

Txw as an out of control marker in Skwxwú7mesh

Peter Jacobs

Ns7eyxnitem ta Snew'eyelh
Squamish Nation Education, and
the University of British Columbia

The clitic *txw* in Skwxwú7mesh has readings associated with out of control marking elsewhere in Salish. Previously, *txw* was described as a 'directional' morpheme. These out of control readings were not noted in this description. In this paper I describe the out of control readings that are obtained by the interaction of *txw* with various verb classes in Skwxwú7mesh. I then place *txw* within the wider system of control marking found in the (in)transitivizing system of Skwxwú7mesh, and in Salish in general. I finish with a preliminary analysis of *txw* as a marker of different initial cause than the grammatical subject.

1 Introduction

In this paper I present an analysis that the morpheme *txw* in Skwxwú7mesh (Sk) marks out of control¹. The readings that are obtained in sentences with *txw* are similar to a sub-set of readings for out of control marking in Interior Salish languages, Lillooet in particular. Control and out of control are semantic notions originally described by Thompson (1979) particularly for Salish languages.

In this paper I first present Kuipers' (1967) description of *txw*, and some problems with this description. In section 3.2 I provide an examination, from recent field work, of cooccurrence restrictions between *txw* and various predicate classes. I also provide a preliminary examination of *txw* as it interacts

¹ Skwxwú7mesh (a.k.a Squamish) is a Coast Salish language from the Salish language family. It is spoken in the areas around Burrard Inlet, Howe Sound and the Squamish Valley. I have too many people to thank for their help on this paper. I first owe my thanks to my late Aunt Doris Williams who said, "have you ever heard this?" and then gave me a bunch of sentences with *txw* in them. To all the Skwxwú7mesh elder and language staff, to the Squamish Research Group, to my committee, the many colleagues, the audience at SULA 3 at Buffalo, the participants at the Salish Working Group meeting (~2003), yewáñ ha7lh n swi7ka, chen kw'enmantumiyap i7xw.

with the (in)transitivizer system. In section 4 I present the control system as it is encoded in the (in)transitivizing, suffixal system. Sk has not been described as having control marking outside of the transitivity system before. In section 5 I investigate the notion of control within its wider context of its representation in the Salish family. Finally, in section 6 I conclude with a summary of my findings and a preliminary analysis of *txw* as a marker of initial cause.

2 Kuipers' description of *txw*

In this section I provide Kuipers' (1967) description of *txw* as a directional morpheme and then some problems with this description.

2.1 Kuipers' description

Kuipers' (1967) description of *txw* in the dictionary section of his grammar is as: "a prefix² indicating direction, coming into a position or state, etc." In the grammar section he provides a fuller description: "The prefix *txw* indicates direction (a) with verbs of motion and (b) with stems referring to the goal or effect of a motion or change." For example, compare the verb of motion *nam*, on its own without *txw* (1) and then with *txw* (2). This is Kuipers' type (a) description for *txw*.

- 1) na nam ta stá7uxwlh³
 rl go det children
 "the children went."

- 2) na **txw** nam ta stá7uxwlh
 rl ooc go det children
 "the children already went."

These two examples are from recently elicited data. From the translation the only difference seems to be aspectual.

² I have found one example where *txw* is separated from the main predicate by a clitic. It is because of this fact that I will refer to *txw* as a clitic and not as a prefix. I have not systematically investigated this property of *txw* yet.

³ Abbreviations are as follows: caus = causative transitivizer, det = determiner, impf = imperfective aspect, inch = inchoative, intr = intransitivizer, irr = irrealis mood, lcintr = limited-control. intransitivizer, lcrefl = limited-control reflexive, lctr = limited-control transitivizer, nom = nominalizer, obl = oblique case, ooc = out of control, part = particle, perf = perfective aspect, pl = plural, prep = preposition, rl = realis, stat = stative, tr = transitivizer, y/n = yes/no question particle, 1subj.sg = first person singular subject clitic, 2subj.sg = second person singular subject clitic, 3conj = 3rd person conjunctive clitic, 3poss = third person possessive

The second type of directional meaning that Kuipers (1967) describes for *txw*, that is his type (b) with the goal of a motion, can be observed with the following two words, one without *txw* (3), and the same root with *txw* in example (4). Here we have a stative predicate which seems to be type-shifted into a verb of motion. The motion meaning obtained in this example is 'landing' and the goal is the fire, where presumably the subject is eventually burned.

- 3) *yulh*
 "to burn"
- 4) ***txw*** *yulh*
 ooc burn
 "(land) into the fire"

2.2 Problems with Kuipers' analysis

One problem with Kuipers' (1967) analysis is with his type (a) readings. These are the collocations of *txw* and verbs of motion. Since verbs of motion already have direction as part of their semantics, it is difficult to tell what additional directional meaning is being added with *txw*. Note in the example (2) above, that there is no further directional meaning added, at least from the translation. In fact, the only difference that seems to arise in the translation is an aspectual difference.

A second problem with Kuipers' description of *txw* is with his type (b) readings, that is, with 'goal of a motion' cases. Many of these cases could be interpreted as change-of-state inchoatives. For another example, compare these two sentences with the bound root *niw/new* 'be inside, or, go inside (an enclosed space)', one with a stative predicate (5) and the other a 'goal of motion' (6).

- 5) *na es-niw t-ta kw'axwa*⁷
 ri stat-inside obl-det box
 "it's inside the box."
- 6) *na txw new t-ta est'et'kw*⁷
 ri ooc inside obl-det hole
 "he fell into a hole."

As in examples (3) and (4) we have a pair predicates, the first a stative predicate and the second, an apparent verb of motion. Note that there is no actual predicate in (6) that translates 'fall'. Only the addition of *txw* obtains this sense. I will argue that this is not actually a shifting function of *txw* turning a stative root into a verb of motion. Rather the sense of 'falling' is obtained

because the most likely way that a person under the normal course of events will unexpectedly end up in a hole is by falling into it.

3 Txw as an out of control marker

In this section I will argue that *txw* marks *out of control* in Sk. As such it appears to be a type of control marking, which is pervasive across the Salish language family. In the rest of this paper I will provide evidence for this claim. In section C.1 I provide examples which show that *txw* does obtain out of control readings. In section C.2 I examine more thoroughly how *txw* interacts with various predicate types. In section C.3 I examine morphosyntactic restrictions with *txw*.

