Lexical aspect and the Stative Present in Kanien'kéha*

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Abstract: Kanien'kéha (Iroquoian) is a morphologically tenseless language where temporal reference is marked primarily through a combination of aspectual and modal markers. Within this context, a present interpretation is expressed in multiple ways. The first is with the Habitual aspect which otherwise provides a habitual reading. The second, however, is with the Stative aspect which otherwise provides a "perfect" reading that is seemingly at odds with present reference. We propose an account of the possibility of both readings in the Stative aspect based on the telicity of the predicate and a conception of the Stative as a light verbal head, v_{BE}, which asserts that the eventuality described by the root predicate holds at the pragmatically-determined Reference Time. As a collaboration between linguists and second-language teachers of Kanien'kéha, this work addresses how the two interpretations of the Stative aspect arise and aims to provide language learners with a more in-depth description than currently available.

Keywords: Kanien'kéha, Iroquoian, aspect, telicity, event structure, tenselessness

1 Introduction

This paper considers how on-going eventualities (events and states) are expressed in Kanien'kéha (Iroquoian), a language where temporal reference is expressed by the interaction of aspect and modality instead of dedicated tense morphology (Baker and Travis 1998). Surprisingly, present reference can be derived through the use of one of the two different aspectual forms whose meanings don't otherwise align: the Habitual, which denotes a habitual interpretation, and the Stative, which denotes a state or "perfect" interpretation.

Eventive verbs in Kanien'kéha come in one of three aspectual forms: punctual, habitual and stative. Of these, the HABITUAL and STATIVE aspects are the most relevant for our puzzle. In the two paradigms in (1)–(2) below, we can see that the Habitual and Stative aspectual forms can be interpreted as conveying an on-going event (a present progressive reading, hereafter the *present* reading), in addition to their usual interpretations (a habitual and a state/perfect, respectively). We follow the terminology in recent pedagogical materials and label these classes of verbs Habitual

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Present and Stative Present (Martin 2023), as these terms are the most descriptively neutral. The present reading is in complementary distribution across the two classes, meaning that each verb can only express the present reading using one of the two possible forms. A Habitual Present verb is given in (1) and a Stative Present verb is given in (2).[1]

(1) **Habitual Present verb**

a. Tiénthos.
k-ientho-**s**
1SG.A-plant-HAB
i. 'I plant.' (Habitual)
ii. 'I am planting.' (Present)

b. Watiénthon.
wak-ienth-**on**
1SG.P-plant-STAT
i. 'I have planted.' (Perfect)
ii. *not* 'I am planting.' (~~Present~~)

(2) **Stative Present verb**

a. Katshókwas.
k-atshokwa-**s**
1SG.A-smoke-HAB
i. 'I smoke.' (Habitual)
ii. *not* 'I am smoking.' (~~Present~~)

b. Wakatshókwen.
wak-atshokwa-**en**
1SG.P-smoke-STAT
i. 'I have smoked.' (Perfect)
ii. 'I am smoking.' (Present)

In past work on Kanien'kéha, the Habitual has been analyzed as the "imperfective" (Baker and Travis 1998). Under this assumption, the availability of a present reading for Habitual forms is not surprising. Cross-linguistically, imperfectives often possess a present reading (Dahl and Velupillai 2013). A present reading for the Stative form, on the other hand, which has been analyzed as the "perfect" (Baker and Travis 1998; Mithun 2016), *is* surprising. While perfect verbal forms in other languages can have a variety of readings (including past perfectives, experientials, and resultatives; see an extensive overview in Bertrand, Aonuki, Chen, Davis, Gambarage, Griffin, Huijsmans, Matthewson, Reisinger, Rullmann, Salles, Schwan, Todorović, Trotter, and Vander Klok 2022), the present progressive reading we observe in Kanien'kéha is not traditionally one of them.

Drawing on the insights in Chafe (1970, 1980) and Baker and Travis (1998), we propose that the relevant property governing this classification is the *telicity* of the verb. Specifically, we argue that Habitual Present verbs are telic and Stative Present verbs are atelic. For atelic verbs, the restriction of present readings to the Stative aspect then follows from two analytical claims, spelled out in more detail in section 3. Firstly, the Stative aspect is a light verb, BE, which asserts that the property denoted by the verb holds at a pragmatically-given interval (the Reference Time). Secondly, the presence of a resulting state in the event structure of telic predicates (i.e., the *non-homogeneity* of telic verbs) requires this interval to include the result. This rules out the Stative form expressing a present reading for verbs like in (1), as it requires non-culmination of the process sub-event. Because telic predicates are inherently culminating, a Stative Present reading is barred.

