Statives in ʔayʔaǰuθəm and St'át'imcets[*]

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Abstract: In this paper, we examine the semantic interpretation of stative marking in ʔayʔaǰuθəm (Comox-Sliammon) and St'át'imcets (Lillooet). Examining statives built on bare roots, we find that ʔayʔaǰuθəm statives encode 'target states', while St'át'imcets statives encode 'result states' (Parsons 1990, Kratzer 2000). More specifically, ʔayʔaǰuθəm statives encode the (potentially temporary) state brought about by the event denoted by a change-of-state verb, while St'át'imcets statives encode the irreversible state which holds simply by virtue of an event having occurred. We also examine the combination of the stative morpheme with the transitivizers found in each language. In ʔayʔaǰuθəm, we find that the stative morpheme can co-occur with the control and causative transitivizers, but not with the non-control transitivizer. With the control transitivizer, the interpretation is always that of the agent 'maintaining' a state, while with the causative transitivizer both 'target state' and 'maintaining state' readings are found. In St'át'imcets, the stative morpheme occurs only with the causative transitivizer and always gives rise to a 'maintaining state' reading.

Keywords: ʔayʔaǰuθəm (Comox-Sliammon), St'át'imcets (Lillooet), stative aspect, semantics

1 Introduction

There is a morpheme glossed 'stative' in both ʔayʔaǰuθəm (Comox-Sliammon, ISO 639-3: coo) and St'át'imcets (Lillooet, ISO 639-3: lil), which at first glance appears to perform similar functions in both languages. In ʔayʔaǰuθəm, the morpheme has a number of phonologically conditioned allomorphs: it may be realized as a suffix *-ít*, an infix *-í-*, or a high tone with no segmental content (see Blake 2000:111, 174; Watanabe 2003:410; Mellesmoen & Huijsmans 2019).[1] In St'át'imcets, the stative marker is a prefix *(ʔə)s-*, descended from proto-Salish **ʔac-*, which has reflexes in every Salish language except ʔayʔaǰuθəm and Bella Coola (Nuxalk) (Kinkade 1996:8).

In both languages, the stative morpheme combines with change-of-state roots to create a predicate of the type that is often labelled 'resultative' in the descriptive literature on Salish. The semantics of these stative predicates has not been previously examined in detail for either language.

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[1] We use an accent above a vowel in ʔayʔaǰuθəm to refer to high tone, realized acoustically as raised pitch: this notation follows Mellesmoen and Huijsmans (2019). Blake (2000) and Watanabe (2003) describe the same prosodic contrast as involving stress placement or foot structure. In St'át'imcets, an accent above a vowel denotes primary stress.

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We show that the meaning of the stative in each language is different. Adopting terminology from Parsons (1990, via Kratzer 2000), we argue that the ʔayʔaǰuθəm statives in (1b) encode TARGET STATES, while the St'át'imcets statives in (2b) encode RESULT STATES.[2]

(1) *ʔayʔaǰuθəm:*

a. **Eventive**			b. **Stative**		
ƛ̓əpxʷ	/ƛ̓əpxʷ/	'get broken'	ƛ̓əp**ɛ́**xʷ	/ƛ̓əp**<í>**xʷ/	'be broken'
təq	/təq̓/	'get closed'	təq̓**ɛ́t**	/təq̓**-ít/**	'be closed'
gəq̓	/gəq̓/	'get opened'	gəq̓**ɛ́t**	/gəq̓**-ít/**	'be open'

(2) *St'át'imcets:*

a. **Eventive**			b. **Stative**		
mays	/mays/	'get fixed'	**(e)s**mays	/**(ʔə)s-**máys/	'be fixed'
pulh	/puɬ/	'get boiled'	**(e)s**púlh	/**(ʔə)s-**púɬ/	'be boiled'
tseq	/cəq/	'get put face up'	**(e)s**tséq	/**(ʔə)s-**cə́q/	'be put face up'

Not all examples with the stative morpheme can be characterized as yielding a result or target state. When the stative morpheme combines with stems suffixed with the control transitive *-t* in ʔayʔaǰuθəm, for instance, the reading is rather one of MAINTAINING STATE. This refers to a state which is under the active control of an agent and persists until an event culminates or terminates.

(3) *ʔayʔaǰuθəm:*

a. **Eventive control transitive**			b. **Stative control transitive**		
χɛc̓**ɛt**	/χic̓**-it/**	'point at it'	χɛ:c̓**ɛ́t**	/χic̓**-ít/**	'be pointing at it'
ǰuθ**ot**	/ǰuθ**-ut/**	'push it'	ǰu:θ**ót**	/ǰuθ**-út/**	'be pushing on it'
ʔɛm**ɛt**	/ʔim**-it/**	'step on it'	ʔɛ:m**ɛ́t**	/ʔim**-ít/**	'be holding it in place w. one's foot'

Transitive statives in St'át'imcets are morphosyntactically different from those in ʔayʔaǰuθəm. The control ('directive') transitivizer *-Vn* is simply ungrammatical with stative marking, and is uniformly replaced by the causative transitivizer *-s*.[3] Nevertheless, once independent differences

[2] Unless otherwise stated, all examples and data presented in this paper come from fieldwork conducted by the authors (vf = volunteered form, sf = suggested form). Examples throughout are given with both an orthographic representation and a phonemic representation. Phonemic transcriptions are given in the North American Phonetic Alphabet (NAPA). Glossing abbreviations used in this paper are: 1 = 1st person, 3 = 3rd person, C/D = complementizer/determiner, CAUS = causative, CONJ = conjunction, COP = copula, CTR = control transitive, DET = determiner, ERG = ergative, EXCL = exclusive, EXIS = existential enclitic, FUT = future, INFER = inferential, IPFV = imperfective, NEG = negation, NMLZ = nominalizer, NCTR = non-control transitive, NTS = non-topical subject, OBJ = object, PASS = passive, PL = plural, POSS = possessive, PROG = progressive, PST = past, QUEX = 'quexistential' (WH-pronoun), RLT = relational, RDR = redirective, RPT = reportative, SBJ = subject, SBJV = subjunctive, SG = singular, and STAT = stative.

[3] That this is a purely morphological constraint in St'át'imcets is shown by the fact that other transitivizers, including the redirective (applicative) transitivizer *-cit /-xit/*, which has control semantics, are fully compatible with stative marking:

between the languages are taken into account, stative causatives in St'át'imcets are semantically close to stative control transitives in ʔayʔaǰuθəm: in particular, they also have a similar maintaining state reading.

(4) *St'át'imcets:*

a. **Directive (control) transitive**			b. **Stative causative**		
áts'x**en**	/ʔáċx̣-**ən**/	'see it'	**(e)s**7ats'x**s**	/**(ʔə)s-**ʔáċx̣-**s/**	'be watching it'
téqe**n**	/téq-**ən**/	'touch it'	**(e)s**teq**s**	/**(ʔə)s-**téq-**s/**	'be holding it'
cát**an**'	/xát-**aṉ**/	'lift it'	**(e)s**cat.**s**	/**(ʔə)s-**xát-**s/**	'be holding it up'

Another goal of this paper is to describe these maintaining state interpretations and their relationship to the 'resultative' type interpretations shown in (1–2).

The remainder of the paper is organized as follows. Section 2 discusses the meaning of statives built on bare roots, including the similarities and differences between ʔayʔaǰuθəm and St'át'imcets. Section 3 examines the distribution and meaning of stative morphology on transitive verbs in the two languages. Section 4 concludes.

