Viewpoint aspect and object case in Kʷakʷala and Finnish

KATIE SARDINHA
Independent Scholar[*]

1 Introduction

Smith's (1997) two component theory of aspect distinguishes two types of aspectual information. SITUATION ASPECT concerns the classification of events according to their inherent temporal properties – for instance as states, activities, accomplishments, semulfactives, or achievements – while VIEWPOINT ASPECT concerns the classification of events according to which interval of their total duration is under discussion in a context. The relationship between these two types of aspectual information is characterized by Smith (1997:61) as follows.

> Aspectual viewpoints function like the lens of a camera, making objects visible to the receiver. Situations are the objects on which viewpoint lenses are trained. And just as the camera lens is necessary to make the object available for a picture, so viewpoints are necessary to make visible the situation talked about in a sentence.

Smith proposes three canonical viewpoints: IMPERFECTIVE, which focuses on an interval that is internal to an event and does not include its endpoints, as illustrated in 1a; PERFECTIVE, which focuses on the whole event including both endpoints, as illustrated in 1b; and NEUTRAL, which focuses on the initial endpoint plus one event stage, as illustrated in 1c.

(1) Canonical viewpoints: ('I' = initial bound; 'F' = final bound; '/' = visible; '.' = stage)

a.	**Imperfective**	I .../// ... F	(Smith 1997:73)
b.	**Perfective**	I ..... F //////////	(Smith 1997:66)
c.	**Neutral**	I .	(Smith 1997:81)

This paper is concerned with the expression of viewpoint aspectual information in two genetically unrelated languages, Finnish (Uralic) and Kʷakʷala (Wakashan). In discussions about

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the relationship between viewpoint aspect and object expression, Finnish is the quintessential example language (Travis 2010:133-4). This is because while viewpoint aspect is not grammaticalized in the verbal morphology of Finnish (Smith 1997:5, 81), in certain environments object case functions to signal a contrast between imperfective and perfective viewpoint (Kiparsky 1998, Travis 2010). The purpose of this paper is to provide some initial evidence that in Kʷakʼʷala, like in Finnish, object case functions in certain environments to approximate a viewpoint contrast which is the mirror opposite, in terms of semantic markedness, of the corresponding imperfective versus perfective contrast found in Finnish. The viewpoint contrast expressed in Kʷakʼʷala will be referred to as INITIATION VIEWPOINT versus NON-INITIATION VIEWPOINT. This finding builds upon a claim made in Sardinha (2017) that Finnish and Kʷakʼʷala's object case systems are semantically mirrored. Kʷakʼʷala will thereby be shown to instantiate an empirically new – yet not unexpected – way for a language to signal viewpoint aspectual information using object case.

The rest of the paper proceeds as follows: Section 2 provides a brief overview of the semantics of object case in Finnish and Kʷakʼʷala; Section 3 discusses how object case communicates viewpoint aspectual information in Finnish; Section 4 presents evidence for the same, albeit mirrored, pattern in Kʷakʼʷala; and Section 5 discusses implications of the reported findings and concludes.

2 Object case in Finnish and Kʷakʼʷala

Finnish and Kʷakʼʷala each possess two direct object cases, referred to as PARTITIVE and ACCUSATIVE in Finnish, and INSTRUMENTAL and ACCUSATIVE in Kʷakʼʷala. In this section, I provide a basic overview of these object case systems from the perspective of Sardinha (2017), who argues that they are semantically mirror images of each other.

In Finnish, accusative case relates an internal argument to an event's final subevent, giving rise to an interpretation of boundedness or telicity (Heinämäki 1984, 1994, Vainikka 1989, Kiparsky 1998,[1] Ritter and Rosen 2000, Kratzer 2004, Borer 2005). This semantic value can be clearly observed in sentences with verbs that allow their object to appear in either object case

[1] Kiparsky's (1998) analysis differs substantially from the others referenced here in that the value of "boundedness" is not equated with telicity, but with gradability. Additionally, Kiparsky analyzes both partitive and accusative as meaningful cases, arguing that partitive case licenses unboundedness (rather than being a meaningless default). I do not adopt this analysis on the grounds that partitive objects implicate but do not entail atelicity, as mentioned below.