This work is the result of collaboration between Kanien'kéha adult second-language immersion program teachers at Kanien'kehá:ka Onkwawén:na Raotitióhkwa Language and Cultural Center (KORLCC) in Kahnawà:ke and linguists at McGill University. As such, the intended audience for this paper is both linguists and advanced second-language learners of Iroquoian languages. We

[1] List of glossing abbreviations: 1, 2 – first and second person; BEN – benefactive; CAUS – causative; CIS – cislocative; DUP – duplicative; EP – epenthetic vowel; F – feminine; FACT – factual; JR – joiner; HAB – habitual; M – masculine; N – neuter; NE – particle *ne*; OPT – optative; pl – plural; PUNC – punctual; SG – singular; SRFL – semi-reflexive; STAT – stative; TRANS – translocative; Z – feminine/zoic. Agreement prefixes belong to one of three categories: agentive/subjective (A); patientive/objective (P) or transitive (X>Y).

have two inter-related goals in this paper. Firstly, we aim to give a clearer description of the system underlying the distribution of the present reading in a way that is accessible and intuitive for those directly involved in language revitalization. Secondly, we hope to present an analysis of the joint roles of lexical aspect and viewpoint aspect in a more general framework, in order to provide the foundation for future research on temporal interpretation in Kanien'kéha.

By establishing clearer diagnostics and rules for the syntactic and semantic properties underlying the pattern in (1)–(2), we hope to make it easier for students to grasp its usage while also shining light on its implications for event structure and temporal reference. In this way, this paper endeavors to support Kanien'kehá:ka efforts to "ensure a rich unabridged language will be transmitted to future generations" (Stacey 2016).

The structure of this paper is as follows. In section 2, we outline the empirical generalizations in more detail. In section 3, we discuss the syntax and semantics of the Stative morpheme, and propose an explanation of how Stative forms obtain the Present reading with atelic, but not telic predicates. We also discuss our present claim in the context of other proposals made for related Iroquoian languages. In section 4, we outline some of the patterns we see arising with respect to the distribution of the present reading and show how they are predicted by the current analysis. We hope that these patterns may aid Kanien'kéha language learners in determining which aspect to use to express a present reading with different verbs. Section 5 concludes.

2 The puzzle in detail

Verbal roots in Kanien'kéha are divided into two major classes based on the compatibility of the verb root with the suffixes traditionally labeled as 'aspectual' in Kanien'kéha. Stative-only verbs, such as *hnir* 'to be hard' in (3), appear only in the Stative aspect (without further derivational morphology, see Baker 2003; Michelson 2023; Mithun 2006). Event verbs, on the other hand, can appear with all three aspects—punctual, habitual and stative—as illustrated in (4).

(3) **Stative-only verbs**
(Baker and Travis 1998:167)

a. *Wa'ohníre'.
wa'-io-hnir-**e'**
FACT-N.SG.P-be.hard-PUNC
Intended: 'It is hard'

b. *Iohnírha'.
io-hnir-**ha'**
N.SG.P-be.hard-HAB
Intended: 'It is (habitually) hard'

c. Iohníren.
io-hnir-**en**
N.SG.P-be.hard-STAT
'It is hard'

(4) **Event verbs**
(Baker and Travis 1998:151)

a. Waháraste'.
wa'-ra-rast-**'**
FACT-M.SG.A-draw-PUNC
'He drew.'

b. Rarástha'.
ra-rast-**ha'**
M.SG.A-draw-HAB
'He draws.'

c. Roráston.
ro-rast-**on**
M.SG.P-draw-STAT
'He draws.'

As previewed in (1)–(2) and repeated in (5)–(6), the class of event verbs is further divided into two subclasses, based on what suffix is used for a present progressive interpretation. Example (5) shows a HABITUAL PRESENT verb, where the Habitual aspect is compatible with two interpretations:

a habitual reading and a present progressive reading. The Stative form, as seen in (5b), only has a perfect interpretation.

Compare this with (6), which shows a STATIVE PRESENT verb. In this case, the Habitual aspect only has one meaning, interpreted habitually. For this class of verbs, it is the Stative aspect which is compatible with two interpretations: a perfect reading and a present progressive one.

(5) **Habitual Present verb**

a. Tiénthos.
k-ientho-**s**
1SG.A-plant-HAB
i. 'I plant.' (Habitual)
ii. 'I am planting.' (Present)

b. Watiénthon.
wak-ienth-**on**
1SG.P-plant-STAT
i. 'I have planted.' (Perfect)
ii. *not* 'I am planting.' (~~Present~~)

(6) **Stative Present verb**

a. Katshókwas.
k-atshokwa-**s**
1SG.A-smoke-HAB
i. 'I smoke.' (Habitual)
ii. *not* 'I am smoking.' (~~Present~~)

b. Wakatshókwen.
wak-atshokwa-**en**
1SG.P-smoke-STAT
i. 'I have smoked.' (Perfect)
ii. 'I am smoking.' (Present)

While habitual and perfect interpretations occur in the same configurations across all event verbs, present readings vary, with some verbs requiring the Habitual form to express the present progressive, and others requiring the Stative. This paradigm gives rise to a central question: what distinguishes verbs that use the Habitual to express a present reading from those that use the Stative?

