

Repetitives, Reversives, and On-going telic events in Kanien'kéha

CLA, 3 June 2025

Arihwí:saks Colin Benedict

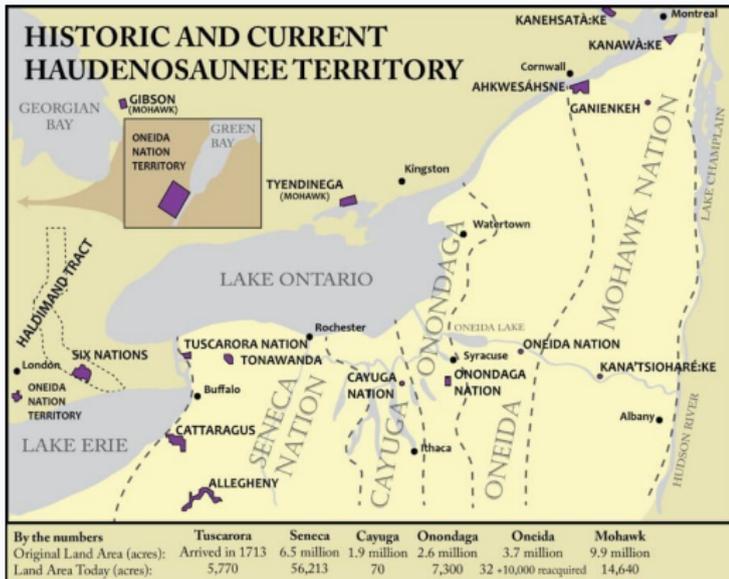
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Background on Kanien'kéha

- Northern Iroquoian language, spoken in Québec, Ontario, and New York
- spoken by ~600 L1 Elders and a growing group of L2s



Background on grammar

- polysynthetic grammar with complex verbal morphology
→ (PRE-PREFIX -) PRONOMINAL PREFIX - VERB STEM - ASPECT

- (1) Enkateweiénsté.
en-k-ate-weien-st-e-'
FUT-1SGA-SRFL-know-CAUS-EP-PUNC
'I will study.'

Background on grammar

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(2) **Habitual**

K-ateweiénst-**ha**'.

ISGA-study-**HAB**

'I study.'

~ **Imperfective**

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(2) **Habitual**

K-ateweiénst-**ha**'.

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'I study.'

~ **Imperfective**

(3) **Punctual**

Wa'-k-atéweienst-**e**'.

FACT-ISGA-study-**PUNC**

'I did study.'

~ **Perfective**

Background on grammar

- Important for today: three-way aspectual contrast

(2) **Habitual**
 K-ateweiénst-**ha'**.
 ISGA-study-**HAB**
 'I study.'

~ **Imperfective**

(3) **Punctual**
 Wa'-k-atéweienst-**e'**.
 FACT-ISGA-study-**PUNC**
 'I did study.'

~ **Perfective**

(4) **Stative**
 Wak-ateweiénst-**on**.
 ISGP-study-**STAT**
 'I have studied.'

~ **Perfect**

Background on learning Kanien'kéha

- adult immersion schools with rigorous 2-year curriculum
- challenges in learning Kanien'kéha from English

Verb	HABITUAL -S, -HA', -S, -AS		STATIVE PRESENT -ON, -EN, -E', -Ø
	'Simple'	'Profession'	Stative Present
cook	kek'hón:nis 'I cook (every day)'	kek'hón:nis 'I am a chef'	wakek'hón:ni 'I am cooking'
dance	tekenonniáhkwá' 'I dance (every day)'	tekenonniáhkwá' 'I am a dancer'	tewakenonniáhkwén 'I am dancing'
drink	khnek'hrí:ia' 'I drink (every day)'	khnek'hrí:ia' 'I am a drunk'	wakhnek'i:ren 'I am drinking'
drive	kató:ie's 'I drive it (every day)'	kató:ie's 'I am a driver'	katorihá:ie' 'I am driving it along'
fight	kateri:os 'I fight (every day)'	kateri:os 'I am a fighter'	wakateri:io 'I am fighting'
read	kewennahnót'ia' 'I read (every day)'	kewennahnót'ia' 'I am a reader'	wakewenná:note' 'I am reading'

Tekawennahsonterónnion Kanien'kéha Morphology (Martin 2023)

Puzzle

- One particularly tricky topic to learn: **PRESENT TENSE**

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- One particularly tricky topic to learn: **PRESENT TENSE**
- There is no dedicated form for expressing the present. Instead, one of two aspectual suffixes is used.