(henceforth ALTERNATING VERBS).[2] In 2 for instance, accusative case on the object of *ampua* 'shoot' contributes an entailment that the event is telic, which in this example means that the cow was indeed shot (cf. 5 below).[3]

(2) Metsästäjä ampui vahingossa **lehmän**
hunter shot accident.in **cow.ACC**
'The hunter shot **a cow** (ACC) by accident.' (Heinämäki 1984:156)

An association between accusative case and telicity is also shown by data like 3. The sentence in 3a with the verb *ravistaa* 'shake' is odd because there is no conventional telic end point for the activity of shaking one's legs which would be compatible with the meaning added by accusative case. However, when the event description is modified by a resultative, accusative case on the object becomes possible, as shown in 3b. This is because the resultative adds an explicit end point to the event description, thereby making it compatible with the semantics of accusative.

(3) a. * ravistin **jalkani**
I-shook **legs-ACC-my**
Intended: 'I shook **my legs** (ACC).'

b. ravistin **jalkani** rennoiksi
I-shook **legs-ACC-my** relaxed.to
'I shook **my legs** (ACC) so that they became relaxed.' (Heinämäki 1994:215)

Kratzer's (2004:394) analysis of the accusative-assigning head (here, $F_{[acc]}$) is given in 4.

(4) $[\![F_{[acc]}]\!] = \lambda R_{<e,vt>}.\lambda x_e.\lambda e_v.R(x)(e)\ \&$
$\exists f\,[\text{measure}(f)\ \&\ \forall x'\,[x' \leq f(x) \rightarrow \exists e'\,[e' \leq e\ \&\ R(x')(e')]]]]$

The accusative-assigning head in 4 relates a direct object referent to the temporal extent of an event by turning it into a 'measuring rod' of the event. The nature of this measuring rod is contextually determined and constrained by the semantics of the verb phrase; for instance, the measuring rod

[2] Finnish (and Kʷakʷala) also possess STRICT VERBS whose objects only ever appear in one case (except in circumstances where the meaningful case is semantically licensed, as it is in 9).
[3] Note that the cow's subsequent death may be implied by 2, but is not entailed by it (Heinämäki 1984:156-7).

in 3b is a scale of leg relaxedness. Via the semantics in 4, an accusative object comes to be interpreted as measuring out the event, and this gives rise to an interpretation of the event as telic.

In contrast to accusative, the Finnish object partitive is a meaningless default case. This default value is once again observable in sentences with alternating verbs, where partitive case on the object implicates, though does not entail, atelicity. Thus 5 allows both culminated and non-culminated readings, unlike its counterpart with accusative case in 2.

(5) Metsästäjä ampui vahingossa **lehmää**
hunter shot accident.in **cow.PART**
'The hunter shot **(at) a cow** (**PART**) by accident.' (Heinämäki 1984:156)

That 5 only implicates atelicity is indicated in Heinämäki (1984:156) as follows: "...the sentence [5] can be used to describe the activity of shooting, no matter what the result is or, the speaker may not know what happened to the cow, and, therefore can not claim anything stronger than [5]."

In summary, Finnish possesses one meaningful object case – accusative – which relates a direct object referent to the final subevent of an event and gives rise to an entailment of telicity. This case is opposed to a meaningless default case, partitive, the use of which implicates atelicity.

Kʷak̓ʷala is the mirror opposite of Finnish in possessing a meaningful instrumental case (=*s*) which relates an internal argument to an event's initial subevent (Sardinha 2017). Some objects which are consistently realized with instrumental case include semantic instruments, such as the money in 6, and event participants (other than an event's initiator) which define the initial bound of the event, such as the bighouse which is 'left' in 7.[4]

(6) kəlxʷʔidsuʔnukʷida babaǧʷəme **sis** **dala**
kəlxʷ -xʔid -suʔnukʷ =i =da babaǧʷəm **=s** **=is** **dala**
buy -BEC -INDEF.OBJ =3DIST =OST little.boy **=INST** **=3REFL.POSS** **money**
'The little boy bought something **with his money** (**INST**).'