Parallel observations have been made for other Northern Iroquoian languages. Chafe (1970, 1980), for instance, attributes a similar pattern in Seneca and Onondaga to the so-called "consequentiality" of the verb, or whether the verb denotes an event with a perceptual result, i.e. consequences which can be talked about. While this observation and the term applied to it is one of the mainstays of the Iroquoian literature, there is no explicit discussion on the relationship of the term "consequentiality" with more general notions drawn from the cross-linguistic literature. This makes comparison with similar phenomena in other languages and, importantly, predicting the class membership of a given verb in Kanien'kéha difficult as it leaves the understanding of 'consequentiality' up to the speaker's individual interpretation.

This paper provides an attempt of reconciling this terminological challenge by proposing that it is the *telicity* of the verb that underlies Chafe's (1970) intuition that consequentiality is the relevant notion for the observed pattern. We further show that, beyond simply bridging a terminological difference, this characterization makes the description of the above phenomenon more easily comparable to other languages where similar phenomena are found (see Cipria and Roberts 2000; Ferreira 2016), and furthers our understanding of what underlies it more generally through the study of a language (and language family) where the on-going event interpretation is spread over two aspectual forms.

3 Proposal

We begin this section by giving an informal characterization of telicity and its interaction with the Stative aspect. We take the Stative to represent a light verbal head, syntactically a v_{BE} (e.g., Folli and Harley 2007). In section 3.2, we lay out our conception of telicity, where the event description

contains a resultant state as part of its meaning. Finally, in section 3.3., we turn to descriptions of other Iroquoian languages and speculate on one difference that arises between Kanien'kéha as described here and the available descriptions of the analogous pattern.

3.1 The stative is a light verb

Recall that the Stative aspect is the sole aspectual form possible with stative-only verbs, such as *hnir* 'to be hard', in (3). Chafe (1970) and Michelson (2023) show that these verbs are "adjectival" in their meaning, describing pure states even though they function syntactically as verbs. Baker (2003) goes a step further, analyzing state verbs as underlyingly adjectival roots, which obligatorily occur with a light verbal head. This is similar to the way that adjectives in English must occur with the copular verb *be* to function as predicates. Under this analysis, only the Stative aspect is a light verbal head which can appear with adjectival roots.[2] This explains why state verbs in Kanien'kéha are Stative-only; only the Stative as a light verbal head can occur with adjectival roots. We take up this analysis for our proposal. For further evidence, see Ormston (1993) and Baker and Travis (1998).

3.2 The stative and its complement

Adopting the above syntactic proposal, we turn now to the interpretation of constructions in the Stative aspect. The first generalization we establish is that there are two "usual" interpretations for verbs in the Stative aspect, depending on whether the verb is a state (Stative-only) verb or an event verb (compatible with all three aspectual forms). Consider (7), where the state verb gets a "pure state" reading in which the state holds in the present (at speech time); this contrasts with the event verb in (8), which gets a "perfect" reading, where the event has ended prior to speech time.

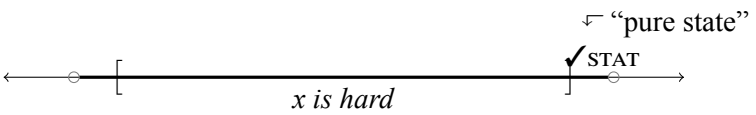
(7) Iohníren.
io-hnir-**en**
N.SG.P-be.hard-STAT
'It is hard.' (Pure State)

(8) Watiénthon.
wak-ienth-**on**
1SG.P-plant-STAT
'I have planted.' (Perfect)

We propose that both of these readings arise from a unified semantic characterization of the Stative aspect. The Stative morpheme describes the predicate it attaches to as holding at speech time; whether the verb is telic or atelic will determine the interpretations that are possible for a given verb.

We turn first to the "pure state" reading of verbs like (7). The Stative aspect asserts that in this interval, the state denoted by the predicate is true. This context is illustrated in (9). In the schematic diagram, the bold line indicates the duration of the state, and the square brackets indicate the time of evaluation (the speech time). For state verbs, the Stative aspect is interpreted like the "present tense" in English, where the state expressed by the predicate is true at the time of speech.

(9) **State predicates have a "pure state" reading**



[2] Following Coon (2023), we take the Stative aspect to be v_{BE} (e.g. Folli and Harley (2007)).

Having established the general interpretation of the Stative aspect with state verbs, we turn to the interpretation of event verbs. More specifically, we first turn to the "perfect" interpretation, where the event described by the predicate has ended prior to the speech time and its result persists into or is relevant for the present. This is seen in (10) and (11), where the first of the two translations correspond to perfect readings.