(5) **Habitual Present**

Ó:nenhste t-iéntho-**s**.
corn 1SGA-plant-**HAB**

'I plant corn.' OR
'I am planting corn.'

(6) **Stative Present**

Wak-atshókw-**en**.
1SGP-smoke-**STAT**

'I have smoked.' OR
'I am smoking.'

Puzzle

- The two present readings are in complementary distribution; verbs must take one or the other.

(7) **If HAB Present...**

T-iéntho-**s**.

1SGA-plant-**HAB**

✓ 'I plant it.'

✓ 'I am planting it.'

(8) **... then STAT Perfect**

Wak-iénth-**on**.

1SGP-plant-**STAT**

✓ 'I have planted it.'

✗ 'I am planting it.'

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Wak-iénth-**on**.

1SGP-plant-**STAT**

✓ 'I have planted it.'

✗ 'I am planting it.'

(9) **If STAT Present...**

Wak-atshókw-**en**.

1SGP-smoke-**STAT**

✓ 'I have smoked.'

✓ 'I am smoking.'

(10) ... **then HAB Imperfective**

K-atshókw-**s**.

1SGA-smoke-**HAB**

✓ 'I smoke.'

✗ 'I am smoking.'

Puzzle

- Determining which suffix to use with which verb seems relatively arbitrary.
- There are no diagnostics for aspectual class.
- Learners must resort to rote memorization of long lists of verbs in order to conjugate correctly.

HAB Present	STAT Present
<i>ientho</i> ‘plant’	<i>atshokw</i> ‘smoke’
<i>hninon</i> ‘buy’	<i>hnekihr</i> ‘drink’
<i>atawen</i> ‘swim’	<i>onni</i> ‘make’
<i>te-ia’toreht</i> ‘judge’	<i>ateriio</i> ‘fight’
<i>rakw</i> ‘choose’	<i>atshennonni</i> ‘get happy’
<i>atorat</i> ‘hunt’	<i>te-ahsaro</i> ‘clap’
<i>ateweienst</i> ‘study’	<i>wennahnot</i> ‘read’

Past analysis: “Consequentiality”

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Despite the widespread adoption of “consequentiality” in Northern Iroquoian descriptions, it has not found independent motivation so far.

Our proposal

- We propose that “consequentiality” is **telicity**, understood as a lexical RESULT STATE (For similar proposals, see e.g., Dowty’s (1979) decompositional analysis)
- Atelic verbs denote **homogeneous processes** (11)
- Telic verbs denote **heterogeneous sums** of a process and result state (12)

$$(11) \quad \llbracket \text{study} \rrbracket = \lambda e.\text{study}(e)$$



$$(12) \quad \llbracket \text{sew.it} \rrbracket = \lambda e.\exists e_1, e_2. (e = e_1 \sqcup e_2) \ \& \ \text{sew.it}(e_1) \ \& \ \text{it.is.sewn}(e_2)$$



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- We found **two contexts** which provide support for the proposal.
 1. EVENT REVERSAL
 2. EVENT REPETITION
- In addition, these contexts can be used as diagnostics for learners/linguists to distinguish verb classes in the language.

Event reversal

- The REVERSIVE suffixes *-hsi* and *-ako* expresses:
 - the reversal of the result state (13)
 - the cessation of atelic events (14)

(and irreversible telic events, see Bhadra (2024) for similar facts in English)

(13) ke-'nikhón-**kwa**-s
REP-1SGA-sew-**REV**-HAB
'I'm **undoing** stitches.'

(14) wak-ateweienhst-á-**kw**-en.
1SGP-study-JR-**REV**-STAT
'I've **stopped** studying.'

Reversive semantics

- Despite the name, we take the Reversive to be a **cessative operator**
- It maps a property of eventualities P to another property of eventualities P' , which is true of all **final sub-eventualities** of P .