[4] Abbreviations used in Kʷak̓ʷala glosses are as follows: 1 'first person', 3 'third person', ACC 'accusative', AUX 'auxiliary', BEC 'become operator, momentaneous aspect, inchoative', CONT 'continuative', DET 'determiner', DIST 'distal deictic', EMB 'embedding *-a*', FV 'final vowel', GRAD.ADV 'gradual advancement', INST 'instrumental', INDEF.OBJ 'indefinite object', INVIS 'invisible', MED 'medial deictic', NEG 'negation', NMZ 'nominalizer', OST 'ostensive determiner', PART 'partitive', POSS 'possessive', PREP 'preposition', REDUP 'reduplicant', REFL.POSS 'reflexive possessive', VER 'verum focus', VIS 'visible'. All data not from an otherwise cited source are from my own fieldwork.

(7)

bəwuǔ		Mabələǔ		**sa**		**gukʷdzi**
bew	=uǔ	Mabel	=(ə)ǔ	**=s**	**=a**	**gukʷdzi**
leave	=3MED	Mabel	=VIS	**=INST**	**=DET**	**bighouse**

'Mabel left **the bighouse** (**INST**).'

Core event participants in initial subevents (other than the INITIATOR) are referred to as CO-INITIATORS in Sardinha (2017). Several empirical arguments are provided in Sardinha (ibid.) for a semantic link between instrumental case and the property of being a co-initiator. I will limit my discussion here to one of these empirical phenomena, the Direct Manipulation Alternation.

Typically in Kʷaḵʷala, direct object referents which undergo any sort of change, such as the snow which melts in 8, are expressed in accusative case (as in 8a) and are ungrammatical in instrumental case (as in 8b).

(8) *Context: Ted's camping. So he builds a fire and melts some snow over it in a pot to make water for him to drink.*

a.

ləm̓is			yaǔʔid		**ǔa**		**ḵʷis**
lə	=ʔm	=(w)is	yaǔ	-xʔid	**=ǔ**	**=a**	**ḵʷis**
AUX	=VER	=and.so	melt	-BEC	**=ACC**	**=DET**	**snow**
	qəs		naq̓ideʔ				
	q(a)	=is	naq	-xʔid	=a	=iʔ	
	PREP	=3REFL.POSS	drink	-BEC	=EMB	=NMZ	

'Then he melted **some snow** (**ACC**) to drink.'

b.

* yaǔʔiduǔ		**sa**		**ḵʷis**	qəs		
yaǔ	-xʔid	=uǔ	**=s**	**=a**	**ḵʷis**	q(a)	=is
melt	-BEC	=3MED	**=INST**	**=DET**	**snow**	PREP	=3REFL.POSS
	naq̓ideʔ						
	naq	-xʔid	=a	=iʔ			
	drink	-BEC	=EMB	=NMZ			

Intended: 'He melted **some snow** (**INST**) to drink.'

However, this same class of direct object referents can appear in instrumental case when certain semantic conditions are met. In particular, both object cases are grammatical whenever the direct object referent simultaneously undergoes change and serves as the co-initiator of the event. For instance, these semantic conditions are met in 9 by the ice, which undergoes change (by melting) while simultaneously being directly manipulated by the event's initiator to bring about a change of state (in this instance, a change in itself), thereby serving as the event's co-initiator.

(9) *Context: Monica held a piece of ice tight between her palms and melted it.*

yaǩʔidi				Monica		{**sa**, **ǩa**}		
yaǩ	-xʔid	=i		Monica		{**=s**	**=a**	, **=ǩ** **=a**}
melt	-BEC	=3DIST		Monica		{**=INST**	**=DET**	, **=ACC** **=DET**}
	ƛ̓uǩʷ		laǩis			ʔiʔəẏəsu		
	ƛ̓uǩʷ		la	=ǩ	=is	ʔi~		ʔəẏəsu
	frozen		PREP	=ACC	=3REFL.POSS	REDUP~		hand/arm

'Monica melted **the ice** {**INST**, **ACC**} in her hands.'

This phenomenon of case alternation, referred to as the Direct Manipulation Alternation in Sardinha (2017), is possible in those contexts where an argument undergoing change is directly manipulated by the event's initiator in the course of its undergoing change. The finding that instrumental case can be semantically licensed in this way demonstrates that instrumental is not merely a semantic case for instruments, but is instead associated with a more abstract meaning, namely one tied to event structure and grounded in initial subevents.

Sardinha's (2017) analysis of the instrumental-case assigning head (here, $F_{[inst]}$) is in 10.