3.1 Out of control marking

In this section I provide some examples of *txw* which clearly have out of control readings. One common out of control reading is called the ‘suddenly, all-of-a-sudden, or unexpectedly’ reading (Demirdache 1997). We have this reading in the following sentences (8) and (10) with the out of control reading ‘all-of-a-sudden’, and ‘unexpectedly’.

- 7) chen men uys
1subj.sg just go.inside
“I went inside.”
- 8) chen men **txw** uys
1subj.sg just ooc go.inside
“I fell inside all-of-a-sudden (as in the case where someone is leaning against a door and they didn’t know it was open, and the door opened, and they fell inside all-of-a-sudden).”
- 9) na kw’iyilsh ta John
rl dance det J.
“John danced.”
- 10) na men **txw** kw’iyilsh ta John
rl just ooc dance det J.
“John just up and danced (context: it wasn’t time to dance at the event, but John got up unexpectedly and started dancing).”

Another out of control reading is what I will be calling in this paper the ‘had to’ reading. This reading indicates that the subject did the activity despite himself, as in example (12), or because circumstances forced him to, as in example (14).

- 11) na χ ay-m ta stá7uxwlh
 rl laugh-intr det children
 “the children are laughing.”
- 12) na (men) **txw** χ ay-m ta stá7uxwlh
 rl (just) ooc laugh-intr det children
 “the children had to laugh (even though they were trying not to).”
- 13) chen men t’íchim
 1subj.sg just swim
 “I swam.”
- 14) chen *(men)⁴ **txw** t’íchim
 1subj.sg just ooc swim
 “I just had to swim.”

3.2 Four predicate classes in **Skwxwu7mesh** (Bar-el)

In this section I look at cooccurrence restrictions between *txw* and four predicate classes in **Skwxwu7mesh** as identified by Bar-el (2005) specifically for Sk. Her basis for these predicate classes is the presence/absence of initial and final points in the event structure of the predicate. All of the examples in this section are from recent field work which I conducted.

Table I **Skwxwu7mesh predicates: initial and final points**

	Initial Point	Final Point
Activity <i>swim, rest, laugh</i>	✓	✗
Accomplishment <i>write a book, fix the car</i>	✗	✗
Achievement <i>win, arrive, find a rock</i>	✓	✓
Inchoative state <i>(get) angry, (get) cloudy</i>	✓	✗

⁴ For reasons that are not clear, the clitic *men* ‘just’ is required with *txw* (ex. 18), 21) when the subject is first person. Note in (16) that *men* is optional with *txw* when the subject is third person. I simply note this fact here and have nothing further to say about it.

3.2.1 Activities

I have found that *txw* can occur with activities (ex. 16), 18), 21). The sense that is obtained with activities is translated as ‘had to’ as in (16) and (18). I will call this sense the ‘had to’ reading. In this case, the subject had reason not to participate in the activity, but because of circumstances beyond his control, he did-participate.

- 15) na *xay-m*⁵ ta stá7uxwlh
rl laugh-intr det children
“the children are laughing.”
- 16) na (men) *txw xay-m* ta stá7uxwlh
rl (just) ooc laugh-intr det children
“the children had to laugh (even though they were trying not to).”
- 17) chen men t’íchim
lsubj.sg just swim
“I swam.”
- 18) chen *(men)⁶ *txw* t’íchim
lsubj.sg just ooc swim
“I just had to swim.”

One activity predicate was not originally accepted as grammatical (20). When one of the speakers provided the right context (in this case the customary laziness of the subject), the sentence was then judged grammatical. Note the out of control reading that is obtained is the ‘unexpected’ sense, and not the ‘had to’ sense.

- 19) chen ts’its’áp’
lsubj.sg work
“I am/was working.”
- 20) *chen men *txw* ts’its’áp’
lsubj.sg just ooc work
- 21) an chen s-em-úmát, welh chen men *txw* ts’its’áp’.

⁵ The control status of the intransitivizer *-m*, which appears in (15) and (16), is not clear

⁶ For reasons that are not clear, the clitic *men* ‘just’ is required with *txw* (ex. 18), 21) when the subject is first person. Note in (16) that *men* is optional with *txw* when the subject is third person. I simply note this fact here and have nothing further to say about it.

very 1subj.sg stat-red-lazy but 1subj.sg just ooc work
“I’m very lazy (normally), but I worked (unexpectedly against everyone’s expectations).”

3.2.2 Accomplishments

The clitic *txw* can also occur with accomplishments. Note, though, that the predicates in (23) and (25) seem to have type-shifted from accomplishments to some type of other predicate. The clitic *txw* appears to be higher up in the tree than just a prefix given that the main predicate (e.g. *ta7stas*, in 23) is translated as part of a subordinate clause. Syntactically, though, these sentences are monoclausal.

As for the context in these cases, the agent of the event was not intending to do the given act, but was then forced to act because of social expectations (23) or because of circumstances (25). This reading is more or less the same as the ‘had to’ reading that is obtained with activities. In the case of activities, the subject of the clause may or may not be choosing to do the given activity (e.g. *laugh*), but eventually does it involuntarily. With accomplishments, though, the subject does choose to do the given act, but chooses to do it against her own will. The issue then is not volitionality of the subject, but what is construed (by the speaker) as the ultimate cause of the event. I have not tested yet whether unintentional readings are possible with accomplishments. That is, I haven’t tested if the ‘unexpected’ reading is possible where the event is ‘unexpected’ by the subject.

- 22) *na tá7-st-as ta sitn.*
 rl make-caus-3erg det basket
 “she made a berry basket.”
- 23) *na men⁷ txw tá7-st-as ta sitn*
 rl just ooc make-caus-3erg
 “she decided to make a berry basket (context: she didn’t want to make a basket, but in the end she decided to because of circumstances).”
 “she was made to make a berry basket (context: she didn’t want to make a basket, but she was made to because she was expected to).”
- 24) *na mikw’-int-as ta lhénpten*
 rl clean-dir-3erg det floor
 “he washed the floor.”
- 25) *na men txw mikw’-int-as ta lhénpten*
 rl just ooc clean-dir-3erg det floor

⁷ I have not yet checked these types of *txw* sentences without *men*.

“he decided to wash the floor (even though he didn’t want to).”

3.2.3 Achievements

I refer to two types of achievements here: controllable and non-controllable, that is, whether the predicate could conceivably be controlled by an agent. Controllable achievements are not compatible with *txw*, at least for most speakers. A possible problem with the translation given by the one speaker who accepted (27) as grammatical is that the word for ‘really’ *teḵwám* is close phonetically to *txw*, and the speaker may have been trying to make sense of a questionable sentence, or he may not have heard the sentence correctly. This needs to be re-checked. All other speakers categorically rejected this sentence.