2 Statives built on bare roots

Eventive bare roots in ʔayʔaǰuθəm and St'at'imcets are unaccusative and telic. When the stative morpheme combines with a bare root, the form is a 'resultative' predicate (5–6), repeated from (1–2).[4]

(5) *ʔayʔaǰuθəm:*

a. **Eventive**			b. **Stative**		
ƛəpxʷ	/ƛəpxʷ/	'get broken'	ƛəp**ɛ́**xʷ	/ƛəp**<í>**xʷ/	'be broken'
təq	/təq/	'get closed'	təq**ɛ́t**	/təq-**ít/**	'be closed'
gəq̓	/gəq̓/	'get opened'	gəq̓**ɛ́t**	/gəq̓-**ít/**	'be open'

(6) *St'át'imcets:*

a. **Eventive**			b. **Stative**		
mays	/mays/	'get fixed'	**(e)s**mays	/**(ʔə)s-**máys/	'be fixed'
pulh	/puɬ/	'get boiled'	**(e)s**púlh	/**(ʔə)s-**púɬ/	'be boiled'
tseq	/cəq/	'get put face up'	**(e)s**tséq	/**(ʔə)s-**cə́q/	'be put face up'

(i) *St'át'imcets:*

stcúsmin'**ci**ts.
s-txʷús-miṅ**-xi[t**]-c
STAT-look-RLT-**RDR-**1SG.OBJ
'Mind it for me.'

(ii) *St'át'imcets:*

wá7lhkan	**s**cweyáyawt**cit**	kw sBill	ta pal7usá7a.
waʔ=łkan	**s-**xʷəyáyawt**-xit**	kʷ=s-Bill	ta=palʔ-usáʔ=a
IPFV=1SG.SBJ	**STAT-**owe**-RDR**	DET=NMLZ-Bill	DET=one-round.thing=EXIS

'I owe Bill one dollar.'

[4] There are apparent exceptions to this generalization, pointed out in Watanabe (2003:416). We leave these aside for future research and focus here on the general pattern.

The term ‘resultative’ is only a descriptive label, however, not an analysis, and it wrongly groups statives in ʔayʔaǰuθəm and St’át’imcets together.

Adopting terminology originally from Parsons (1990), we argue that the ʔayʔaǰuθəm ‘resultatives’ in (1) encode TARGET STATES, while the St’át’imcets ‘resultatives’ in (2) encode RESULT STATES. Kratzer (2000) uses these terms to describe two different subclasses of the German adjectival passive: those that encode the (potentially temporary) state brought about by the occurrence of a change-of-state predicate, and those that encode the state of an event having occurred (a state that exists forever after the occurrence of any event). The first kind of state she calls a target state, and the second a result state. An example of a target state passive is given in (7), while an example of a result state passive is given in (8). The target state passive in (7) is compatible with *immer noch* ‘still’ since the state described is temporary, while the result state passive in (8) is not, because result states are by definition permanent.[5]

(7) *German:*

Die	Geisslein	sind	immer noch	versteckt.
The	little goats	are	still	hidden.

(8) *German:*

Das	Theorem	ist	(* immer noch)	bewiesen.
The	theorem	is	(* still)	proven.

As already hinted in the characterizations above, the lexical aspectual properties of the predicate determine which reading a German adjectival passive will receive. If a stem encodes an event leading to a target state, the adjectival passive built on this stem will have a target state reading. If a stem does not encode a target state, the adjectival passive built on this stem will have a result state reading.

In Kratzer (2000), the stativizer for target state readings combines with a predicate that encodes both an event and a target state and existentially closes the event argument, backgrounding the event and foregrounding the target state, as in (9).

(9) $\lambda R \lambda s \exists e \, . R(s)(e)$ (Kratzer 2000:8)

This means that target states can only be built from predicates that lexically encode a target state argument, in contrast to result states, which simply require that the event described by the predicate has occurred preceding the reference time. Kratzer characterizes the result state stativizer as an aspectual operator which returns a predicate of times, as shown in (10).

(10) $\lambda P \lambda t \exists e \, . P(e) \,\&\, \tau(e) < t$ (Kratzer 2000:12)

[5] Note that if a state passive passes the *immer noch* ‘still’ test, this distinguishes it as a target state passive, but if it fails the test, this does not necessarily mean that it is a result state passive; individual-level target states like ‘dead’ do not typically pass the test except in exceptional contexts, such as where the dead come back to life (Kratzer 2000:3).

2.1 ʔayʔaǰuθəm target state statives

We show that ʔayʔaǰuθəm statives built on bare roots are only licensed when the predicate provides a target state and this target state holds at the reference time.

In order to investigate the distinction between target and result states in the languages under investigation, we designed storyboards to capture a target state interpretation (if available) for a specific root. Over the course of the story, the target state was then reversed or altered to test if it needed to hold at the reference time for felicitous use of the stative-marked form. We also noted whether the stative form was volunteered in each context by the speaker, and then checked whether the stative form could be felicitously used in each context in follow-up elicitation.

Each picture was shown as an individual image in a "flipbook-style", rather than in a traditional "comic-style" storyboard. This allowed for more targeted elicitation, prompting the description of specific semantic contexts with images progressing through minimal adjustments, while not allowing the speaker to look ahead or view other images of the story at the same time.

Our Broken Cup storyboard is illustrated in Figures 1–7; the captions provide a minimal description of the English prompt associated with each image. We walked through the storyboards with our ʔayʔaǰuθəm-speaking consultants in English, and then had them go through and tell the story in ʔayʔaǰuθəm. Subsequently, we went back to the most critical images (showing the key semantic contrasts) and asked whether target ʔayʔaǰuθəm sentences could be used to describe the image. This resulted in a combination of spontaneous speech and judgements on the grammaticality and felicity of constructed sentences.

Figure 1: Marianne had a cup.

Figure 2: Marianne dropped her cup.

Figure 3: Marianne's cup broke.

Figure 4: The cup is broken.

Figure 5: Marianne picked up the pieces.

Figure 6: Marianne glued the cup together.

Figure 7: The cup is glued back together. ("Can you use the stative?")

The results for this storyboard with one ʔayʔaǰuθəm speaker are given in (11). While the consultant did not initially volunteer the form in (11a) for Figure 4, she found it perfectly felicitous when offered as a description of this point in the story. In contrast, the same stative-marked form was rejected when provided as a description of Figure 7, where the target state has been reversed (11b).

(11) *ʔayʔaǰuθəm:*

a. *Context: The cup is broken. (Figure 4)*
pi:ɬ**ɛ́t**.
piɬ**-ít**
get.shattered-**STAT**
'It's shattered.' (sf)

b. *Context: The cup was broken but has been repaired. Cracks are visible. (Figure 7)*
#pi:ɬ**ɛ́t**.
piɬ**-ít**
get.shattered-**STAT**
'It's shattered.' (sf)

A second set of pictures, extracted from a storyboard depicting a coat being ripped and then sewn up, is shown in Figure 8.[6] As with the sentences elicited for the Broken Cup storyboard (11),

[6] In Figure 8, we show only the most crucial images from the Ripped Coat storyboard; we adopt this practice for the remainder of the paper.

the ʔayʔaǰuθəm sentence with the stative form in (12a) was judged felicitous for the left-hand panel of Figure 8, which depicts the coat as ripped. The same form was judged infelicitous for the right-hand panel of Figure 8, at which point the coat has been repaired, as shown in (12b). Note that even visible evidence of the previous target state, such as cracks in the repaired cup in Figure 7 and stitches on the repaired coat in Figure 8 (righthand panel), was not sufficient for felicitous use of the stative form once the target state was reversed.

Figure 8: Daniel's coat caught on a tree and ripped (left), but Gloria sewed it up (right).

(12) *ʔayʔaǰuθəm:*

a. *Context: Daniel goes for a walk in the woods. His coat gets snagged on a tree and torn. (Figure 8, left-hand panel)*

paχ**ét**	tə kɛpos	Daniel.
pəx̣**-ít**	tə=kapu-s	Daniel
get.ripped-**STAT**	DET=coat-3POSS	Daniel

'Daniel's coat is ripped.' (sf)

b. *Context: Gloria fixes Daniel's coat. It's still possible to see where it's been mended. (Figure 8, right-hand panel).*

#paχ**ét**	tə kɛpos	Daniel.
pəx̣**-ít**	tə=kapu-s	Daniel
get.ripped-**STAT**	DET=coat-3POSS	Daniel

'Daniel's coat is ripped.' (sf)

The past tense suffix *-oł /-(ʔ)uł/* was volunteered in (13) as a means of rescuing (12b.)