(10) $[\![F_{[inst]}]\!] = \lambda R_{<e,vt>}.\lambda x_e.\lambda e_v.R(x)(e) = 1$ & x is *Co-initiator*[5] of e

The instrumental-assigning head in 10 relates an internal argument to an event's initial subevent via the event role Co-initiator.

In contrast to instrumental, the accusative case (=*ǩ*) in Kʷaḵʷala is a meaningless default case. One manifestation of this finding is that unlike in Finnish, accusative objects do not give rise to telicity entailments (Greene 2013, Sardinha 2017). This is shown by the possibility of sentences like 11, in which the culmination of an event described using an accusative-marked object is felicitously negated (compare its English translation, which is infelicitous).

[5] $\lambda x_e.\lambda e_v.x$ is *Co-initiator* of e = (x is a dependent cause of e) ∨ (x defines the initial bound of e) ∨ (x is in the possession of an *Initiator* at the initial bound of e). See Chapter 4 of Sardinha (2017) for discussion.

(11) hiɬʔidoxˇda bəgʷanəma **xˇən** **ka**
hiɬ -xʔid =oxˇ =da bəgʷanəm **=xˇ** **=ən** **ka**
fix -BEC =3MED =OST man **=ACC** **=1POSS** **car**
kiˀʔsmˀoxˇ gʷałoxˇda bəgʷanəm
kiˀʔs =ʔm =oxˇ gˇʷał =oxˇ =da bəgʷanəm
NEG =VER =3MED finish =3MED =OST man
hiɬʔi **xˇən** **ka**
hiɬ -xʔid **=xˇ** **=ən** **ka**
fix -BEC **=ACC** **=1POSS** **car**
'The man fixed **my car** (ACC) but didn't finish fixing **my car** (ACC).' (Greene 2013:44)

More evidence for accusative case being a meaningless default comes from predicates formed using the dummy root, *ʔəxˇ*-. Specifically, Sardinha (2017) reports that accusative objects do not restrict the meaning of monotransitive *ʔəxˇ*- predicates, while instrumental objects do (Table 1).

CASE FRAME	POSSIBLE INTERPRETATIONS
ʔəxˇ- + INST	'use something', 'wear something'
ʔəxˇ- + ACC	'use something', 'wear something', 'take something', 'obtain something', 'do to something'

Table 1: Possible interpretations of monotransitive *ʔəxˇ*- predicates

In summary, Kʷakˀʷala possesses one meaningful object case, instrumental, which relates a direct object referent to the initial subevent of an event, and one meaningless default case, accusative.

Figure 1 represents the mirrored nature of Finnish and Kʷakˀʷala object case systems.

	Initial bound/subevent	***Final bound/subevent***
Finnish	{partitive}	*accusative*
Kʷakˀʷala	*instrumental*	{accusative}

(*…* indicates a meaningful case, {...} indicates a meaningless case)

Figure 1. Semantic mirroring in Finnish and Kʷakˀʷala object case systems

Figure 1 shows that in both Finnish and K^{w}ak̓^{w}ala, a semantic relationship exists between object interpretation and event structure. The two languages differ, however, in terms of which subevent it is – initial or final – which is associated with a meaningful object case.

3 Object case and viewpoint in Finnish

Finnish lacks overt grammatical viewpoint morphemes (Smith 1997:5, 81). Nevertheless, in environments where either object case is grammatical, the semantic contrast encoded through object case gives rise to an imperfective versus perfective viewpoint contrast (Kiparsky 1998, Travis 2010).[6] The pattern is represented in Figure 2, where the semantic value associated with accusative case and partitive case is shown alongside the type of viewpoint information which arises from each case's use.

	Semantic value	***Viewpoint information***
i. *accusative case*	bounded/telic event	perfective viewpoint
ii. *partitive case*	null	imperfective viewpoint (via implicature)

Figure 2. Object case and viewpoint information in Finnish

For instance, with an alternating verb like *luki* 'read', an accusative object is associated with a perfective interpretation (12), while a partitive object is associated by default with an imperfective interpretation (13).

(12) Terttu luki **kirjan**
Terttu read **book.ACC**
'Tertu read (all) **the book** (ACC).' (Heinämäki 1994:212)

(13) Terttu luki **kirjaa**
Terttu read **book.PART**
'Tertu was reading **a book** (PART).' (Heinämäki 1994:212)

[6] For this reason, Finnish object case alternations have occasionally been compared to alternations in Slavic aspectual marking (e.g. Dahl and Karlsson 1976; Kiparsky 1998).