26) na tɫ'xwenk ta stá7uxwlh
rl win det children
“the children won.”

27) *na **txw** tɫ'xwenk ta stá7uxwlh
rl ooc win det children
* (for most speakers); one speaker translated it as, “they really won it, eh.”

For completeness sake, I will also need to check non-controllable achievements, such as *appear*, or, *be born*. In Lillooet, a related Salish language, many of these types of predicates regularly occur with out of control marking (Davis, unpublished). It is already clear from the Sk data that this is not the case as can be seen from example (28). From a preliminary examination of various written texts and pedagogical material, no such cases exist in Sk. This still needs to be checked, though, if *txw* can occur with these types of achievements, and if they do, then what is the reading that is obtained.

28) chen xwey na7 tɫ'a Eslha7áñ
lsubj.sg born at obl/det E
“I was born at E.”

3.2.4 Inchoative states

Inchoative states are compatible with *txw*⁸. The sense that *txw* provides with inchoative states is the ‘had to’ sense.

29) na t'áyak' ta stá7uxwlh
rl angry det children

⁸ As with activities, the clitic *men* is required when the subject is first person (31), but not so with third person subjects (30).

“the children got mad.”

30) na (men) **txw** t'áyak' ta stá7uxwlh
rl (just) ooc angry det children
“the children had to get mad,” “they (the children) had to get mad.”

31) chen *(men) **txw** t'áyak'
lsubj.sg just ooc angry
“I had to get mad.”

For this reading, the subject is conscious of being angry, and of the timing of becoming angry, so the anger is not unexpected (except maybe by others who are nearby?), and it isn't sudden. The anger is literally “out of the control” of the speaker. The speaker becomes angry in spite of himself.

We also have the all-of-a-sudden reading with inchoative states.

32) chen men uys
lsubj.sg just go.inside
“I went inside.”

33) chen men **txw** uys
lsubj.sg just ooc go.inside
“I fell inside all-of-a-sudden (as in the case where someone is leaning against a door and they didn't know it was open, and the door opened, and they fell inside all-of-a-sudden).”

3.2.5 Summary

In summary then, *txw* can cooccur with activity, accomplishment and inchoative state predicates. Controllable achievements are not compatible with *txw*. It has not been determined if non-controllable achievements are compatible with *txw*, but preliminary evidence indicates at least that *txw* is not obligatory with them.

Two readings are obtained with *txw* and activities: had to, unexpectedly. With accomplishments only the ‘had to’ sense is obtained. With inchoative states we obtain both the ‘had to’ and the ‘unexpectedly’ reading. From these data, we see that *txw* productively yields out of control readings. It is not yet clear what determines these different readings and I leave this as a matter for further research. The following table summarizes these findings.

Table II Predicate classes with *txw* and their respective meanings

Predicate class	Compatible with <i>txw</i>	Meaning
Activities	✓	‘had to’ ‘unexpectedly’
Accomplishments	✓	‘had to’
Achievements	✗	✗

(controllable)		
Achievements (non-controllable)	?	?
Inchoative states	✓	'had to' 'unexpectedly'

3.3 Nouns with *txw*

In this section I present one other use of *txw* and that is *txw* with nominal predicates. This use of *txw* is productive. Kuipers (1967) mentions this use of *txw* and provides only one example (34). The comments in brackets, though, were provided in recent elicitations with contemporary speakers. It is not clear what out of control sense is being obtained with *txw* in these cases.

- 34) chen men **txw** shaw
 1subj.sg just ooc bone
 'I'm all bone now.' (one speaker laughed saying: "It sounds like you don't have any flesh or anything. You're just all bones now.")

Contemporary speakers felt that this description is hyperbolic. When asked about example (35) with a non-human (and now inanimate) subject, we see that this hyperbolic sense is still obtained. While we can easily imagine a context where a deer carcass has been totally cleaned and all that is left is the bones, this is not the sense that is obtained with this sentence. Rather we get a sense where the deer itself is somehow (unexpectedly?) completely transformed into bone.

- 35) na men **txw** shaw ta s_xwi7shn
 rl just ooc bone det deer
 "the deer's all bone now, it's been turned into bone."

That *txw* is not just fulfilling an inchoative function can be seen though from example (37) where the inchoative suffix is also present. Speakers actually preferred this example with the inchoative suffix than without it.

- 36) na men **txw** smant ta snexwilh
 rl just ooc rock det canoe
 "the canoe turned to all stone."
- 37) na men **txw** smant(-i7) ta milha7aw7txw
 rl just ooc rock-inch det dance-house
 "the dance-house was turned into stone."

In traditional *S_kw_xwu7mesh* legends there are stories of animals, people and things being transformed into rock. This construction with *txw* is not

the one that is used, though, in these stories. After discussing these sentences, speakers offered the standard type of construction used in legends to describe these transformations. This construction has a particular inchoative use of the reflexive. Even though the control reflexive is used, this use does not necessarily imply control on the part of the subject.

- 38) na nexw7áy-nt-sut ta smant ta snexwilh
 rl change-dir-crefl det rock det canoe
 "the canoe was transformed into rock."

From the translations of *txw* with nouns, I take the 'all' sense to be obtained by the clitic *men*. That is, I take example (31) to mean "the deer is just bone now, and nothing else". What the out of control sense marking obtains could presumably be the suddenness or unexpectedness of the becoming 'all bone', since this is not the normal course of events for anything, that is, to turn completely into bone. This matter requires further research. A comparison with the use of inchoative would also seem in order here to help determine what inchoative sense is being obtained specifically by the addition of *txw*.

4 Control in Skwxwú7mesh?

In this section I first provide some background on control and non-control marking in Sk. This is essentially a description of the (in)transitivizer suffixal system. I then examine how *txw* interacts with these different morphemes.

4.1 Control and non-control in Skwxwú7mesh

In this section I first present the control system in Sk, as it is encoded morphologically by the (in)transitivizer system. The following table gives all the transitivizers and intransitivizers in Sk. Here we have the basic opposition between control and limited-control transitivizers. I have a third group of transitivizers in this table, which I have not checked the control status of yet, and so have nothing further to comment on them.