(13) *ʔayʔaǰuθəm:*

Context: Gloria fixes Daniel's coat. It's still possible to see where it's been mended. (Figure 8, right-hand panel)

paχ**étoł**	tə kɛpos	Daniel.
pəx̣**-ít-uł**	tə=kapu-s	Daniel
get.ripped-**STAT-PST**	DET=coat-3POSS	Daniel

'Daniel's coat was ripped.' (vf)

The past tense suffix shifts the reference time from the point in time represented by the picture (when the target state does not hold), to a previous point in the story (when the target state does hold).[7]

Some ʔayʔaǰuθəm bare roots we tested using storyboards turned out to be ungrammatical with stative morphology. For instance, *ʔɛ:mét /ʔim-ít/*, from *ʔɛm- /ʔim-/* 'step', was not accepted by any of our ʔayʔaǰuθəm-speaking consultants, even when they were provided with a context designed to facilitate a target state reading (see below for a contrast with the equivalent root in St'át'imcets). The storyboard in Figure 9 (the Trodden Worm storyboard) was provided to facilitate a potential target state reading for *ʔɛ:mét /ʔim-ít/*, giving the action a visible consequence. As seen in (14), however, *ʔɛ:mét /ʔim-ít/* was not accepted and *maʔt̓ɛ́k̓ /mat̓<í>k̓/* 'squished' was suggested instead.

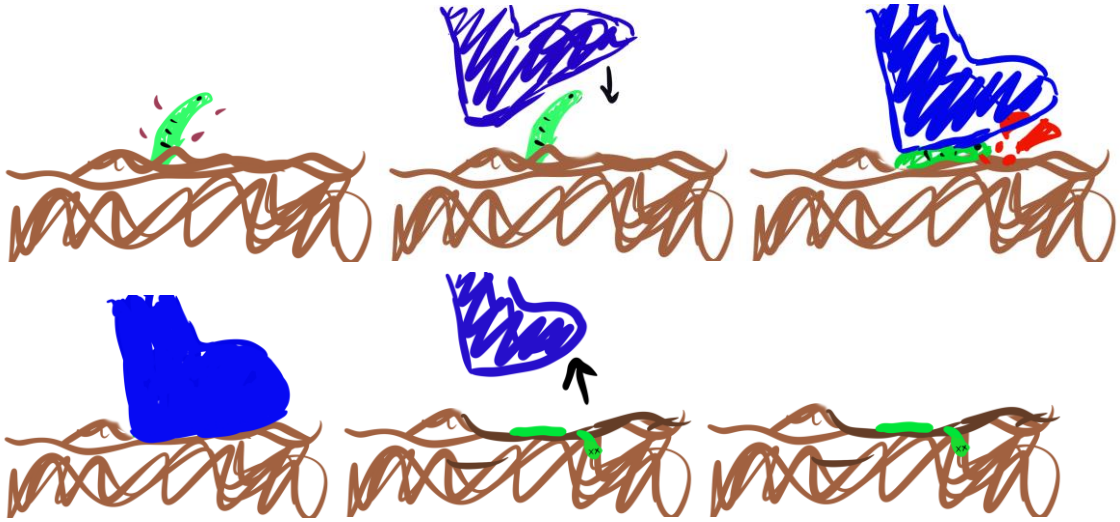

Figure 9: The Trodden Worm storyboard.

(14) *ʔayʔaǰuθəm:*

Context: The worm has been squished (final two images in bottom right of The Trodden Worm storyboard in Figure 9.[8]

a. * ʔɛ:m**ét** t̓$^{\theta}$ɛt̓$^{\theta}$ɛk̓^{w}.
ʔim-**ít** t̓$^{\theta}$it̓$^{\theta}$ik̓^{w}
step-**STAT** worm
'The worm is stepped on.' (sf)

b. mat̓ɛ́k̓ t̓$^{\theta}$ɛt̓$^{\theta}$ɛk̓^{w}.
mət̓**<i>**k̓ t̓$^{\theta}$it̓$^{\theta}$ik̓^{w}
get.squished**<STAT>** worm
'The worm is squished.' (vf)

[7] ʔayʔaǰuθəm has a null non-future tense with similar semantic properties to its equivalent in St'át'imcets (Matthewson 2006). The default reference time for unmarked stative forms is the utterance time, but this can be contextually overridden, when stative forms appear in narratives about past happenings, for instance.

[8] While nouns in argument positions in ʔayʔaǰuθəm are generally preceded by determiners (with the exception of proper names), they are frequently elided in connected speech, especially among younger speakers (see e.g., Watanabe 2003:79, Huijsmans et al. 2018:330).

The restriction demonstrated by the examples in (14) is predicted if the ʔayʔaǰuθəm stative marker only combines with roots that lexically encode a target state, and *ʔɛm /ʔim/* 'step' does not do so. (Recall that the stative morpheme itself does not introduce a target state, but rather foregrounds a state already encoded by the root, as expressed in the formula in 9.) Additional rejected stative-marked forms in ʔayʔaǰuθəm are given in (15). We provided contexts intended to facilitate target state readings for these predicates, and also asked in follow-up questions whether the stative-marked forms were ever possible: however, consultants were unable to find any context where stative marking would be acceptable and seemed to reject the stative-marked forms as simply ungrammatical, rather than infelicitous in a given context.

(15) *ʔayʔaǰuθəm:*

a. *Context: There's is a murder victim found with a note in his mouth.*
* qʷoːmɛ́**t** tə pipa.
qʷum-**ít** tə=pipa
put.in.mouth-**STAT** DET=paper
'The paper is in *(his) mouth.' (sf)

b. *Context: No one is supposed to touch the delicate vases, but I find fingerprints on one (using a picture of a vase with fingerprints on it to support the context).*
* qəpɛ́**t** tə nəpamɛns kʷ qʷasəm.
qəp-**ít** tə=nəp-amin-s kʷ=qʷasəm
get.touched-**STAT** DET=get.put.in-instrument-3POSS DET=flower
?? 'The vase is touched.' (sf)

c. *Context 1: It says in the newspaper that one of the fugitives in a robbery case has been seen.*
Context 2: It says in the newspaper that one of the fugitives in a robbery case is being watched (tailed by a policeman).
* k̓ʷa k̓ʷʊnɛ́**t** šɛ pɛpaʔa.
k̓ʷa k̓ʷən-**ít** šə=pipaʔa
RPT get.seen-**STAT** DET=one.person
?? 'One guy is seen/watched.' (sf)

d. i. *Context 1: One ball is across the field and must have been kicked over there.*
* yɪmɛ́**t** tə laspal.
yəm-**ít** tə=laspal
get.kicked-**STAT** DET=ball
?? 'The ball is kicked.' (sf)

ii. *Context 2: My wall has a footprint on it where someone kicked it.*
* č̓ɛ yɪmɛ́**t** tə ƛ̓oqʷtən.
č̓a yəm-**ít** tə=ƛ̓əqʷtən
INFER get.kicked-**STAT** DET=wall
?? 'The wall must be kicked.' (sf)

Which particular roots are compatible with stative marking in ʔayʔaǰuθəm is not always predictable on the basis of English intuitions. While *closed*, *open*, and *broken* encode a target state

in English, like the corresponding forms in ʔayʔaǰuθəm (see 5a–c), and can therefore function as adjectival passives in English (as in e.g., *the closed door*), other predicates that can form target state statives in ʔayʔaǰuθəm do not translate into well-formed adjectival passives in English. For instance, (16) is judged grammatical and felicitous by our ʔayʔaǰuθəm consultants when describing a window that is lifted up and left open, but the corresponding English adjectival passive (as in the translation below) sounds odd.

