

Unifying the ‘Still’ and ‘Just’ Readings of *k’ay* in Gitksan

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1. Introduction

This paper investigates the aspectual ‘still’ and ‘just’ readings contributed by the morpheme *k’ay* in Gitksan. The current understanding of such readings comes from *still* (Krifka 2000; Ippolito 2004, 2007; Greenberg 2008) and *just* (Wiegand 2016, 2018) in English and *noch* ‘still’ in German (König 1977; Löbner 1989; Michaelis 1993; Mittwoch 1993; Van Der Auwera 1993), all of which are alternative-sensitive particles with both aspectual and non-aspectual uses. In these languages, the semantics of ‘still’ and ‘just’ seem quite distinct from each other. This paper shows, however, that the two readings can arise from a single lexical entry when a language has an exclusively aspectual morpheme such as *k’ay*.

1.1. Language background

Gitksan is a Tsimshianic language spoken in northern British Columbia, Canada. It is an endangered language, with approximately 520 fluent speakers (Dunlop et al. 2018). The word order is VSO (Rigsby 1986). Most notable for current purposes is that it lacks an overt tense morpheme. Non-future sentences (1, 2) can have either present or past interpretations regardless of lexical aspect (Jóhannsdóttir and Matthewson 2007, henceforth J&M 2007).

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|---------------------------|----------|------------------|------------------------------------|-----------|------------------|
| (1) Luu am=hl | goot=s | Diana | (2) Gub-i=s | Noriko=hl | hon |
| in happy=CN | heart=PN | Diana | eat-TR=PN | Noriko=CN | fish |
| ‘Diana {is / was} happy.’ | | (state) | ‘Noriko {is eating / ate} salmon.’ | | (accomp.) |
| | | (J&M 2007:2(1a)) | | | (J&M 2007:2(3b)) |

1.2. First look at data

In the literature on Gitksan, Rigsby (1986) documents occurrences of *k’ay* with durative reduplication¹ and glosses it as ‘still’ (3), while Hunt (1993) glosses *k’ay* occurring with a bare predicate as ‘just.’ Both interpretations are attested in the data below (see Section 2).

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|---------------------------------|-------------------|-------------------------------|------------|---------------------|
| (3) K’ay | ga-gol-diit | (4) K’ay | gyuksxw=s | Martin |
| | DUR-run.PL-3PL.II | | wake.up=PN | Martin |
| ‘They’re still running.’ | (Rigsby 1986:363) | ‘Martin just woke up.’ | | (Hunt 1993:140(19)) |

Further support for a single morpheme having the two readings comes from a closely related language, Nisga’a, in which *k’ay* is interpreted as either ‘still happening’ or ‘just happened’ depending on the presence of aspectual markers (Tarpent 1987:445). Nevertheless, there has been no systematic investigation of interaction between *k’ay* with aspect nor formal account of the morpheme in either

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¹ My consultants rarely volunteer durative reduplication; an imperfective marker *yukw* is used instead (see (7)-(9)).

language. This paper demonstrates that the interpretation of *k'ay* is predictable from viewpoint and lexical aspects in the sentence and proposes a formal account unifying the two readings.

2. Data

2.1. Predictability of the 'still' and 'just' readings

When occurring with bare predicates, *k'ay* is consistently interpreted as 'still' with statives (5) and 'just' with achievements (6). *K'ay* is largely incompatible with bare activities and accomplishments.²

- (5) **K'ay**=t ixsda-din=s Mary=hl maa'y (bare stative)
 =3.I tasty-CAUS2=PN Mary=CN berry
 'Mary **still** likes berries.'

- (6) **K'ay** (k)'witxw=s Michael (bare achievement)
 arrive=PN Michael
 'Michael **just** arrived.'

When an imperfective marker *yukw* is present, *k'ay* is always interpreted as 'still' regardless of whether the lexical aspect is an activity (7), accomplishment (8), or achievement (9).

- (7) **K'ay** yukw yee=s Mary (ipfv. activity)
 IPFV walk=PN Mary
 'Mary is **still** walking.'

- (8) **K'ay** yukw si-gwila=s Mary (ipfv. accomplishment)
 IPFV CAUS1-blanket=PN Mary
 'Mary is **still** making a blanket.'

