õtaɹeʔ } 'be a lake'.

Hu. { -õtaɹ- } in / ˈõtaɹaʔ / <Ontara> 'lac, Mer' (MS 59:194).

Wy. { -ɔ̃taɹeʔ } in / jɔ̃ˈtaːɹeʔ / 'lake' (cf. Barbeau 1960:105), { -ɔ̃taɹ- } in

/ utɔ̃taˈɹɔ̃ːnih / 'she has made a lake' (cf. Barbeau 1960:103);

/ jɔ̃taˈɹaʔjeh / 'at the lake' (Barbeau 1960:269).

[cf. Lounsbury 1961:13, Mithun 1984b:274, Rudes 1995:49]

413   PNI * { -**ɹ**- } 'be in, be on'

Tu. { -r- } in / waˈʔoːraʔ / 'it touched upon it, it got into it' (cf. Rudes 1999:377).

Mo. { -ɹ- } in / ˈikeɹeʔ / 'I am in a cradleboard' (cf. Maracle 1990:15).

Oe. { -l- } in / iːˈkaleʔ / 'there's something in it'

(cf. Michelson & Doxtator 2002:504); / kajaʔˈtalhaʔ / 'it's pictured'

(cf. Michelson & Doxtator 2002:796).

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Oo. { -R- } in / kajáʔˈtaːhaʔ / 'movie, camera [lit. there are beings in it]'
  (cf. Woodbury 2003:443).

Ca. { -R- } in / kaˈjaʔtaːʔ / 'a picture [lit. there is a being in it]'
  (cf. Froman et al. 2002:587).

Se. { -R- } in / haːnekahaʔ / 'he puts water in it' (cf. Chafe 1967:47).

Hu. { -ɹ- }, cf. <gar> 'q.c. etre dedans, etre avec les autres' (MS 59:130).

Wy. { -ɹ- } in / iˈjaɹ / 'it is in it' (cf. Barbeau 1960:96).

414 PNI * { -ɹ- } 'moon to be present, planet to be present, sun to be present'

Tu. { -r- } in / ə̃ˈkaːraːk / 'it [the sun, the moon, a planet] will be present'
  (cf. Rudes 1999:378).

OMo. { -ɹ- }, cf. <Gar> 'paroitre, reluire', / ˈoːnʌ̃ ˈihskaɹ / <Onne iskar>
  'nous avons nouvelle lune', / ˈʌ̃tjek nʌ̃ˈkaːɹak / <Entiek négárák>
  'à midy' (Bruyas 1863:85).

Hu. { -ɹ- }, cf. <gar> 'signif. ostum Solis, lunae', / ˈoːnã̃ ˈiːxar / <onne i̯ar>
  'le Soleil ē levé' (MS 59:129).

415 PNI * { -ɹahkʷ- } 'moon, planet, sun'

Mo. { -ɹahkʷ- } in / kaˈɹahkʷaʔ / 'the celestial light, sun, moon'
  (cf. Maracle 1990:30).

Oo. { -Ræhkʷ- } in / kaǽhˈkʷitkẽ̃ʔs / 'the sun rises, the moon rises'
  (cf. Woodbury 2003:329).

Ca. { -Rakʷ- } in / kaːˈkʷaːkjeʔs / 'the sun and moon'
  (cf. Froman et al. 2002:324), lack of / h / anomalous.

Se. { -Ræhkʷ- } in / tjoæhkʷiˈtkɛ̃ʔɔ̃h / 'the sun (or moon) has come out'
  (cf. Chafe 1967:60).

Hu. { -ɹahkʷ- } in / xaˈɹahkʷaʔ / <garak8a> 'Soleil' (MS 59:131),
  / h / assumed present.

Wy. { -ɹahkʷ- } in / nuɹahˈkuːtaʔ / 'when the sun shines' (cf. Barbeau 1960:74),
  with loss of rounding before / u /.

[cf. Lounsbury 1978:340]

416 PNI * { -ɹakew- } 'erase, rub out, wipe out'

Tu. { -rakjɛw- } in / raraˈkjɛːwahs / 'he wipes it' (cf. Rudes 1999:38).

Mo. { -ɹakew- } in / keˈɹakewahs / 'I wipe clean, rub off something, brush off,
  dust off, brush' (cf. Maracle 1990:43).

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Oe. { -lakew- } in / waklakeˈwâːthũ / 'I have used it to wipe something'
    (cf. Michelson & Doxtator 2002:508), with causative.

Oo. { -Rækew- } in / kaǽːˈkeːwẽh / 'it is wiped' (cf. Woodbury 2003:326).

Ca. { -Rakew- } in / kɹaˈkeːwahs / 'I am erasing it, wiping it'
    (cf. Froman et al. 2002:370).

[cf. Michelson 1988:180]

417   PNI * { -ɹako- }, * { -ɹakw- } 'choose, pick out, select'

Tu. { -rakw- } in / raˈraːkwahs / 'he chooses, he prefers, he unloads'
    (cf. Rudes 1999:380).

Mo. { -ɹakw- } in / keˈɹakwahs / 'I choose, pick out, select'
    (cf. Maracle 1990:43).

Oe. { -lakw- } in / ˈklakwas / 'I'm choosing it'
    (cf. Michelson & Doxtator 2002:508).

Oo. { -Rækw- } in / ˈkǽːkwas / 'I choose' (cf. Woodbury 2003:327).

Ca. { -Rako- } in / ẽhˈsɹaːkoʔ / 'you will choose it, take it out'
    (cf. Froman et al. 2002:54).

Hu. { -ɹaw- }, cf. < gara8an > 'ôter de dedans, d'avec. Choisir parmi pl: Ch:'
    (MS 59:136), reflex of * / k / absent as in the reversive suffix.

Wy. { -ɹaw- } in / eˈɹaːwaʔ / 'I choose' (cf. Barbeau 1960:219).

418   PNI * { -ɹan- } 'sap, syrup'

Mo. { -ɹan- } in / oˈɹaːnaʔ / 'sap' (cf. Maracle 1990:73).

Oe. { -lan- } in / olaˈnâ: / 'corn coup' (cf. Michelson & Doxtator 2002:508),
    with semantic shift.

Ca. { -Ran- } in / ẽhsɹanaˈwẽʔtoh / 'you will sweeten'
    (cf. Froman et al. 2002:327).

Se. { -Ræn- } in / owæːnɔ̃ʔ / 'sugar, maple sugar, candy' (cf. Chafe 1967:47).

Hu. { -ɹan- } in / oˈɹaːnaʔ / < oranda > 'leau d'Erables, ou de &c' (MS 59:134).

Wy. { -ɹan- } in / uɹaːˈnaʔ / 'syrup' (cf. Barbeau 1960:123).

419   PNI * { -ɹat- } 'heel'

Mo. { -ɹat- } in / oˈɹaːtaʔ / 'heel of the foot, shoe' (cf. Maracle 1990:73).

Oe. { -lat- } in / olaːˈtâ: / 'heel' (cf. Michelson & Doxtator 2002:509).

Oo. { -Ræt- } in / óˈwæːtaʔ / 'heel of a shoe' (cf. Woodbury 2003:325).

Se. { -Ræt- } in / ˈoætahsaʔ / 'heel' (cf. Chafe 1967:47).

Hu. { -ɹat- } in / ʃɹaˈtaʔxeh / <chrata‿e> 'a ton Talon' (MS 59:137).

420   PNI * { **-ɹathẽ-** }, * { **-ɹaʔthẽ-** } 'climb'

Tu. { -rathə̃- } in / waʔkaˈra:thə̃ʔ / it climbed' (cf. Rudes 1999:381).

Mo. { -ɹathʌ̃- } in / keˈɹathʌ̃hs / 'I climb something' (cf. Maracle 1990:43).

Oe. { -lathʌ̃- } in / ˈklathʌ̃s / 'I keep climbing up'
        (cf. Michelson & Doxtator 2002:510).

Oo. { -Ræʔthẽ- } in / haǽʔˈthẽs / 'he climbs' (cf. Woodbury 2003:333).

Ca. { -Rathẽ- } in / kɹathẽhs / 'I climb' (cf. Froman et al. 2002:57).

Se. { -Ræʔthẽ- } in / ˈhæ:ʔthẽs / 'he climbs' (cf. Chafe 1967:48).

Hu. { -ɹaʔthẽ- }, cf. <garaθen> 'monter' (MS 59:137), / ʔ / assumed present.

Wy. { -ɹaʔtẽ- } in / aʔhaˈɹaʔtẽʔ / 'he climbed' (cf. Barbeau 1960:216).

421   PNI * { **-ɹaʔnẽta:k-** } 'adhere, stick, stick on'

Mo. { -ɹaʔnʌ̃tak- } in / joɹaʔˈnʌ̃:takhs / 'it is attached to, glued to, stuck to,
        adjacent to, it adheres to something' (cf. Maracle 1990:20).

Oe. { -laʔnʌ̃tak- } in / klaʔnʌ̃:ˈtaks / 'I'm sticking something on something'
        (cf. Michelson & Doxtator 2002:514).

Oo. { -Ræʔnẽtak- } in / owæʔnẽ́ˈta:kih / 'it is stuck to it'
        (cf. Woodbury 2003:332).

Ca. { -Raʔnẽta:k- } in / owaʔˈnẽ:ta:s / 'it sticks to it; it adheres to it'
        (cf. Froman et al. 2002:315).

Se. { -Ræʔnẽta:k- } in / oʔˈkæʔnẽ:ta:k / 'I stuck it on' (cf. Chafe 1967:48).

Hu. { -ɹaʔnẽta:K- }, cf. <garannenta‿i> 'q.c. etre attachée' (MS 59:135),
        long vowel and / ʔ / assumed present.

Wy. { -ɹaʔnẽtaK- } in / tautiˈɹaʔnẽta / 'they stuck' (cf. Barbeau 1960:257).

[cf. Michelson 1988:173]

422   PNI * { **-ɹẽn-** } 'incantation, song, spell, witchcraft'

Tu. { -rə̃t- } in / oˈrə̃:tɛh / 'witchcraft' (cf. Rudes 1999:385).

Mo. { -ɹʌ̃n- } in / kaˈɹʌ̃:naʔ / 'tune, song, chant' (cf. Maracle 1990:30).

Oe. { -lʌ̃n- } in / kalʌ̃:ˈnâ: / 'song' (cf. Michelson & Doxtator 2002:516).

Oo. { -Rẽn- } in / káˈẽ:naʔ / 'wheel, song' (cf. Woodbury 2003:402).

Ca. { -Rẽn- } in / ˈkaẽ:naʔ / 'a song' (cf. Froman et al. 2002:305).

Se. { -Rẽn- } in / ˈkaɛ̃nɔ̃ʔ / 'song' (cf. Chafe 1967:50).

Hu. { -ɹẽn- } in / xaˈɹẽ:naʔ / <garenda> 'danse, cérémonie, festin, Sort, priére'

(MS 59:139).

Wy. { -ɹɛ̃n- } in / tehutiˈɹɛ̃nuʔtɛ̃hk / 'their song will be of that sort'
      (cf. Barbeau 1960:104).

[cf. Michelson 1988:175]

423   PNI * { -ɹhat- } 'bush, forest, woods'

Tu. { -rhaʔn- } in / oˈrhaʔnɛh / 'forest, woods' (cf. Rudes 1999:390).

Mo. { -ɹhat- } in / kaɹhataʔˈkeha / 'small forest berries and fruits'
      (cf. Maracle 1990:178).

Oo. { -hat- } in / sahatíˈjaʔkih / 'you have crossed the forest'
      (cf. Woodbury 2003:486).

Ca. { -hat- } in / kaˈhaːtaʔ / 'forest' (cf. Froman et al. 2002:126).

Se. { -hat- } in / kahaːtaʔ / 'forest' (cf. Chafe 1967:51).

424   PMO * { -ɹho- } 'coat with, put on'

Mo. { -ɹho- } in / kaʔtaˈɹaɹhohs / 'I plaster, put on a layer of plaster'
      (cf. Maracle 1990:188).

Oe. { -lho- } in / jũtnikʷɑ̃htaˈlalhos / 'she puts on lipstick'
      (cf. Michelson & Doxtator 2002:247).

425   PI * { -ɹhok } 'be paternal aunt to'

Ch. { -lhòkíː } in / ùːlhòkíː / 'his aunt' (cf. Feeling & Pulte 1975:166).

PNI * { -ɹhak }, * { -aɹhak } 'be paternal aunt to'

Tu. { -arhak } in / ˈrorhak / 'his paternal aunt' (cf. Rudes 1999:49).

Ca. / aˈkeːhaʔk / 'my aunt (old word)' (cf. Froman et al. 2002:458),
      glottal stop anomalous.

Se. { -Rhak } in / akeːhak / 'she is aunt to me, my aunt' (cf. Chafe 1967:51).

Hu. { -aɹhak }, cf. <Arhak> 'etre Tante' (MS 59:10),
      retention of / k / anomalous.

[cf. Lounsbury 1961:13]

426   PI * { -ɹiː- } 'socks, leggings'

Ch. { -àːlìː- } in / àːlĭːjő́ː / 'sock' (cf. Feeling & Pulte 1975:40),
      initial / àː / anomalous, perhaps from semireflexive * { -àr- }.

PNI * { -ɹihs }, * { -ɹihsr- } 'socks, leggings'.

