

# Two Optional Past “Tenses” in Kanien’kéha

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## Empirical question

OPTIONAL PAST TENSE, illustrated with the two past suffixes in Kanien’kéha in (1)<sup>1</sup>, has been identified in several languages with the following properties:

- Past time reference is attainable with and without the past tense morpheme
- Marked past tense forms often come with an **additional discontinuity or cessation meaning** (Cable 2017 on Tlingit, Bochnak 2016 on Wá-šiw, Chen et al. 2021 on Javanese and Atayal)

### (1) “Tense” suffixes: Former Past *-(h)kwe’* and Remote Past *-hne’*

- a. Ohna’kénhaton shà:kken’                      wató:ratskwe’  
Ohna’kénhaton sh-a’-k-ken’                      w-atorat-s-kwe’  
last.time                      COIN-FACT-ISGA-see-PUNC    FZ.A-hunt-HAB-FOR.PAST  
‘When I saw her last, she was hunting.’  
⇒ She is not currently hunting.
- b. Sue rotiniakòn:ne’.  
Sue roti-niak-on-hne  
Sue M.DU.P-marry-STAT-REM.PAST  
‘He had been married to Sue.’  
⇒ They are no longer married.

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<sup>1</sup>Abbreviations used in glosses follow Leipzig conventions, with the following Kanien’kéha specific glosses added: A, agent pronominal prefix; CIS, cislocative; COIN, coincidental; DUPL, duplicative/dualic; HAB, habitual aspect; FACT, factual mood; FI, feminine-indefinite; FOR.PST, former past; FUT, future mood; FZ, feminine-zoic; N, neuter; P, patient pronominal prefix; PRT, partitive; PUNC, punctual aspect; Q, question particle; REM.PST, remote past; STAT, stative aspect.

## Contributions

① This cessation interpretation has raised a typological question on the status of so-called DISCONTINUOUS PAST as a category of tense that is *semantically distinct from plain past tense*. Two proposals have been forwarded:

1. **Discontinuous pasts exist (Plungian and van der Auwera 2006):**  
“...roughly characterizable as “past and not present” or “past with no present relevance”” (p. 317)
2. **No discontinuous past (Cable 2017):**  
Discontinuity/cessation interpretations associated with such past tenses are IMPLICATURES

**Contribution to question of discontinuous past:**

I show that “discontinuous past” finds **no independent, unambiguous support** in Kanien’kéha.

② In prior descriptions and analyses of Kanien’kéha (and other Northern Iroquoian languages), the two suffixes are treated together as instances of “past marking”.<sup>2</sup> **I will argue today that:**

1. The Former Past *-(h)kwe’* is a **past tense** with a cessation implicature (as in English, Tlingit, Wá·šiw)
2. The Remote Past *-hne’* is **not a past tense**, but rather a “cessative” (to defined below, §4)

**Contribution to description of Kanien’kéha:**

- I note a **previously undescribed semantic difference** between the use of the two past suffixes.
  - Forward a novel hypothesis about the **distribution** of the Remote Past *-hne’*, which is **more restricted than previously described**.
- ⇒ Together, these may help us make **better predictions about where speakers** use the Remote Past *-hne’*.

I proceed as follows:

- §1: **Establish** that the two Past morphemes can be understood (provisionally) as **Tense**
- §2: **Describe** an difference in the strength of the cessation inference between the two Past suffixes, suggesting a “discontinuous past” analysis
- §3: **Establish** further the **distribution** of the two Past suffixes, and **conclude** that there is in fact **no support for “discontinuous past”** in Kanien’kéha
- §4: **Propose** that difference in inference strength **arises from the temporal properties of the verb**
- §5: Summarize and raise further questions.

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<sup>2</sup>For Kanien’kéha, see Michelson (1973: 17), Bonvillain (1973: 213–4); explicit claims of their syntactic/semantic identity are forwarded in Ormston (1993); Baker and Travis (1997, 1998); for implicit claims elsewhere, see e.g. Lounsbury (1953: 87–8) on Oneida, Lukaniec (2018: 322) on Wendat, Woodbury (2018: 165ff) on Onondaga.