- (9) *Context: You're watching a slow-motion movie. John is falling into the water. You leave to get a drink and come back, and it's still the same scene.*

- K'ay** yukw t'ugwantxw=s John ts'im aks (ipfv. achievement)
 IPFV fall=PN John in water
 'John is **still** falling into the water.'

When the morpheme *hlis* is present, *k'ay* is consistently interpreted as 'just,' both with activities (10) and accomplishments (11). Intuitively, the 'just' reading corresponds to temporal proximity between the event time (ET) and the reference time (RT).

- (10) **K'ay** hlis bax=hl gimxdi-'y win 'witxw ha'w-i'y ky'oots
 run=CN sister-1SG.II COMP arrive go.home-1SG.II yesterday
 'My sister had **just** finished running when I came home yesterday.'

- (11) **K'ay** hlis=t jap=s Mary=hl gwila
 =3.I make=PN Mary=CN blanket
 'Mary **just** made a blanket.'

² *K'ay* is either rejected or interpreted as 'still' with bare activity predicates (12); and either rejected, interpreted as 'still,' or interpreted as 'just' with bare accomplishments. These judgements vary on an intra-speaker and lexical basis. I take this as an indication that *k'ay* is generally incompatible with bare activities and accomplishments.

- (12) **K'ay** yee=s Mary (bare activity; VG: ✓ BS: ?)
 walk=PN Mary
 'Mary is **still** walking.'

Table 1 summarizes the interpretations of *k'ay* according to co-occurring viewpoint and lexical aspects.

	states	achievements	activities	accomplishments
bare predicate	still	just	#	#
with imperfective <i>yukw</i>	NA	still	still	still
with <i>hlis</i>	NA	#	just	just

Table 1. Interactions of *k'ay* with viewpoint and lexical aspects

The semantics of the morpheme *hlis* is yet to be investigated. While it has been glossed as a perfective marker (Tarpent 1987; Hunt 1993), it also has a verbal use meaning ‘to finish’ (Hunt 1993), and it is not clear whether the two uses are distinct. For current purposes, it suffices to point out that *hlis* contributes culmination and back-shifting. As suggested by Schwan (2013), accomplishments in Gitksan lack a culmination entailment (see also Bar-el et al. 2005 for the same phenomenon in St’át’imcets and Skw̓wú7mesh). Two tests for telicity support this point. First, Dowty’s (1979) ‘almost’ test for telicity cannot pick up the completion of an event expressed by an accomplishment predicate (13a) unless *hlis* is present (13b). Second, a bare accomplishment sentence can be immediately followed by denial of culmination (14a); once *hlis* is present, the context must entail culmination (14b).

(13) *Cxt.*: *You started reading a story but didn’t read it all.*

a. Mooji=n litsxxw=hl adaawk
almost=1.I read=CN story
‘I almost started reading a story.’ #‘I almost finished reading a story.’
VG: ‘That would indicate you pushed the book away.’

b. Mooji=n **hlis** litsxxw=hl adaawk
almost=1.I read=CN story
‘I almost finished reading a story.’

(14)a. Jab=i=s Mary=hl k’am k’ii’y=hl gwila, ii k’ap nee=dii=t hlisin-t
make-TR=PN Mary=CN only one=CN blanket CCNJ VERUM NEG=FOC=3.I finish-3.II
‘Mary made one blanket, but she didn’t finish it.’

b. **Hlis**=t jap=t Mary=hl k’am k’i’i=hl gwila ky’oots
=3.I make=DM Mary=CN only one=CN blanket yesterday
‘Mary finished making a blanket yesterday.’
Cxt. 1: *Mary was working on her blanket yesterday, but it’s not done yet.*
✓*Cxt. 2*: *Mary started making a blanket last month/yesterday and finished it yesterday.*

Finally, *hlis* is incompatible with achievements if *k'ay* is present (15) but preferred when the ET is distant from the RT (16). This suggests that it (perhaps pragmatically) contributes back-shifting of the ET from the RT.

(15) ?**K’ay** hlis (k)’witxw=s Michael
 arrive=PN Michael
intended: ‘Michael just arrived.’