Tu. { -rihstr- } in / oˈrihstrɛh / 'leggings' (cf. Rudes 1999:607).

No. * { -ɹihsɹ- } in <Orisrāg> 'Stockings' (cf. Rudes 1981a:47).

Su. * { -ɹis } in <Khaalis> 'Strumpor' (cf. Mithun 1981a:23).

Mo. { -ɹihs } in / ˈkaːɹihs / 'stocking' (cf. Maracle 1990:398).

Oe. { -lisl- } in / oˈlislaʔ / 'pant leg' (cf. Michelson & Doxtator 2002:536).

Oo. { -Ris- } in / ˈkáːis / 'leggings' (cf. Woodbury 2003:437).

Ca. { -Risɹ- } in / kaˈiːsɹaʔ / 'leggings' (cf. Froman et al. 2002:180),
     lack of / h / anomalous.

Se. { -RishR- } in / ˈkaishæʔ / 'leggings' (cf. Chafe 1967:54).

Hu. { -ɹihʃ } in / ˈxaːɹihʃ / <garich> 'Chausses' (MS 59:143),
     / h / assumed present.

Wy. { -ɹihʃɹ- } in / jaɹihˈʃɹuʔtɛ̃h / 'kind of leggings' (cf. Barbeau 1960:89).

[cf. Mithun 1979:184, Mithun 1984b:275]

427   PNI * { -ɹihw- } 'affair, business, thing, matter'

Tu. { -rihw- } in / oˈrihwɛh / 'affair, business, event, habit, matter, news, song,
     theme, tune' (cf. Rudes 1999:394).

Su. * { -ɹihw- } in <Serwquácksi> 'Tu ast ond' (cf. Mithun 1981a:23).

Mo. { -ɹihw- } in / oˈɹîːwaʔ / 'matter, affair, deal, business, reason, thing,
     concern' (cf. Maracle 1990:73).

Oe. { -lihw- } in / oˈlîːwaʔ / business, matter'
     (cf. Michelson & Doxtator 2002:524).

Oo. { -Rihw- } in / oˈwihwaʔ / 'matter, thing, reason, thought, word'
     (cf. Woodbury 2003:601).

Ca. { -Rihw- } in / oˈihwaʔ / 'a word; an affair; business'
     (cf. Froman et al. 2002:556), accent anomalous.

Se. { -Riːw- } in / ˈoiwaʔ / 'thing, etc' (cf. Chafe 1967:61),
     vowel length appears in other morphological forms.

Hu. { -ɹihw- } in / xaˈɹihwaʔ / <garih8a> 'Chose, aff.e, discours, nouvelle'
     (MS 59:144).

Wy. { -ɹiːw- } in / nusaːʒaˈtɹiːwahʃɹɔ̃njaʔ / 'now again they made an agreement'
     (cf. Barbeau 1960:110).

428   PNI * { -ɹijo- }, * { -ɹjo- } 'fight, kill'

Tu. { -rijo- } in / waʔkaʔˈriːjoʔ / 'I fought' (cf. Rudes 1999:405),
     with semireflexive; { -rjo- } in / jaˈkoːrjohs / 'it kills someone'
     (cf. Rudes 1999:405).

No. * { -ɹijo- } in < Wauntrehu > 'To fight', < Untatreeyou > 'To kill'
(cf. Rudes 1981a:48).

Mo. { -ɹijo- } in / kateˈɹiːjohs / 'I fight, battle' (cf. Maracle 1990:33),
with semireflexive; { -ɹjo- } in / ˈkeɹjohs / 'I kill, vaniquish'
(cf. Maracle 1990:44).

Oe. { -lijo- } in / katliːˈjos / 'I fight, I'm a fighter'
(cf. Michelson & Doxtator 2002:240), with semireflexive; { -ljo- } in
/ kliːˈjos / 'I'm beating it, I'm killing it'
(cf. Michelson & Doxtator 2002:545).

Oo. { -Rjo- } in / ˈkéːjos / 'I am killing it' (cf. Woodbury 2003:932).

Ca. { -Rijo- } in / ẽhˈsɹiːjoʔ / 'you will kill s.t.' (cf. Froman et al. 2002:173);
{ -njo- } in / aˈhaːnjoʔ / 'he killed it' (cf. Froman et al. 2002:173).

Se. { -Rijo- } in / oʔkatiːjoʔ / 'I fought' (cf. Chafe 1967:74), with semireflexive;
{ -njo- } in / hanjos / 'he's killing it' (cf. Chafe 1967:74).

Hu. { -ɹio- }, { -jo- }, cf. < gario >, < gaïo > 'frapper, battre, prendre'
(MS 59:82).

Wy. { -ɹiʒu- } in / eɹiːˈʒuhʃ / 'I kill it' (cf. Barbeau 1960:284), / usahɔ̃tɹiːˈʒuʔ /
'they fought again' (cf. Barbeau 1960:309), with semireflexive; { -ʒu- }
in / eːʒaˈʒuʔ / 'he will kill you' (cf. Barbeau 1960:82).

[429] PNI * { **-ɹjoːʔ** } 'animal'

Tu. { -rjoːʔ } in / ˈkaːrjoːʔ / 'beast, prey, wild animal' (cf. Rudes 1999:405).

La. * { -joːʔ } in < Aggayo > 'Ung chian' (Biggar 1924:244).

Su. * { -ɹjoːʔ } in < Abgârijw > 'Hund' (cf. Mithun 1981a:23).

Mo. { -ɹjoʔ } in / ˈkaːɹjoʔ / 'a wild animal' (cf. Maracle 1990:319).

Oe. { -ljoʔ } in / ˈkaljoʔ / 'wild animal' (cf. Michelson & Doxtator 2002:460).

Oo. { -Rjoʔ } in / ˈkáːjoʔ / 'animal, game' (cf. Woodbury 2003:932).

Ca. { -njoːʔ } in / kanjoːʔ / 'wild animal(s)' (cf. Froman et al. 2002:11).

Se. { -njoːʔ } in / kanjoːʔ / 'it's wild, ref. to plant or animal' (cf. Chafe 1967:74).

Hu. { -joːʔ } in / ˈxajoːʔ / < gaïo > 'Bête, animal' (MS 59:82),
long vowel and / ʔ / assumed present.

Wy. { -ʃuʔ } in / jaˈʃuʔ / 'animals' (cf. Barbeau 1960:99),
{ -ʒuʔ } in / atiʒuʔ / 'animals' (cf. Barbeau 1960:253).

[cf. Mithun 1981b:240, Mithun 1984b:271]

430 PNI * { -ɹõhj- } 'blue, sky'

Tu. { -rə̃hj- } in / oˈrə̃hjɛh / 'sky, blue' (cf. Rudes 1999:384).

La. * { -Rõhj- } in < Quemhya > 'Le ciel' (Biggar 1924:244).

Mo. { -ɹũhj- } in / oˈɹũ̂:jaʔ / 'blue' (cf. Maracle 1990:73);
      / kaˈɹũ̂:jaʔ / 'sky, heavens, atmosphere' (cf. Maracle 1990:30).

Oo. { -Rẽhj- } in / óˈwẽhjaʔ / 'blue' (cf. Woodbury 2003:400);
      / kaẽ́hˈjaʔkeh / 'in the sky' (cf. Woodbury 2003:400).

Ca. { -Rõhj- } in / ˈaõhjaẽ:ʔ / 'blue' (cf. Froman et al. 2002:33);
      / ˈkaõhjʔakeh / 'in the heavens; in the sky' (cf. Froman et al. 2002:297).

Se. { -Rõ̃:j- } in / ˈkẽõ̃jateʔ / 'the sky (is present)' (cf. Chafe 1967:89).

Hu. { -ɹõhj- } in / xaˈɹõhjaʔ / < garonhia > 'le Ciel' (MS 59:146).

Wy. { -ɹõ̃:ʒ- } in / hatiɹõ̃:ʒõ̃ʔ / 'they are many in the sky' (cf. Barbeau 1960:77).

[cf. Lounsbury 1978:340, Mithun 1979:185]

431 PNI * { -ɹõt- } 'log, tree'

Tu. { -rə̃ʔn- } in / oˈrə̃:ʔnɛh / 'ax, log' (cf. Rudes 1999:386).

La. * { -Rõt- } in < Conda > 'Ils appellent le boys' (Biggar 1924:243).

Mo. { -ɹũt- } in / kaˈɹũ:taʔ / 'a log, beam, trunk of a tree, a tree'
      (cf. Maracle 1990:30).

Oe. { -lũt- } in / ka:ˈlũteʔ / 'log, tree, a cut-down tree'
      (cf. Michelson & Doxtator 2002:542).

Oo. { -Rẽt- } in / káˈẽ:taʔ / 'tree, log' (cf. Woodbury 2003:388).

Ca. { -Rõt- } in / ˈkaõ:taʔ / 'log' (cf. Froman et al. 2002:186).

Se. { -Rõ̃t- } in / kẽõ̃taʔ / 'tree, log, trunk, stem, post' (cf. Chafe 1967:89).

Hu. { -ɹõt- } in / xaˈɹõ:taʔ / < garonta > 'arbre' (MS 59:147).

Wy. { -ɹõ̃T- } in / ehˈʃɹõ̃:kjaʔ / 'you will cut down the tree'
      (cf. Barbeau 1960:204).

[cf. Lounsbury 1978:340, Mithun 1981b:240]

432 PNI * { -ɹʔo- }, * { -ɹʔok- } 'chop'

Mo. { -ɹoʔk- } in / ˈkeɹoʔkhs / 'I chop (with an axe)' (cf. Michelson 1973:99).

Oe. { -loʔok- } in / ˈikloʔoks / 'I'm chopping'
      (cf. Michelson & Doxtator 2002:540).

Oo. { -Rʔo- } in / ˈkeʔos / 'I chop into it, I notch it' (cf. Woodbury 2003:970).

Ca. { -ʔo- } in / keʔohs / 'I am a chopper' (cf. Froman et al. 2002:54).

Hu. { -ɹʔo- }, cf. < garo > 'buscher' (MS 59:145), / ʔ / assumed present.

Wy. { -ɹʔu- } in / aʔˈjeɹʔu / 'I chopped' (cf. Barbeau 1960:227).

433   PNI * { **-t-** } 'be present, exist'

Mo. { -t- } in / joˈtû̃:njateʔ / 'there is a peninsula' (cf. Maracle 1990:141).

Oe. { -t- } in / i:ˈketeʔ / 'I'm standing' (cf. Michelson & Doxtator 2002:673).

Oo. { -t- } in / óˈha:teʔ / '(it is a) road' (cf. Woodbury 2003:216).

Ca. { -t- } in / otõhwẽˈtsa:teʔ / 'country [lit. land exists]'
       (cf. Froman et al. 2002:72).

Se. { -t- } in / jõ̃ẽ̃tsateʔ / 'the earth (is present)' (cf. Chafe 1967:77).

Hu. { -t- }, cf. <gate> 'etre présent' (MS 59:156).

Wy. { -t- } in / kõtaɹateʔ / 'the lake is there' (cf. Barbeau 1960:59).

434   PMO * { **tahnũʔ** } 'and, besides'

Mo. / ˈtahnũʔ / 'and, besides' (cf. Maracle 1990:82).

Oe. / tahˈnû̃: / 'and, besides' (cf. Michelson & Doxtator 2002:676).

435   PNI * { **-takh-** } 'run'

Mo. { -takh- } in / ˈktakheʔs / 'I run, trot, go faster than a walk'
      (cf. Maracle 1990:56).

Oe. { -takh- } in / ˈktakheʔ / 'I'm running' (cf. Michelson & Doxtator 2002:677).

Oo. { -takh- } in / ˈktákheʔ / 'I am running' (cf. Woodbury 2003:339).

Se. { -takh- } in / ɛ̃ˈjetakheʔ / 'she'll be running' (cf. Chafe 1967:84).

Hu. { -takh- }, cf. <gataχon> 'aller venir courant' (MS 59:155).

Wy. { -tak- } in / ejeˈtakeʔ / 'I will run' (cf. Barbeau 1960:92).

[cf. Mithun 1981b:233]

436   PI * { **taɹa:ɹ** } 'woodpecker'

Ch. / tàlà:lä́: / 'woodpecker' (cf. Feeling & Pulte 1975:72).

PNI * / ˈta:ɹa:ɹ / 'woodpecker'.

Tu. / ˈna:ra?r / 'red headed woodpecker' (cf. Rudes 1999:320).

[cf. Rudes 1995:56]

437   PI * { **tawi:hskaɹaʔ** } 'flint'

Ch. / tàwǐ:hskálä́: / 'flint' (cf. Feeling & Pulte 1975:77).

PNI * { tawihskaɹaʔ } 'flint'.

Mo. / shaˈwihskaɹaʔ / 'flint' (cf. Rudes 1995:45), with 3SGM:3 prefix and

repetitive, refers to evil twin of / thaɹũhjaˈwaːkũ /, a creator god.

Oe. / taˈwiskalaʔ / 'devil or the Evil twin' (cf. Rudes 1995:45).

Hu. / ataˈwihskaɹaʔ / < ata8iskara > 'Pierre a fusil' (MS 67:155),

  / h / assumed present, word-initial / t / recast as reflexive { at }.