(16) *ʔayʔaǰuθəm:*

Context: A window that opens by sliding upwards is currently open.
qah**ét** tə məmḵeyustən.
qəh-**ít** tə=məmḵayustən
get.lifted-**STAT** DET=window
?? 'The window is lifted.'/ ?? 'a lifted window' (sf)

The fact that the distribution of the ʔayʔaǰuθəm stative is not predictable on the basis of translation is not surprising; the ability of a root to combine with stative morphology depends on its lexical semantic properties, and these properties may differ between translation equivalents in different languages. While the lexical nature of the restriction necessarily makes it difficult to determine exactly which roots will be able to combine with the stative, rough generalizations are possible. What seems to be required of ʔayʔaǰuθəm roots to allow them to combine with the stative is that they describe a change-of-state or change-of-position that continues to affect the argument undergoing the change after the event is completed. The examples in (14a–b) differ from the examples in (5) in requiring ongoing participation from the agent to maintain the effect on the patient, while with (15c–d) it is not clear that the predicate encodes an effect on the theme/patient argument at all; these roots seem to encode only an action/event.[9]

2.2 St'át'imcets result state statives

Our results for St'át'imcets are different. We used the same storyboards and a similar methodology. The stories were presented using a St'át'imcets script as a prompt to guide the elicitation by 'co-narration'. The pictures in the storyboard were presented in the context of a conversation, where the consultant was asked questions in St'át'imcets to prompt an appropriate response or asked if a sentence in St'át'imcets was acceptable for a given picture.

Using this methodology, we found that for stativized bare root intransitives, the target state does *not* have to hold at the reference time: in other words, St'át'imcets statives seem to be sensitive only to the result state rather than the target state. We illustrate this finding with three storyboards.

The first storyboard involves the root √*cik /*√*xik/* 'push', which surfaces as the bare intransitive verb *cik /xik/* 'get pushed' and as the stative-marked verb *(e)scík /(ʔə)s-xík/* 'be pushed'. In the story, a car breaks down and the driver and passenger must figure out how to get it moving again. The driver and the passenger push it to try and get it to start, as pictured in the left-hand panel of Figure 10. Their efforts are unsuccessful, and nothing happens, as illustrated in the right-hand panel of Figure 10. At that point, the car has been pushed (i.e., there is a result state), but the pushing has had no effect (i.e., there is no discernable target state).

[9] *yım- /yəm-/* 'kick' in (15d) refers only to the act of kicking, rather than kicking something *somewhere*, and so is perfectly compatible with the action of kicking something stationary, such as a large rock or tree stump. This is different from a predicate like *qəh /qəh/-* 'lift' in (16), which necessarily involves a change of position for the patient argument.

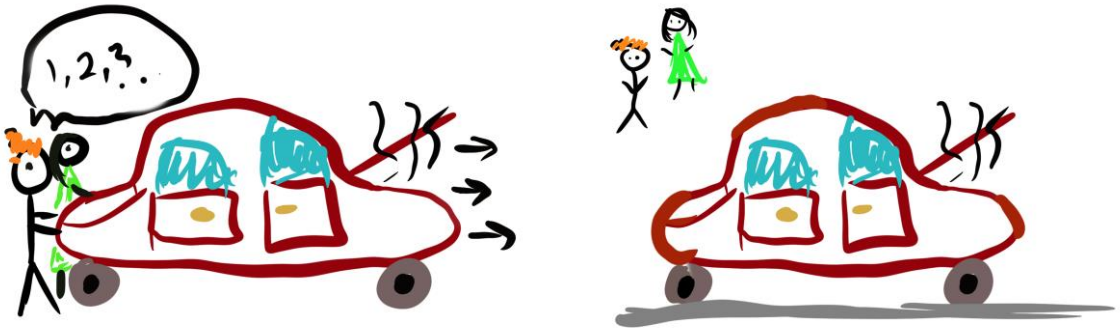

Figure 10: The Breakdown storyboard.

In response to the right-hand panel in Figure 10, our St'át'imcets-speaking consultant was asked whether the stative form *(e)scík /(ʔə)s-xík/* would be appropriate.

(17) *St'át'imcets:*

Interviewer: 'What about ***es****cík /****ʔes****-xík/*, if it's just been pushed?'
Consultant: '*Plan* ***es****cík /plan* ***ʔəs****-xík/* (= 'already pushed') would work.'[10]

The second storyboard depicts a visit by two friends to a carnival, where they take turns shooting at bottles in a shooting gallery. If they hit the bottle and it breaks, they win a prize. The first of the friends to try their luck hits a bottle, which shatters, as shown in the left-hand picture in Figure 11; but when the second friend tries, his bullet bounces off the bottle and it remains intact, as shown in the right-hand picture.

Figure 11: The Shooting Gallery storyboard.

Following the events depicted in Figure 11, a dispute ensues between the friends about whether a 'hit bottle' wins a prize, or just a 'shattered bottle'. The crucial test sentence is given in (18). There is no target state associated with the stative form *esqám't /ʔəs-qáṁt/* 'hit', yet it was judged to be felicitous in this context.

[10] It is important to note that the aspectual auxiliary *plan* 'already' does not shift the reference time into the past: its meaning is close to that of the perfect in English.

(18) *St'át'imcets:*

Wenácw	ṭ'u7	kwas		**esqám'ṭ**,	tsúkw ṭ'u7
wənáxʷ=ɫ̓uʔ		kʷas		**ʔəs-qaṁt**	cúkʷ=ɫ̓uʔ
true=EXCL		D/C+NMLZ+IPFV+3POSS		**STAT-get.hit**	finish=EXCL
kwas		cw7aoz	kwas		**esśék'ẉ**.
kʷas		xʷʔaz	kʷas		**ʔəs-sák**ʷ
D/C+NMLZ+IPFV+3POSS		NEG	D/C+NMLZ+IPFV+3POSS		**STAT-get.shattered**

'It's true that it's been hit, it just hasn't been broken.' (sf)

Our third storyboard involves the 'Trodden Worm' storyboard given in Figure 9, but this time rewritten with a different (happier!) ending, as shown in Figure 12.

Figure 12: Trodden worm escapes unscathed in The Trodden Worm Redux.

In the 'Trodden Worm (redux)' scenario in Figure 12, the worm survives being trodden on by the boot with no apparent ill-effects. The consultant remarks:

(19) *St'át'imcets:*

Esk'ẉwát,	ṭ'u7	wa7 t'u7	áma.
ʔəs-kʷwát,	ɫ̓uʔ	wáʔ=ɫ̓uʔ	ʔáma
STAT-get.trodden	but	IPFV=EXCL	good

'He's been stepped on, but he's still good.' (vf, consultant's translation)

Once again, there is no detectable target state after the event has culminated (the worm wriggles away unscathed), yet the stative prefix is felicitous in this context. In other words, stative marking in St'át'imcets is sensitive to the result state rather than the target state, as also indicated by the English translation provided by the consultant in (19), which uses the perfect, the closest equivalent to a result state-denoting operator in English.

We obtained similar results with two other storyboards (not shown in this paper), involving *(e)sk'íh /(ʔə)s-kíh/* 'be picked up (of a baby)' and *(e)ssék'w /(ʔə)s-sək'ʷ/* 'be broken (of something brittle)'. We conclude that there is a genuine (and surprising) difference between the representation of stative predicates built on bare intransitives in ʔayʔaǰuθəm and St'át'imcets: the former encode target states, while the latter encode result states.

3 Transitive statives

In this section, we examine the semantic interpretation of stative transitive predicates. As will be seen in the examples below, we find that the stative morpheme co-occurs with both the control and

causative transitivizers in ʔayʔaǰuθəm, but with different interpretations. When the stative morpheme co-occurs with the control transitive, the resulting predicate does not encode a target state provided by the root, but instead yields a 'maintaining' state reading: that is, a state which is maintained by an agent in control of the event described by the root (see also Watanabe 2003:430). In contrast, when the stative morpheme co-occurs with the causative transitivizer, the resulting predicate often encodes a target state, but can also encode a maintaining state reading, and in some cases is ambiguous between the two (see also Watanabe 2003:443). We did not find that the stative morpheme could co-occur productively with the non-control transitivizer (see also Watanabe 2003; cf. Mellesmoen & Andreotti 2017).