(16) *Cxt.*: *When you get to the department, you see Michael’s bike parked. You say:*

#(Hlis) (k)’witxw=t Michael
 arrive=DM Michael
‘Michael has already arrived.’

2.2. Presuppositions

Part of the semantic contribution of *k'ay* is a presupposition that the relevant eventuality obtains at some time prior to the RT, which is also observed in aspectual *still* (see Section 3). The presuppositional status of this meaning component is evident in its projective behaviour in polarity questions.³ In (17a), *k'ay* occurs in a polarity question and is interpreted as ‘still,’ and the sentence is only felicitous if the context entails that the eventuality of Mary’s loving John obtained before the RT. This contrasts with a *k'ay*-less counterpart (17b), which can be uttered without such context.

- (17) a. **K'ay**=t siip'in=s John gyuu'n=aa?
 =3.I like=PN John now=Q
 ‘Does she **still** love John now?’
 ✓Cxt. 1: *Ten years ago, Mary was in love with her husband John.*
 #Cxt. 2: *Ten years ago, Mary hated her husband John.*
- b. Siip'in=s John gyuu'n=aa?
 like=PN John now=Q
 ‘Does she love John now?’
 ✓Cxt. 2: *Ten years ago, Mary hated her husband John.*

The same holds when *k'ay* is interpreted as ‘just.’ In (18a), the question with *k'ay*, unlike the *k'ay*-less counterpart (18b), can only be uttered if the speaker knows that an event of Mary’s finding her dog has taken place. Note that the context must entail not only the occurrence but also culmination of the finding event since the predicate is telic.

- (18) a. **K'ay**=t 'wa=s Mary=hl us-t=aa?
 =3.I find=PN Mary=CN dog-3.II=Q
 ‘Did Mary **just** find her dog?’
 ✓Cxt. 1: *Mary’s dog had ran away recently. Running into her, you see that she has her dog, looking very excited and happy.*
 #Cxt. 2: *Mary’s dog had ran away recently. You don’t know if she found it yet.*
- b. 'Wa-yi=s Mary=hl us-t=aa?
 Find-TR=PN Mary=CN dog-3.II=Q
 ‘Did Mary find her dog?’
 ✓Cxt. 2: *Mary’s dog had ran away recently. You don’t know if she found it yet.*

3. Literature on ‘still’

There is an extensive literature on the aspectual uses⁴ of *still* in English (Krifka 2000; Ippolito 2004, 2007; Greenberg 2008) and *noch* ‘still’ in German (König 1977; Löbner 1989; Michaelis 1993; Mittwoch 1993; Van Der Auwera 1993). As most authors agree, *still* presupposes that the relevant eventuality obtains at a time prior to the RT and asserts that it holds at the RT (cf. Krifka 2000). The status of the ‘prior time’ (Greenberg 2008) reading as a presupposition is evident in its projection and suspension behaviours (Michaelis 1993; Mittwoch 1993).

³ With regards to other presupposition-projecting contexts, *k'ay* doesn’t seem to embed under negation, and evidence for projection from the antecedent of a conditional was inconclusive. The latter may have to do with the semantics of the morpheme *ji*, which has been described as irrealis (Rigsby 1986:274) and may not be a conditional.

⁴ *Still* and *noch* also have non-temporal uses (19, 20) (König 1977; Michaelis 1993; Ippolito 2004, 2007).

(19) We told Bill not to come, but he still showed up.

(Michaelis 1993: 193(2))

(20) Compact cars are still fairly safe; subcompacts start to get dangerous.

(Michaelis 1993: 223(42))

With respect to its interaction with aspect, authors agree that aspectual *still* combines with statives and imperfectives (Löbner 1989; Michaelis 1993; Greenberg 2008). Michaelis (1993) further recognizes that, although continuation throughout an interval including the RT and some prior time is a property of both states and activities, bare activities are incompatible with *still* (excluding a habitual reading) (21). She suggests that states have a “finer level of granularity” such that all “subcomponents of a state are identical to one another” (Michaelis 1993: 199).