Table III Transitive/Intransitive Paradigm in Skwxwú7mesh

	Transitive	Intransitive		
		Plain	Reflexive	Reciprocal
Control	-(V)n(t), -(V)t	-im̄	-sut	-way
Limited-control	-n(exw)	-(n)alhn	-numut	-newas
Control status not	-s(t) causative		-sténamut	-stway
	-nit applicative			

ascertained	-miñ applicative			
	-shit benefactive			
	-chewan(t) benefactive			
		-(V)m̃, -m, -(V)m		

4.1.1 Control and limited control

Here I provided a comparison of the two different control values commonly ascribed to Sk: full control and limited control. The full control transitivizers are $-(V)n(t)$, $-(V)t^9$. The non-control counterpart, the limited-control marker, is $-nexw$. In (39) we have the full control version of the predicate. In this case the subject is construed as being in full control of the action of shooting. In the limited-control case in (40), though, the subject is construed as having difficulty in performing the action of shooting. Another common translation for limited control marked predicates is ‘accidentally’, the second translation provided in this example. The choice of translations is usually provided by the context.

39) na kwélash-t-as ta s̄xwi7shn ta swiwlus
 rl shoot-tr-3erg det deer det young.man
 “the young man shot the deer.”

40) na kwélash-nexw-as ta s̄xwi7shn ta swiwlus
 rl shoot-lctr-3erg det deer det young.man
 “the young man managed to shoot the deer,” or, “the young man accidentally shot the deer.”

4.1.2 Limited-control marking

I now provide more description of limited control and the readings that are obtained with limited control marking in Sk. Sk actually has four limited-control markers. The uses and readings that can be obtained with these various suffixes have not been systematically been examined, and is a matter for further research. Some preliminary comments can be made, though, on the types of readings that are available with these suffixes. Only three of the four readings described for out of control marking in Lillooet, as described by Davis

⁹ They appear to have the same semantics for control, since some predicates can take either transitivizer and are translated exactly the same. The nature of this variation requires further research.

(unpublished), are available with limited-control marking in Sk. These readings are: i) the 'managed to' reading, ii) the 'accidental' reading, and iii) the 'ability' reading. The fourth reading, iv) the 'all-of-a-sudden' reading, is not available with limited-control marking in Sk. Some preliminary research indicates that across Salish languages differ as to the entailments and implicatures available with predicates marked for non-control (i.e. out of control, or limited-control) (Bar-el, et. al., to appear).

4.1.2.1 The 'managed to' and 'accidental' reading

With a simple clause (that is, a clause with no further aspectual markers, modals, scope bearing elements, etc.), a clause with a limited-control (in)transitivizer only obtains two readings: i) the 'managed to' reading, which is variously translated as 'manage to', 'finally did X', 'have done X'; ii) the 'accidental' reading. As mentioned in the previous section, the context normally provides which translation is more likely. Individual predicate themselves also have implicatures about which translation is more likely. In the following example, a person is more likely to be out hunting and trying to shoot a deer and having difficulty in performing the activity. Hence the 'managed to' reading is more likely than the 'accidental' reading.

- 41) chen kwélash-nexw ta s_xwi7shn
 1subj.sg shoot-lctr det deer
 "I managed to shoot the deer," "I have shot the deer," "I accidentally shot the deer."

4.1.2.2 The 'ability' reading

The ability reading can be obtained by adding the imperfective marker *wa*, to a predicate marked with one of the limited-control markers (42). It can also be obtained with a limited-control marker under the scope of negation (43). Other operators, such as 'always', have not been checked yet.

- 42) chen wa kw'ach-nálhn
 1subj.sg impf see-lcintr
 "I can see."
- 43) haw chen k_{al}h i ts'its'áp'-numut
 neg 1subj.sg irr part work-lcrefl
 "I am unable to get a job."

4.1.3 Summary

No systematic study has been done on the readings obtained with limited control marking in Sk. Besides marking control, the transitivizers also

interact with tense, aspect, modality, evidentiality, syntax and other parts of the grammar, matters outside the scope of this paper. In the following table I summarize the ways that *Skw̥wú7mesh* encodes non-control readings. For the moment I am describing the fourth reading as out of control and not as the all-of-a-sudden reading as Davis (unpublished) does for Lillooet.

Table IV Non-control readings in *Skw̥wú7mesh*

	<i>Skw̥wú7mesh</i>
i) ability	-nexw (transitive)
ii) success	-nalhn (intransitive)
iii) accidental	-numut (reflexive)
iv) out of control	txw

4.2 *txw* as it interacts with the control system

In this section I make some preliminary observations about *txw* and how it interacts with the rest of the control system in Sk. I have not systematically examined all of the possible cooccurrence restrictions between *txw* and the (in)transitivizers, and their respective readings. I provide these observations, though.

4.2.1 *txw* and the full control markers

As noted in section 4.1, the directive transitivizer and the other full control transitivizer $-(V)t$ in Sk are marked as +control. I have found conflicting evidence for *txw* cooccurring with these transitivizers. I have elicited only one example of *txw* with the transitivizer $-(V)t$ (44), but not a sentence example. This needs to be checked further. What is also not clear from this example is whether the ‘accidental’ part of the translation refers to the subject’s actions, or to the object’s.

- 44) *txw* ch’ém-t-m
 ooc bite-tr-pass
 “accidentally bit someone”

In this case, we have a reading typical of one of the readings for limited control marking, the accidental reading. In fact, this root does occur with the limited-control transitivizer with apparently the same semantics of “accidentally bit”, although this has not been systematically checked yet.

- 45) chexw ch’ém-n-emsh
 2subj.sg bite-lctr-1obj.sg
 “You bit me accidentally.”

On the other hand, in recent elicitations speakers do not accept *txw* cooccurring with the directive for at least one predicate.

- 46) *na **txw** chá-y-nt-as ta s̥xwi7shn ta swi7włus
rl ooc follow-dir-3erg det deer det young.man
“the young men had to follow the deer.”

When presented with this sentence, one of the speakers asked: “what do you mean by na **txw** chayntas”? They did recognize the morphemes of the clause, but could not find an appropriate context or meaning. Note, though, that in example (25) above, that *txw* and the directive are compatible.

In Interior Salish there is a morphosemantic cooccurrence restrictions between the out of control marker and transitive predicates marked with the directive transitivizer. Normally, the causative transitivizer only cooccurs with the out of control marker and not the directive (cf. Demirdache 1997; and for Sk, cf. ex. 47). This phenomenon needs to be checked further in Sk.

4.2.2 *txw* with the causative

The causative transitivizer can cooccur with *txw*. For example:

- 47) **txw** p'i7-s chexw
ooc take-caus 2subj.sg
“catch it! (said about something thrown)”

Note the meaning difference without *txw*.