(10) Watiénthon.
wak-ienth-**on**
1SG.P-plant-STAT
i. 'I have planted it.' (Perfect)
ii. *not* I am planting it. (~~Present~~)

(11) Wakatshókwen.
wak-atshokwa-**en**.
1SG.P-smoke-STAT
i. 'I have smoked.' (Perfect)
ii. 'I am smoking.' (Present)

Note firstly that the English translations for the Stative of these two predicates, 'I have planted it' and 'I have smoked' are not exactly comparable. While 'I have planted it' expresses that the speaker has completed a one-time action where something was successfully planted, 'I have smoked' does not indicate that the action of smoking is finished and cannot happen again. As demonstrated in Bertrand et al. (2022), "perfect" forms across languages are interpreted in a variety of ways. For instance, some "perfect" forms express a resultative reading in which the result of an event holds at utterance time. Others permit only an experiential reading, where the event is asserted to have occurred once in an individual's lifespan.

(12) **Examples of Perfects (Bertrand et al. 2022)**

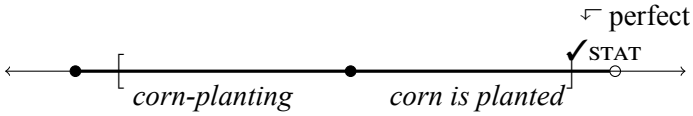
a. David Bowie has become even more of a legend since his death (result state)
b. #David Bowie has acted in several movies (experiential)
c. Bowie has been an androgynous icon ever since Ziggy Stardust (continuous)
d. David Bowie has just died (recent past)

In the case of Kanien'kéha, we can see that the Stative form of a verb can also correspond to different types of "perfects". In examples (10) and (11) above, for instance, we see that the perfect of 'plant' gives rise to a result state interpretation while the perfect of 'smoke' aligns more with an experiential interpretation. We leave comprehensively testing the diagnostics for the various interpretations aside for future work but, for now, we take examples such as (11) to indicate that result state readings are ruled out when a predicate, such as 'smoke', does not encode a result state as part of its lexical meaning. In other words, the Stative form of the verb 'smoke' cannot give rise to a result state reading because the verb itself cannot express a result state.

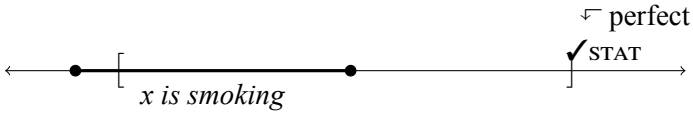
This distinction between verbs which do and do not lexically encode result states aligns with a verb's telicity. For telic verbs, such as 'plant' a result state is part of their meaning and, consequently, the Perfect use of the Stative form leads to the assertion that the result state holds at speech time. Atelic verbs, like 'smoke', do not encode such a result state and therefore, the perfect interpretation is only one where the event has occurred once in a relevant past time interval, possibly the lifespan of the individual (e.g., the "continuing present relevance"; Comrie 1976). This distinction is represented in the two diagrams below.

(13) **Two kinds of perfects in Kanien'kéha**

a. Perfect reading of telic verb



b. Perfect reading of atelic verb (with "non-result" perfect)

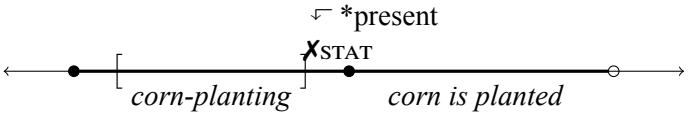


In each of the above "perfect" readings, the interval of evaluation is taken to be the speech time. The Stative aspect takes the entire event described by the predicate and asserts that it holds in this given interval. When the event includes a result, as in (13a), the assertion is that this result holds, giving rise to the resultative reading of the English translation. When the event does not include a result (as in 13b), the interpretation is one where the event has occurred once within an interval which includes the speech time, giving rise to the experiential reading of the English translation.[3]

Thus far, we have presented an account of how the Stative aspect contributes to perfect readings across different verbs. The second piece of the puzzle is the generalization that telic predicates cannot use the Stative form to express the present (i.e. ongoing events), as in (10), while atelic predicates can, as in (11). The crucial intuition is that the requirements of a present interpretation and the Stative aspect are semantically incompatible for telic predicates.

Consider first what an ongoing telic process means: if a telic process is in progress, the result has not yet been achieved. In other words, the interval of evaluation excludes the result state. However, this reading is ruled out by the proposed syntax of the Stative aspect. The Stative requires that the predicate's entire event, *including the result state*, holds in the evaluation interval. A present interpretation, on the other hand, requires that only a subpart of the event, *excluding the result state*, holds in the evaluation interval. In the case of the predicate 'corn-planting', for instance, the Stative requires that it's true that corn-planted occurred and as a result, corn has been planted; the present requires that corn-planting is still going on and the corn has not yet been planted. It is not possible such a telic predicate to satisfy both of these conditions at the same time. This incompatibility, we claim, underlies the inability of telic predicates to get a present interpretation, as illustrated in (14).