# 1 Kanien'kéha has two optional pasts

## 1.1 Interpretation of morphologically tenseless clauses and past marked clauses

- Verbs inflect for one of three aspects. The Habitual and Stative aspects have **on-going episodic interpretations**, depending on the aspectual properties of verb (Cross et al. 2023)
- Kanien'kéha past suffixes are **not required for past reference**, illustrated in (2) for the Habitual aspect and (3) for the Stative.

### (2) Morphologically Tenseless Clause with Habitual Aspect

- a. **Wató:rats.**  
w-atorat-s  
FZ.A-hunt-HAB  
'She is hunting.' (Present on-going)
- b. Oh na'kénhaton shà:kken'                      **wató:rats.**  
Oh na'kénhaton sha'-k-ken-'                      w-atorat-s  
last.time                      COIN-1SG>FZSG-see-PUNC FZ.A-hunt-HAB  
'When I saw her last, she was hunting.' (Past on-going)

### (3) Morphologically Tenseless Clause with Stative Aspect<sup>3</sup>

- a. **Shawátis rotshókwen.**  
Shawatis ro-atshokw-en  
John MSGP-smoke-STAT  
'John is smoking.' (Present on-going)
- b. **Shawátis shahí:ken'                      rotshókwen.**  
Shawatis sh-a'-hi-ken-'                      ro-atshokw-en  
John COIN-FACT-1SG>MSG-see-PUNC MSGP-smoke-STAT  
'John was smoking when I saw him.' (Past on-going)

When marked with one of two Past suffixes, they are **obligatorily past referring**.

### (4) Past suffixes

- a. **wató:ratskwe'**  
w-atorat-s-kwe'  
FZ.A-hunt-HAB-FOR.PST  
'She \*is/was hunting.' (Former Past -(h)kwe')
- b. **Shawátis rotshokwèn:ne'.**  
Shawatis ro-atshokw-en-hne'  
John MSGP-smoke-STAT-REM.PST  
'John \*is/was smoking.' (Remote Past -hne')

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<sup>3</sup>The example in (3b) requires further consideration in light of the account developed below, which predicts this sentence to be infelicitous. Anticipating the discussion below: while in matrix contexts, tenseless stative forms of unbounded verbs like (3b) are able to express past on-going events; in embedded contexts, they cannot.

## 1.2 Optional pasts are absolute past referring

No past-in-the-future use, i.e., suffixes restricted to absolute past (*omitted for time*)

(See appendix ?? for further details.)

### Summary

- Morphologically tenseless clauses may have present or past reference
- Both Former and Remote Pasts are **restricted to (absolute) past reference**

## 2 Semantic differences: defeasibility of the cessation inference

This section illustrates a semantic difference between the two past suffix, which have previously been described as semantically identical. Specifically,

- FORMER PAST *-(h)kwe'* has a cessation **implicature** (5–6)
- REMOTE PAST *-hne'* has a cessation **entailment** (7–8)

### (5) Former past on Stative gives rise to cessation inference

Kahiatónhsera rowennahnó:tahkwe'  
kahiatonhsera ro-wennahnot-a-hkwe'  
book MSGP-read-STAT-FOR.PST  
'He was reading the book.'  
⇒ He is not currently reading

### (6) Cancellation of inference via explicit denial and ignorance statement

- a. Shontakatáweia'te rowennahnó:tahkwe'  
Shon-ta-k-ataweia't-e ro-wennahnot-a-hkwe'  
COIN-CIS.FACT-1SGA-enter-PUNC MSGP-read-STAT-FOR.PST  
tánon shé:kon rowennà:note' ó:nen'k  
tanon' shekon ro-wennahnot-e' onen'k  
and still MSGP-read-STAT right.now  
'He was reading when I entered, and he is still reading right now.'
- b. ... nek tsi iah tewakateriéntare' tóka shé:kon rowennà:note'  
... nek tsi iah te-wak-aterientar-e' toka shekon ro-wennahnot-e'  
... but NEG NEG-1SGP-know-STAT if still MSGP-read-STAT  
'He was reading when I entered, but I don't know if he's still reading.'