The use of accusative in 12 results in the event being interpreted as telic, and therefore as an event with a final bound; in this way, the use of accusative case consistently gives rise to a perfective viewpoint. On the other hand, the use of partitive in 13 gives rise to an imperfective viewpoint via implicature; as such, this viewpoint information is defeasible (apparently despite the single translation provided for 13). Heinämäki (1994:213) states the following in support of this point.

> ...[13], with a partitive object, is compatible with a situation where Terttu in fact read the whole book, but, for some reason or other, the speaker did not choose to present the situation as bounded. ... But semantically, the sentence [13] is non-committal as to whether the situation itself had some bound or not. In other words, [13] is a non-bounded situation description.

By default, a listener encountering 13 assumes that the speaker has avoided using the accusative case in order to avoid expressing a perfective viewpoint on the event. The listener assumes, therefore, that the speaker intended to communicate an imperfective viewpoint – unless, that is, this assumption is somehow overruled in context. In this way, imperfective viewpoint arises in 13 pragmatically as a result of the semantic opposition between partitive and accusative case.[7]

In summary, in environments where either object case is grammatical, Finnish object case functions to communicate viewpoint aspectual information. The use of accusative case gives rise to a perfective viewpoint via the semantic value of accusative case, while the use of partitive case gives rise to an imperfective viewpoint via implicature. This implicature arises, moreover, due to the null semantics of partitive case together with the enriched meaning that partitive objects receive as a result of the semantic opposition between partitive and accusative.

4 Object case and viewpoint in Kʷaǩʷala

Kʷaǩʷala, like Finnish, does not indicate viewpoint aspect grammatically.[8] Nevertheless, since Kʷaǩʷala's object case system is semantically the mirror image of the one in Finnish, we might

[7] This markedness pattern is reminiscent of what has been reported for various Slavic languages, where the use of perfective verbs is only licit with complete event descriptions, while the use of imperfective verbs is licit with either incomplete or complete event descriptions (Grønn 2003, Alvestad 2014).

[8] Functionally, the nearest thing to a grammatical perfective marker is *–xʔid* (Greene 2013); however, this suffix does not entail telicity and turns out to be neither sufficient nor necessary for communicating (canonical) perfective viewpoint. The nearest thing to a grammatical imperfective is *–n̓akʷəla*; however, this suffix has a more specific meaning than a canonical imperfective (for instance, adding a meaning of graduality to motion events), and while this suffix is sufficient for expressing imperfective viewpoint, it is not necessary for doing so.

expect that in environments where either object case is grammatical, the semantic contrast encoded through object case will give rise to a viewpoint contrast that in terms of markedness, is the mirror image of the imperfective versus perfective contrast found in Finnish. Indeed, this is the claim I will defend here. This claim is summarized in Figure 3, where the semantic value associated with instrumental and accusative case in K^{w}ak̓^{w}ala is shown alongside the type of viewpoint information which arises from each case's use in context. These viewpoints are termed initiation viewpoint and non-initiation viewpoint, respectively.

	Semantic value	***Viewpoint information***
i. *instrumental case*	co-initiated event	initiation viewpoint
ii. *accusative case*	null	non-initiation viewpoint (via implicature)

Figure 3. Object case and viewpoint information in K^{w}ak̓^{w}ala

Initiation viewpoint focuses on an interval within an event's initial (or initiating) subevent, while non-initiation viewpoint focuses on an interval containing an event's final (or non-initiating) subevent.

The empirical evidence for this viewpoint contrast in K^{w}ak̓^{w}ala takes the form of a bias in how sentences are volunteered, and is therefore more subtle than evidence for the corresponding contrast in Finnish. In particular, there is a tendency in K^{w}ak̓^{w}ala for instrumental case to be volunteered in contexts where the speaker is describing an ongoing event, and a tendency for accusative case to be volunteered in contexts where the speaker is describing an event that has been completed or which has resulted in some salient change of state. An example illustrating these tendencies is given in 18: in order to describe an event in which Katie is in the process of putting soup on the stove, the speaker volunteers a sentence with an instrumental object, 18a, while in order to describe an event in which Katie has just put the pot on the stove, a sentence with an accusative object is volunteered, namely 18b (note that the difference in subject-auxiliary ording in these sentences is not semantically significant.)