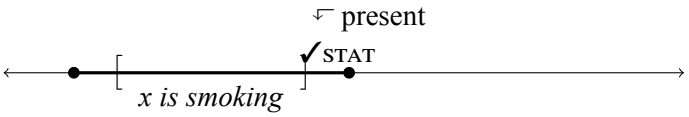
(14) **Present reading impossible for telic predicates**



Though telic verbs in the Stative cannot express a present, on-going event interpretation atelic verbs can. As above, the present interpretation requires that the evaluation interval is inside the runtime of the event – that is, the event has not yet ended. While in the case of telic predicates, this led to incompatibility due to the lexically encoded result state, atelic predicates crucially do not have a result state. Lacking this result state, the Stative aspect is able to make an assertion about an interval inside the runtime of the event. This is illustrated in (15).

[3] This predicts lifetime effects. Testing whether this and other diagnostics for experiential perfects are born out is left for future research.

(15) **Present reading possible for atelic predicates**



In summary, we have shown that the present and perfect interpretations in the Stative aspect, as well as the restriction of the present reading to atelic predicates, can be derived from two analytical claims. First, the Stative aspect is a light verbal head, which asserts that the event expressed by the verb holds at the evaluation interval, usually the time of speech. When that interval is larger than the runtime of the event, we get a perfect reading. Second, the telicity of a predicate affects the reading expressed in the Stative form. Only atelic predicates can receive a present reading in the Stative because because telic predicates lead to contradictory requirements based on the inclusion/exclusion of a result state within verb's event.

To conclude, we briefly touch upon one cross-Iroquoian consequence of this analysis. We claimed that the "perfect" readings of Stative forms are heterogenous: while telic predicates can naturally give rise to resulting state perfects, atelic predicates are predicted to give rise to an "experiential" perfect. In Chafe's (1970; 1980) original discussion of consequentiality in Onondaga and Seneca, he notes that the perfect reading of the Stative form of nonconsequential (our atelic) verbs was simply absent. In Kanien'kéha, however, we noted that *both* present and (experiential) perfect readings of the Stative are available for both telic and atelic predicates. The question is then whether this discrepancy in description between the languages reflects a true difference between their grammars, or whether this is due to methodological differences.

> If we consider why a speaker of Onondaga might not say something like 'He has sung' or 'He has danced' while he would say things like 'He has planted corn' or 'It has burned', we notice that events like planting or burning have perceptible consequences. They result in states which can be talked about. (Chafe 1970:17)

Crucially, this discussion focuses on the availability of the *result state* perfects specifically. However, as noted in cross-linguistic work on the perfect (e.g., Bertrand et al. 2022), this is only one potential interpretation of the "perfect". It is therefore possible that while the result state interpretation is indeed unavailable for the Stative forms of the atelic verbs in languages like Onondaga, alternative perfect meanings are still possible for these forms. In Kanien'kéha, for example, atelic verbs do have the Stative "perfect" reading, albeit an "experiential" one. We suggest that this may be a possible source for the difference between the descriptive generalization drawn here and those drawn from Onondaga and Seneca by Chafe.

4 Implications

In the discussion above we have proposed that the relevant property which underlies a verb's status as a Habitual Present or Stative Present is the telicity of the predicate. As of now, however, we have not found independent telicity diagnostics for Kanien'kéha. For example, one of the most widely-used telicity test concerns the compatibility with different time denoting expressions. Telic predicates, like *finish a report* are compatible with time-frame adverbials such as *in an hour*, but not with the time-span adverbials like *for an hour*, see (16a). The opposite is true for atelic predicates like *walk*, as seen in (16b).

(16) a. Tina finished the report in an hour / # for an hour.
b. Tina walked for an hour / *in an hour.

In Kanien'kéha, the same diagnostic cannot be used. For example, we find that the verb *ienth* 'to plant', which we take to be telic in Kanien'kéha is compatible with both time-span and time-frame adverbials, as shown in (17). Although the form of the main verb is not identical, we see that the same lexical verb is compatible with both types of temporal expressions.

(17) a. Énska wa'kahwistà:'eke' ó:nenhste' wa'tiéntho'.
enska wa'kahwista'eke' onenhste' wa'-k-ienth-o'
one hour corn FACT-1SG.A-plant-PUNC
'I planted corn for one hour.'

b. Énska khok wa'kahwistà:'eke' ia'káko' ne ó:nenhste'
enska khok wa'kahwista'eke' i-a'-ka-ko-' ne onenhste'
one just hour TRANS-FACT-Z.SG.A-GO-PUNC NE corn
atiéntho'.
a-k-ienth-o'
OPT-1SG.A-plant-PUNC
'I planted corn in one hour.'

Thus, in order to use such a diagnostic properly, more work is needed to understand how different aspectual suffixes affect the telicity of the predicate as well as the general semantics of temporal expressions.