- 48) p'i7-s chexw
take-caus 2subj.sg
“squeeze it!”

Txw is compatible with the causative transitivizer, but the semantic contribution is not clear from these limited examples. Note that example (23) also has *txw* cooccurring with the causative.

4.2.3 *txw* and the control reflexive –sut

Sk has both control and limited-control reflexive suffixes: –*sut* **control reflexive** and –*numut* **limited-control reflexive**. I have found one example where *txw* and –*sut* co-occur with the same predicate (50). This seems to have the ‘had to’ reading of out of control.

- 49) chen híl-it-sut
1subj.sg roll-tr-crefl
“I rolled down the hill.”

- 50) chen men **txw** hil-it-sut
 1subj.sg just ooc roll-tr-crefl
 “Oh, I just rolled myself.”
 “I rolled myself down the hill (I couldn’t walk down).”

In fact, the predicate in this example could be understood to be marked twice for +control since the transitivizer used here *-it* is a full-control transitivizer noted, and the reflexive maker is the control reflexive. I have not yet checked a transitive predicate marked with the directive transitivizer *-an* and the control reflexive to see if they can cooccur.

4.2.4 *txw* with other intransitivizers

Sk has various types of intransitivizers. I found *txw* cooccurring with both the control intransitivizer *-im̩*, and the limited-control intransitivizer *-nalhn*, as well as the middle marker *-m*. In (52) we have the control intransitivizer co-occurring with *txw*, with no noticeable difference in translation without *txw*. In (54) we have the limited-control intransitivizer *-nalhn*. The uses of these various intransitivizers have not been systematically investigated for Sk. From the examples, though, we can see that *txw* is compatible with either control value.

- 51) chen men ch’eýxw-im̩
 1subj.sg just dry-cintr
 “I’m just drying something.”
- 52) chen men **txw** ch’eýxw-im̩
 1subj.sg just ooc dry-cintr
 “I’m just drying something.”
- 53) chen p’i7-nalhn t-kwi sxwi7shn
 1subj.sg take-lcintr obl-det deer
 “I manage to get a deer.”
- 54) chen **txw** p’i7-nalhn
 1subj.sg ooc take-lcintr
 “I manage to catch it.”

4.2.5 Summary

In this section I made some preliminary observations about which (in)transitivizers *txw* can cooccur with. It is compatible with the control transitivizer *-t*, the control reflexive *-sut*, with the control intransitivizer *-im̩*, but not in all cases with the directive transitivizer (which is also a control transitivizer). It is also compatible with the causative transitivizer. As for

limited control markers, *txw* has been found to be compatible with the limited control intransitivizer $-(n)alhn$. From this we can see that *txw* is compatible both with control and limited control markers. These facts may indicate that *txw* is operating on a different kind of control notion than that found in the (in)transitivizing system. In the next section I examine the notion of control as it has been described for Salish. We will see that the readings obtained with *txw* fit into readings obtained by out of control marking in other Salish languages.

5 Control in Salish

In this section I examine the notion of control in the Salish family. I begin with the Thompsons' description of control. I then examine how control is marked morphologically in Salish. I follow this with a description of the readings available with of out of control marking in one particular Salish language, Lillooet. From this overall examination of control I will conclude that *txw*, even though it is not part of the morphological system of control markers in Sk, is nevertheless part of the control system of Sk.

5.1 Control as described by Thompson

The semantic notion of control was first described for Salish languages by Thompson (1979). In the Thompson and Thompson grammar of the Thompson language (1992), an Interior Salish language, they provide the following description of **control**, and its converse - **non-control**.

Control

"Controlled situations are those in which the agent functions with usual average capacities in keeping things under control."

Non-control

- i) can be "events which are natural, spontaneous-happening without the intervention of any agent," or,
- ii) "intentional, premeditated [events] which are carried out to excess, or are accomplished only with difficulty, or by means of much time, special effort, and/or patience, and perhaps a little luck."

An example of a **control** situation is in (55), and an example of a **non-control** situation is in (56). The following two examples are from Lushootseed, a Coast Salish language¹⁰.

- 55) ʔu-4ič'i-d čəd
 perf-cut-tr lsubj.sg
 "I cut it (on purpose)."

¹⁰ Example from Thompson 1979.

- 56) ʔu-ʔičʔi-dx^w čəd
perf-cut-lctr 1subj.sg
“I cut it (accidentally).”

In the literature on Salish languages, there are two different ways that non-control marking is described. For the Interior Salish branch, non-control marking is usually described as ‘out of control’ marking. In the Coast Salish branch it is usually described as ‘limited-control’ marking. These two terms are not synonymous, though. Out of control marking has a wider range of readings than limited-control. I use non-control as a cover term for both out of control and limited-control.

5.2 Morphological marking of control in Salish

In this section I make a brief comparison of how the semantic notion of control is marked morphologically across the whole Salish family. There are five branches of the Salish family and I have provided representative languages from each branch (the Bella Coola and Tillamook branches are comprised of only one language each).

A few notes about researching how control is encoded in the various Salish languages. There is a problem of differing terminology for the same morpheme in different languages. There is also a problem of differing analyses concerning control. Not all grammars have morphemes representing all the categories that I have listed. These categories represent the categories as I have analyzed them for Sk. Other languages may have cognate morphemes to the Sk ones, but they may be labeled outside of the control system.

Another factor is that different languages divide up how to mark control. For example, in Lillooet, there is only basically a difference morphologically between control marked predicates and then out of control marked predicates (the limited-control transitivizer –nun is not productive in the language). The readings that are obtained by different types of morphemes, in Sk for example, for limited-control (in)transitive and for out of control, can be obtained by the one circumfix ka- -a in Lillooet.

Table V Control Comparison across Salish

		Control		limited-control		out of control
Salish		transitive	intransitive	Transitive	Intransitive	
Coast	Squamish	-an, -at	-im̓	-nexw	-nalhn	txw
	Halkomelem ¹¹	-t	-els	-nəx ^w	(-əłtən?)	(tx ^w -?)
	Straits ¹²	-ət	-əŋ	-nax ^w	-naŋət	(tx ^w -?)
Interior	Lillooet ¹³	-an	-xal -M	ka- -a, (-nun)	Ka- -a	ka- -a
	Thompson ¹⁴	-nt	-əme	-VC ₂	-newłn	-VC ₂
Bella Coola ¹⁵		bare stem	bare stem	-(ay)nix	-(ay)nix	-(ay)layx
Tsamosan	Upper Chehalis ¹⁶	?	?	?	?	tx ^w -
Tillamook ¹⁷		-ən-t	?	-nəx ^w	?-əC ₂	-əC ₂

¹¹ Suttles, 2004.