Wy. / taˈwihskaːɹaʔ / 'flint' (cf. Barbeau 1960:206).

[cf. Rudes 1995:45]

438   PNI * { **tekniːh** } 'two'

Tu. / ˈnɛːkti: / 'two' (cf. Rudes 1999:347).

No. < Dekanee > 'Two' (cf. Rudes 1981a:47).

Su. < Tiggene > '2' (cf. Mithun 1981a:23).

La. < Tigueny > 'Deux' (Biggar 1924:241).

Mo. / ˈtekeni / 'two' (cf. Maracle 1990:88).

Oe. / ˈtekni / 'two' (cf. Michelson & Doxtator 2002:686).

Oo. / ˈtéknih / 'two' (cf. Woodbury 2003:347).

Ca. / teˈkhni: / 'two' (cf. Froman et al. 2002:605), accent anomalous.

Se. / tekhni:h / 'two' (cf. Chafe 1967:82).

Hu. / ˈteni:h / < tendi > 'deux' (MS 59:18),

   long vowel and / h / assumed present.

Wy. / teˈnih / 'two' (cf. Barbeau 1960:185).

[cf. Lounsbury 1978:339, Mithun 1979:186, Mithun 1981b:237]

439   PNI * { **tekɹõʔ** } 'eight'

Tu. / ˈnɛːkrə̃ʔ / 'eight' (cf. Rudes 1999:347).

No. < Dekra > 'Eight' (cf. Rudes 1981a:47).

Su. < Tickerom > '8' (cf. Mithun 1981a:23).

Oe. / ˈteklũʔ / 'eight' (cf. Michelson & Doxtator 2002:686).

Oo. / ˈté:kẽ:ʔ / 'eight' (cf. Woodbury 2003:346).

Ca. / tekɹõʔ / 'eight' (cf. Froman et al. 2002:605).

Se. / tekjõ̃ʔ / 'eight' (cf. Chafe 1967:82).

[cf. Lounsbury 1978:339]

440   PNI * { **-teni-** }, * { **-tenj-** } 'change'

Tu. { -ʔnetj- } in / jotkə̃ʔnɛˈtjaʔnə̃ / 'it is changeable, it is mutable'

   (cf. Rudes 1999:336).

Mo. { -tenj- } in / teˈktenjehs / 'I change, alter something, reverse'

542

(cf. Maracle 1990:92).

Oe. { -tenj- } in / teˈktenjehseʔ / 'I'm changing it'
  (cf. Michelson & Doxtator 2002:687).

Oo. { -tenj- } in / téˈkteːnjũs / 'I change things, I make changes'
  (cf. Woodbury 2003:349).

Ca. { -teni- } in / ɛ̆hsatkʷɛ̃njaːˈteːniʔ / 'you will change your clothes'
  (cf. Froman et al. 2002:426).

Se. { -tenj- } in / akteːnjɔ̃ːh / 'I've changed it' (cf. Chafe 1967:82).

Hu. { -teni- }, { -tenj- }, cf. <gatendi> 'changer' (MS 59:158).

Wy. { -tenj- } / tuteˈteːnjɔ̃h / 'it has changed there' (cf. Barbeau 1960:288),
  with semireflexive.

441 PI * { -tẽːhs- } 'mosquito'

Ch. / tòːhsɛ́ / 'mosquito' (cf. Feeling & Pulte 1975:86).

PNI * / ˈtẽhseʔ / 'mosquito'.

Hu. / ˈtẽhʃeʔ / <tenˈchié> 'maringoins' (MS 67:128).

[cf. Mithun 1984b:267]

442 PNI * { -tih- } 'alternate, differ'

Tu. { -ʔnih- } in / nɛjotʔˈnihɔ̃ / 'the two of them differ' (cf. Rudes 1999:70),
  with semireflexive.

Mo. { -tih- } in / tekũˈttihaʔ / 'there is a difference between things'
  (cf. Maracle 1990:92), with semireflexive.

Oe. { -tih- } in / tetjaˈttihɔ̃ / 'you and I are different'
  (cf. Michelson & Doxtator 2002:274), with semireflexive.

Oo. { -tih- } in / tejotíˈhaʔtih / 'it is uneven' (cf. Woodbury 2003:361).

Ca. { -tih- } in / teˈwahtihɛ̃h / 'the difference; it is different'
  (cf. Froman et al. 2002:87), with semireflexive.

Se. { -tiH- } in / tewahˈtiaʔthaʔ / 'it alternates' (cf. Chafe 1967:83),
  with semireflexive and causative.

443 PI * { tiʔɹ } 'skunk'

Ch. / tíʔlíː / 'skunk' (King 1975:210), / tíʔlɛ́ː / 'skunk' (Mooney 1900:516).

PNI * / ˈteʔɹõ /, * / ɛ̃ˈtiʔɹõ / 'skunk', with sementic shift to 'raccoon' in languages
  other than Tuscarora.

Tu. / ˈnɛrʔɔ̃ / 'skunk' (cf. Rudes 1999:347), with metathesis of cluster / ʔr /.

Mo. / aˈtîːɹũ / 'raccoon' (cf. Maracle 1990:6).

Oe. / ʌ̃tiˈlũ / 'raccoon' (cf. Michelson & Doxtator 2002:351), unexpected loss of
glottal stop.

Hu. / ẽˈtiʔɹõ / < Entiron > 'Chat Sauvage' (MS 62:7), / ʔ / assumed present.

[cf. Mithun 1984b:265, Rudes 1995:53]

444   Hu. { **tjohskẽẽʔ** } 'nearby'

Hu. / tjohˈskẽːẽʔ / < tioskenhen > 'proche' (MS 59:149), preconsonantal / h /
assumed present, orthographic / h / assumed to separate nasal vowels in
succession.

Wy. / kjuhˈskẽːʒẽʔ / 'it is nearby' (cf. Barbeau 1960:109).

445   Hu. { **tjoʔxjẽtsihk** } 'snake'

Hu. / tjoʔˈxjẽtsihk / < Tiogentsik > 'serpent' (MS 59:32),
/ ʔ / and cluster / xj / assumed present.

Wy. / kjuʔˈʒẽtsih / 'snake' (cf. Barbeau 1960:66).

446   PI * { **-tkẽː-** } 'decay, rot, spoil'

Ch. { -kòː- } in / ũːkòːhskǽː / 'it's decaying, it's spoiling'
(cf. Feeling & Pulte 1975:165).

PNI * { -tkẽː- }, * { -atkẽ- } 'be decayed, be spoiled, be rotten'.

Tu. { -atkə̃- } in / ˈjoːtkə̃h / 'it is rotten' (cf. Rudes 1999:64).

Mo. { -atkʌ̃ } in / ˈjotkʌ̃ / 'it is rotten, spoiled, mouldy, sour'
(cf. Maracle 1990:22).

Oe. { -atkʌ̃ } in / ˈjotkʌ̃ / 'it's rotten, it's spoiled'
(cf. Michelson & Doxtator 2002:217).

Oo. { -tkẽ- } in / óˈtkẽh / 'it is rotten' (cf. Woodbury 2003:805).

Ca. { -tkẽ- } in / ẽˈjohjatkẽʔ / 'the fruit will spoil' (cf. Froman et al. 2002:273),
with inchoative.

Se. { -tkẽ- } in / takaːtkẽ̃ʔt / 'it got worse' (cf. Chafe 1967:83), with inchoative.

Hu. { -akẽ- }, cf. < Aken > 'pourri, gâté, aigre' (MS 59:6).

[cf. Rudes 1995:42]

447   PNI * { **toːh** } 'how, how many, how much' (limited to Iroquoia)

Mo. / ˈtoː / 'how' (cf. Maracle 1990:98).

Oe. / ˈtoː / 'how many, how much' (cf. Michelson & Doxtator 2002:712).

Oo. / ˈto: / 'how, how much' (cf. Woodbury 2003:362).

Ca. / to: / 'how (or other terms involving measurement)'
(cf. Froman et al. 2002:676).

Se. / to:h / 'how many?' (cf. Chafe 1967:84).

448   PNI * { **-tokẽ:h** } 'be certain, be exact, be true'

Mo. { -tokʌ̃ } in / kaˈto:kʌ̃ / 'it is certain, not doubtful' (cf. Maracle 1990:36).

Oe. { -tokʌ̃- } in / akato:ˈkʌ̃neʔ / 'it may become certain, it's possible'
(cf. Michelson & Doxtator 2002:713), with inchoative.

Oo. { -tokẽh } in / káˈto:kẽh / 'it is certain, it is a certain one, it is the same'
(cf. Woodbury 2003:363).

Ca. { -tokẽ: } in / kaˈto:kẽ: / 'a certain way; together; a certain thing'
(cf. Froman et al. 2002:428).

Se. { -tokẽ:h } in / kato:kẽ:h / 'it's exact, a specific one, the same one'
(cf. Chafe 1967:84).

Hu. { -toxẽ:h }, cf. < gato‚en > 'etre vray' (MS 59:159),
long vowel and / h / assumed present.

Wy. { -tujẽh } in / jatu:ˈjẽh / 'it is certain' (cf. Barbeau 1960:65).

449   PI * { **-toʔn-** } 'stand'

Ch. * { -tòʔn- } in / ã:nì:tô:nàʔã̌: / 'they are standing (congregation)'
(cf. Feeling & Pulte 1975:45).

PNI * { -taʔ- }, * { -taʔn- } 'stand up, stop', final * / n / preserved in punctual
and imperative in some Northern languages.

Mo. { -taʔn- } in / ˈtehstaʔn / 'stand! stop! (Deering & Delisle 1976:499).

Oe. { -taʔn- } in / waʔˈtektaneʔ / 'I stood up, I stopped in my tracks'
(cf. Michelson & Doxtator 2002:682).

Oo. { -taʔn- } in / téˈstaʔnah / 'Stand up! Stop!' (cf. Woodbury 2003:341).

Ca. { -taʔ- } in / tehstaʔ / 'stand up; stop' (cf. Froman et al. 2002:423).

Se. { -taʔ- } in / ˈoʔtktaʔt / 'I stood up' (cf. Chafe 1967:81).

Hu. { -taʔ- }, cf. < Katandi > 'Se tenir debout' (MS 59:154).

Wy. { -taʔ- } in / aʔˈtatahaʔ / 'he stood up' (cf. Barbeau 1960:213).

450   PNI * { **tɹiʔtɹi:ʔ** } 'bluejay' (limited to Iroquoia)

Mo. / teˈɹĩ:teɹiʔ / 'a bluejay' (cf. Maracle 1990:92).

Oo. / tiʔti:ʔ / 'blue jay' (cf. Froman et al. 2002:33), borrowed from Seneca.

Se. / ˈtiʔtiːʔ / 'bluejay (Cyanocitta cristata)' (cf. Chafe 1967:83).

[cf. Mithun 1984b:268]

451 PNI * { **tsaheʔ** }, * { **-tsaheʔt-** } 'beans'

Tu. / ˈθaheʔ / 'beans' (cf. Rudes 1999:410).

La. <Sahé> 'Ilz appellent leur febves' (Biggar 1924:245).

Mo. { -saheʔt- } in / osaˈhêːtaʔ / 'bean' (cf. Michelson 1973:101).

Oe. { -saheʔt- } in / osaˈhêːtaʔ / 'bean' (cf. Michelson & Doxtator 2002:652).

Oo. { -hsaheʔt- } in / ohsáˈheʔtaʔ / 'bean' (cf. Woodbury 2003:550).

Ca. { -hsaheʔt- } in / ohˈsaheʔtaʔ / 'beans' (cf. Froman et al. 2002:25),
   cluster / hs / anomalous.

Se. { -saeʔt- } in / oˈsaeʔtaʔ / 'beans' (cf. Chafe 1967:79).

[cf. Mithun 1984b:274]

452 PNI * { **-tsheʔ** }, * { **-tsheʔt-** }, * { **-tsheʔw-** } 'bottle, gourd, jar'

Tu. { -tʃhɛʔw- } in / oˈtʃhɛʔwɛh / 'bottle, gourd, melon, pumpkin, squash, yam'
   (cf. Rudes 1999:120).

No. * { -tʃheʔw- } in <Chewag> 'A Bottle' (cf. Rudes 1981a:47).

Su. * { -tsheʔ } in <Kaatzie> 'Faat' (cf. Mithun 1981a:23).

Mo. { -tsheʔ } in / ˈkatsheʔ / 'a bottle, container, jar, flask'
   (cf. Maracle 1990:37).

Oe. { -tsheʔ } in / ˈkatsheʔ / 'bottle, jar' (cf. Michelson & Doxtator 2002:719).

Oo. { -itsheʔt- } in / kɛ́ˈtsheʔtaʔ / 'bottle, jar' (cf. Woodbury 2003:635),
   initial / i / anomalous.

Ca. { -tsheʔt- } in / kaˈtsheʔtaʔ / 'bottle; jar' (cf. Froman et al. 2002:36).

Se. { -sheʔt- } in / kaˈsheʔtaʔ / 'bottle' (cf. Chafe 1967:80).

Hu. { -sheʔt- } in / xaˈsheʔtaʔ / <gaseta> 'courge, bouteille' (MS 59:148),
   / h / and / ʔ / assumed present.

Wy. { -seʔt- } in / jaˈseʔtajɔ̃h / 'in the bottle' (cf. Barbeau 1960:96).