This being said, we still find patterns in the class membership of Kanien'kéha verbs that can be directly linked to the notion of telicity. In this section, we highlight observations regarding verbs with derivational morphology, complex predicates and verbs with incorporated nouns, noting the effect of different elements in the verbal domain on the telicity of the predicate. We also discuss how these examples may be useful for second-language learners in acquiring the distribution of the present reading across the aspectual forms.

4.1 Fixed class membership for verbs with valency-changing morphology

Verb constructions containing certain derivational suffixes exhibit regular patterns with respect to the distribution of the present reading. Generalizations like this are especially useful for classifying this phenomenon in second-language pedagogy, as it allows students to predict whether a verb is Stative Present or Habitual Present based on its morphology. Below we give examples of two suffixes which can be useful heuristics for learners: causatives and benefactives. While these suffixes can predict the class membership of a verb in many cases, it is important to note that some exceptions exist.

4.1.1 Causative predicates

If a verb is modified by a causative suffix, it typically patterns as a Habitual Present verb, despite the distribution of the present reading for the unmodified verb root. This can be seen below for the verb *ʔsen'* 'to fall'. This verb typically is a Stative Present verb, as shown in (18) where the Habitual form can only be interpreted as a habitual. Strikingly, when the same verb occurs with ta causative suffix, its class membership changes to Habitual Present. The Habitual form of the causativized verb has both the habitual and present readings, as seen in (19).

(18) Tewà:'sen's.
t-w-'sen-'**-s**
CIS-N.SG.A-fall-INCH-HAB
i. 'It falls (everyday).' (Habitual)
ii. *not* 'It's falling' (~~Present~~)

(19) Tka'sénhtha'.
t-k-'sen-**ht-ha'**
CIS-1SG.A-fall-CAUS-HAB
i. 'I make it fall all the time.' (Perfect)
ii. 'I'm lowering it.' (Present)

The presence of a causative suffix in verbs is particularly helpful in identifying the class membership of predicates whose telicity does not align with that of the verbs in their English translations. Take, for instance, the verb stems *teia'toreht* 'to judge' and *ateweienhst* 'to study'. In English these verbs are atelic, occurring only with 'for an hour' and not 'in an hour', as shown in (20a)-(20b).

(20) a. Carol judged John for an hour / # in an hour.
b. Diane studied for an hour / #in an hour.

As a result, one might expect their translational equivalents in Kanien'kéha to also be atelic, and therefore Stative Present. However, (21)-(22) shows that this prediction is not borne out: both verbs express the present in the Habitual.

(21) a. Tehatia'toréhtha'.
Te-rak-ia'tore-ht-**ha'**
DUP-M.SG>1SG-judge-CAUS-HAB
i. 'He judges me.' (Habitual)
ii. 'He is judging me.' (Present)

b. Tehatia'toréhton.
te-rak-ia'tore-ht-**on**
DUP-M.SG>1SG-judge-CAUS-STAT
'He has judged me.' (Perfect)

(22) a. Kateweiénstha'.
k-ateweien-st-**ha'**
1SG.A-study-CAUS-HAB
i. 'I am a student.' (Habitual)
ii. 'I am studying.' (Present)

b. Wakateweiénston.
wak-ateweien-st-**on**
1SG.P-study-CAUS-STAT
'I have studied' (Perfect)

A similar pattern is found with a wide number of verbs when causativized. Intuitively, this pattern is expected if we assume that causative morphology adds a caused result state into the verb's event structure; if the agent successfully causes the causee to carry out an action, it entails the presence of a result state. In future work, we would like to evaluate whether causative forms in Kanien'kéha are indeed obligatorily telic as in other languages, causative predicates can sometimes denote events without result states (Lyutikova, Tatevosov, Ivanov, Shluinskij, and Pazel'skaja 2006). Additionally, as noted, we find some exceptions to the causative generalization in Kanien'kéha. One example of this is shown in (23). The verb *-athrori-* 'to talk, to describe' occurs with a causative suffix and expresses a present reading in the Stative, unlike the causative verbs presented above.

(23) Wakathrorià:ton.
wak-athrori-aht-**on**
1SG.P-talk-CAUS-STAT
i. 'I have talked (about something).' (Perfect)
ii. 'I am talking (about something).' (Present)

While exploring the possible differences between causative verbs lies outside the scope of this paper, we want to highlight that the presence of patterns like in (18)-(22) can still be useful for the

purposes of second-language teaching, as it provides a useful heuristic for acquiring the distribution of the present reading.

4.1.2 Benefactives

Another class of verbs that pattern together in regards to present readings is those containing a benefactive suffix, used to express that the verb's event affects someone (Mithun 2001). Across the board, most benefactives pattern as Stative Present verbs, regardless of how the unmodified verb root behaves. With the verb *hninon* 'to buy', for instance, the root alone is Habitual Present. As seen in (24), the Stative form of *hninon* can only get a perfect reading. However, when the benefactive suffix is added, as in (25), the resulting form can also get a present reading.