### (7) Remote Past cessation inference cannot be cancelled via explicit denial of cessation

- a. Shawátis rotshokwèn:ne.  
Shawatis ro-atshokw-en-hne  
John MSGP-smoke-STAT-REM.PAST  
'John was smoking.'  
⇒ John is not currently smoking

- b. #Shawátis rotshokwèn:ne {tánon'/nek tsi} shé:kon rotshókwen.  
 Shawatis ro-atshokw-en-hne tanon'/nek tsi shekon ro-atshokw-en  
 John MSGP-smoke-STAT-REM.PAST and/but still MSGP-smoke-STAT  
 Intended: 'John was smoking and/but he is still smoking.'

(8) No cancellation with explicit statement of ignorance

- a. **Context:** *Paul and Sue got married in the 80s. Someone asks me whether I know Paul*  
 Hen riienté:ri'. Sue rotiniakòn:ne'.  
 Hen ri-ienteri-'. Sue roti-niak-on-hne  
 Yes 1SG>M.SG-know-PUNC. Sue M.DU.P-marry-STAT-REM.PST  
 'Yes, I know him. He was married to Sue.'  
 ⇒ they are not married anymore
- b. #Sue rotiniakòn:ne'  
 Sue roti-niak-on-hne  
 Sue M.DU.P-marry-STAT-REM.PAST  
 nek tsi iah tesewakaterièn:tare' tóka' shé:kon rotiniá:ken  
 nek tsi iah te-se-wak-aterien:tar-e' toka' shekon roti-niak-en  
 but NEG NEG-REP-1SG.P-know-PUNC if still M.DU.P-marry-STAT  
 Intended: 'He was married to Sue, but I don't know if they're still married.'

Interim summary

- Former and Remote Pasts are differentiated by the defeasibility of their cessation inference.
- A straightforward account encodes this difference in the semantics of the suffixes: i.e., the Remote Past *-hne* is a “discontinuous past” ([Plungian and van der Auwera 2006](#)).

⇒ In the following section, I show that this is too hasty a conclusion.

### 3 Distributional differences of the Past suffixes

#### 3.1 Former Past *-(h)kwe'* can occur on Habitual *and* Stative aspect verbs

The Former Past occurs productively on Habitual aspect forms (9), and on a subset of Stative aspect forms (10–11).

- (9) a. ierákwas  
 ie-rakwa-s  
 FLA-choose-HAB  
 'she/they/s.o. is choosing'
- b. ierákwas<sup>kwe'</sup>  
 ie-rakwa-s-kwe'  
 FLA-choose-HAB-FOR.PST  
 'she/they/s.o. were choosing'  
 ([Martin 2023](#): 138)

Some verbs have on-going episodic readings of that stative, but do not permit the Remote Past.<sup>4</sup> In such cases, the Former Past takes the Stative form as its complement.

- |  |  |
|--|--|
| <p>(10) a. Ieksà:'a teiakonniáhkwen.<br/>         ieksa'a te-iako-nnoniahkw-en<br/>         child DUPL-FL.P-dance-STAT<br/>         'The child is/was dancing'</p> <p>b. *Ieksà:'a teiakonnonniáhkwen:ne'<br/>         ieksa'a te-iako-nnoniahkw-en-hne<br/>         child DUPL-FL.P-dance-STAT-REM.PST<br/>         Intended: 'The child was dancing.'</p> <p>c. Ieksà:'a teiakonnonniáhkwenhkwe'<br/>         ieksa'a te-iako-nnoniahkw-en-hkwe'<br/>         child DUPL-FL.P-dance-STAT-FOR.PST<br/>         'The child was dancing.'</p> | <p>(11) a. rowennà:note'<br/>         ro-wennahnot-e'<br/>         MSGP-read-STAT<br/>         'He is/was reading.'</p> <p>b. *rowennà:notehne'<br/>         ro-wennahnot-e-hne'<br/>         MSGP-read-STAT-REM.PST<br/>         Intended: 'He was reading.'</p> <p>c. rowannahnótahkwe'<br/>         ro-wennahnot-a-hkwe'<br/>         MSGP-read-STAT-FOR.PST<br/>         'He was reading.'</p> |
|--|--|