(18) [*Context: KS is holding an actual pot and acting out a scenario in the speaker's kitchen. When 18a is volunteered, KS is in the middle of slowly placing the pot onto the stove.*]

KS: "If you saw me, doing it?"
Speaker: "Mhm ['Yes']."
KS: "How would you ask — how would you, um, say, 'Katie's putting the pot on the stove'…?"

a.

ləm̓uǰ			Katiyəǰ	hənxƛ̓ənd					
lə	=ʔm	=uǰ	Katie	=(ə)ǰ	hən			-xƛ̓	-xʔid
AUX	=VER	=3MED	Katie	=VIS	hollow.container.upright			-on.fire	-BEC
sa			**sup**		laǰʷa			ləğʷilaċiǰ	
=s	**=a**		**sup**		la	=ǰ	=ʷ	=a	ləğʷilaċi =(ə)ǰ
=INST	**=DET**		**soup**		PREP	=ACC	=3MED	=DET	stove =VIS

'Katie's putting **the soup** (**INST**) on the stove.'

KS: "[…] And now let's say I walk away. [*KS has put the pot on the stove and is actually walking away*.] How would you say, 'The soup is on the stove'…?"

b.

ləm̓uǰ			hənxƛ̓ənduǰ						Katie
lə	=ʔm	=uǰ	hən			-xƛ̓	-xʔid	=uǰ	Katie
AUX	=VER	=3MED	hollow.container.upright			-on.fire	-BEC	=3MED	Katie
ǰʷa				**supiǰ**		laǰʷa			
=ǰ	**=ʷ**		**=a**	**sup**	**=(ə)ǰ**	la	=ǰ	=ʷ	=a
=ACC	**=3MED**		**=DET**	**soup**	**=VIS**	PREP	=ACC	=3MED	=DET
	ləğʷilaċiǰ								
	ləğʷilaċi		=(ə)ǰ						
	stove		=VIS						

Speaker: "Katie has put the **soup** (**ACC**) on the stove."

Examples 19 and 20 illustrate the same association, this time using consecutive sentences containing the same verb root. In 19, the verb *qəp-* 'pour, spill' takes an instrumental object when the process of pouring is described, as in 19a, but an accusative object when the endpoint of this pouring event is explicitly mentioned, as in 19b. Similarly in 20, the verb *dənǰ-* 'sing' takes an instrumental object when describing the action of singing a song, as in 20a, but an accusative object when referring specifically to the endpoint of this same event, as in 20b.

(19) *Context: Eddie has a bucket with some water, and there's a dog's bowl on the ground.*

a.

qəpc̓udi				Eddie	**sa**		**w̓ap**
qəp	-c̓u	-xʔid	=i	Eddie	**=s**	**=a**	**w̓ap**
spill	-in	-BEC	=3DIST	Eddie	**=INST**	**=DET**	**water**
	la	x̌a			w̓abac̓i		
	la	=x̌	=a		w̓abac̓i		
	PREP	=ACC	=DET		water.dish		

'Eddie was pouring/poured **the water** (**INST**) into a water-bowl.'

b.

gəlʔəm		gʷał		qəpa	**x̌a**		**w̓ap**		
gəl	=ʔm	ǧʷał		qəp	-a	**=x̌**	**=a**	**w̓ap**	
first	=VER	finish		spill	-FV	**=ACC**	**=DET**	**water**	
	laʔe			qut̓axʔidida					w̓abac̓i
	lə	=a	=i	qut̓	-a	-xʔid	=i	=da	w̓abac̓i
	AUX	=EMB	=3DIST	full	-FV	-BEC	=3DIST	=OST	water.dish

'Right when he finished pouring **the water** (**ACC**), the bowl got full.'

(20) *Context: Karen entered a charaoke contest, and started singing O Canada — but halfway through she started to feel sick, and had to stop.*

KS: 'Karen sang O Canada, but she didn't finish it.'

dənx̌əlux̌		Karen	**sida**			**q̓əmdəm**		***O***
dənx̌	-əla	=ux̌	Karen	**=s**	**=i**	**=da**	**q̓əmdəm**		**O**
sing	-CONT	=3MED	Karen	**=INST**	**=3DIST**	**=OST**	**song**		**O**
Canada,		k̓iʔsλux̌			ǧʷał	dənx̌ʔidə**x̌**			
Canada		k̓iʔs	=λ	=ux̌	ǧʷał	dənx̌	-xʔid	**=x̌**	
Canada		NEG	=surprise	=3MED	finish	sing	-BEC	**=ACC**	

'Karen was singing/sang **O Canada** (**INST**), but she didn't finish singing **it** (**ACC**).'