(24) Wakhní:non.
wak-hninon
1SG.P-buy.STAT
i. 'I have bought it.' (Perfect)
ii. *not* 'I am buying it.' (~~Present~~)

(25) Konhninòn:se'.
kon-hninon-**hse'**
1SG>2SG-buy-BEN.STAT
i. 'I have bought it for you.' (Perfect)
ii. 'I'm buying it for you.' (Present)

Unlike causatives, benefactives are not generally assumed to change the event structure of a verb. Nevertheless, the benefactive suffix seems to affect the availability of the present reading systematically. To account for this, we point to past claims that the benefactive suffix arose as a verb—in the case of the the examples above, you can still recognize the phonological similarity between the benefactive suffix and the verb *awase* 'to help' (see Mithun 2020 on the verbal origins of benefactive suffixes in Iroquoian). It is possible that the addition of a 'helping' verb like this could affect the telicity of a root verb, or that it is the telicity of the final verb (in this case, the benefactive) which drives the present reading of the Stative form. This latter possibility could also apply to causatives if we assume that the causative suffix also originated as a separate verb.

Overall, this pattern further reinforces the idea that additional components of the verbal complex, such as derivational suffixes, can play a role in the availability of the present reading for a given verb. What's more, these patterns can be useful for Kanien'kéha learners hoping to better recognize which verbs pattern in which way.

4.2 Complex verb meaning

Beyond derivational suffixes, the account proposed in this paper can also help learners unpack complex verbs composed of multiple morphemes and avoid the rote memorization of Present form verb by verb. While we argue that the driver of class membership for a given verb falls out of its telicity, determining whether a verb is telic or not based solely on its English translation is generally not possible. One example of this is the verb *atawen* 'to swim'. In English, this verb is typically atelic, as shown in (26).

(26) Summer swam for an hour / # in an hour.

Based on this fact alone, one might predict that the same verb in Kanien'kéha would fall into the STAT Present group. However, this prediction is not borne out, as shown in (27)-(28). The verb has no derivational suffixes like the causative or benefactive and its English meaning seems atelic. Yet,

it patterns like a telic verb. Given the lack of language-specific telicity tests, examples like this are particularly difficult for learners to remember.

(27) Katá:wens.
k-atawen-**s**
1SG.A-swim-HAB
i. 'I am a swimmer' (Habitual)
ii. 'I am swimming.' (Present)

(28) Wakatá:wen.
wak-atawen
1SG.P-swim.STAT
'I have swum' (Perfect)

However, if we turn to the internal structure of the verb, its class membership as a Habitual Present verb starts to make more sense. The verb root *atawen* actually consists of the root *awen* related to the word for 'water' and the semireflexive prefix *at-*. As a result, a more literal translation would be 'to immerse oneself in water' or 'to get wet'. Under this interpretation with its focus on the consequential change of states from dry (out of the water) to wet (in the water), the fact that the full verb patterns like a telic predicate isn't surprising at all. In this vein, learning the parts of a more complex verb is a useful way to diagnose its class membership to create a present reading.

Kanien'kéha has many complex verbs like *atawen* which include roots that appear in many other constructions. One example of this is the verb root *onni* 'to make'. This root occurs in a number of verbal constructions, from actions such as 'basket making' to psychological events such as 'getting frightened.' Despite its robust distribution, verbs that include *onni* all pattern in the same way in regards to present readings. They consistently appear as Stative Present verbs, as seen in (29). This expected, as the verb *onni* on its own also falls into the Stative Present group (30).

(29) a. Katshennón:nis.
k-at-shenn-onni-**s**
1SG.A-SRFL-happy-make-HAB
'I get happy.' (Habitual)

b. Wakatshennón:ni.
wak-at-shenn-onni
1SG.P-SRFL-happy-make.STAT
'I am happy.' (Present)

(30) a. Nahò:ten són:nis?
nahoten s-onni-**s**
what 2SG.A-make-HAB
i. 'What do you make?' (Habitual)
ii. *not* 'What are you making?' (Present)

b. Nahò:ten són:ni?
nahoten s-onni
what 2SG.P-make.STAT
i. 'What have you made?' (Perfect)
ii. 'What are you making?' (Present)

This data show us two things: first, that the root verb of a complex verbal construction can often drive the construction's telicity; and second, that learning the class of one verb can help in diagnosing all the other different forms in occurs in. While not every verb can be decomposed in these ways, the examples presented in this section provide several patterns, based on a verb's makeup and telicity, which can help learners better choose present forms.