In St'át'imcets, there are no control transitive (directive) statives (see example 4 above), and in contrast to ʔayʔaǰuθəm, causative statives seem to only have a maintaining state reading. This finding should be treated with caution, however, since we have not yet examined transitive statives using storyboards, and therefore do not yet have negative data on possible missing readings. Nevertheless, if this finding does hold up to further scrutiny, the lack of a target state reading with transitive statives in St'át'imcets is consistent with its absence on bare root statives, as discussed in the previous section.

Our goal in this section is limited: we aim to produce a preliminary picture of available readings, rather than a full semantic analysis. We leave a more complete account for future work.

3.1 Transitive statives in ʔayʔaǰuθəm

We begin with ʔayʔaǰuθəm. As illustrated in (20), when stative marking and the control transitivizer co-occur, the result is a maintaining state reading.

(20) *ʔayʔaǰuθəm:*

a. *Context: The wind blew papers that Gloria was carrying out of her hands. Henry stopped one with his foot.*
ʔɛ:m**ɛ́t**əs tə paʔa.
ʔim-**ít**-as tə=paʔa
step-**CTR<STAT>**-3ERG DET=one
'He is holding one in place with his foot.' (sf)

b. qəp**ɛ́t**əs.
qəp-**í-t**-as
get.touched-**STAT-CTR**-3ERG
'She is feeling, caressing it.' (vf)

c. *Context: Gloria is going on a trip...*
gayɛtəm k̓ʷa səm Gloria Daniel k̓ʷʊn**ɛ́t**əs č̓ɛn̓os.
gay-at-əm=k̓ʷa=səm Gloria Daniel k̓ʷən-**í-t**-as č̓an̓u-s
ask-CTR-PASS=RPT=FUT Gloria Daniel get.seen-STAT-CTR-3ERG dog-3POSS
'Gloria will ask Daniel to watch her dog.' (vf)

In combination with the control transitivizer, the stative morpheme occurs with roots that cannot directly be made stative, such as *ʔɛm- /ʔim-/* 'step', *qəp- /qəp-/* 'touch', and *k̓ʷʊn- /k̓ʷən-/* 'see' (cf. 14–15). We take this to mean that the control transitivizer combines with the root prior to the stative morpheme in these forms.

While maintaining state statives are translated into English using the progressive, they have a distinct interpretation from progressive forms in ʔayʔaǰuθəm.[11] This is particularly clear where the same stem can appear in both stative and progressive forms, as illustrated in (21)–(23). As when investigating intransitive statives, we used pictures and storyboards to elicit these forms. For instance, Figure 13 was used to elicit the negative data in (21ai) and the positive data in (21bi). Figure 14 was used to elicit the positive data in (21aii) and the negative data in (21bii).

Figure 13: Henry steps on papers as he walks.

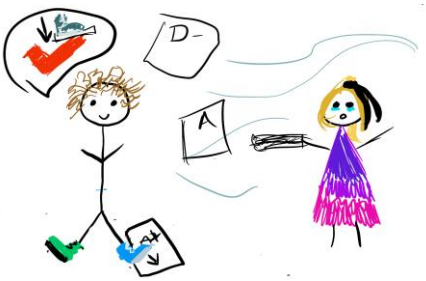

Figure 14: Henry steps on a paper to keep it in place.

(21) *ʔayʔaǰuθəm:*

a. **Progressive**

i. *Context: There are papers strewn over the floor of Henry's office. To get across his office, he ends up stepping on them*

# ʔɛm**ɛ́t**əs	šɛ pəppipas.
ʔim-**ít**-as	šə=pəp~pipa-s
step-**CTR<STAT>**-3ERG	DET=PL~paper-3POSS

'He is stepping on his papers.' (sf)

ii. *Context: The wind blew papers that Gloria was carrying out of her hands. Henry stopped one with his foot.*

ʔɛm**ɛ́t**əs	šɛ paʔa.
ʔim-**ít**-as	šə=paʔa
step-**CTR<STAT>**-3ERG	DET=one

'He is stepping on one.' (sf)

b. **Stative**

i. *Context: There are papers strewn over the floor of Henry's office. To get across his office, he ends up stepping on them*

ʔɛʔɛm**ɛt**əs	šɛ pəppipas.
ʔi~ʔim-**it**-as	šə=pəp~pipa-s
PROG~step-**CTR-**3ERG	DET=PL~paper-3POSS

'He is stepping on his papers.' (sf)

[11] Bar-el (2005) argues that CV- (C_1) reduplication in Sḵwx̱wú7mesh encodes progressive aspect, rather than imperfective aspect. There are several reasons to think that the same is true of ʔayʔaǰuθəm. C_1 reduplication does not occur on stative predicates (Watanabe 2003:412), and we further observe that C_1 reduplication does not lead to habitual readings on its own (an additional adverb is used). Both these behaviours would be expected of an imperfective, but not a progressive morpheme (e.g. Comrie 1976). See 3.2 for further remarks on the difference between imperfective marking in ʔayʔaǰuθəm and St'át'imcets.

ii. *Context: The wind blew papers that Gloria was carrying out of her hands. Henry stopped one with his foot.*
ʔi~ʔim-it-as
PROG~step-**CTR**-3ERG
'He is stepping on it.' (sf)

(22) *ʔayʔaǰuθəm:*

a. **Stative**

i. *Context: Picture of a man pushing on the wall of a shed that's being built to keep it in place.*
ǰu:θ**ót**əs tə laplaš.
ǰuθ-**út**-as tə=laplaš
push-**CTR<STAT>**-3ERG DET=board
'He's holding the board up.' (vf)

ii. *Context: Picture of a man pushing on a car stuck in the mud.*
#ǰu:θ**ót**əs tə ʔatnopɛl.
ǰuθ-**út**-as tə=ʔatnupil
push-**CTR<STAT>**-3ERG DET=board
'He's pushing the car.' (vf)
Consultant's comment: I don't know why he would be doing that. I don't think he has strength to hold it in place.

b. **Progressive**

i. *Context: Picture of a man pushing on the wall of a shed that's being built to keep it in place.*
#**ǰu**ǰuθotəs tə laplaš.
ǰu~ǰuθ-**ut**-as tə=laplaš
PROG~push-**CTR**-3ERG DET=board
'He's pushing on the board.' (sf)
Consultant's comment: ǰuǰuθotəs *is pushing something forward.*

ii. *Context: Picture of a man pushing on a car stuck in the mud.*
ǰuǰuθotəs tə ʔatnopɛl.[12]
ǰu~ǰuθ-ut-as tə=ʔatnupil
PROG~push-**CTR**-3ERG DET=car
'He's pushing on the car.' (vf)

[12] The car does not need to be actually moving for the progressive to be used instead of the stative. The progressive is still preferred in (iii), even if the man is unable to get the car to move, likely because predicates with the control transitive do not entail successful completion, only initiation of the action.