(21) Bill (*still) jogged. \neq Bill was still jogging. (adapted from Michaelis 1993:198(5c))

The relevant property here is the subinterval property (Bach 1981; Dowty 1986), which applies to states but not activities (cf. Bennett and Partee 1972; Champollion and Krifka 2016 on divisivity). To my knowledge, there has been no attempt to encode the relevance of the subinterval property in the semantics of *still*. However, König’s (1977) proposal for the assertion of *noch* ‘still’ (22) may be relevant for encoding the requirement of the subinterval property: in his account, *noch p* asserts that *p* holds at all intervals t_k between some prior time t_j and t_i (the RT).

(22) $V_{i,w}(\text{noch}(p))=1$ iff $\exists t_j[t_j < t_i \ \& \ \forall t_k[t_j \leq t_k \leq t_i \rightarrow V_{k,w}(p)=1]$ (adapted from König 1977:182(26))

The only compositional account of *still* that I am aware of is given by Ippolito (2004, 2007). In her analysis of *still* as a focus-sensitive particle, she provides examples of aspectual *still* combined with statives (23) and progressives (24a). For her, aspectual *still* is a partial function that induces a presupposition that the eventuality overlapping the RT also overlaps a time before the RT. This explains the intuition that in (24a), with *still*, a single event of John’s cooking must be continuing for the past couple of days; this contrasts with *again* (24b), in which John’s cooking that overlaps a past time is different from the one that obtains at the utterance time (UT).

(23) John is still a UPS employee. (Ippolito 2004:128(7a))

(24) a. Two days ago John was cooking. He is still cooking. (Ippolito 2004:133(22))
b. Two days ago John was cooking. He is cooking again.

In order to ensure that the assertion and presupposition of *still* refer to the same eventuality, Ippolito (2004, 2007) introduces a covert variable e_1 , which refers to a contextually salient eventuality. *Still* (25) takes a covert temporal variable t_1 , the eventuality variable e_1 , the denotation of the aspectual phrase (AspP), *P*, with a presupposition that there is a contextually salient time t' such that t' precedes t_1 and *P* holds of e_1 at t' . If the presupposition is satisfied, it asserts that *P* holds of e_1 at t_1 as well. She encodes the ‘prior time’ presupposition as an input restriction on *P*, even though she argues that *still* focus-marks tense (Ippolito 2004), or a temporal variable t_1 (Ippolito 2007).⁵

(25) $\llbracket \text{still} \rrbracket^{c:g}_{(i,(v,((v,it),t)))} = \lambda t_1. \lambda e_1. \lambda P_{(v,it)}: \exists t' \in C[t' < t_1 \ \& \ P(e_1)(t')=1]. P(e_1)(t_1)$
(adapted from Ippolito 2007:9(21))

Ippolito assumes that the eventuality variable in the denotation of the progressive marker *-ing* is not existentially closed (26) so that *still* can take e_1 as its input. The denotation of the second clause of (24a) is given in (27b): it presupposes that there is a salient prior time t' that is included in the time of John’s cooking and asserts that the same cooking event obtains at the RT.

(26) $\llbracket \text{-ing} \rrbracket^{c:g}_{(v,t),(v,it)} = \lambda Q_{(v,t)}. \lambda e. \lambda t. t \subseteq \tau(e) \ \& \ Q(e)=1$ (adapted from Ippolito 2007:8(19))

⁵ In Ippolito (2007), in order to combine the output of *still*, which is of type t , and the denotation of tense, she assumes that Predicate Abstraction applies to the former, in which t_1 is bound by a lambda operator.

- (27) a. $\llbracket\text{-ing [John cook]}\rrbracket^{c,g} = \lambda e. \lambda t. t \subseteq \tau(e) \ \& \ \text{John-cook}(e)=1$ (adapted from Ippolito 2007:8(20))
- b. $\llbracket\text{PRES[still } t_1 \ e_1]\llbracket\text{-ing [John cook]}\rrbracket^{c,g}$ defined iff $\exists t' \in C[t' < t_c \ \& \ t' \subseteq \tau(e_1) \ \& \ \text{John-cook}(e_1)=1]$
 $=1$ iff $t_c \subseteq \tau(e_1) \ \& \ \text{John-cook}(e_1)=1$ (adapted from Ippolito 2007:10(25))

Ippolito's analysis successfully accounts for the aspectual *still* in progressive sentences. However, she does not comment on how it accounts for statives (23) or the incompatibility of *still* with bare activities.