Event reversal: atelic verbs

(15) a. 'study' is atelic



b. REVERSIVE of 'study' picks out final subevent



More examples of atelic readings

- (16) Context: I was cooking something but now I'm finished. . .
wake-kh-onni-á-**hsi**-on
1SGP-food-make-JR-**REV**-STAT
'I've **stopped** cooking.'
atelic: Reversive of 'to cook' results in the cessation of the atelic event.
- (17) Context: I was shy but now I'm not. . .
wak-atsheiarón-**kw**-en.
1SGP-shy-**REV**-STAT
'I stopped being shy.'
atelic: Reversive of 'to be shy' results in the cessation of the atelic event.

Event reversal: telic verbs



More examples of telic readings

- (19) k-hiatón-**kw**-as.
1SGA-write-**REV**-HAB
'I'm erasing.'
telic: Reversal of the result state of 'to write'.
- (20) k-ienthó-**kw**-as.
1SGA-plant-**REV**-HAB
'I'm harvesting.'
telic: Reversal of the result state of 'to plant'.

Event repetition

- Event repetition in Kanien'kéha is expressed with the pre-pronominal prefix *s-*, commonly translated as English *again*.

(21) K-atá:wen-s.
1SGA-swim-s
'I am swimming.'

(22) S-k-atá:wen-s.
REP-1SGA-swim-HAB
'I am swimming again.'

Repetitive semantics

- Repetitive prefix → a repetitive operator that modifies an event predicate and introduces a presupposition that a similar event has occurred previously.

(von Stechow 1996, Jäger and Blutner 2003, Beck and Johnson 2004, Bale 2007, and many others)

- (23) Kà:sere' se-k-hní:non-s.
car REP-1SGA-buy-HAB

'I am buying a car again.'

Presupposes: An event of [me buying a car] happened before.

Restitutive readings

- Like English *again*, the repetitive prefix also gives rise to RESTITUTIVE readings in which only the result state of the event repeats.

(24) Context: My mom put my shoes on this morning. Then, she took them off so I could play. Now...

Te-**s**-k-aráhta'-s.

DUP-**REP**-1SGA-put.shoes.on-HAB

'I'm putting my shoes on again.'

Presupposes: An event of [me having my shoes on] happened before.

More examples of restitutive readings

(25) Context: I bought a new car but I don't like it so now. . .

S-k-atkè:ron-s.

REP-1SGA-sell-HAB

'I'm re-selling it.'

Presupposes: An event of [it being sold] happened before.

More examples of restitutive readings

- (25) Context: I bought a new car but I don't like it so now. . .

S-k-atkè:ron-s.

REP-1SGA-sell-HAB

'I'm re-selling it.'

Presupposes: An event of [it being sold] happened before.

- (26) Context: Paul found a toy on the ground but lost it. I found it and. . .

T-onta-hí:i-on-'. .

CIS-REP.FACT-1SG>MSG-give-PUNC

'I gave it back to him.'

Presupposes: An event of [Paul having the toy] happened before.

Accounting for restitutive readings

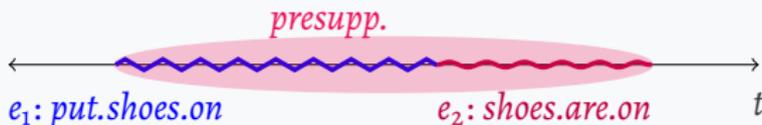
- Restitutive readings are commonly explained via lexical decomposition of the verb into causing events and resulting states.

(von Stechow 1996, Beck and Johnson 2005)

- *put on shoes* = [CAUSE [WEAR SHOES]]
- *sell* = [CAUSE [BECOME SOLD]]
- *give* = [CAUSE [HAVE]]

Accounting for restitutive readings

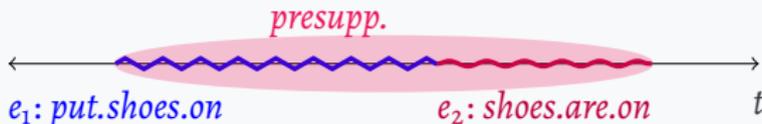
- The adjunction site of the repetitive operator determines the content of the presupposition:
 - REP(CauseP) = **repetitive** reading



'Again, I'm putting my shoes on.' (and I put them on before too)

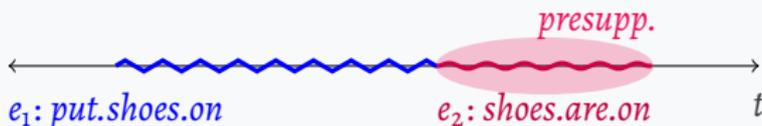
Accounting for restitutive readings

- The adjunction site of the repetitive operator determines the content of the presupposition:
 - REP(CauseP) = **repetitive** reading



'Again, I'm putting my shoes on.' (and I put them on before too)

- REP(ResP) = **restitutive** reading



'I'm putting my shoes back on.' (and I had them on before too)

Prediction of proposal

- The availability of a restitutive reading is based on a verb's telicity.