### 3.2 Remote Past *-hne'* is restricted to a subset of verbs, not to the Stative aspect

Descriptions of the Remote Past *-hne'* typically state that it's distribution is limited to the Stative aspect. As we have seen above in (10–11), the distribution is in fact rather restricted.<sup>5</sup>

#### Proposal

Remote Past forms are restricted to verbs whose event descriptions **do not encode an endpoint**.

Examples of such predicates include:

- number predicates (12)
  - temperature predicates (13)
  - evaluative predicates (14)
  - notionally permanent or difficult-to-change properties, like being lost (15a) or being married (15b)
- (12) **Number predicates**
- |       |                       |             |                                |
|-------|-----------------------|-------------|--------------------------------|
| áhsen | nikontíhne'           | akohsá:tens | ronáhskwaiéntahkwe'            |
| ahsen | ni-konti-hne          | akohsatens  | ro-nahskwaién-t-a-hkwe'        |
| three | PRT-be.number-REM.PST | horse       | MSGP-have.horse-T-STAT-FOR.PST |
- 'He had three horses.
- (13) **Temperature predicates**
- |                          |     |                     |
|--------------------------|-----|---------------------|
| Iowistóhne               | ken | shiiohrhón'ke       |
| io-wisto-hne             | ken | shi-io-hrhon'ke     |
| N.P-be.cold-STAT-REM.PST | Q   | COIN-N.P-be.morning |
- 'Was it cold (weather) this morning?'

<sup>4</sup>See Cross et al. (2023) for a suggestion that a telicity contrast underlies which aspect has the on-going reading. Interestingly, *not all* stative present verbs can use the Remote Past – i.e., this property seems to cross-cut telicity.

<sup>5</sup>Some predicates appear to take both, with corresponding differences in interpretation; see Appendix ??.

(14) **Evaluative predicates**

É:so tsi iaontonna'tòn:ne'  
eso tsi ia-ontonna't-on-hne  
this that N.P-be.boring-STAT-REM.PST  
'It was boring.'

(15) **Notionally difficult-to-change properties**

- a. wakatiòn:ne ne akehnhotónkwa.  
wak-ati-on-hne ne ake-hnhotonkwa  
1SGP-lose-STAT-REM.PST NE 1SGP-keys  
'I lost my keys.'
- b. Sue rotiniakòn:ne'.  
Sue roti-niak-on-hne  
Sue M.DU.P-marry-STAT-REM.PAST  
'He was married to Sue.'

**Right-Unboundedness**

The property assumed to underlie the distribution of the Remote Past *-hne* is **right unboundedness** defined in (16), following the temporal profile of statives proposed in Altshuler and Schwarzschild (2013) (see also Cable 2017, Appendix ??).

(16) **An (untensed stative) verb describes a right-unbounded eventuality  $\varphi$  iff:**

- a.  $\varphi$  is true at a moment  $m$ ,  
b. for any moment  $m''$  such that  $m < m''$ ,  $\varphi$  is true (right-unboundedness)

## 4 Account: Status of the discontinuous past

This section illustrates the two derivation paths to cessation inferences.