(23) *ʔayʔaǰuθəm:*

a. **Stative**

i. *Context: Marianne is pushing down a suitcase so Gloria can zip it up.*
λ̓ɛ:t̓$^{\theta}$**ɛ́t**əs tə χ^{w}ɛłɛmowuł.
λ̓it̓$^{\theta}$-**ít**-as tə=χ^{w}iłimuwuł
push.down-**CTR<STAT>**-3ERG DET=suitcase
'She's pushing down on the suitcase.' (vf)

ii. *Context: Marianne is flattening a batch of cookies with a fork.*
#λ̓ɛ:t̓$^{\theta}$**ét**əs / λ̓ɛ:t̓$^{\theta}$**égat**əs.
λ̓it̓$^{\theta}$-í-t-as / λ̓it̓$^{\theta}$-**íg-at**-əs
push.down-STAT-CTR-3ERG / push.down-**PL<STAT>-CTR**-3ERG
'She's pushing them down.' (sf)
Consultant's comment: That would mean she's keeping her hands on it or her hand on it.

b. **Progressive**

i. *Context: Marianne is pushing down a suitcase so Gloria can zip it up.*
#**λ̓ɛ**λ̓ɛt̓$^{\theta}$**ɛt**əs tə χ^{w}ɛłɛmowuł.
λ̓i~λ̓it̓$^{\theta}$-**it**-əs tə=χ^{w}iłimuwuł
PROG~push.down-**CTR**-3ERG DET=suitcase
'She's pushing down on the suitcase.' (sf)

ii. *Context: Marianne is flattening a batch of cookies with a fork.*
λ̓ɛλ̓ɛt̓$^{\theta}$eg**at**əs.
λ̓i~λ̓it̓$^{\theta}$-ig-**at**-əs
PROG~push.down-PL-**CTR**-3ERG
'She's pushing them down.' (sf)

Stative control transitives forms in ʔayʔaǰuθəm only have maintaining state readings: they cannot have target state readings. In some cases, this means that a stative control transitive form does not exist (the 'b' forms of 24–27), while in others the stative control transitive form does exist, but can only have a maintaining state reading (28b). For a transitive target state reading, a causative form is used, built from an intransitive target state stative (as in the 'a' forms in 24–28).[13] We used

(iii) *ʔayʔaǰuθəm:*

a. **ǰu**ǰuθ**ot**əs tə ʔatnopɛls ʔi x^{w}a čɛməs ʔi tayq.
ǰu~ǰuθ-**ut**-as tə=ʔatnupil-s ʔiy x^{w}aʔ čam̓=as ʔiy tayq
PROG~push-**CTR**-3ERG DET=car-3POSS CONJ NEG QUEX=3SBJV CONJ get.moved
'He's pushing his car and it won't budge.' (vf)

b. #ǰu:θ**ót**əs tə ʔatnopɛls ʔi x^{w}a čɛməs ʔi tayq.
ǰuθ-**út**-as tə=ʔatnupil-s ʔiy x^{w}aʔ čam̓=as ʔiy tayq
push-**CTR<STAT>** DET=car-3POSS CONJ NEG QUEX=3SBJV CONJ get.moved
'He's pushing his car and it won't budge.' (sf)
Consultant's comment: [with ǰu:θót], it's like you're holding it in place.

[13] As reported in Watanabe (2003:443), stativity appears to be marked twice with causatives: once with the stativizer suffixed or infixed to the root and once within the causative suffix (with the infixation of *-i-*). We

a combination of pictures and verbal contexts to elicit these forms; the positive and negative data in (28) were elicited using the pictures in Figure 15, for instance, with the right-hand panel showing the crucial case, since the girl is no longer engaged in the action, but the target state holds.

(24) *ʔayʔaǰuθəm:*

Context: Freddie left his door open for us to go in the house.

a. gəq̓ét**st**ɛxʷəs tə ʔɛmɛns.
gəq̓-**ít-st<i>xʷ**-əs tə=ʔimin-s
get.opened-**STAT-CAUS<STAT>**-3ERG DET=door-3POSS
'He has his door open.' (sf)

b. * gəq̓**ét**əs tə ʔɛmɛns.
gəq̓-**í-t**-əs tə=ʔimin-s
get.opened-**STAT-CTR**-3ERG DET=door-3POSS
'He has his door open.' (sf)

(25) *ʔayʔaǰuθəm:*

Context: I got some fish and have frozen it.

a. tag**ítstɛxʷ**č šɪtᶿ ǰɛnxʷ.
taʔg-**ít-st<i>xʷ**=č šə=tᶿ=ǰanxʷ
freeze-**STAT-CAUS<STAT>**=1SG.SBJ DET=1SG.POSS=fish
'I have my fish frozen.' (sf)

b. * tag**ít**č tᶿ ǰɛnxʷ.
taʔg-**í-t**=č tᶿ=ǰanxʷ
freeze-**STAT-CTR**=1SG.SBJ 1SG.POSS=fish
'I have my fish frozen.' (sf)

(26) *ʔayʔaǰuθəm:*

Context: I took a fish out of the freezer and now it is thawed and ready to cook.

a. ǰɛχʷ**ɛ́tstɛx**ʷč tətᶿ ǰɛnxʷ.
ǰaχʷ**-ít-st<i>xʷ**=č tə=tᶿ=ǰanxʷ
melt-**STAT-CAUS<STAT>**=1SG.SBJ DET=1SG.POSS=fish
'I have my fish thawed.' (sf)

b.?* ǰɛχʷ**á**tč tətᶿ ǰɛnxʷ.
ǰaχ̣ʷ**-át**=č tə=tᶿ=ǰanxʷ
melt-**CTR<STAT>**=1SG.SBJ DET=1SG.SBJ=fish
'I have my fish thawed.' (sf)

have found that this is not obligatory (see e.g. 29 and 31), and that there does not seem to be any clear semantic difference between forms where the stative is also marked within the causative transitivizer and forms where it is not.

(27) *ʔayʔaǰuθəm:*

Context: I've just finished barbecuing my fish.

a. ṫɛ:nɛ́**tstɛxʷ**č tətᶿ ǰɛnxʷ.
ṫin-**ít-st<i>xʷ**=č tə=tᶿ=ǰanxʷ
get.bbq'd-**STAT-CAUS<STAT>**=1SG.SBJ DET=1SG.POSS=fish
'I have my fish barbecued.' (sf)

b. * ṫɛ:n**ɛ́t**č tətᶿ ǰɛnxʷ.
ṫin-**ít**=č tə=tᶿ=ǰanxʷ
get.bbq'd-**CTR<STAT>** DET=1SG.POSS=fish
'I have my fish barbecued.' (sf)

(28) *ʔayʔaǰuθəm:*

Context: Picture with a little girl having pressed down one cookie with a fork. She's no longer pressing on it.

a. ƛ̓ɛ:ṫᶿ**ɛ́tstɛxʷ**əs.
ƛ̓iṫᶿ**-ít-st<i>xʷ**-əs
get.pushed.down**-STAT-CAUS<STAT>-**3ERG
'She has it pushed down.' (sf)

b. # ƛ̓ɛ:ṫᶿ**ɛ́t**əs.[14]
ƛ̓iṫᶿ**-ít**-as
get.pushed.down**-CTR<STAT>**-3ERG
'She has it pushed down.' (sf)

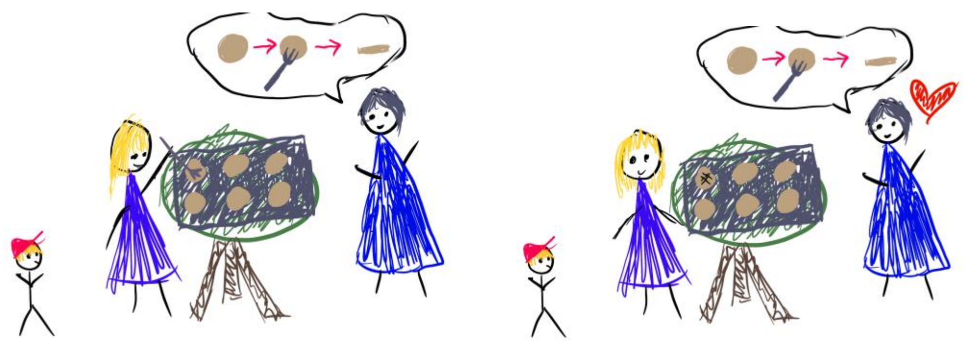

Figure 15: The girl is pushing the cookie down (left), and the girl has pushed the cookie down (right).