[cf. Mithun 1979:183, Mithun 1981a:3, Mithun 1984b:276, Rudes 1995:47]

453 PNI * { **-tsihkʷ-** } 'club, fist, knot'

Tu. { -tʃihkʷ- } in / oˈtʃihkʷɛh / 'club' (cf. Rudes 1999:565).

Mo. { -tsihkʷ- } in / oˈtsihkʷaʔ / 'knot, button, fist, mallet, warclub, beet, a root
   crop' (cf. Maracle 1990:75).

Oe. { -tsihkʷ- } in / oˈtsihkʷaʔ / 'button, fist, knuckle, turnip'

(cf. Michelson & Doxtator 2002:730).

Oo. { -tsihkʷ- } in / óˈtsihkʷaʔ / 'fist, knot, button' (cf. Woodbury 2003:645).

Hu. { -tsihkʷ- } in / oˈtsihkʷaʔ / < otsik8a > 'casse-tete' (Fraser 1920:454),
   preconsonantal / h / assumed present.

Wy. { -tsihkʷ- } in / haʔˈutsihku:tɛ̃ʔ / 'it became a knot on a tree'
   (cf. Barbeau 1960:183), loss of rounding before / u /.

454 PI * { **tsi:hskʷo:ʔkʷo:ʔ** } 'robin'

Ch. / tsǐ:hskʷô:kʷő: / 'robin' (cf. Feeling & Pulte 1975:134).

PNI * / tsihˈskoʔkoʔ / 'robin', with simplification of * / kʷo: / to * / ko /.

Tu. / tʃihˈskoʔkoʔ / 'robin' (cf. Rudes 1999:128).

Mo. / tsihˈskô:ko / 'robin' (cf. Maracle 1990:99).

Oe. / tsiˈskô:koʔ / 'robin' (cf. Michelson & Doxtator 2002:732).

Oo. / tsíˈskaʔkaʔ / 'robin' (cf. Woodbury 2003:651),
   reshaped by analogy with Oo. / káʔˈkaʔ / 'crow'.

Ca. / ˈtsihskokoʔ / 'robin' (cf. Froman et al. 2002:271).

[cf. Mithun 1984b:268]

455 PI * { **tsi:jẽh** } 'otter, seal'

Ch. / tsì:jő: / 'otter' (King 1975:213), / tsì:jÃ̃: / 'otter' (Mooney 1900:538).

PNI * / ˈtsi:jẽh / 'seal'.

Mo. / oˈtsi:jo / 'seal', / ˈtsi:jã̃ / 'seal (the animal)' (cf. Maracle 1990:75).

Oo. / ˈtsí:jẽh / 'seal [aquatic mammal]' (cf. Woodbury 2003:651).

456 PNI * { **-tsikheʔt-** } 'salt'

Tu. { -tʃikheʔn- } in / otʃikheʔˈna:kriʔ / 'brine' (cf. Rudes 1999:129).

Mo. { -tsikheʔt- } in / otsiˈkhê:taʔ / 'sugar, candy, honey, seasoning'
   (cf. Maracle 1990:75).

Oo. { -tsikheʔt- } in / otsíˈkheʔtaʔ / 'salt' (cf. Woodbury 2003:647).

Ca. { -tsikheʔt- } in / oˈtsikheʔtaʔ / 'salt' (cf. Froman et al. 2002:276).

Se. { -tsikheʔt- } in / oˈtsikheʔtaʔ / 'salt' (cf. Chafe 1967:62).

Hu. { -tsikheʔt- } in / otsiˈkheʔtaʔ / < otsiχéta > 'Sel' (MS 67:263),
   / ʔ / assumed present.

Wy. { -tsikeʔt- } in / uˈtsikeʔtaʔ / 'sugar lump' (cf. Barbeau 1960:123).

457   PNI * { **-tsin** } 'be male'

      Su. * { -tsin } in < Ræætsin > 'En Mann' (cf. Mithun 1981a:23).

      Mo. { -tsin } in / ˈɹa:tsin / 'a male, it is male' (cf. Maracle 1990:77).

      Oe. { -tsin } in / keˈtsin / 'I'm industrious, determined, aggressive'
           (cf. Michelson & Doxtator 2002:731).

      Oo. { -tsin- } in / hatsíːˈnah / 'he is a male, he is a man'
           (cf. Woodbury 2003:647).

      Ca. { -tsin- } in / haˈtsi:nah / 'he is masculine, brave'
           (cf. Froman et al. 2002:192).

      Se. { -tsin- } in / hatsi:nɔ̃h / 'he's a male' (cf. Chafe 1967:62).

458   PI * { **-tsiːɹ** } 'fire'

      Ch. { -tsìːl- } in / àtsɪ̌ːlä̌ː / 'fire' (cf. Feeling & Pulte 1975:31).

      PNI * { -tsiɹ- } 'fire, ember'.

      Tu. { -tʃiʔr- } in / oˈtʃiʔrɛh / 'candle, ember, flash of light, lamp, light, spark,
           taper' (cf. Rudes 1999:134), the glottal stop is possibly a noun suffix
           / -ʔ / that metathesized before another noun suffix / -ɛh / was added,
           i.e. * / ˈoːtʃirʔ / (cf. Nottoway) > * / ˈoːtʃiʔr / > / oˈtʃiʔrɛh /.

      No. * { -tʃiɹ- } in < Auteur > 'Fire' (cf. Rudes 1981a:46).

      Mo. { -tsiɹ- } in / ˈoːtsiɹeʔ / 'fire, embers of a fire' (cf. Maracle 1990:60).

      [cf. Mithun 1979:182, Rudes 1995:44]

459   PNI * { **-tsist-** } 'coal, ember, fire, spark'

      (lack of / h / before / s / possibly due to derivation from * { -tsiːr- } 'fire' [000],
           i.e. * / rst / > * / st /)

      Tu. { -tʃisn- } in / oˈtʃiːsnɛh / 'ember, glowing coal, spark' (cf. Rudes 1999:131).

      La. * { -tsist- } in < Azista > 'Feu' (Biggar 1924:245).

      Su. * { -tsist- } in < uthsysta > 'eld' (cf. Mithun 1981a:23).

      Oe. { -tsist- } in / oːˈtsisteʔ / 'light' (cf. Michelson & Doxtator 2002:732).

      Oo. { -tsist- } in / óˈtsistaʔ / 'fire, ember' (cf. Woodbury 2003:648).

      Ca. { -tsist- } in / kaˈtsihstaʔ / 'a lamp' (cf. Froman et al. 2002:499).

      Se. { -tsist- } in / kaˈtsi:staʔ / 'ember, etc.' (cf. Chafe 1967:62).

      Hu. { -tsist- } in / xaˈtsistaʔ / < gatsista > 'feu, ignis' (MS 59:163).

      Wy. { -tsist- } in / uˈtsi:staʔ / 'live coals' (cf. Barbeau 1960:161).

      [cf. Mithun 1981a:3, Rudes 1995:40]

460 PNI * { **tsitshoʔ** } 'fox, lynx'

Tu. / ˈtʃitʃho / 'small fox, lynx' (cf. Rudes 1999:127).

Su. <Tzídtze> 'Katta' (cf. Mithun 1981a:23).

Mo. / ˈtsitshoʔ / 'a fox' (cf. Maracle 1990:100).

[cf. Mithun 1984b:265, Rudes 1995:46]

461 PNI * { **-tsiʔnkʷaɹ-** } 'bile, green, yellow'

Tu. / ˈtʃiʔtkʷar / 'bile, yellow stuff' (cf. Rudes 1999:135).

Mo. { -tsiʔnekʷaɹ } in / oˈtsîːnekʷaɹ / 'yellow, bile, jaundice'
        (cf. Maracle 1990:75).

Oe. { -tsiʔnkʷal } in / oˈtsîːnkʷal / 'yellow, orange'
        (cf. Michelson & Doxtator 2002:737).

Oo. { -tsiʔtkʷaR- } in / óˈtsiʔtkʷaːʔ / 'bile, yellow' (cf. Woodbury 2003:654).

Ca. { -tsitkʷaR- } in / oˈtsiːtkʷaːʔ / 'yellow' (cf. Froman et al. 2002:500).

Se. { -tsitkʷaR- } in / oˈtsitkʷææʔ / 'bile' (cf. Chafe 1967:62).

Hu. { -tsiʔnxʷaɹ- } in / oˈtsiʔnxʷaɹaʔ / <otsinguara> 'Bile' (MS 59:162),
        / ʔ / assumed present.

Wy. { -tsiʔnwaɹ- } in / tsiʔnwaɹaʔ / 'green' (cf. Barbeau 1960:261).

462 PNI * { **tsiʔtẽʔ** } 'bird'

Tu. / ˈtʃiʔnə̃ʔ / 'bird' (cf. Rudes 1999:134).

No. <Cheeta> 'A bird' (cf. Rudes 1981a:46).

Mo. { -tsiʔtʌ̃ʔ- } in / otsiʔˈtʌ̂̃ːhaʔ / 'a bird' (cf. Maracle 1990:75).

Oe. { -tsiʔtʌ̃ʔ- } in / otsiʔˈtʌ̂̃ːha / 'bird' (cf. Michelson & Doxtator 2002:738).

Ca. { -tsiʔtẽʔ- } in / tsiˈtẽːʔẽh / 'bird' (cf. Froman et al. 2002:31).

Se. { -tsiʔtɛ̃ʔ- } in / tsiʔˈtɛ̃ʔɔ̃ːh / 'bird' (cf. Chafe 1967:63).

463 PI * { **-tsiːʔtsiːʔ** } 'corn tassel'

Ch. { -tsìːʔtsí̃ } 'Scottish thistle, blowgun dart' (King 1975:213).

PNI * { -tsiʔtsiʔ }, * { -tsiʔtsj- } 'corn tassel, flower'.

Tu. { -tʃiʔtʃi- } in / oˈtʃiʔtʃiʔ / 'liverwort flower' (cf. Rudes 1999:132).

La. * { -tsiʔtsiʔ } in <Ozisy> 'Ilz appellent leur bled' (Biggar 1924:242).

Mo. { -tsiʔtsj- } in / oˈtsîːtsjaʔ / 'flower, blossom' (cf. Maracle 1990:75).

Oe. { -tsiʔtsj- } in / oˈtsîːtsjaʔ / 'flower' (cf. Michelson & Doxtator 2002:738).

Oo. { -tsiʔtsj- } in / oˈtsiʔtsjaʔ / 'cider, hops' (cf. Woodbury 2003:759).

Se. { -tsiʔts- } in / oˈtsiʔtsoːt / 'corn tassel' (cf. Chafe 1967:63).

Hu. { -tsiʔts- } in / oˈtsiʔtsaʔ / < Otsitsa > 'Fleur' (MS 67:99),
   / ʔ / assumed present.
[cf. Mithun 1984b:263, Rudes 1995:41]

464   PNI * { **tsjatahk** } 'seven'
Tu. / ˈtʃaːʔnahk / 'seven' (cf. Rudes 1999:116).
No. < Chatag > 'Seven' (cf. Rudes 1981a:47).
Su. < Tzadack > '7' (cf. Mithun 1981a:23).
Mo. / ˈtsjaːtahk / 'seven' (cf. Maracle 1990:99).
Oe. / tsjaˈtak / 'seven' (cf. Michelson & Doxtator 2002:741).
Oo. / ˈtsjáːtak / 'seven' (cf. Woodbury 2003:655).
Ca. / ˈtsaːtahk / 'seven' (cf. Froman et al. 2002:605).
Se. / tsaːtak / 'seven' (cf. Chafe 1967:62).
[cf. Lounsbury 1961:13, Lounsbury 1978:339]

465   PI * { **-tsjoːɹ-** } 'tobacco'
Ch. { -tsòːl- } in / tsòːlɑ̃́ː / 'tobacco' (cf. Feeling & Pulte 1975:135).
PNI * { -tsjaɹ- } 'tobacco'.
Tu. { -tʃar- } in / ˈtʃarhoʔ / 'tobacco (Nicotiana angustifolia)'
   (cf. Rudes 1999:116).
OMo. { -tsjaɹ- } in / takeˈtsjaɹhoʔs / < Tagetsiarhos >
   'donne moi a petuner' (MS 58:900).
Hu. { -tsaɹ- } in / xaˈtsaːraʔ / < gatsara >, / taxetsaˈɹohoʔs / < taˌetsarohos >
   'donne moy a petuner' (MS 59:160).
[cf. Rudes 1995:55]

466   PNI * { **tsjotaɹeʔ** } 'six; seven'
La. < Judaié > 'Six' (Biggar 1924:241).
Hu. / tsoˈtaːɹeʔ / < tsotare > '7' (MS 66:133),
   / ʔ / and penultimate accent assumed present.
Wy. / tsuˈtaːɹeʔ / 'seven' (cf. Barbeau 1960:76).
[cf. Lounsbury 1961:13, Lounsbury 1978:339, Rudes 1995:53]

467   PI * { **-tsjõʔt-** } 'fish'
Ch. { -tsàʔt- } in / àtsàʔtɪ̃́ː / 'fish' (cf. Feeling & Pulte 1975:30); nasal * / õ /
   reduced to short / à /, but reflex retained in the form / àtsɑ̃̀ʔtìːjɑ̃́ː /

550

'minnow', lit. 'real fish'.

