



Puzzle

- Like other Iroquoian languages, Kanien'kéha (Mohawk) has a series of verb-initial *pre-pronominal prefixes* that mark a variety of meanings.
- Verbal template for pre-pronominal prefixes (Bonvillain 1973):



Problems:

- Multiple Orderings
- Distributed Exponence
- Morphologically-Conditioned Allomorphy (see Rolle 2023)

Proposal: In Kanien'kéha, pre-pronominal prefix allomorphy can be handled using **phonology**, **phonologically-** and **peripherally-conditioned allomorphy**, **portmanteaus**, and **basic concatenative morphology**.

Introducing Pre-Pronominal Prefixes

Group	Gloss	Independent Form	Meaning
5 (Peripheral)	PART	ni-	Quantity
	COIN	shi-	"When"
	CONTR	thi-	Surprise
	NEG	te-	Negation
4	TRANS	ie-	Distal
3	DUP	te-	"Two"-ness
2 (Modal)	FUT	en-	Future
	OPT	a-	Irrealis
	FACT	wa'-	Realis
1 (Inner)	CIS	t-	Proximal
	REP	s-	Repetition

Modals as a natural class:

- In complementary distribution
- Punctual* (Perfective) aspect requires a modal (Martin 2023)
- Similar semantic effects

Revised Template

Take classes at face value:



Obscured by **phonology**, **portmanteaus**, and **non-morphological allomorphy**.

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Combination 1: The Factual and the Inner Prefixes

FUT+Inner → FUT-Inner:

- (1) *enskátien'*
en-s-k-ati-en-'
FUT-REP-1SGA-sit-PUNC
'I will sit again'
- (2) *éntkon'*
en-t-k-on-'
FUT-CIS-1SGA-give-PUNC
'I will give it'

FACT+Inner → Inner-FACT:

- (3) *sakátien'*
s-a-k-ati-en-'
REP?-FACT?-1SGA-sit-PUNC
'I did sit again'
- (4) *tá:kon'*
t-a-k-on-'
CIS?-FACT?-1SGA-give-PUNC
'I did give it (4420)'

- Assuming class of **modals** → **Modal-Inner** and **Inner-Modal**.
- Adding another morpheme before **Inner-FACT** results in intervening *on*:

- (5) *tonsátien'*
t-on-s-a-k-ien-'
DUP-?-REP?-FACT?-1SGA-put-PUNC
'I did gamble again'
- (6) *tontá:kon'*
t-on-t-a-k-on-'
DUP-?-CIS?-FACT?-1SGA-give-PUNC
'I did give it back'

Proposal: *onta-* and *onsa-* are portmanteaus. More evidence from allomorphy:

Morpheme	Form
FACT	wa'-
Other-FACT	-a'-
Inner-FACT	-a-

Morpheme	Form
REP.FACT	onsa-
CIS.FACT	onta-

- When the form is initial, *on* is deleted to respect a constraint requiring verbs to be consonant-initial (Flack 2009).

Combination 2: The Duplicative and the Factual

DUP+OPT,FUT → DUP-OPT, DUP-FUT

- (7) *takatskáhon'*
t-aa-k-atskahon-'
DUP-OPT-1SGA-eat-PUNC
'I ought to eat'
- (8) *tenkatskáhon'*
t-en-k-atskahon-'
DUP-FUT-1SGA-eat-PUNC
'I will eat'

DUP+FACT → FACT-DUP:

- (9) *wa'tkenónniakhwe'*
wa'-t-k-onniakhw-'
FACT?-DUP?-1SGA-dance-PUNC
'I danced'
- (10) *wa'tekkwátho'*
wa'-te-k-kwatho-'
FACT?-DUP?-1SGA-hem-PUNC
'I hemmed it'

DUP-Modal and Modal-DUP

	Conditioning Environment	
Morpheme	-{/s/,/t/}	Elsewhere
FACT	we-	wa'-
FACT+DUP		wa'-
DUP		te-
DUP+FACT	ti-	t(e)-

Proposal: *wa't-* is a portmanteau, FACT.DUP:

	Conditioning Environment	
Morpheme	-{/s/,/t/}	Elsewhere
FACT.DUP	wa'ti-	wa't-
DUP		te-

Broader Implications: Allomorphic Domains

- This analysis obviates the use of **morphologically-conditioned allomorphy**.

Claim: only three types of allomorphy are required for pronominal and pre-pronominal prefixes:

- Phonologically-conditioned:**

Morpheme	-{a,e,en,o,on}	Elsewhere
N.A	w-	ka-

- Peripherally-conditioned:**

Morpheme	Initial	Medial
2sg>1sg	tak-	-hsk-

- Lexically-Conditioned:**

Morpheme	-{e,en,o,on}	-√ehre "want"
FI.A	iak-	ien-

- Compare allomorphy in derivational and TAM suffixes:

Morpheme	{√-atek-,√-the't-,CAUS,-}	Elsewhere
HAB	-ha'	-s

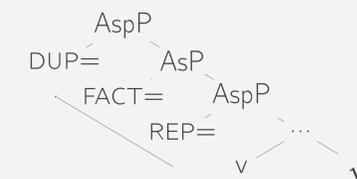
	Prefixes	Roots + Suffixes
Allomorphy	Phonological, Peripheral	Morphological, Syntactic
Phonology	awa → on	- → a / C_C

Allomorphic Domains: The distribution of types of allomorphy is sensitive to the same subword domains as phonology.

Broader Implications: Overlapping Portmanteaus

- Posited FACT.DUP, REP.FACT, and CIS.FACT.
- DUP-FACT-REP, DUP-FACT-CIS → **overlapping portmanteaus** (contra Radkevich 2013).

Morphemes	Form	Parse
DUP,FACT,REP	tonsa-	DUP-REP.FACT
DUP,FACT,CIS	tonta-	DUP-CIS.FACT



- Only inner two morphemes fuse.
- Portmanteau formation proceeds **from the root outwards** → same direction proposed for Vocabulary Insertion (Halle & Marantz 1993, Bobaljik 2000).

Defusion Hypothesis: In a sequence of morphemes C-B-A-...-√ or √-...-A-B-C, where portmanteaus are available for A+B and B+C, the fusion of A+B bleeds the fusion of B+C.

Issues + Future Work

- Doesn't capture certain recurring alternations in portmanteaus.
- FACT allomorph recurrence: intentives and imperatives.
- Full distribution of allomorphy in rest of verb - syntactic cause?