4.3 Noun incorporation

The last pattern we want to note in this paper concerns direct object incorporation. Specifically, we find that incorporating of the object can change the distribution of the Present reading for the predicate in specific contexts. This is exemplified below with the verb *k* 'to eat'. When the verb's

object *káhi* ‘apple’ is not incorporated, the Habitual form of the predicate gets a present reading (31a). However, if the object is incorporated, as in (32), the stative form gets a present reading instead.

(31) a. Káhi í:keks.
kahi i-k-k-**s**
fruit EP-1SG.A-eat-HAB
i. ‘I eat fruit’ (Habitual)
ii. ‘I am eating fruit.’ (Present)

b. Káhi waké:kon.
kahi wak-k-**on**
fruit 1SG.P-eat-STAT
‘I have eaten fruit’ (Perfect)

(32) a. Kà:iaks.
k-ahi-a-k-**s**
1SG.A-fruit-JR-eat-HAB
‘I eat fruit.’ (Habitual)

b. Wakahiá:kon.
wak-ahi-a-k-**on**
1SG.P-fruit-JR-eat-STAT
i. ‘I have eaten fruit.’ (Perfect)
ii. ‘I am eating fruit’ (Present)

In this paradigm, we see that expressions where the object is not incorporated into the verb (where it is ”excorporated”, in the terminology of DeCaire, Johns, and Kučerová 2017) pattern as telic. Expressions where an object is incorporated, on the other hand, pattern as atelic. This generalization seems to reflect similar observations about how the interpretation of incremental theme arguments can affect a predicate’s telicity (Dowty 1991; Krifka 1989, 1992). Incremental themes refer to the objects of predicates that denote events whose progress is tied isomorphically to the extent of the objects. One such verb is the English verb ‘to write’ — when we write, we create the object we are writing gradually as we are carrying out the act of writing. Notably, the telicity of such predicates is tied to the interpretation of the incremental theme. When the verb *to write* takes a quantified direct object, like *a letter*, it is interpreted as a telic verb. When the direct object is not quantified, like *letters*, the verb is interpreted as atelic instead.

(33) a. Nina wrote a letter #for an hour / in an hour.
b. Nina wrote letters for an hour / #in an hour.

In the Kanien’kéha example, we see that the verb in question – ‘to eat’ – is also a predicate with an incremental theme; compare, for instance, ‘eating two apples’ and ‘eating apples’ in general. It is thus possible that incorporated nouns in Kanien’kéha may have the same effect as those in other languages with respect to their effect on telicity. However, at the moment, we are hesitant to make such a strong claim as we have not found any other verbs where the incorporation of the direct object affects the distribution of the Present reading. Surprisingly, only ‘to eat’ seems to function in this way. (34)-(35) show that the incorporation of a direct object does not affect the telicity of the verb *-hnekir-* ‘to drink’, which often patterns like ‘to eat’ in regards to incremental themes in languages like English. In both cases below, the present reading of ‘drink’ is expressed solely by the Stative form.

(34) a. Onerahtákeri khnekíhrha’.
onerahtakeri k-hnekihr-**ha’**
tea 1SG.A-drink-HAB
i. ‘I drink tea.’ (Habitual)
ii. *not* ‘I am drinking tea.’ (~~Present~~)

b. Onerahtákeri wakhnekì:ren.
onerahtakeri wak-hnekihr-**en**
tea 1SG.A-drink-HAB

i. ‘I have drunk tea.’ (Perfect)
ii. ‘I am drinking tea.’ (Present)

(35) a. Kanerahtahnekíhrha’.
k-anerahta-hnekihr-**ha’**
1SG.A-tea-drink-HAB
i. ‘I drink tea.’ (Habitual)
ii. *not* ‘I am drinking tea.’ (~~Present~~)

b. Wakanerahtahnekì:ren.
wak-anerahta-hnekihr-**en**
1SG.P-tea-drink-STAT
i. ‘I have drunk tea.’ (Perfect)
ii. ‘I am drinking tea.’ (Present)

While the pattern we observe with the verb ‘to eat’ does not seem to expand to other predicates, this phenomenon still highlights the advantage of linking the distribution of the Present reading to the predicate’s telicity instead of more opaque terms like consequentiality. As it is well established that a verb’s telicity can be affected by non-verbal elements in the verbal complex, we might also expect patterns like in (31)-(32) to arise. We hope that future research will reveal why we see this process affecting the properties of some but not other predicates.

5 Conclusion

In this paper, we discussed how the present temporal reference is expressed in Kanien’kéha in light of the lack of tense morphology in the language. We focused on the typologically interesting fact of the Stative form being compatible with both a perfect and a present interpretation. We propose that the present reading of the Stative arises specifically with atelic verbs and follows from the interaction of atelic event structure and the semantics of the Stative morpheme as a light verb. This intuition is shown to be compatible with a number of patterns within the distribution of the present reading across verb classes. These findings provide a starting point for future research on the Kanien’kéha aspectual system as well several insights that may aid language practitioners engaged in the important task of preserving and passing on Kanien’kéha to future generations of speakers.

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