PNI * { -itsjõh }, incorporating form * { -itsj- }, * { -itsjõ?t- } 'fish';
origin of * / i / unclear.

Tu. { -itʃə̃h } in / ˈkə̃:tʃə̃h / 'fish' (cf. Rudes 1999:246).

No. * { -itʃõh } in <Kaintu> 'A fish' (cf. Rudes 1981a:46).

La. * { -itsõh } in <Quejon> 'Poisson' (Biggar 1924:242).

Mo. { -itsjũ? } in / ˈkə̃tsjũ? / 'fish' (cf. Maracle 1990:43).

Oe. { -itsj- } in / ˈkə̃tsi? / 'fish' (cf. Michelson & Doxtator 2002:438).

Oo. { -itsjũ?t- } in / óˈtsjũ?ta? / 'fish' (cf. Woodbury 2003:632).

Ca. { -itsõ?t- } in / oˈtsõ?ta? / 'fish' (cf. Froman et al. 2002:121).

Se. { -itsɔ̃h } in / kẽtsɔ̃h / 'fish' (cf. Chafe 1967:59).

Hu. { -itsõh } in / ˈxẽtsõh / <gentson> 'Poisson' (MS 59:179),
final / h / assumed present.

[cf. Lounsbury 1978:342, Mithun 1979:182, Mithun 1981b:238 and 1984b:274,
Rudes 1995:45]

468   PI * { **-tso?** } 'be daughter-in-law'

Ch. { -tső:?î̂: } 'daughter-in-law' (King 1975:213).

PNI { -tsa?w } 'be daughter-in-law', 'have as in-law',
origin of / w / unclear, perhaps original to PI.

Tu. { -θa?w } in / ˈakθa?w / 'my daughter-in-law' (cf. Rudes 1999:572).

Mo. { -sa?w- } in / kheˈsâ:wha / 'my daughter-in-law'
(Deering & Delisle 1976:32).

Oo. { -hsa?wah } in / khehˈsa?wah / 'my daughter-in-law'
(cf. Woodbury 2003:551).

Se. { -sa? } in / khe:sa? / 'I have her as daughter-in-law, my daughter-in-law'
(cf. Chafe 1967:79).

[cf. Rudes 1995:42]

469   PNI * { **-tsɹẽht-** } 'dream, sleep'

Tu. { -θrə̃hn- } in / oˈθrə̃hnɛh / 'dream, sleep' (cf. Rudes 1999:413).

Mo. { -seɹʌ̃ht- } in / oseˈɹʌ̃hta? / 'sleep' (cf. Maracle 1990:276).

Oe. { -slʌ̃ht- } in / oˈslʌ̃hta? / 'dream' (cf. Michelson & Doxtator 2002:666).

470   PI * { **-uː-** } 'put into the water'

Ch. { -ùː- } in / kùːhʌ́hskǽː / 'he's putting it in water'

(cf. Feeling & Pulte 1975:125).

PNI * { -oː- } 'put into water'.

Tu. { -oː- } in / waʔɛhˈsɛharoːʔ / 'one put lye in water'
   (cf. Feeling & Pulte 1975:462).

Mo. { -o- } in / ˈjeːkohs / 'I put, immerse, throw something into a liquid'
   (cf. Maracle 1990:12).

Oe. { -o- } in / waˈkitsjoʔ / 'I'm boiling fish'
   (cf. Michelson & Doxtator 2002:630).

Oo. { -o- } in / ˈwáʔkok / 'I immersed it in water, I dipped it into water'
   (cf. Woodbury 2003:742).

Ca. { -oː- } in / shõˈnaʔtoː / 'boil the potatoes' (cf. Froman et al. 2002:535).

Se. { -o- } in / aˈkoõh / 'I've put it in the water' (cf. Chafe 1967:74).

Hu. { -oː- }, cf. < O > 'dans leau' (MS 59:180), long vowel assumed present.

Wy. { -u- } in / tawaˈteʔskuh / 'she got into the water' (cf. Barbeau 1960:89).
[cf. Mithun 1984b:274]

471   PI * { **-uːkʷ-** } 'remove from the water'

Ch. { -ùːkì- } 'take from water' (King 1975:216).

PNI * { -okw- }, * { -oko- } 'remove from water'.

Tu. { -okw- } in / ranõˈhoːkwahs / 'he takes corn from the water'
   (cf. Rudes 1999:461).

Mo. { -okw- } in / kataʔaˈɹokwahs / 'I draw a net from the water'
   (cf. Maracle 1990:155).

Oe. { -okw- } in / ˈkokwas / 'I'm taking something out of the water'
   (cf. Michelson & Doxtator 2002:637).

Oo. { -okw- } in / wáʔˈkoːkwaʔ / 'I took it out of the water'
   (cf. Woodbury 2003:749).

Se. { -okw- } in / kaːokwẽh / 'he's taken it out of the water' (cf. Chafe 1967:74).

Hu. { -ow- }, cf. < O8an > 'Retirer ex aquâ' (MS 59:180),
   loss of * / k /, as with reversive.

472   PI * { **-uːɹ-** } 'cover'

Ch. { -ùːl- } in / hùːlhã́ʔʌ̃̀ːkã́ː / 'cover it!' (cf. Feeling & Pulte 1975:125).

PNI * { -oɹ- }, * { -oɹok- }, * { -oɹeːk- }, * { -ʔɹhoɹ- }, * { -ʔɹhoɹeːk- },
   * { -ʔɹhoɹok- } 'cover, cover over, cover up', forms in * / ʔɹh / occurring
   in certain languages where no incorporated noun root is present.

Tu. { -orok- } in / ˈroːroks / 'he covers it' (cf. Rudes 1999:569).

Mo. { -ʔɹhoɹok- } in / keʔˈɹhoːɹokhs / 'I cover up, cover over' (cf. Maracle 1990:44).

Oe. { -ʔlholok- } in / keʔlhoˈloks / 'I'm covering it up' (cf. Michelson & Doxtator 2002:849).

Oo. { -ʔhow- } in / óʔˈhoːwih / 'it is covering it, it has covered it' (cf. Woodbury 2003:1063).

Ca. { -ʔhowek- } in / keʔˈhoːweːs / 'I am covering s.t.' (cf. Froman et al. 2002:73).

Se. { -ʔhowek- } in / waʔˈeʔhoːweːk / 'she covered it' (cf. Chafe 1967:90).

Hu. { -ʔɹhor- }, cf. <garhori> 'empaqueter, envelopper' (MS 59:142),
/ ʔ / assumed present; { -oɹ- }, cf. <Ori> 'couvrir, se couvrir, etre couvert' (MS 59:197).

Wy. { -uɹ- } in / aʔhakjaʔˈtuːɹiʔ / 'he covered his body' (cf. Barbeau 1960:258).

473   PI * { **-uːtsɹ-** } 'splash water, sprinkle'

Ch. { -ŭːtsl- } in / tã̀ːhstùːtlíʔã́ː / 'he's sprinkling it (with a liquid)' (cf. Feeling & Pulte 1975:76), { -hstùːtsìːt- } 'sprinkle [around]' (King 1975:187).

PNI * { -otsɹ- } 'sprinkle'.

Tu. { -ohθr- } in / rahnɛˈkohθraws / 'he sprinkles it' (cf. Rudes 1999:652),
/ h / anomalous.

Mo. { -oseɹ- } in / kehneˈkoseɹaʔs / 'I sprinkle, splash water on something' (cf. Maracle 1990:154).

Oe. { -osl- } in / lũwahneˈkoslas / 'they're sprinkling him with water, they're baptizing him' (cf. Michelson & Doxtator 2002:389).

Oo. { -ohsR- } in / ẽkhehnéˈkohsæːk / 'I will sprinkle her with water, I will baptize her' (cf. Woodbury 2003:531).

Ca. { -otsɹ- } in / ẽˈhẽnotsɹahs / 'they will sprinkle on', Lower Ca. / ẽˈhẽnotɹahs / (cf. Froman et al. 2002:310).

Se. { -osR- } in / ˈhaosæɔ̃h / 'he has sprinkled it' (cf. Chafe 1967:75).

474   PI * { **waʔkuhɹiːʔ** } 'whippoorwill'

Ch. * / wàʔkùːlĩ́ː / 'whippoorwill' (King 1975:222).

PNI * / waʔˈkohɹi(ː)ʔ /, * / kwaʔˈkohɹjVʔ / 'whippoorwill'.

Tu. / kwaʔˈkorhjɛh / 'whippoorwill' (cf. Rudes 1999:672).

Mo. / waʔˈkôːɹjaʔ / 'whippoorwill' (cf. Maracle 1990:411).

Oe. / kwaʔˈkôːli / 'whippoorwill' (cf. Mithun 1981:268).

Ca. / kwẽʔˈkohnjẽʔ / 'whippoorwill' (cf. Froman et al. 2002:368),
        partially reshaped, perhaps borrowed from Seneca.

Se. / ˈkwẽʔkoːnjẽʔ / 'whippoorwill (*Caprimulgus vociferus*)' (cf. Chafe 1967:68),
        partially reshaped.

[cf. Mithun 1984b:268]

475   PI * { -**we**- } 'say, speak'

Ch. { -wè- } in / nìkàwèʔắː / 'he's saying it, it's barking, meowing,
        whinnying, etc.' (cf. Feeling & Pulte 1975:147).

PNI * { -we- } 'speak'.

Tu. { -wɛ- } in / ˈkaːwɛh / 'it speaks' (cf. Rudes 1999:479).

No. * { -we- } in <Wasweke> 'To speak' (cf. Rudes 1981a:48).

[cf. Rudes 1995:54]

476   PNI * { -**wẽn**- } 'language, voice, word'

Tu. { -wɔ̃t- } in / oˈwɔ̃ːtɛh / 'command, language, letter (postal), message, music,
        order, speech, voice, word' (cf. Rudes 1999:483), / rawɔ̃ˈtiːtkɔ̃ʔθ /
        'he speaks' (cf. Rudes 1999:263).

Mo. { -wʌ̃n- } in / oˈwʌ̃ːnaʔ / 'word, voice, tone, speech, pronunciation'
        (cf. Maracle 1990:77).

Oe. { -wʌ̃n- } in / owʌ̃ˈnâː / 'word' (cf. Michelson & Doxtator 2002:769),
        / waʔewʌ̃ˈninikʌ̃neʔ / 'she spoke out'
        (cf. Michelson & Doxtator 2002:771).

Oo. { -wẽn- } in / áˈkwẽːnaʔ / 'my word, my voice' (cf. Woodbury 2003:864).

Ca. { -wẽn- } in / oˈwẽːnaʔ / 'a word' (cf. Froman et al. 2002:372).

Se. { -wẽn- } in / owẽːnɔ̃ʔ / 'word' (cf. Chafe 1967:85).

Hu. { -wẽn- } in / xaˈwẽːnaʔ / <ga8enda> 'vox' (MS 59:127);
        / ˈwẽːnaːt / 'Huron', cf. <8endat> 'le huron' (MS 59:13).

Wy. { -wẽn- } in / ihatiˈwẽːnajeh / 'their languages' (cf. Barbeau 1960:98);
        / wẽːˈnat / 'Wyandot' (cf. Barbeau 1960:299).

[cf. Rudes 1995:55]

477   PNI * { -**whjõhkaɹ**- } 'thumb' (limited to Iroquoia)

Mo. { -wejũhkaɹ- } in / oweˈjũhkaɹaʔ / 'thumb' (cf. Maracle 1990:76).

Oe. { -whjũhkar- } in / kewhjũhkaˈlâːke / '(on) my thumb'
  (cf. Michelson & Doxtator 2002:771).

Oo. { -WjũhkaR- } in / keːjűhˈkaːʔkeh / 'my thumb' (cf. Woodbury 2003:939).

Ca. { -wẽʔjõhkaR- } in / kwʔẽjõhˈkaːʔkeh / 'on my thumb'
  (cf. Froman et al. 2002:338), probably recast.

Se. { -jõhkaR- } in / kjɔ̃hˈkææʔkeh / 'on my thumb' (cf. Chafe 1967:89).

[cf. Michelson 1988:177]

478   PI * { -**wiːnõːh** } 'young person'

Ch. { -wíːnâ- } in / àwíːnâː / 'young man' (cf. Feeling & Pulte 1975:62).

PNI * { -winõːh } 'young woman'.

Tu. { -winɔ̃ː } in / kaˈwiːnɔ̃ː / 'virgin' (cf. Rudes 1999:486).

OMo. { -winũ } in / kaˈwiːnũ / 'young woman', cf. <Ga8innon>
  'monialis, jeune fille pas encore mariée' (Bruyas 1863:65).

Hu. { -winõːh } in / xaˈwiːnõːh / <ga8innon> 'jeune fille nubile, ou jeune
  f[ill]e marieé' (MS 59:129), long vowel and / h / assumed present.

Wy. { -winɔ̃ } in / jawiːˈnɔ̃h / 'young woman' (cf. Barbeau 1960:234).

[cf. Rudes 1995:55]

479   PNI * { -**wiɹ**- } 'baby, child, infant, offspring'

Tu. { -wir- } in / oˈwiːrɛh / 'bud, embryo, infant, offspring' (cf. Rudes 1999:486).