Greenberg (2008) largely supports Ippolito's approach but points out that the eventuality expressed by the predicate needs not be salient; *still*-sentences can be uttered out-of-the-blue (28). Instead, she argues that what must be salient is the RT, as *still* is compatible with past tense as long as the RT is specified (29a) but infelicitous without such specification (29b).

(28) The baby is still asleep. Please be quiet! (Greenberg 2008:62(28))

(29) How's John? (Greenberg 2008:50(1), 51(5))

- a. Well, I saw him last month. He was still unemployed. b. #Well, he was still unemployed.

In summary, the consensus is that *still* presupposes the existence of a prior time t' such that the relevant eventuality obtains at t' and asserts that the eventuality holds at the RT. However, authors differ in the formal implementations of the intuition that the eventuality continues throughout an interval containing t' and the RT. Ippolito (2004, 2007) remains the only compositional account of *still*. While her analysis accounts for *still* in progressive sentences, it is not clear how it would predict the (in)compatibility of *still* with bare predicates of various lexical aspects. The analysis below builds on Ippolito's account and integrates Michaelis's, König's, and Greenberg's observations. The analysis unifies the 'still' and 'just' readings of *k'ay* and accounts for its incompatibility with bare activity predicates.

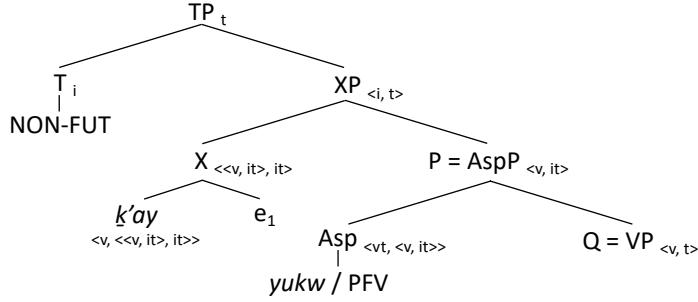
4. Analysis

4.1. Denotations

I adopt J&M's (2007) covert non-future morpheme (30) for Gitksan. Following Ippolito (2004, 2007), I assume that the eventuality variable is not existentially closed in the denotation of imperfective *yukw* (31). When *yukw* is absent, a silent perfective marker, PFV (32) is assumed to be present.

- (30) $\llbracket\text{NON-FUT}_i\rrbracket^{g,c}$ is only defined if not part of $g(i)$ is after t_c . If defined, $\llbracket\text{NON-FUT}_i\rrbracket^{g,c} = g(i)$
(J&M 2007:5(13))
- (31) $\llbracket\text{yukw}\rrbracket^{g,c}_{\langle vt, \langle v, it \rangle \rangle} = \lambda Q_{\langle v, t \rangle}. \lambda e. \lambda t. Q(e) \ \& \ t \subseteq \tau(e)$
- (32) $\llbracket\text{PFV}\rrbracket^{g,c}_{\langle vt, \langle v, it \rangle \rangle} = \lambda Q_{\langle v, t \rangle}. \lambda e. \lambda t. Q(e) \ \& \ \tau(e) \subseteq t$

A schematic syntactic representation of a sentence with *k'ay* is given in Fig. 1. Following Ippolito (2004, 2007), I propose that *k'ay* (33) takes a covert eventuality variable e_1 , the denotation of the AspP, P, and the denotation of the non-future tense as its input. Based on Greenberg's observation that the RT must be salient, I encode the 'prior time' presupposition (underlined) as an input restriction on the non-future tense, which says that there is a contextually salient time t' such that t' precedes t and P is true of e_1 at t' . The assertion of *k'ay* builds on König's (1977) proposal for *noch* 'still': *k'ay* asserts that, for all the moments t'' between the run time of e_1 and t , there is an eventuality e' such that P is true of e' at t'' .