¹² Montler, 1986.

¹³ Van Eijk, 1997.

¹⁴ Thompson and Thompson, 1992.

¹⁵ Davis and Saunders, 1997.

¹⁶ Kinkade, 1991.

¹⁷ Czaaykowska-Higgins, 1998.

5.2.1 Control marking in Salish

When comparing Sk with all members of the Salish family, we see a very similar pattern. Three of the five branches divide the control system between control and non-control. For control, all the languages that do mark full control mark it with a reflex of either of the Proto-Salish control transitivizers *-Vt or *Vn(t). Squamish has both. Both these transitivizers serve the same function in terms of providing a control transitive predicate. Bella Coola and the Tsamosan branches seem to be the only Salish languages that does not overtly mark control transitives. See examples (24), (39), (55) for some examples of these transitivizers.

5.2.2 Limited-control marking in Coast Salish

All members of the Coast branch also have a reflex of the Proto-Coast Salish limited-control transitivizer *-nəx^W. It is not as clear if all members have a reflex of the control intransitivizer, or the limited-control intransitivizer. Again, part of the problem may be terminological. The Halkomelem suffix *-els* is described as ‘structured activity’ by Galloway, and simply as ‘activity’ by Suttles (2004), but it appears to have similar syntactic and semantic properties to what I described as the control-intransitivizer in Sk. For examples of the different limited-control transitivizers see examples (40)-(43), (56).

5.2.3 Non-control marking in Interior Salish

In the Interior branch we see a different pattern for non-control marking. Lillooet has a limited-control transitive marker *-nun*, but this morpheme is not productive. Instead, most non-control readings are obtained by the out of control marker, the circumfix *ka- -a*, which is unique in the marking of non-control in Salish. A more common way in other Interior languages to mark non-control is with the out of control *-VC₂* infix on the verbal stem. This infix marks readings similar to the readings obtained by *ka- -a* in Lillooet. Note that Thompson also has a limited-control intransitivizer that is cognate with the same in Sk (Thompson and Thompson, 1992). In the Interior branch, then, we have non-control marking in the form of a transitivizer, a circumfix, and also as an infix on the stem.

5.2.4 *txw* in other Coast Salish languages

The morpheme *txw* occurs in many, if not all the Coast languages. It has not been analyzed in any of the grammars, though, as part of the control system. The Musqueam (Downriver Halkomelem) reflex is also *tx^W-*, and Suttles (2004) provides only a few examples with a few quantifiers and cardinals. In all these cases, the prefix *tx^W-* is translated as “remaining, only”.

Musqueam

- 57) k^w'in
how.many
'how many?'
- 58) tx^w-k^w'in
remaining-how.many
'how many more?'

The same morpheme tx^w- also occurs in the Island dialect of Halkomelem, and can occur with other quantifiers and with negation (Tom Hukari, pc). I do not have any examples, though, of such.

Montler (1986) describes the prefix tx^w- as 'mutative' in Straits Salish, but with only a few examples. From these examples it is not clear if any of the uses of this morpheme have an out of control reading.

5.2.5 *suddenly, with a burst in Musqueam*

Interestingly, in Musqueam there is another prefix that obtains the sense of *suddenly* (Suttles 2004). It appears with roots that otherwise do not appear bare. This is a similar distribution to txw in Sk, which also appears with roots that do not occur otherwise unaugmented.

- 59) nəwł wəpək^w ta sp'ál'əms
ni wəł wə -pək^w tə sp'ál'əm-s
AUX already suddenly-burst.forth.in.small.particle ART smoke -3POS
'His smoke has appeared. His smoke has suddenly burst out.'

5.2.6 *tx^w- in Upper Chehalis*

In Kinkade's (1991) dictionary for Upper Chehalis (the only published dictionary for a language from the Tsamosan branch) he describes one of the functions of the prefix tx^w- as a marker of out of control. This is the only grammatical description of the morpheme tx^w- from another Salish language where it has the "all of a sudden" type of out of control reading, or any non-control reading. It is also the only Salish grammar that specifically describes tx^w- as, at least partially, an out of control marker.

- 60) tx^w-kwayəm'-n
ooc-disappear-?
'disappear suddenly'

5.2.7 Summary

In summary, then, most Salish languages mark a control predicate with either transitivity marker *-Vt, or *-Vn(t), Bella Coola and the Tsamosan branches being the exception. The Coast languages mark non-control readings with one of the (in)transitivity marker set. These non-control readings are normally labeled limited-control. The Interior languages, on the other hand, mark non-control readings by a variety of ways: ka- -a in Lillooet, and in most of the other Interior languages as the infix -VC₂. The only other non-control marking

described for any Salish language is the prefix *tx*^W- ‘out of control’ in Upper Chehalis. Other Salish languages have this same morpheme, but none of the grammars of these languages describe it as part of the control system. Musqueam has a different prefix *wə*- which obtains the reading *suddenly*. From Suttles (2004) description, though, it is not clear if this prefix is productive, nor what the range of readings that are possible.

5.3 Out of control in Lillooet

In this section I describe the semantics of the out of control circumfix ka- -a in Lillooet. The different readings are dependent on the type of predicate that ka- -a is attached to, the possibility of agenthood and the context.

Davis (unpublished) describes four readings that are obtained with out of control marking in Lillooet: i) the ability reading, ii) the success reading (“manage to”), iii) the accidental reading, iv) the all-of-a-sudden reading (“suddenly” or “unexpectedly”). Ultimately in Davis’ analysis, these four readings are reducible to two primary readings: readings i) and ii) are reduced to the ‘ability’ reading, and readings iii) and iv) are reduced to the ‘all-of-a-sudden’ reading. For descriptive purposes, though, I will leave these readings as four separate readings.

5.3.1 The ability reading

The ability reading is translated as “able to do X”. The ability reading is available in Lillooet when the out of control marker is attached to an activity.

- 61) ka-álks t-kan-a¹⁸
ooc-work-1sg.sub-ooc
“I am able to work.”

The ability reading is also available with controllable achievements (that is, in the case where the predicate could have been controlled by a

¹⁸ Example from Demirdache 1997.

conscious agent) when they are under the scope of the imperfective marker *wa7*. This reading is not available with non-controllable achievements, though.