We speculate that the lack of target state readings with control transitives follows from the fact that control transitives never entail event culmination (e.g. J. Davis 1978, 2012 or Watanabe 2003 for ʔayʔaǰuθəm; see also Bar-el, H. Davis, & Matthewson 2005 for Sḵwx̱wú7mesh and St'át'imcets, and Jacobs 2011 for Sḵwx̱wú7mesh), even when built on roots that encode a target state. Since a target state can only hold when an event has culminated, stative morphology on a control transitive cannot encode a target state reading. Instead, a maintaining state reading obtains, but how exactly this reading comes about is a matter for future research.

[14] This form is good in a context where someone is maintaining downward pressure on something. See (13a).

Causative stative forms can have either target state or maintaining state readings. Examples of target state readings are given in (24–28) above, while maintaining state readings are given below in (29–31). Note that some of these seem to be interchangeable with stative control transitive forms, having — as far as we can ascertain at this point — the same interpretation (30–31, cf. 22a and 23a).

(29) *ʔayʔaǰuθəm:*

Context: Daniel is holding up a window so that a cat can come in.
qəh**ét̓sxʷ**əs tə məmk̓eyustən.
qəh-**ít-sxʷ**-əs tə məmk̓ayustən
get.lifted.up-**STAT-CAUS**-3ERG DET=window
'He is keeping the window lifted up.' (sf)

(30) *ʔayʔaǰuθəm:*

Context: Marianne is holding the lid of an overfilled suitcase down so that Gloria can zip it up.
ƛ̓ɛ:t̓ʲ**ét̓stɛxʷ**əs tə təqamɛns χʷɛɬɛmawuɬ.
ƛ̓it̓ʲ**-ít-st<i>xʷ**-əs tə=təq-amin-s x̣ʷiɬimawuɬ
get.pushed.down-**STAT-CAUS<STAT>**-3ERG DET=close-instrument-3POSS suitcase
'She is keeping the lid of the suitcase down.' (sf)

(31) *ʔayʔaǰuθəm:*

Context: Picture of a man pushing on the wall of a shed that's being built to keep it in place.
ǰu:θé**tsxʷ**əs.
ǰuθ**-ít-sxʷ**-as
get.pushed-**STAT-CAUS**-3ERG
'He is holding it in place by pushing.' (vf)

Figure 16: Marianne is holding the suitcase closed.

In some cases, only a maintaining state reading seems to be possible. We tried to elicit a target state reading for the causative stative form in (32) using Figure 18, for instance, but it was

infelicitous in this context, and could only be used in a context where the state was being maintained by the agent, such as that illustrated in Figure 17 (see example 29).

(32) *ʔayʔaǰuθəm:*

Context: Daniel lifted up a window and it caught so he could let go of it and it stayed open.[15]

#	qəh**ɛ́tsxʷ**əs	tə məmkʼeyustən.
	qəh-**ít-sxʷ**-əs	tə=məmkʼayustən
	get.lifted.up-**STAT-CAUS**-3ERG	DET=window

'He has the window lifted up.' (sf)

Figure 17: (The window fell back down after Henry tried to open it and) Daniel lifted the window.

Figure 18: Daniel let go of the window and it remained where he had lifted it to.

[15] We also tried the form *qəhítstixʷəs* in an almost identical context and the result was the same, as shown in (iv). As noted in footnote 13, we have been unable to find any clear semantic difference between stative causative forms where the stative marker also appears within the causative morpheme and forms where it does not.

(iv) *ʔayʔaǰuθəm:*

Context: Daniel lifted up a window and it caught, so he could walk away, and it stayed open.

#	qəh-**ít-st<i>xʷ**-əs.	
	get.lifted.up-**STAT-CAUS<STAT>**-3ERG	

'He has it lifted up.' (sf)

The absence of a target state reading for this form is puzzling from a compositional point of view, since *qəhét /qəhít/* 'lifted up' is grammatical as an intransitive target state stative (13); the addition of the causative transitivizer is therefore expected to result in a transitive target state reading. Further elicitation is still required to determine whether there are other intransitive target state statives that cannot be interpreted as transitive target state statives with the addition of the causative transitivizer. If not, *qəhétsxʷ /qəhítsxʷ/* may be treated as a lexicalized exception, but if other forms follow this same pattern, more work is needed to determine what is blocking the expected target state reading.

We turn now to a final puzzling fact concerning the combination of stative marking with transitivizers in ʔayʔajŭθəm: the absence of stative non-control predicates. When discussing the stative control transitives, we suggested that the absence of target state readings was due to the fact that control transitives do not entail culmination. Predicates that take the non-control transitivizer do entail culmination (e.g. Watanabe 2003:205), and therefore entail that the target state is reached when built upon roots encoding a target state. Therefore, we might expect to find stative non-control transitives with target state interpretations parallel to those given for the causative statives in (24–28). This does not seem to be the case, however: non-control forms are ungrammatical with *qəǰi /qəǰi/* 'still', which is compatible with (temporary) state predicates, even if given a context that would fit a stative use. We tried forms ending in *-nɛxʷ /-n<i>xʷ/*, as reported by Watanabe (2003:442) for the exceptional (lexicalized) non-control stative *toχʷnɛxʷ /təχʷnixʷ/* 'know', as well as forms where stative is marked solely by raised pitch, as described by Mellesmoen and Andreotti (2017).[16] Neither version was accepted by our consultants, who instead in each case substituted a causative stative form.

(33) *ʔayʔajŭθəm:*

Context: Freddie opened his door open earlier when it was warm out. Now it's quite cool but his door is still open.

a.	qəǰɛ ʔot	gəq̓**ét̓sxʷ**əs	tə ʔɛmɛns.
	qəǰi=ʔut	gəq̓**-ít-sxʷ**-as	tə=ʔimin-s
	still=EXCL	get.opened-STAT-CAUS-3ERG	DET=door-3POSS
	'He still has his door open!' (sf)		

b.	* qəǰɛ gəq̓**ú́xʷ**əs / gəq̓**né́xʷ**əs		tə ʔɛmɛns.
	qəǰi gəq̓**-ə́xʷ**-as / gəq̓**-n<í>xʷ**-as		tə=ʔimin-s
	still get.opened-**NCTR<STAT>**-3ERG		DET=door-3POSS
	'He still has his door open!' (sf)		

[16] Mellesmoen and Andreotti (2017) report that non-control transitive statives are formed productively in this manner. It is possible that our different findings are due to inter-speaker or dialect differences. Although we have worked with several other speakers, we have not had the opportunity to conduct the tests reported here with the two speakers whom Mellesmoen and Andreotti worked with. It is worth noting that the pattern of raised pitch observed by Mellesmoen and Andreotti is parallel to that found with control transitives and may represent an extension of that pattern to the non-control paradigm.

(34) *ʔayʔaǰuθəm:*

Context: I got some fish and froze it. I still haven't used it.

a. qəǰɛč ʔot taʔg**ítstɛ́x^{w}** šɪt^{θ} ǰɛnx^{w}.
qəǰi=č=ʔut təẇ**-ít-st<i>x^{w}** šə=t^{θ}=ǰanx^{w}
still=1SG.SBJ=EXCL get.frozen-**STAT-CAUS<STAT>** DET=1SG.POSS=fish
'I still have my fish frozen.' (sf)

b. * qəǰɛč ʔot tag**óx^{w}** / tun**éx^{w}** šɪt^{θ} ǰɛnx^{w}.
qəǰi=č=ʔut təẇ**-ə́x^{w}** / təw**-n<í>x^{w}** šə=t^{θ}=ǰanx^{w}
still=1SG.SBJ=EXCL get.frozen-**NCTR<STAT>** DET=1SG.POSS=fish
'I still have my fish frozen.' (sf)

(35) *ʔayʔaǰuθəm:*

Context: I have some butter melted in a pan and I'm keeping it warm so it stays melted. You aren't sure if I am still keeping the butter hot and ask me if I have melted butter that you could use on the vegetables.

a. ʔɛ, qəǰɛč ǰɛ:χ^{w}**ɛ́tstɛx^{w}** tə pətə.
ʔi qəǰi=č ǰaχ^{w}**-ít-st<i>x^{w}** tə=pətə
yes still=1SG.SBJ get.melted-**STAT-CAUS<STAT>** DET=butter
'Yes, I still have butter melted.' (sf)

b. * ʔɛ, qəǰɛč ǰɛχ^{w}**óx^{w}** / ǰɛχ^{w}**nɛ́χ^{w}** tə pətə.
ʔi qəǰi=č ǰaχ^{w}**-ə́x^{w}** / ǰaχ̣^{w}**-n<í>x^{w}** tə=pətə
yes still=1SG.SBJ get.melted-**NCTR<STAT>** det=butter
'Yes, I still have butter melted.' (sf)

At this point, we do not have an explanation for the absence of stative marking with non-control transitives. More work is required to determine the aspectual properties of the non-control transitive predicates before we can properly determine whether stative versions of these are blocked semantically, morphologically, or by some other means.