Fig. 1 Syntactic representation of sentences with *k'ay*

$$(33) \quad \llbracket k'ay \rrbracket^{g,c}_{(v, \langle \langle v, it \rangle, it \rangle)} = \lambda e_1. \lambda P_{\langle v, it \rangle}. \lambda t: \underline{\exists t' \in C[t' < t \ \& \ P(e_1)(t')]} . \forall t'' [\tau(e_1) \leq t'' < t \rightarrow \exists e' [P(e')(t'')]]$$

4.2. Accounting for the 'still' reading

Recall that *k'ay* is interpreted as 'still' in combination with bare statives ((5) repeated below as (34a)). Since there is no overt aspectual marker, a covert PFV⁶ is assumed to be present, in addition to a covert non-future tense and an eventuality variable e_1 (34b). *k'ay* presupposes that there is a contextually salient time t' such that t' precedes the non-future RT and the time of an eventuality e_1 of Mary's liking berries is included in t' (35a). If the presupposition is satisfied, *k'ay* asserts that for all moments t'' between the run time of e_1 and the non-future RT, there is an eventuality e' of Mary's liking berries such that the time of e' is included in t'' (35b). The presupposition and assertion together ensure a continuation of the relevant state from a prior time t' to the RT: if a state of Mary's liking berries holds at t' , and all the times between the time of that state and the RT includes the time of some state of Mary's liking berries, then there is an uninterrupted state of Mary's liking berries which stretches from t' to the RT. This is because states are cumulative (Krifka 1989; Champollion and Krifka 2016).

- (34) a. **k'ay**=t ixsda-din=s Mary=hl maa'y (bare stative)
 =3.1 tasty-CAUS2=PN Mary=CN berry
 'Mary **still** likes berries.'

b. $\llbracket [\text{NON-FUT}_i] k'ay e_1 [\text{PFV}] ixsdaadin=s \text{ Mary=hl maa'y} \rrbracket^{g,c}$

(35) a. Presupposition: $\exists t' \in C[t' < \llbracket \text{NON-FUT}_i \rrbracket^{g,c} \ \& \ \text{Mary-likes-berries}(e_1) \ \& \ \tau(e_1) \subseteq t']$

b. Assertion: $\forall t'' [\tau(e_1) \leq t'' < \llbracket \text{NON-FUT}_i \rrbracket^{g,c} \rightarrow \exists e' [\text{Mary-likes-berries}(e') \ \& \ \tau(e') \subseteq t'']]$

The same analysis applies to the 'still' reading in combination with imperfective *yukw* ((7) repeated as (36a)), except that cumulativity is now contributed by the viewpoint aspect. The presupposition (37a) and the assertion (37b) ensure that there is an uninterrupted event of Mary's walking from t' to the RT.

- (36) a. **k'ay** yukw yee=s Mary (ipfv. activity)
 IPFV walk=PN Mary
 'Mary is **still** walking.'

b. $\llbracket [\text{NON-FUT}_i] k'ay e_1 yukw yee=s \text{ Mary} \rrbracket^{g,c}$

⁶ Alternatively, the analysis is compatible with the assumptions that states 1) are imperfective by default or 2) overlap the RT (Bochnak et al. 2019: 436(73)).

(40) a. **K'ay** (k)'witxw=s Michael (bare achievement)
 arrive=PN Michael
 'Michael **just** arrived.'

b. $\llbracket[\text{NON-FUT}_i] \text{ k'ay } e_1 \text{ [PFV] (k)'witxw=s Michael} \rrbracket^{\text{g,c}}$

(41) a. Presupposition: $\exists t' \in C[t' < \llbracket[\text{NON-FUT}_i] \rrbracket^{\text{g,c}} \& \text{Michael-arrives}(e_1) \& \tau(e_1) \subseteq t']$

b. Assertion: $\forall t''[\tau(e_1) \leq t'' < \llbracket[\text{NON-FUT}_i] \rrbracket^{\text{g,c}} \rightarrow \exists e'[\text{Michael-arrives}(e') \& \tau(e') \subseteq t'']]$

Finally, the current analysis offers a possible explanation as to why *k'ay hlis* [*achievement predicate*] is rejected. Recall that *hlis* contributes culmination and (either semantically or pragmatically) back-shifts the ET from the RT. Since achievements are inherently telic, the only contribution of *hlis* would be back-shifting. However, back-shifting contradicts the assertion of *k'ay*, which eliminates a temporal distance between the run time of e_1 and the RT.