- 62) *Wa7 ha ka-t'ál-a ta káoh-sw-a l-ta kwézkwzem-a s7áołt.*
Impf y/n ooc-stop-ooc det car-your-det on-det slippery-det ice
“Can your car stop on the slippery ice?”

5.3.2 The success reading

The success reading is commonly translated as “managed to do X”. It is obtained by adding *ka-* to an activity, given a context of adversity. Davis (unpublished) analyzes this reading as the past tense reading of the ability reading, and so unifies these two readings.

- 63) *Qwenúxw-kan i nátcw-as, t'u7 ka-tsunam'-cal-lhkán-a t'u7.*¹⁹
sick-1subj.sg when.past one.day.away-3conj but ooc-teach-act.intr-
1subj.sg-ooc ?part
“I was sick yesterday, but I still managed to teach.”

Furthermore, the success reading is available with transitive achievements. Note that the accidental reading is also available with these predicates. Context often determines the choice between the success reading and the accidental reading. For example:

- 64) *Ka-zík-s-as-a ta sráp-a i sám7-a.*
ooc-cut-caus-3conj-ooc det tree-det det white.people-det
“The white people managed to cut the tree down.”

5.3.3 The accidental reading

The accidental reading is obtained by adding *ka-* to controllable intransitive achievements. For example:

- 65) *Ka-mulaká7-lhkan-a l-ta slhúm'-a*
ooc-dipped.hand.in-1subj.sg-ooc into-det soup-det
“My hand dipped into the soup by accident.”

The accidental reading is also available with controllable transitive achievements (cf. 64) above). Again, the success reading is also available in this case.

5.3.4 The all-of-a-sudden reading

¹⁹ The rest of the examples in this section on Lillooet are taken from Davis (unpublished). The glosses were done with the help of Lisa Matthewson. Any errors are of course due to chance.

The all of a sudden reading is obtained by adding *ka-* to a non-controllable intransitive achievement. In fact, many intransitive achievements only appear with out of control marking. For example:

- 66) *Ka-lhéxw-a ta snéqwm-a*
 ooc-come.out-oo det sun-det
 "The sun came out."

5.3.4 Summary of readings for Lillooet out of control marking

The following table is Davis' (unpublished) summary of the available readings that occur with *ka-* as it interacts with different predicate types. I have added in the last row as it is described as such in his grammar. Davis (unpublished) also briefly describes the interaction of out of control marking and other predicate types which I have not included in this section. The point I would like to make in this section is that the various readings for out of control are obtained by the interaction of out of control marking and various predicated types, the potentiality of control and the context. In the next section I compare these facts in Lillooet with Sk.

Table VI Out of control readings in Lillooet

	Ability	Success	All-of-a-sudden	Accidental
Activities	yes	yes	no	no
Controllable Achievements	yes	yes	yes	yes
non-controllable achievements	no	yes	Yes (intr) no (trans)	no
states	no	no	no	no
accomplishments	no	no	no	no

6 Discussion

6.1 Summary of findings

In this examination of the clitic *txw* I have found that it *productively* obtains an out of control sense with a number of predicate types. The readings that obtained are: i) had to, ii) unexpectedly, iii) all-of-a-sudden. The second two readings are readings typical of out of control marking in Lillooet, an Interior Salish language. The first reading has not been described (to my knowledge) for any Salish language as part of the non-control readings.

For Lillooet, Davis (unpublished) described four readings for out of control. These various out of control readings are obtained by the interaction of the out of control marker with predicate class, transitivity, and the potential for a controlling agent. Sk, on the other hand, obtains three of these non-control

readings with the (in)transitivizing suffixal system. The fourth reading is obtained with the clitic *txw*. I summarize these findings in the following table.

Table VII Non-control readings in *Skwxwú7mesh* and Lillooet

	<i>Skwxwú7mesh</i>	Lillooet
i) ability	-nexw (transitive)	ka- -a (-nun)
ii) success	-nalhn (intransitive)	
iii) accidental	-numut (reflexive)	
iv) all-of-a-sudden	<i>txw</i>	

Out of control marking interacts differently, though, with different predicate classes between Lillooet and Sk. I summarize which predicate classes out of control marking can cooccur with in the two languages. Note that Lillooet, though, has not been described as having a predicate class “inchoative states” as has Sk. Out of control marking is compatible with accomplishments in Sk but not in Lillooet. On the other hand, out of control marking is compatible with some achievements in Lillooet, but not in Sk, at least not with controllable achievements.

Table VIII Compatibility of out of control marking between *Skwxwú7mesh* and Lillooet

	Sk	Lillooet
i) activities	✓	✓
ii) accomplishments	✓	✗
iii) achievements (controllable)	✗	✓
(non- controllable)	?	✓
iv) inchoative states	✓	?

These differences could be due to actual differences in the nature of predicate classes between the two languages. It could also have to do with the nature of the elicitation and the tests that were used to obtain data. I did not do extensive testing for any one of the predicates classes. For achievements, I only elicited two predicates from this class. A clear difference exists, though, between achievements in Sk and in Lillooet. As mentioned in section 5.3, many intransitive achievements in Lillooet only appear with out of control marking. This is definitely not the case in Sk. In fact, there are no recorded cases in any of the textual linguistic material or pedagogical material for Sk, even though there are many examples of such predicates.

From this comparison we can see that *txw* is obtaining a non-control reading that is also obtained by out of control marking in Lillooet (and other Interior languages). It is because of these facts that I conclude that *txw* is also a marker of out of control. It does not have identical semantics to out of control in

Lilloet, and it appears to have a further reading - the 'had to' reading - that has not been described for non-control readings in other Salish languages.

6.2 *Txw* as external cause

For a preliminary semantic analysis of *txw*, I propose that its basic semantic value is to indicate that the causer of the event is different than the grammatical subject of the sentence. This separates volitionality from causation. This description aptly describes the 'had to' reading as it pertains to the interaction of *txw* with accomplishments. These are examples (23), (25). I repeat (23) here as (67).

- 67) na men **txw** tá7-st-as ta sitn
rl just ooc make-caus-3erg
"she decided to make a berry basket (context: she didn't want to make a basket, but in the end she decided to because of circumstances)."

In this case, the volition of the subject of the sentence is completely involved. And, in the basic sense, the subject is the physical cause of the event that is described. On the other hand, as far as the subject's will is concerned, ultimately it is not her will that is the first cause of the described event. It is instead some other person, or even some other social convention (i.e. a group of other people).

This description also fits for the 'unexpected' reading that is obtained with *txw*, as in example (21)).