In each of these examples, an instrumental object is volunteered when discussing an ongoing event, while an accusative object is volunteered when discussing an event's completion.

This association between object case and viewpoint in Kʷak̓ʷala is, however, only a bias. Speakers do, in fact, volunteer sentences in which the above associations do not hold. Moreover, when sentences such as those in 18-20 are changed by substituting into them whichever object case was not initially volunteered, speakers consistently judge the resulting sentences to be grammatical and insist that case substitution does not change the literal meaning of such sentences. Moreover, while some speakers do comment that case substitution makes a difference of some sort, they consistently struggle to put this difference into words. This is a very different empirical

situation compared to what we see in Finnish, where the difference in meaning between sentences with a partitive object versus an accusative object is effable.

This difference in the clarity of empirical evidence derives from the fact that in K^{w}ak̓^{w}ala, instrumental case is semantically redundant in most of those environments where either object case is grammatical.[9] This is true, in particular, whenever the semantic value of instrumental case is redundant with respect to entailments of the verb phrase (as it is in 18-20). The fact that instrumental case is redundant in these environments, together with the fact that accusative case is meaningless, means that the semantic contrast encoded by object case is neutralized in these environments. This neutralization explains why speakers judge sentence pairs like 18a and 18b to be synonymous and insist that they literally mean the same thing. Yet while case choice in these environments makes no semantic difference, existence of the bias illustrated in 18-20 still suggests that case choice makes an informational difference. This difference is at the core of my claim, which is that case choice functions in these environments to signal a viewpoint contrast.

One proposal for how the communication of viewpoint information comes about in these environments is that case choice triggers a relevance implicature. A relevance implicature could arise in 18a as follows: the listener knows that either case would be semantically possible (based on the type of event being described), and registers that the speaker has chosen instrumental case. The listener knows, moreover, that instrumental case associates an internal argument with an event's initial subevent; this leads them to reason that the speaker must have chosen instrumental case intending to highlight the initial subevent of the event as particularly relevant to the discourse. In this way, the speaker invites the listener to see the event from the point of view of its initial subevent, thereby giving rise to initiation viewpoint. A relevance implicature for 18b would proceed along parallel lines: the listener knows that either case would be semantically possible given the type of event being described, and registers the speaker's choice of accusative case. The listener infers that the speaker chose accusative in order to avoid highlighting the initial subevent and concomitantly, to highlight the non-initial (i.e. final) subevent as more relevant to the discourse. Hence, non-initiation viewpoint is born. A relevance implicature analysis along these lines can explain the existence of a bias in how sentences are volunteered illustrated by 18-20.

[9] The Direct Manipulation Alternation illustrated in 9, in which instrumental case is licensed by contextual information, is an example of an environment where instrumental case adds non-redundant information.

Moreover, since relevance implicatures are defeasible, this proposal can also explain why this pattern is merely a bias and not an inviolable constraint.

5 Conclusion

In this paper I've discussed how in Finnish and K^{w}ak̓^{w}ala, two languages which do not mark viewpoint aspect grammatically, object case case functions in certain environments to present situations from a certain point of view. Languages like Finnish, in which some aspect of object expression is associated semantically with final subevents and perfectivity, are familiar within the field of linguistics. K^{w}ak̓^{w}ala, however, presents us with an empirically new, mirror opposite type of system, in which a meaningful object case is associated with initial subevents and an aspectual viewpoint grounded in initial subevents, here termed initiation viewpoint. More generally, the findings in this paper show that aspectual viewpoints can focus on either initial or final subevents, and that languages may differ in in terms of which subevent is semantically marked. This parameterization is broadly in accord with Ritter and Rosen's (2000) proposal that languages are divided in terms of whether they grammatically privilege the initial or final bound of events. In conclusion, the findings in this paper widen the scope of inquiry into aspectual systems by showcasing a new, though not unexpected, way for a language to signal information about aspectual viewpoint.

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