5. Alternative approaches

This section considers two alternative approaches and argues in favour of the current analysis. While the current analysis is largely built on the literature of *still* and extended to the 'just' reading, one could imagine taking the 'just' reading as a starting point. Intuitively, if an eventuality has *just* started, then it is likely *still* ongoing. However, this alternative approach is implausible for language-internal reasons. There is another aspectual particle, *hlaa*, which is seemingly dedicated to the 'just' reading. Previously described as an "inceptive" marker (Rigsby 1986:273) and a "temporal proximity marker" (Jóhannsdóttir 2006:83), it indicates proximity between the ET and the evaluation time (EvalT) (Matthewson et al. 2019). Despite sharing the 'just' reading, *hlaa* and *k'ay* behave differently with respect to future. Gitksan expresses future with either *dim*, a prospective marker, or *yukw dim*, a combination of imperfective and prospective markers (see J&M 2007; Matthewson et al. 2019). However, *k'ay* requires imperfective *yukw* (42a). In contrast, *hlaa* is compatible with both *yukw dim* and *dim*, and infelicitous *#k'ay dim* sentences are often repaired by replacing *k'ay* with *hlaa* (42b).

(42) Context: *You open the window and see Michael walking towards the department building.*

a. **K'ay** #(yukw) dim k'witxw=s Michael
 IPFV FUT arrive=PN Michael
 'Michael is just about to arrive.'

b. **Hlaa** (yukw) dim k'witxw=s Michael
 PROX IPFV FUT arrive=PN Michael
 'Michael is just about to arrive.'

Perhaps the most intuitive way of extending 'still' to 'just' would be to say that in the latter reading, *k'ay* targets the result state of a relevant eventuality, indicating that the result state *still* holds. However, such an approach is ruled out because the result state of a *k'ay* sentence can be immediately denied (43).

(43) **K'ay**=t 'wa=s Mary=hl us-t ii ap hoo k'ee_kxw-t
 =3.I find=PN Mary=CN dog-3.II CCNJ VER again run.away-3.II
 'Mary just found her dog, but it ran away again.'

6. Conclusion

This paper has demonstrated that the aspectual particle *k'ay* in Gitksan interacts with the viewpoint and lexical aspects to yield either a 'still' or a 'just' reading. In particular, *k'ay* contributes the 'still'

reading when combined with cumulative predicates with the subinterval property and the ‘just’ reading in combination with telic predicates. By synthesizing and formalizing the previous proposals for *still*, the current analysis not only unifies the two readings as a single denotation but also offers an explanation as to why both *k’ay* and *still* are incompatible with bare activity predicates.

The analysis highlights potential areas for future studies. Language-internally, the contribution of *k’ay* in future contexts (42a) is yet to be given a compositional account. From a cross-linguistic perspective, the current analysis raises a question of whether *still* and *noch* should be viewed as the English- and German- counterpart of *k’ay*, respectively. To my knowledge, *k’ay* does not seem to have alternative-sensitive or non-temporal uses analogous to those observed in *still* and *noch* (19, 20). Therefore, it seems plausible to say that *k’ay* is dedicated to temporal ‘still’ and ‘just’ and that *still* and *noch* lack the temporal ‘just’ reading because they are semantically distinct from *k’ay* in being alternative-sensitive and having non-temporal, cross-categorial uses. Nevertheless, temporal *still* shares its distribution with *k’ay* with regards to their compatibility with imperfectives and bare stative predicates and incompatibility with bare activity predicates, the latter of which is not captured in the existing accounts of *still*. While the denotation of *k’ay* can be adopted for the temporal uses of *still* to account for their distribution, it cannot straightforwardly be integrated into an account of *still* as an alternative-sensitive particle (Ippolito 2004, 2007). How does one decide which different ‘readings’ correspond to a single lexical entry? This dilemma calls for cross-linguistic investigation of both temporal particles and temporal uses of alternative-sensitive particles.

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