- 68) an chen s-em-úmhat, welh chen men **txw** ts'its'áp'.
very 1subj.sg stat-red-lazy but 1subj.sg just ooc work
"I'm very lazy (normally), but I worked (unexpectedly, since no one would have expected me to)."

In this case, the subject of the sentence is volitional in choosing to do the activity of work. There is no indication that the subject of this sentence was motivated by social obligation. Nevertheless, the subject was motivated by something other than what normally motivated him to not work (i.e. the need for money). This description then fits if we think of the ultimate cause of the event as other than the subject, and other than what happens in the normal course of events.

As for the all-of-a-sudden reading, I take this to be another case of the unexpected reading except that the event happens spontaneously. Take example (8), here repeated as (69). Normally a door is opened intentionally by a volitional agent. In this case, though, the door is opened simply because of the weight of the subject against the door combined with the door being unexpectedly open resulting in the door opening, and, hence, the subject 'unexpectedly goes inside'.

- 69) chen men **txw** uys
 Isubj.sg just ooc go.inside
 "I fell inside all-of-a-sudden (as in the case where someone is leaning against a door and they didn't know it was open, and the door opened, and they fell inside all-of-a-sudden)."

One problem with this analysis is the 'had to' reading with inchoative states. Here is example (31), repeated as (70). It would seem that normally, as often as not, the cause of anger can already be outside a person's own will. In my elicitations for inchoative states, the cause was always an external source and not because of the subject's own doing. This would make out of control marking seem redundant if it is only encoding an outside cause. In the normal course of events a subject chooses to do or be a part of an event, or vice versa. But in these cases of *txw* with inchoative states, even though the subject is choosing not to be a part of the event of getting mad, she still ends up involved. Possibly, *txw* is not adding to what the initial cause of the anger is (the *state* aspect of inchoative state). Rather, it may be adding a different cause to the 'getting' part of the inchoative state. A difference without *txw* could be that the subject thought about circumstances and decided to get angry. But with *txw* the subject thought about circumstances and decided not to get angry, but then got angry anyways. This would mean that the predicate meaning 'to get angry' in Squamish implies or entails volition. I leave this matter for further research.

- 70) chen *(men) **txw** t'áyak'
 Isubj.sg just ooc angry
 "I had to get mad."

This leaves us with the case of nominal predicates. I repeat one example here. It is difficult to imagine what the external cause is of turning into rock, or what the normal course of events is for a dance-house turning into stone. The alternative sentences offered by speakers in place of these sentences may offer some insight that may help with my analysis. There is a normal course of events culturally for things turning into rock, that is, the events that happened in the time of the legends. And, this type of event appears to have a stylized way of being expressed which is different from this use of *txw*. In these cases, we at least have a marking with *txw* that says that the course of events did not follow the normal course of events. This also requires further research.

- 71) na men **txw** smant(-i7) ta milha7áwt**txw**
 rl just ooc rock-inch det dance-house
 "the dance-house was turned into stone."

6.3 Other cases with *txw*

Some cases of *txw* I have not discussed in this appear. Some of these appear to be lexicalized. Some other uses of *txw* appear to be productive, but I

have not been able to include them semantically with the uses of *txw* that I have described for the predicate classes I examined. Kuipers (1967) describes the use of *txw* with some quantifiers, with *wh*-question words, with different types of negation and with some verbs of speech. There may be homophonous clitics.

As mentioned in section 5.2, Halkomelem has a prefix *tx^W*- which is only used with quantifiers (Suttles 2004), and this prefix does not appear to be productive elsewhere in the grammar, and it certainly does not have out of control readings.

Halkomelem also has a homophonous prefix *tx^W*- which means 'to buy'.

Further testing may help resolve how these other uses of *txw* in Sk fit in with the analysis presented here or help revise this analysis.

Timá tkwetsi tin sníchim
(This is all I have to say)

References

- Bar-el, Leora. 2005. Aspectual distinctions in Skwxwú7mesh. PhD thesis at the University of British Columbia.
- Bar-el, Leora and Henry Davis and Lisa Matthewson. to appear. On non-culminating accomplishments.
- Czaykowska-Higgins, Ewa, and M. Dale Kinkade, ed. 1998. Salish languages and linguistics: theoretical and descriptive perspectives. New York: Mouton and Gruyter.
- Davis, Henry. Unpublished. Out of control. chapter 25 in unpublished St'at'imcets grammar.
- Davis, Henry and Hamida Demirdache 2000. On Lexical Verb Meanings: Evidence from Salish. In J. Pustejovsky and C. Tenny (eds.), *Events as Grammatical Objects: the Converging Perspectives of Lexical Semantics and Syntax*. CSLI: Stanford University Press, 97-142.
- Davis, Phillip W. and Ross Saunders. 1982. The control system of Bella Coola. Vol 48. No. 1 In the *International Journal of American Linguistics*. Chicago: University of Chicago Press, 1-15.
- _____. 1997. A grammar of Bella Coola. Missoula: UMOPL 13.
- Demirdache, Hamida 1997. 'Out of control' in St'at'imcets Salish and Event (de)composition. In A. Mendikoetxea and M. Uribe-Etxebarria (eds.), *Theoretical Issues at the Morphology-Syntax Interface*. Supplements of the *International Journal of Basque Linguistics and Philology*, 355-401.
- Gerds, Donna, and M. Dale Kinkade, ed. 2004. *Studies in Salish linguistics in honor of M. Dale Kinkade*. Missoula: UMOPL 17.
- Kinkade, M. Dale. 1991. *Upper Chehalis dictionary*. Missoula: UMOPL 7.
- Kuipers, Aert. 1967. *The Squamish language*. Paris: Mouton and Co.
- Montler, Timothy. 1986. *An Outline of the Morphology and Phonology of Saanich, North Straits Salish*. Missoula: UMOPL 4.

- Suttles, Wayne. 2004. Musqueam reference grammar. Vancouver, BC: UBC Press.
- Tenny, Carol and James Pustejovsky. 2000. Events as grammatical objects. Stanford, CA: CSLI Publications.
- Thompson, Laurence C. 1979. The control system: A major category in the grammar of Salishan languages. In Barbara Efrat (ed.), *The Victoria Conference on Northwestern Languages*. Victoria, BC: British Columbia Provincial Museum.
- _____ and M. Terry Thompson. 1992. The Thompson Language. Missoula: UMOPL 8.
- Van Eijk, Jan P. 1997. The Lillooet Language: Phonology, Morphology, Syntax. Vancouver: UBC Press.