3.2 Transitive statives in St'át'imcets

Turning to St'át'imcets, as already mentioned (see footnote 3) the directive (control) transitivizer is blocked with the stative prefix, for what appear to be purely morphological reasons. Interior Salish languages largely lack non-control transitivizers, so this leaves the causative as the only transitivizer which occurs productively with stative marking.[17]

The following examples (from Alexander et al. in prep.) all show stative causatives with a maintaining state reading:

[17] We set aside here transitive verbs suffixed with one of the two applicative transitivizers *-cit /-xit/* (redirective) and *-min(') /-miṅ~-min/* (relational), which tolerate stative marking quite readily. We have yet to investigate the interpretation(s) of stative marking on applicative transitives.

(36) *St'át'imcets:*

T̓'ak	áta7	saq'w	ta haláw'a,	**es**xíms**s**as	ta sts'úqwaz'a.
ƛ̓ak	ʔátaʔ	saq̓^{w}	ta=haláẇ=a	**ʔəs-**x̣ím-**s**-as	ta=sc̓úq^{w}az̓=a
go.by	to.there	fly	DET=eagle=EXIS	**STAT-**clutch-**CAUS-**3ERG	DET=fish=EXIS

'An eagle went flying by, clutching a fish.'

(37) *St'át'imcets:*

Sgwél**s** malh ti7!
s-ʕ^{w}əl-**s**=malh=tiʔ
STAT-lit-**CAUS**=ADHORT=that
'Keep it lit!'

(38) *St'át'imcets:*

Smúqw**s**kan	i s7icwlhálk'a̓	nl̓op.
s-muq^{w}-**s**=kan	ʔi=s-ʔix^{w}ɬ-alk̓=a	n-l̓op
STAT-mound**-CAUS**=1SG.SBJ	PL.DET=STAT-different-string=EXIS	1SG.POSS-rope

'I keep my different sized ropes in one pile.'

(39) *St'át'imcets:*

Stsáqwemaz'	ta ts'eqw7íqwa	**s**cwáp**s**tal'i̓	ta sts'úqwaz'a.
scáq^{w}əm-az̓	ta=c̓əq^{w}ʔíq^{w}=a	**s-**x^{w}áp-**s-**tali̓	ta=sc̓úq^{w}az̓=a
saskatoon-wood	DET=stretcher=EXIS	**STAT-**spread**-CAUS-**NTS	DET=fish=EXIS

'The stretcher that held the fish apart was made of saskatoon wood.'

(40) *St'át'imcets:*

Nilh	aylh	zam'	múta7	sts'ílas	ku **s**k'á7**s**as
nił	ʔayɬ	zam̓	mútaʔ	s=c̓íla=s	k^{w}u=**s-**k̓aʔ**-s-**as
COP	then	well	and	NMLZ=like=3POSS	D/C=**STAT-**get.stuck**-CAUS-**3ERG

láku7	ta smém'lhatsa.
lák^{w}uʔ	ta=smə́m̓łac=a
there	DET=girl=EXIS

'So then he kind of kept the girl imprisoned.'

In contrast to the examples given in (36–40), we have found no cases where stative marking on a causative yields a target state reading, though this has to be checked more systematically (including with negative data). If our observations are accurate, they are consistent with what we have discovered about intransitive (bare root) statives: in St'át'imcets, stative marking *never* yields a target state reading, unlike in ʔayʔaǰuθəm.

We conclude with a final point regarding the interaction of stative and imperfective marking in the two languages under discussion. The imperfective auxiliary *wa7 /waʔ/* in St'át'imcets is fully compatible with transitive statives (and more generally with any stage-level state), as shown below (again, from Alexander et al. in prep.):

(41) *St'át'imcets:*

Wa7	**s**k'ih**s**ás	ta skwékwza7sa.
waʔ	**s-**kih-**s-**ás	ta=sk^{w}á<k^{w}>zaʔ-s=a
IPFV	**STAT-**get.picked.up-**CAUS-**3ERG	DET=child<DIM>-3POSS=EXIS

'She is holding her little child on her lap.'

(42) *St'át'imcets:*

Wá7lhkan	**s**teq**s**	ta nxulák7a.
waʔ=łkan	**s-**təq-**s**	ta=n-x̱^{w}ulákʔ=a
IPFV=1SG.SBJ	**STAT-**touch-**CAUS**	DET=1SG.POSS-finger=EXIS

'I was holding my finger.'

This fits its analysis as a general-purpose imperfective marker, since imperfective morphemes cross-linguistically are proposed to be compatible with stative predicates (e.g. Comrie 1976).

In contrast, C_1 reduplication in ʔayʔaǰuθəm, though similarly glossed imperfective in key references such as Watanabe (2003) and Blake (2000), is not compatible with stative marking (Watanabe 2003:414), nor with stative predicates more generally. While this restriction is not expected for a general imperfective morpheme, it is characteristic of progressive morphemes cross-linguistically (e.g. Comrie 1976). For this reason, we have chosen to gloss C_1 reduplication as specifically marking progressive aspect rather than general imperfective, following a previous proposal for C_1 reduplication in Sḵwx̱wu7mesh (Bar-el 2005); see also footnote 11 above.

4 Conclusion

In this paper, we have examined the different readings available for the stativizer in ʔayʔaǰuθəm and St'át'imcets. Looking at evidence from ʔayʔaǰuθəm, we have argued that the stative morpheme combines with bare roots to produce target state statives. The stative morpheme is only found in combination with roots that encode a target state, foregrounding the target state and backgrounding the event that leads to it (behaving in a similar manner to the stativizer found in German target state adjectival passives, as analyzed in Kratzer 2000). In contrast, the combination of the stative morpheme with bare roots in St'át'imcets leads to a result state reading, the irreversible state of an event having occurred: here, stative marking simply encodes that the event described by the predicate precedes the reference time (behaving like the stativizer in German result state adjectival passives, as analyzed by Kratzer). In ʔayʔaǰuθəm, the stativizer also combines with stems transitivized with the control transitivizer, in which case the resulting reading is not a target state reading, but rather one of maintaining state. Transitive stative forms can also be constructed with the causative transitivizer, in which case both target state and maintaining state readings are possible. In St'at'imcets, the stative morpheme combines only with the causative transitivizer, apparently always giving rise to maintaining state readings.

While we have provided a preliminary analysis of statives built on bare roots in this paper, we have not attempted a more complete analysis of the stative morpheme in combination with transitivizing morphology. We have, however, provided evidence for the different readings that arise when the stative morpheme occurs in combination with control and causative transitivizers: future elicitation and further analysis is needed to determine how these different readings arise, and to what extent the semantics we have proposed to account for the stativizer in combination with bare roots can be extended to capture the readings associated with transitive statives. In addition to this, future work should also examine the stative morpheme in combination with other

in/transitivizing morphemes, including active intransitive and middle suffixes. While these questions are beyond the scope of the current paper, we look forward to investigating them in future work.

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