Mo. { -wiɹ- } in / oˈwiːɹaʔ / 'a baby, child, infant, newborn'
  (cf. Maracle 1990:77).

Oe. { -wil- } in / owiːˈlâː / 'baby, offspring' (cf. Michelson & Doxtator 2002:771).

Oo. { -wiR- } in / óˈwiːjæʔ / 'infant, baby' (cf. Woodbury 2003:869).

Ca. { -wiR- } in / oˈwiːjaʔ / 'young; offspring (for example, of an animal); baby'
  (cf. Froman et al. 2002:586).

Se. { -wiR- } in / jewiːjæʔ / 'her offspring' (cf. Chafe 1967:85).

Hu. { -wiɹ- } in / ˈxaːwiɹ / <ga8ir> 'petit, Faon' (MS 59:129).

[cf. Michelson 1988:173]

480   PNI * { -**wj**- } 'arm, fin, wing'

Tu. { -wj- } in / ˈoːwjɛh / 'fan, wing, armspan, wingspan' (cf. Rudes 1999:488).

La. * { -j- } in <Agaiascon> 'Les bras' (Biggar 1924:241).

Mo. { -wej- } in / oˈweːjaʔ / 'a wing, an arm' (cf. Maracle 1990:76).

Ca. { -waj- } / oˈwaːjaʔ / 'a fish fin; wings' (cf. Froman et al. 2002:581).

Hu. { -j- } in / ˈxaja? / <gaïa> 'aile' (MS 59:79); { -jahʃ- } in / xaˈjahʃa? / <gaïachia> 'bras' (MS 59:79), / h / assumed present.

Wy. { -ʒahʃ- } in / haˈʒahʃa? / 'his arm' (cf. Barbeau 1960:125).

481 PMO * { -wjahũtsh- } 'wing'

Mo. { -wejahũtsh- } in / owejaˈhũtsha? / 'wing, an arm of a bird' (cf. Maracle 1990:76).

Oe. { -wjahũtsh- } in / owjaˈhũtsha? / 'wing' (cf. Michelson & Doxtator 2002:780).

482 PNI * { -wjẽhst- } 'learn, teach'

Mo. { -wejλ̃hst- } in / kateweˈjλ̃hstha? / 'I learn, study something' (cf. Maracle 1990:33).

Oo. { -Wjẽst- } in / ẽshakóˈjẽstẽ? / 'he will teach them' (cf. Woodbury 2003:927).

Ca. { -wajẽhst- } in / ẽhsateˈwa:jẽ:s / 'you will learn' (cf. Froman et al. 2002:581), long vowel anomalous.

Se. { -jẽst- } in / haˈtejẽstha? / 'he's trying to learn it, he's reading' (cf. Chafe 1967:87).

Hu. { -jẽhst- }, cf. <gaïensti> 'Enseigner' (MS 59:81), / h / assumed present.

483 PNI * { -wjẽhw- }, * { -wjẽw- }, * { -wjẽ?- } 'know how, learn how'

Tu. { -wjõw- } in / ˈra:wjõws / 'he learns' (cf. Rudes 1999:488).

Mo. { -wejλ̃w- } in / keweˈjλ̃:hũ / 'I am good at, know how to, have a knack for' (cf. Maracle 1990:44).

Oo. { -Wjẽ?- } in / hóˈjẽ?ih / 'he has learned how, he is accomplished' (cf. Woodbury 2003:932).

Se. { -jẽ?- } in / akejẽ?ˈhe?õh / 'I've learned it' (cf. Chafe 1967:87).

Hu. { -jẽhw- }, cf. <gaïenh8i> 'Savoir faire q.c.' (MS 59:80).

Wy. { -ʒẽ:w- } in / jeˈʒẽ:wih / 'I know how' (cf. Barbeau 1960:262).

484 PNI * { -wjẽn- } 'craft, manner, skill, way'

Tu. { -wjõn- } in / oˈwjõ:nɛh / 'craft, manner, skill' (cf. Rudes 1999:488), perhaps a borrowed word.

Mo. { -wejλ̃n- } in / oweˈjλ̃:na? / 'conduct, mien, posture, way of doing, acting' (cf. Maracle 1990:76).

Oe. { -wjʌ̃n- } in / kewjʌ̃nʌ̃ːˈtâːseʔ / 'I'm getting something ready'
(cf. Michelson & Doxtator 2002:777).

Oo. { -Wjẽn- } in / káːˈjẽːnaʔ / 'task, manner, way' (cf. Woodbury 2003:924).

Ca. { -wajẽn- } in / aʔewajẽːˈnẽːtaʔ / 'she finished' (cf. Froman et al. 2002:581).

Hu. { -jẽn- } in / xaˈjẽːnaʔ / < gaïenda > 'maniere dagir b.' (MS 59:80).

[485] PMO * { **-wjʌ̃tehtaʔ-** } 'become capable, learn how'

Mo. { -wejʌ̃tehtaʔ- } in / kewejʌ̃ˈtehtaʔs / 'I become capable, I make progress'
(cf. Maracle 1990:282).

Oe. { -wjʌ̃tehtaʔ- } in / ʌ̃hsewjʌ̃ˈtehtaneʔ / 'you will learn'
(cf. Michelson & Doxtator 2002:829).

[486] PI * { **-wohst** } 'be good'

Ch. { -ò:hst- } in / ő:hstâː / 'good, well' (cf. Feeling & Pulte 1975:150).

PNI * { -wahstih }, * { -akwahst } 'be good'; syllable * / ak / anomalous or
perhaps original.

Tu. { -akwahst } in / ˈwakwahst / 'it is good' (cf. Rudes 1999:590).

No. * { -akwahst } in < Waquast > 'Good' (cf. Rudes 1981a:47).

Se. { -akwast- } in / oˈkwastɔ̃h / 'it's auspicious' (cf. Chafe 1967:68).

Hu. { -wahstih }, cf. < ga8asti > 'avoir beau Temps' (MS 59:124),
/ h / assumed present.

Wy. { -wahstih } in / jaˈwahstih / 'it is good' (cf. Barbeau 1960:78).

[487] PNI * { **-wɹ-** } 'air, wind'

Tu. { -wr- } in / ˈowrɛh / 'air, wind' (cf. Rudes 1999:482).

Mo. { -weɹ- } in / oˈweːɹaʔ / 'air, wind, thunder' (cf. Maracle 1990:76).

Oe. { -wel- } in / ˈowelaʔ / 'air, wind' (cf. Michelson & Doxtator 2002:768).

Oo. { -R- } in / ˈóːwæʔ / 'wind' (cf. Woodbury 2003:69).

Ca. {-R- } in / oˈwaːno: / 'it is a cold wind' (cf. Froman et al. 2002:60).

Se. { -R- } in / tejoæwɛ̃:njɔ̃:h / 'the breeze is stirring' (cf. Chafe 1967:47).

Hu. { -ɹ- } in / ˈoɹaʔ / < ora > 'vent, air' (MS 59:131).

[488] PI * { **-ʔn-** } 'arrow'

Ch. { -ʔn- } in / káʔnǐː / 'bullet, lead' (cf. Feeling & Pulte 1975:108);
according to King (1975:191), the Cherokee term also refers to Mountain
Cane (*Phyllostachys violescens*), from which arrow shafts were made.

PNI * { -ʔn- } 'arrow'.

Tu. { -ʔt- } in / ˈaʔtɛh / 'arrow, bullet, dart, projectile' (cf. Rudes 1999:112).

Ca. { -ʔn- } in / kʔanõh / 'arrow' (cf. Froman et al. 2002:15),
        borrowed from Seneca.

Se. { -ʔn- } in / kaʔnɔ̃ʔ / 'arrow' (cf. Chafe 1967:91).

Hu. { -ʔn- } in / ˈxaʔnaʔ / < ganda > 'fléche' (MS 59:84), / ʔ / assumed present.

Wy. { -ʔn- } in / ˈuʔnaʔ / 'arrow' (cf. Barbeau 1960:154).

[cf. Mithun 1979:181, Mithun 1984b:269]

489   PNI * { -**ʔnẽj**- } 'bone'

Oo. { -ʔnẽj- } in / óʔˈnẽ:jaʔ / 'human remains' (cf. Woodbury 2003:948).

Se. { -ʔnɛ̃j- } in / oʔnɛ̃:jaʔ / 'bone' (cf. Chafe 1967:91).

Hu. { -ʔnẽJ- } in / oʔˈnẽ:aʔ / < onnea > 'os' (MS 59:109),
        / ʔ / and / ẽ / assumed present.

Wy. { -ʔnɛ̃J- } in / uʔˈnɛ̃:aʔ / 'bone' (cf. Barbeau 1960:157).

490   PNI * { -**ʔnhõhs**- } 'egg'

Tu. { -ʔnhə̃hs- } in / oʔˈnhə̃hsɛh / 'egg, testicle' (cf. Rudes 1999:528).

Mo. { -ʔnhũhs- } in / oʔˈnhũhsaʔ / 'egg' (cf. Maracle 1990:58).

Oe. { -ʔnhũhs- } in / oʔˈnhũhsaʔ / 'egg' (cf. Michelson & Doxtator 2002:853).

Oo. { -ʔnhũhs- } in / óʔˈnhũhsaʔ / 'egg' (cf. Woodbury 2003:948).

Ca. { -ʔnhõhs- } in / oʔˈnhõhsaʔ / 'eggs' (cf. Froman et al. 2002:102).

Se. { -ʔhɔ̃hs- } in / oʔˈhɔ̃hsaʔ / 'egg' (cf. Chafe 1967:90).

Hu. { -ʔnhõhʃ- } in / oʔˈnhõhʃaʔ / < Onnhonchia > 'ovum' (MS 59:112),
        / ʔ / and preconsonantal / h / assumed present.

Wy. { -tɔ̃hʃ- } in / uˈtɔ̃hʃaʔ / 'egg' (cf. Barbeau 1960:274).

491   PNI * { -**ʔnikõhɹ**- } 'mind, spirit'

Tu. { -ʔtikə̃hr- } in / oʔtiˈkə̃hrɛh / 'mind, reason, temper' (cf. Rudes 1999:184).

Mo. { -ʔnikũhɹ- } in / oʔniˈkũ̂:ɹaʔ / 'spirit, character, thought, opinion, brain,
        mind, belief, intention' (cf. Maracle 1990:598).

Oe. { -ʔnikũhl- } in / oʔniˈkũ̂:laʔ / 'mind, spirit'
        (cf. Michelson & Doxtator 2002:855).

Oo. { -ʔnikũhR- } in / kaʔníˈkũhæ:ʔ / 'mind, thought, spirit'
        (cf. Michelson & Doxtator 2002:952).

Ca. { -ʔnikõhR- } in / kʔaˈnikõhaʔ / 'the mind' (cf. Froman et al. 2002:200).

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Se. { -ʔnikɔ̃HR- } in / hoʔˈnikɔ̃ɛ̃ʔ / 'his mind' (cf. Chafe 1967:91).

Hu. { -ʔnixõhɹ- } in / xaʔniˈxõhɹaʔ / <gandigonˈra> 'esprit, ame, pensée'
      (MS 59:100), / ʔ / assumed present.

Wy. { -ʔnijɔ̃:ɹ- } in / huʔnijɔ̃:ɹuˈwa:nɛ̃h / 'his mind is great'
      (cf. Barbeau 1960:266).

492   PNI * { **-ʔnitsko-** }, * { **-ʔnitskʷ-** } 'be late, delay'

Tu. { -ʔtiθko- } in / joʔˈtiθkoʔ / 'it is late' (cf. Rudes 1999:536),
      { -ʔtiθkʷ- } in / roʔˈtiθkʷahs / 'he delays' (cf. Rudes 1999:573).

Mo. { -ʔnihskʷ- } in / wakeʔˈnihskʷahs / 'I am late (not on time)'
      (cf. Maracle 1990:363).

Oe. { -ʔniskʷ- } in / joʔˈniskʷʌ̃ʔ / 'it's late' (cf. Michelson & Doxtator 2002:861).

Oo. { -ʔniskʷ- } in / óʔˈniskʷɛ̃h / 'it is late' (cf. Woodbury 2003:964).

Ca. { -ʔnihsko- } in / ɛ̃ˈwakhnihskoʔ / 'I will be late'
      (cf. Froman et al. 2002:178).

493   PNI * { **-ʔnjakɛ̃ʔ-** } 'escape, flee, run away'

Mo. { -ʔnjakʌ̃ʔ- } in / keʔˈnja:kʌ̃ʔs / 'I run away, escape' (cf. Maracle 1990:38).

Oe. { -ʔnjakʌ̃ʔ- } in / loʔnjaˈkʌ̃̂:ũ / 'he has run away'
      (cf. Michelson & Doxtator 2002:864).

Oo. { -ʔnjakɛ̃ʔ- } in / kéʔˈnja:kɛ̃ʔs / 'I escape, I run away'
      (cf. Woodbury 2003:969).

Ca. { -ʔnjakɛ̃ʔ- } in / keʔˈnja:kɛ̃ʔs / 'I'm an escaper' (cf. Froman et al. 2002:107).

Se. { -ʔnjakɛ̃ʔ- } in / akeʔnjaˈkɛ̃ʔɔ̃h / 'I've escaped, run away' (cf. Chafe 1967:92).

Hu. { -ʔnjaxɛ̃ʔ- }, cf. <gandiagendi> 'Séchapper des Ennemis' (MS 59:96),
      / ʔ / assumed present.