- The Former Past cessation implicature is a Gricean inference (§4.1)
- The Remote Past cessation entailment arises from the Remote Past's contribution: it derives a *right-bounded* eventuality (§4.2)

### 4.1 Former Past cessation is a Gricean inference

I follow much work in deriving cessation implicatures via Gricean reasoning: **use of a past tense implicates the falseness of the present tense alternative** (e.g. Altshuler and Schwarzschild 2013; Cable 2017). However, more work must be done to spell out the assumptions regarding morphologically tenseless clauses in general (see e.g., Matthewson 2006; Pancheva and Zubizarreta 2023).

For now, I assume the contributions of Tense and Aspect in Table 1, in particular with respect to the relation between UT  $t^*$  and ET  $\tau(e)$

Table 1: Kanien'kéha Temporal interpretations

	Tense	HAB/STAT aspect	on-going at $t^*$ ?
PRES $\emptyset$	RT = UT	$RT \subseteq \tau(e)$	$t^* \subseteq \tau(e)$ entailed
PST $\emptyset$	RT < UT	$RT \subseteq \tau(e)$	no claim
PST $-(h)kwe'$	RT < UT	$RT \subseteq \tau(e)$	<b>cessation implicated</b>

The inference from Past to *Past and ceased-by-UT* proceeds as such:

- Competition is between (null or marked) Past, with no assertion of on-goingness, and Present, which entails on-goingness.
- Use of marked Past leads specifically to the inference that  $\neg (t^* \subseteq \tau(e))$ , which is defeasible as seen above.

$\Rightarrow$  Raises the question of choice between null and marked Past tense (to be worked out)

## 4.2 Remote Past cessation is an endpoint assertion: the intuition

The analysis proposed here is that the Remote Past *-hne'* is not marking past tense but is a **derivational suffix**: it is an event-structural operator that **adds an actualized right-bound**.

Two desired components for the truth-conditions of *-hne'* marked verbs:

- **ENDPOINT INTRODUCTION**:  
the endpoint exists (a cessation inference arises)
- **ENDPOINT ACTUALITY**:  
the endpoint has happened in the past in the evaluation world (cessation is entailed)

Consequences of RIGHT-UNBOUNDEDNESS of the eventuality:

- ① for unmarked verbs, the temporal contrast between Past (Ceased at UT) and Present (On-going at UT) is neutralized: they are *necessarily on-going at UT* (see Appendix ??)
- ② for *-hne'* marked verbs, the contrast is neutralized in the other direction: they are *necessarily ceased by UT*:
  - The endpoint actuality condition requires that the endpoint takes place in the history of the evaluation world
  - A present tense (RT = UT) contributes a restriction **conflicting with the endpoint actuality and is ruled out**
  - A past ceased-event interpretation is the only remaining interpretation available

We can see further the necessity of the endpoint actuality condition in the following contrast – *-hne'* is **not 'finish'**: the predicate *-hs* 'finish' is possible in contexts of future actualization of the right-bound, *-hne'* marked verbs are not



- (17) a. Wisk mínit enhahsa' tsi rotshókwen  
 wisk minit en-ra-hs-a' tsi ro-atshokw-en  
 five minute FUT-MSGA-finish-PUNC that MSGP-smoke-STAT  
 'In five minutes, he will finish smoking.'
- b. \*wisk mínit enhotsokwèn:ne'  
 wisk minit en-ro-atsokwen-hne'  
 five minute FUT-MSGP-smoke-STAT-REM.PST  
 Intended: 'In five minutes, he will finish smoking/have smoked.'

### Summary

Under the analysis sketched here, neither suffix encodes *both* cessation and a Tense restriction along the lines needed for a DISCONTINUOUS PAST (Plungian and van der Auwera 2006).

## 5 Conclusions and future research

### Overall upshot:

- Kanien'kéha Former Past  $-(h)kwe'$  is a Tense suffix;
  - the Remote Past  $-hne'$  is instead an event-structural operator: it derives a right-bounded eventuality from a lexically right-unbounded eventuality, by introducing an actualized right-bound.
- ⇒ The status of discontinuous past as an available tense does not find independent, unambiguous motivation in Kanien'kéha (as in Cable 2017)

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