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- The availability of a restitutive reading is based on a verb's telicity.
 - Restitutive readings require a result state.
 - Only HAB Present verbs have a result state.
- Only HAB Present verbs can have restitutive readings.

Testing the prediction

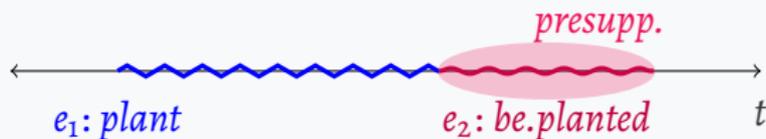
Habitual Present + REP = restitutive

- (27) Context: Mary planted corn last week but rabbits dug it up so today...

Ó:nenhste tsi-t-iéntho-s.

corn REP-1SGA-plant-HAB

'I am re-planting the corn.'



Testing the prediction

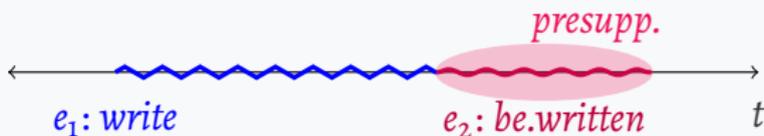
Habitual Present + REP = restitutive

- (28) Context: Mary wrote a message on the board last week but someone erased it so now. . .

Se-k-hiá:ton-s.

REP-1SGA-write-HAB

'I am writing it back (up on the board).'



Testing the prediction

Stative Present + REP = repetitive only

(29) S-k-atshókwa-s.

REP-1SGA-smoke-HAB

'I smoke it again.'

Cannot mean: 'I re-smoke/smoke it back.'



(30) Te-s-k-áhsaro'k-s.

DUP-REP-1SGA-clap-HAB

'I clap again.'

Cannot mean: 'I re-clap/clap back.'



Summary

- The two verb classes which pattern different with regards to present readings also pattern different with regards to reversive and repetitive readings.

Verb class	REV	REP
HAB Present	undo	repetitive or restitutive
STAT Present	stop doing	repetitive only

- In addition to functioning as verb class diagnostics, these two contexts also provide further evidence for the core proposal that the two verb classes differ in the presence/absence of a result state.

Pedagogical implications

- Curriculum Design: having tests/diagnostics makes it easier to learn; better understanding roots and inherent meanings (swim means get in water; study means make know) upheld
- Byproducts of this research include expanding the known standards of applicability for reversive suffixes, and increased context into reversive variation, with the expansion of the known vocabularies of both reversive and repetitive verbs.

Theoretical implications

- This proposal provides further **empirical grounding** for a robust aspectual contrast in Kanien'kéha verbs
- Analytically, it lays the foundation for future work on the interpretation of aspects (see Gatchalian, in prep.)
 - For example, the STATIVE PRESENT is only available for atelic verbs; similar restrictions appear for continuative perfects across languages, Iatridou et al. (2003) and Pancheva (2003).
 - The HABITUAL PRESENT is only available for telic verbs, possibly linked to their heterogeneity and obligatory culmination with the Stative aspect

Summary

- Kanien'kéha has two classes of verbs which pattern differently across a number of contexts:
 - Present tense
 - Reversive readings
 - Repetitive/restitutive readings
- The classes differ fundamentally in **telicity**.
 - Class 1: only process, no result state
 - Class 2: process + result state
- This distinction explains all three patterns, with benefits for language learning.

Niá:wen

- Ro'nikonhkátste Norton & Tehokwiráthe Cross
- Konwaronhiá:wi Norton, Katerí Deer & Warisó:se Bush
- Tsowén:te Cross & the Kanien'kehá:ka Onkwawén:na Raotitióhkwa Language and Cultural Center
- Mary Onwá:ri Tekahawáhkwen McDonald
- Akwiratékha Martin
- Wíshe Mittelstaedt
- Roti'nikonhrowá:nens
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