Wy. { -ʔnjajɛ̃ʔ- } in / nusahaˈtiʔnjajɛ̃haʔ / 'that they escaped again'
      (cf. Barbeau 1960:311).

494   PI * { **-ʔnjõ:hs-** } 'nose'

Ch. { -ʔjʌ̃̂:hs- } in / khàjʌ̃̂:hsɔ́:lî / 'his nose' (cf. Feeling & Pulte 1975:143).

PNI * { -ʔnjõhs- } 'nose'.

Tu. { -ʔtjɔ̃hs- } in / ˈktjɔ̃hsɛh / 'my nose' (cf. Rudes 1999:537).

No. * { -ʔtjõhs- } in <Oteusag> 'The nose' (cf. Rudes 1981a:46).

Mo. { -ʔnjũhs- } in / oʔˈnjũhsaʔ / 'nose' (cf. Maracle 1990:58).

Oe. { -ʔnjũhs- } in / oʔˈnjũhsaʔ / 'nose' (cf. Michelson & Doxtator 2002:866).

Oo. { -ʔnjũhs- } in / keʔnjǘhˈsaʔkeh / 'my nose' (cf. Woodbury 2003:970).

Ca. { -ʔnjõhs- } in / oʔˈnjõhsaʔ / 'nose' (cf. Froman et al. 2002:213).

Se. { -ʔnjɔ̃hs- } in / oʔˈnjɔ̃hsaʔ / 'nose' (cf. Chafe 1967:92).

[cf. Rudes 1995:50]

495   PNI * { -**ʔnonsh**- } 'be envious, be jealous, envy'

Tu. { -ʔtoθh- } in / raʔˈto:θhahs / 'he begrudges, he envies' (cf. Rudes 1999:536).

Mo. { -ʔnosh- } in / keʔˈnoshahs / 'I envy, am envious of, I am jealous'
        (cf. Maracle 1990:42).

Oo. { -ʔnũsh- } in / hũwáʔˈnũshas / 'he or she envies him'
        (cf. Woodbury 2003:967), change of vowel anomalous.

Ca. { -ʔnosh- } in / seʔˈno:shahs / 'you are envious' (cf. Froman et al. 2002:170).

Se. { -ʔnosh- } in / koʔno:shɛ̃:h / 'she's jealous' (cf. Chafe 1967:91).

Hu. { -ʔnosh- }, cf. <gand8sandi> 'porter envie a qlq.' (MS 59:105),
        dative-benefactive form, / ʔ / and / h / assumed present.

496   PNI * { -**ʔnshanst**- } 'be powerful, be strong'

Tu. { -ʔθhaθn- } in / kaʔˈθha:θnɛʔ / 'it is potent, it is powerful'
        (cf. Rudes 1999:273).

Mo. { -ʔshatst- } in / joʔˈshatsteʔ / 'it is strong, tough, durable, brutal, violent'
        (cf. Maracle 1990:17).

Oe. { -ʔshatst- } in / keʔˈshatsteʔ / 'I'm strong'
        (cf. Michelson & Doxtator 2002:867).

Oo. { -ʔshast- } in / hoʔshastẽhse:ˈwa:nẽh / 'the Creator' [lit. 'his power is great']
        (cf. Woodbury 2003:548).

Ca. { -ʔshahst- } in / tshẽh niˈkaʔshahsteʔ / 'exponents'
        (cf. Froman et al. 2002:387).

Hu. { -ʔshast- }, cf. <gasaste> 'une ch. etre chere, qlq. vend. cher' (MS 59:147),
        / ʔ / and / h / assumed present.

497   PNI * { -**ʔtskoʔ**- } 'drown, fall into water'

Tu. { -ʔθkoʔ- } in / ˈraʔθkoʔθ / 'he drowns' (cf. Rudes 1999:274).

Mo. { -ʔskoʔ- } in / ˈkê:skoʔs / 'I drown, fall into the water'
        (cf. Maracle 1990:38).

Oe. { -ʔskoʔ- } in / waˈkê:skoneʔ / 'I fell in the water'
        (cf. Michelson & Doxtator 2002:869).

Oo. { -ʔskoʔ- } in / hóʔˈskoʔih / 'he has drowned, he has fallen into the water'
(cf. Woodbury 2003:975).

Ca. { -ʔskoʔ- } in / ahõwaˈtiʔskoʔ / 'they (m) have baptized him, them'
(cf. Froman et al. 2002:387).

Se. { -ʔskoʔ- } in / oʔˈkeʔskoʔt / 'I fell in the water' (cf. Chafe 1967:93).

Hu. { -ʔskoʔ- }, cf. <gasko> 'tomb. a leau, enfoucer, fe. naufrage' (MS 59:149),
/ ʔ / assumed present.

Wy. { -ʔskuʔ- } in / eˈheʔskuhk / 'I will drown him' (cf. Barbeau 1960:249).

⁴⁹⁸ PNI * { **-ʔtsɹ-** } 'drag, drive, pull, ride'

Tu. { -ʔθr- } in / ˈroʔθreːʔ / 'he rode' (cf. Rudes 1999:272).

Mo. { -ʔseɹ- } in / ˈkâːseɹeʔ / 'a vehicle, car, wagon, cart' (cf. Maracle 1990:135).

Oe. { -ʔsl- } in / ˈlâːsleʔ / 'he's dragging it' (cf. Michelson & Doxtator 2002:870).

Oo. { -ʔsR- } in / káˈseːhtaʔ / 'car, vehicle' (cf. Woodbury 2003:971),
with causative.

Ca. { -ʔtsɹ- } in / ʔaˈkeʔtsɹeːʔ / 'I dragged it', Lower Ca. / ʔaˈkeʔtɹeːʔ /
(cf. Froman et al. 2002:95).

Se. { -ʔsR- } in / aˈkeʔsjɔ̃ːh / 'I've dragged it' (cf. Chafe 1967:93).

REFERENCES

Abbott, Clifford. (2000). *Oneida*. Languages of the World, Materials, 301. Munich: Lincom Europa.

Abbott, Clifford, ed. (1996). *An Oneida Dictionary, Ukwehu·wehneha Tekawʌnateʔnyése*. Oneida Tribe of Indians of Wisconsin.

Alsop, George. (1666). *A Character of the Province of Maryland*. London: Peter Dring.

Barbeau, Marius. (1960). *Huron-Wyandot Traditional Narratives in Translations and Native Texts*. Ottawa: National Museum of Canada, Bulletin 165, Anthropological Series No. 47.

Barbeau, Marius. (1961). The Language of Canada in the Voyages of Jacques Cartier (1534-1538). *Contributions to Anthropology 1959*, 108-229. Ottawa: National Museum of Canada, Bulletin 173.

Beatty, John. (1972). *Mohawk Morphology*. Ph.D. dissertation, City University of New York.

Biggar, Henry Percival. (1924). *The Voyages of Jacques Cartier: Published from the Originals with Translations, Notes and Appendices*. Ottawa: F. A. Acland.

Binford, Lewis. (1967). An Ethnohistory of the Nottoway, Meherrin and Weanock Indians of Southeastern Virginia. *Ethnohistory* 14: 103-218.

Bonvillain, Nancy. (1973). *A Grammar of Akwesasne Mohawk*. National Museum of Man, Mercury Series, Ethnology Division, Paper No. 8. Ottawa: National Museums of Canada.

Bonvillain, Nancy. (1984). Mohawk Dialects: Akwesasne, Caughnawaga, Oka. In Michael Foster, Jack Campisi, and Marianne Mithun, eds. *Extending the Rafters: Interdisciplinary Approaches to Iroquoian Studies*, 313-323. Albany: State University of New York Press.

Boyce, Douglas. (1978). Iroquoian Tribes of the Virginia-North-Carolina Coastal Plain. In William Sturtevant, ed. *Handbook of North American Indians*. Volume 15, 282-289.

Bruyas, James. (1863). *Radices Verborum Iroquaeorum*. New York: J. M. Shea.

Campanius, Johannes. (1696). *Lutheri Catechismus öfwersatt på American-Virginiske språket*. Stockholm: Georg Burchardt.

Campanius Holm, Thomas. (1702). *Kort beskrifning om provincien Nya Swerige uti America: som nu förtjden af the Engelske kallas Pensylvania*. Stockholm: J. H. Werner.

Castiglioni, Luigi. (1790). *Viaggio negli Stati Uniti dell' America Settentrionale, fatto negli anni 1785, 1786, e 1787*. Milan: Giuseppe Marelli.

Chafe, Wallace. (1959). Internal Reconstruction in Seneca. *Language* 35: 477-495.

Chafe, Wallace. (1961). *Seneca Thanksgiving Rituals*. Bureau of American Ethnology Bulletin 183.

Chafe, Wallace. (1964a). Another Look at Siouan and Iroquoian. *American Anthropologist* 66: 852-862.

Chafe, Wallace. (1964b). Linguistic Evidence for the Relative Age of Iroquois Religious Practices. *Southwestern Journal of Anthropology* 20: 278-285.

Chafe, Wallace. (1967). *Seneca Morphology and Dictionary*. Washington, D.C.: Smithsonian Press.

Chafe, Wallace. (1970a). *A Semantically Based Sketch of Onondaga*. Indiana University Publications in Anthropology and Linguistics, Memoir 25 of the International Journal of American Linguistics.

Chafe, Wallace. (1970b). Review of Paul Postal, Aspects of Phonological Theory. *Language* 46: 116-125.

Chafe, Wallace. (1973). Siouan, Iroquoian, and Caddoan. In Thomas Sebeok, ed. *Current Trends in Linguistics, Volume 10*, 1164-1209.

Chafe, Wallace. (1976). *The Caddoan, Iroquoian, and Siouan Languages.* The Hague: Mouton.

Chafe, Wallace. (1977a). Accent and Related Phenomena in the Five Nations Iroquois Languages. In Larry Hyman, ed. *Studies in Stress and Accent*, 169-181. Southern California Occasional Papers in Linguistics 4.

Chafe, Wallace. (1977b). The Evolution of Third Person Verb Agreement in the Iroquoian Languages. In Charles Li, ed. *Mechanisms of Syntactic Change.* Austin: University of Texas Press. 493-524.

Chafe, Wallace. (1984). How To Say They Drank in Iroquois. In Michael Foster, Jack Campisi, and Marianne Mithun, eds. *Extending the Rafters: Interdisciplinary Approaches to Iroquoian Studies*, 301-311. Albany: State University of New York Press.

Chafe, Wallace. (1996). Sketch of Seneca, an Iroquoian Language. In William Sturtevant, ed. *Handbook of North American Indians*. Volume 17, 551-580.

Chafe, Wallace, and Michael Foster. (1981). Prehistoric Divergences and Recontacts Between Cayuga, Seneca, and the Other Northern Iroquoian Languages. *International Journal of American Linguistics* 47: 121-142.

Cook, William Hinton. (1979). *A Grammar of North Carolina Cherokee*. Ph.D. dissertation, Yale University.

Crouse, Dorothy, and Blair Rudes. (1987). *The Tuscarora Legacy of J. N. B. Hewitt: Materials for the Study of the Tuscarora Language and Culture*. Mercury Series, Canadian Ethnology Service Paper no. 108. Ottawa: Canadian Museum of Civilization.

Cuoq, Jean-André. (1873). *Kaiatonsera ionteweienstakwa kaiatonserase: nouveau syllabaire iroquois*. Montreal: John Lovell.

Cuoq, Jean-André. (1882). *Lexique de la langue iroquoise avec notes et appendices*. Montreal: J. Chapleau et fils.

De Vorsey, Louis, ed. (1971). *De Brahm's Report of the General Survey in the Southern District of North America*. Columbia, South Carolina: University of South Carolina Press.

Deering, Nora, and Helga Harries Delisle. (1976). *Mohawk Teaching Grammar (Preliminary Version)*. Kahnawake: Kanien'kehaka Raotitiohkwa Cultural Center.

Dudley, Ruth Holmes. (1974). *Seneca Stridents*. Ph.D. dissertation, State University of New York at Buffalo.

Engelbrecht, William. (2003). *Iroquoia: The Development of a Native World*. Syracuse, New York: Syracuse University Press.

Feeling, Durbin, and William Pulte. (1975). *Cherokee-English Dictionary*. Tahlequah: Cherokee Nation of Oklahoma.

Foster, Michael. (1982). Alternating Weak and Strong Syllables in Cayuga Words. *International Journal of American Linguistics* 48: 59-72.

Fraser, Alexander, ed. (1920). Huron Manuscripts From Rev. Pierre Potier's Collection. *15th Report of the Bureau of Archives for the Province of Ontario*. Toronto: Clarkson W. James.

Froman, Frances, et al. (2002). *English-Cayuga / Cayuga-English Dictionary*. Toronto: University of Toronto Press.

Gallatin, Albert. (1836). *A Synopsis of the Indian Tribes of North America*. In Archaeologia Americana, Transactions and Collections of the American Antiquarian Society 2: 1-422.

Hewitt, John Napoleon Brinton, ed. (n.d). *Nottoway-Anonymous*. National
Anthropological Archives, manuscript no. 3603, Washington, D.C.

Hewitt, John Napoleon Brinton. (1912). Wenrohronon. In Frederick Webb Hodge, ed.
Handbook of American Indians North of Mexico. Bureau of American Ethnology
Bulletin 30, 2: 932-934.

Holmes, Ruth Bradley, and Betty Sharp Smith. (1977). *Beginning Cherokee*. Second
edition. Norman, Oklahoma: University of Oklahoma Press.

Hyde, Jabez Backus. (1818). *Kianasa Nana Nonedowaga Neuwenuda / Hymns in the
Seneca Language*. Buffalo, New York: H. A. Salisbury.

Jennings, Francis. (1968). Glory, Death, and Transfiguration: the Susquehannock
Indians in the Seventeenth Century. *Proceedings of the American Philosophical
Society* 112: 15-53.

Julian, Charles. (2008). *On the Proto-Iroquoian Origin of Cherokee Affricates.* Unpublished
manuscript.

Julian, Charles. (2009). *Huron Prefix Allomorphy*. Unpublished manuscript.

Kilham, Hannah Spurr. (1818). *A Short Vocabulary in the Language of the Seneca Nation,
and in English / Ung-eish-neut Teu-au-geh Neh-huh Yoh-weh-neut-dah Eng-lish*.
London: W. & S. Graves.

King, Duane. (1975). *A Grammar and Dictionary of the Cherokee Language*. Ph.D.
dissertation, University of Georgia.

Kopris, Craig. (2001). *A Grammar and Dictionary of Wyandot*. Ph.D. dissertation, State
University of New York, Buffalo.

Lagarde, Pierrette. (1980). *Le verbe huron: étude morphologique d'après une description
grammaticale de la seconde moitié du XVIIe siècle*. Paris: L'Harmattan.

Lawson, John. (1709). A New Voyage to Carolina. *A New Collection of Voyages and Travels, With Historical Accounts of Discoveries and Conquest in all Parts of the World*. London: John Stevens.

Le Clercq, Crestien. (1882). *First Establishment of the Faith in New France*. John Gilmary Shea, translator. New York, New York: Privately Published.

Lounsbury, Floyd. (1953). *Oneida Verb Morphology*. Yale University Publications in Anthropology 48. New Haven: Yale University Press.

Lounsbury, Floyd. (1961). Iroquois-Cherokee Linguistic Relations. In William Fenton and John Gulick, eds. *Symposium on Cherokee and Iroquois Culture.* Bureau of American Ethnology Bulletin 180, 11-17.

Lounsbury, Floyd. (1978). Iroquoian Languages. In William Sturtevant, ed. *Handbook of North American Indians*. Volume 15, 334-343.

Maracle, David. (1990). *Iontewennaweienhstahkwa' / Mohawk Language Dictionary*. Belleville, Ontario: Mika Publishing.

Michelson, Gunther. (1973). *A Thousand Words of Mohawk*. National Museum of Man, Mercury Series, Ethnology Division, Paper No. 5. Ottawa: National Museums of Canada.

Michelson, Karin. (1981a). A Philological Investigation Into Seventeenth-Century Mohawk. *International Journal of American Linguistics* 47: 91-102.

Michelson, Karin. (1981b). *Three Stories in Oneida, Told and Translated by Georgina Nicholas*. National Museum of Man, Mercury Series, Ethnology Division, Paper No. 73. Ottawa: National Museums of Canada.

Michelson, Karin. (1986). Ghost R's in Onondaga. In Leo Wetzels and Engin Sezer, eds. *Studies in Compensatory Lengthening*, 147-166. Dordrecht: Foris Publications.

Michelson, Karin. (1988). *A Comparative Study of Lake-Iroquoian Accent*. Dordrecht: Kluwer Academic Publishers.

Michelson, Karin, and Mercy Doxtator. (2002). *Oneida-English / English-Oneida Dictionary*. Toronto: University of Toronto Press.

Mithun, Marianne. (1976). *Kanien'kéha Okara'shòn:'a: Mohawk Stories*. Albany: New York State Museum Bulletin 427.

Mithun, Marianne. (1979). Iroquoian. In Lyle Campbell & Marianne Mithun, eds. *The Languages of Native America: A Historical and Comparative Assessment*, 133-212. Austin: University of Texas Press.

Mithun, Marianne. (1981a). Stalking the Susquehannocks. *International Journal of American Linguistics* 47: 1-26.

Mithun, Marianne. (1981b). The Mystery of the Vanished Laurentians. In Anders Ahlqvist, ed. *Papers from the 5th International Conference on Historical Linguistics*. Amsterdam Studies in the Theory and History of Linguistics Science IV, 230-242. Current Issues in Linguistic Theory 21. Amsterdam: John Benjamins.

Mithun, Marianne. (1982). The Synchronic and Diachronic Behavior of Plops, Squeaks, Croaks, and Moans. *International Journal of American Linguistics* 48: 49-58.

Mithun, Marianne. (1984a). The Evolution of Noun Incorporation. *Language* 60: 847-894.

Mithun, Marianne. (1984b). The Proto-Iroquoians: Cultural Reconstruction from Lexical Materials. In Michael Foster, Jack Campisi, and Marianne Mithun, eds. *Extending the Rafters: Interdisciplinary Approaches to Iroquoian Studies*, 259-281. Albany: State University of New York Press.

Mithun, Marianne. (1985). Untangling the Huron and the Iroquois. *International Journal of American Linguistics* 51: 504-507.

Mithun, Marianne. (1986). Evidential Diachrony in Northern Iroquoian. In Wallace Chafe and Johanna Nichols, eds. *Evidentiality: The Linguistic Coding of Epistemology*, 89-112. Norwood, New Jersey: Ablex Publishing Corporation.

Mithun, Marianne. (1989). The Incipient Obsolescence of Polysynthesis: Cayuga in Ontario and Oklahoma. In Nancy Dorian, ed. *Investigating Obsolescence: Studies in Language Contraction and Death*, 243-257. New York: Cambridge University Press.

Mithun, Marianne. (1999). *The Languages of Native North America*. New York: Cambridge University Press.

Mithun, Marianne, and Reginald Henry. (1984). *Watęwayę́stanih: A Cayuga Teaching Grammar*. Brantford: Woodland Indian Cultural Educational Centre.

Montgomery-Anderson, Brad. (2008). A Reference Grammar of Oklahoma Cherokee. Ph.D. dissertation, University of Kansas.

Mooney, James. (1900). Myths of the Cherokee. *19th Annual Report of the Bureau of American Ethnology, Part 1,* 3-548. Washington, D.C.: Government Printing Office.

MS 58. (n.d.). *Dictionnaire Français-Iroquois.* Collection de manuscrits, Archives du Séminaire de Québec.

MS 59. (n.d.). *Radices Linguae Huronicae*. Collection de manuscrits, Archives du Séminaire de Québec.

MS 62. (n.d.). *Dictionnaire Huron*. Collection de manuscrits, Archives du Séminaire de Québec.

MS 65. (n.d.). *Radices Linguae Huronicae*. Collection de manuscrits, Archives du Séminaire de Québec.

MS 66. (n.d.). *Recueil de Chants Hurons*. [by Paul Picard Tsawenhohi]. Collection de manuscrits, Archives du Séminaire de Québec.

MS 67. (n.d.). *Dictionnaire Huron*. Collection de manuscrits, Archives du Séminaire de Québec.

Pendergast, James. (1991). *The Massawomeck: Raiders and Traders into the Chesapeake Bay in the Seventeenth Century*. Transactions of the American Philosophical Society, Vol. 81, Part 2. Philadelphia: The American Philosophical Society.

Postal, Paul. (1968). *Aspects of Phonological Theory*. New York: Harper & Row.

Postal, Paul. (1979). *Some Syntactic Rules of Mohawk*. Ph.D. dissertation, Yale University.

Rudes, Blair. (1974). Sound Changes Separating Siouan-Yuchi From Iroquoian-Caddoan. *International Journal of American Linguistics* 40: 117-119.

Rudes, Blair. (1976). *Historical Phonology and the Development of the Tuscarora Sound System*. Ph.D. dissertation, State University of New York at Buffalo.

Rudes, Blair. (1981a). A Sketch of the Nottoway Language from a Historical-Comparative Perspective. *International Journal of American Linguistics* 47: 27-49.

Rudes, Blair. (1981b). Cowinchahawkon / Akawęčʔáꞏkaꞏʔ the Meherrin in the Nineteenth Century. *Algonquian and Iroquoian Linguistics Newsletter* 6: 32-34.

Rudes, Blair. (1987). *Tuscarora Roots, Stems, and Particles: Towards a Dictionary of Tuscarora*. Algonquian and Iroquoian Linguistics Memoir no. 3. Winnipeg: Algonquian and Iroquoian Linguistics.

Rudes, Blair. (1995). Iroquoian Vowels. *Anthropological Linguistics* 37: 16-69.

Rudes, Blair. (1999). *Tuscarora-English / English-Tuscarora Dictionary*. Toronto: University of Toronto Press.

Rudes, Blair. (2002). *Early Vocabularies and Dictionary Development*. In Barbara Burnaby and Jon Reyhner, eds. Indigenous Languages Across the Community. Flagstaff, Arizona: Northern Arizona University Press.

Sagard, Gabriel. (1632). *Dictionaire de la langue huronne necessaire à ceux qui n'ont l'intelligence d'icelle & ont a traiter avec les savages du pays*. Paris: Chez Denys Moreau.

Shea, John Gilmary. (1860). *Dictionnaire François-Onontagué, édité d'après un manuscrit du 17e siècle*. New York: Cramoisy Press.

Sickles, Abraham W. (1855). *A Collection of Hymns in the Oneida Language, for the Use of Native Christians*. Toronto: Wesleyan Missionary Society.

Steckley, John. (1997). Wendat Dialects and the Development of the Huron Alliance. *Northeast Anthropology* 54: 23-36.

Steckley, John. (2004). *De Religione: Telling the Seventeenth-Century Jesuit Story in Huron to the Iroquois*. Norman, Oklahoma: University of Oklahoma Press.

Steckley, John. (2007a). *Words of the Huron*. Waterloo, Ontario: Wilfrid Laurier University Press.

Steckley, John. (2007b). *A Huron-English / English-Huron Dictionary*. Lewiston, New York: Edwin Mellen Press.

Sturtevant, William. (1978). Oklahoma Seneca-Cayuga. In William Sturtevant, ed. *Handbook of North American Indians*. Volume 15, 537-543.

Swanton, John Reed. (1968). *The Indian Tribes of North America*. Bureau of American Ethnology Bulletin 145.

Thwaites, Reuben Gold, ed. (1896-1901). *The Jesuit Relations and Allied Documents: Travels and Explorations of the Jesuit Missionaries in New France 1610-1791*. Cleveland, Ohio: Burrows Brothers.

Tooker, Elizabeth. (1978). Wyandot. In William Sturtevant, ed. *Handbook of North American Indians*. Volume 15, 398-406.

Trigger, Bruce. (1987). *The Children of Aataentsic: A History of the Huron People to 1660*. Montreal: McGill-Queen's University Press.

Van Wassenaer, Nicolaes Janszoon. (1624). *Historisch Verhael Alder Ghedenck-Weedichste Geshiednisse die Hier en Daer Europa van den Beginne des Jaers 1621 Voorgevallen Zyn*. Amsterdam: Jan Evertsz Cloppenburg.

Warrick, Gary. (2008). *A Population History of the Huron-Petun, A.D. 500-1650*. New York: Cambridge University Press.

White, Marian. (1978a). Neutral and Wenro. In William Sturtevant, ed. *Handbook of North American Indians*. Volume 15, 407-411.

White, Marian. (1978b). Erie. In William Sturtevant, ed. *Handbook of North American Indians*. Volume 15, 412-417.

Williams, Marianne Mithun. (1976). *A Grammar of Tuscarora*. New York: Garland Publishing.

Wood, John. (1820). *Vocabulary of the Language of the Nottoway Tribe of Indians*. American Philosophical Society, manuscript no. 2478, Philadephia.

Woodbury, Hanni. (1975). *Noun Incorporation in Onondaga*. Ph.D. dissertation, Yale University.

Woodbury, Hanni. (1981). The Loss of a Phoneme. *International Journal of American Linguistics* 47: 103-120.

Woodbury, Hanni. (2003). *Onondaga-English / English-Onondaga Dictionary*. Toronto: University of Toronto Press.

Woodbury, Hanni, ed. (1992). *Concerning the League: The Iroquois League Tradition as Dictated in Onondaga by John Arthur Gibson*. Winnipeg: Algonquian and Iroquoian Linguistics.

Wright, Richard. (1996). Tone and Accent in Oklahoma Cherokee. In Pamela Munro, ed. *Cherokee Papers from UCLA*, 11-22. Los Angeles: Department of Linguistics, UCLA.

Wright, Roy. (1974). People of the Panther: A Long Erie Tale. In Michael Foster, ed. *Papers in Linguistics from the 1972 Conference on Iroquoian Research*, 47-118. National Museum of Man Mercury Series, Ethnology Division Paper no. 10. Ottawa: National Museums of Canada.

Zeisberger, David. (1887). *Zeisberger's Indian Dictionary*. Cambridge, Massachusetts: John Wilson and Son.

Zeisberger, David. (1888). *Essay of an Onondaga Grammar, or a Short Introduction to Learn the Onondaga al. Maqua Tongue*. Philadelphia: J. B. Lippincott.