

## Imperfectivity in Squamish\*

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This paper investigates the semantics of two imperfective morphemes in Squamish. I show that one of these morphemes, a reduplicant, yields continuous and stative readings, while the other, an auxiliary, yields continuous, stative and habitual readings. I propose that these morphemes are the Squamish progressive marker and the general imperfective marker, respectively. I argue that the progressive morpheme removes the initial state component of a predicate to derive the readings associated with this type of reduplication. I further propose that the readings associated with the imperfective morpheme might be explained by generic quantification.

### 1. Introduction

Comrie (1976) suggests that “the general characterization of imperfectivity...[is] explicit reference to the internal structure of a situation; viewing a situation from within”. There are many ways of marking imperfectivity across the Salish language family (see Kinkade 1996).<sup>1</sup> Squamish has at least two morphemes that seem to indicate imperfectivity: (i) the *CV-* reduplicant, and (ii) the auxiliary *wa*. The *CV-* reduplicant has been described as marking “continuousness, durative, frequentative, intensive”, while *wa* is used to mark “continuous, iterative” (Kuipers 1967). The focus of this paper is the examination and analysis of these two morphemes. In this section I present a brief look at the data to be analyzed, the questions that are raised by the data and an overview of the remainder of the paper.

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<sup>1</sup> The Salish language family is made up of approximately 23 languages spoken primarily in Washington State and Southern British Columbia of the Pacific Northwest. Squamish (in the official orthography, *Skwxwú7mesh*) is a Central Coast Salish language spoken in the Burrard Inlet and Howe Sound area around Vancouver, British Columbia, Canada. There are less than twenty fluent native speakers remaining.

Predicates that are *CV*- reduplicated are translated by speakers with the English progressive and seem to indicate continuous events or events in-progress. This is illustrated in (1) (the reduplicant and the base are bolded)<sup>2</sup>:

- (1) a. chen **7i-7ilhen**  
 1SUB.SG **REDUP-eat**  
 ‘I’m (continuously) eating’
- b. na **we-wlhkw**-m ta s-takw  
 RL **REDUP-boil**-INTR DET NOM-water  
 ‘The water is bubbling’

Sentences containing *wa* are sometimes translated by speakers as habitual events. This is illustrated in (2):

- (2) a. Peter na **wa teh**-im’ ta lam’ nilh s-ts’its’ap’-s  
 Peter RL **wa make**-INTR DET house FOC NOM-work-3POSS  
 ‘Peter builds houses, that’s his job’
- b. na **wa lhelh-sp’utl’em** kwa John  
 RL **wa ingest-smoke** DET John  
 ‘John smokes/is a smoker’

However, sentences containing *wa*, are also translated with the English progressive, like the *CV*- reduplicated predicates, and in these cases seem to indicate continuous events. This is illustrated in (3)<sup>3</sup>:

- (3) a. na **wa 7ilhen** ta mixalh  
 RL **wa eat** DET black.bear  
 ‘The bear is eating’
- b. chen-t **wa xaam**  
 1SUB.SG-PAST **wa cry**  
 ‘I was crying’

An additional reading is available for both *wa* and *CV*- that is not normally associated with imperfectivity cross-linguistically: stative. Squamish possesses no primitive stage-level states; statives are derived from inchoatives by the addition of either *CV*- or *wa*<sup>4</sup> (the basic (inchoative) predicate is given in (a)):

<sup>2</sup> Abbreviations used in this paper: 1=first person, 2=second person, 3=third person, CONJ=conjunction, DET=determiner, FOC=focus, IMP=imperative, INTR=intransitive, IRR=irrealis, LOC=locative, NEG=negation, NOM=nominalizer, OBL=oblique, PAST=past tense, POSS=possessive, REDUP= reduplicant, RL=realis, SG=singular, STAT= stative, SUB=subject, TR=transitive.

<sup>3</sup> The (b) example contains an overt past tense marker and is meant to illustrate that *wa* is not restricted to a particular tense.

<sup>4</sup> As well as the stative prefix *7es*- (see Bar-el 2003).

- (4) a. chen **t'ayak'** kwi s-es tl'ik ta John  
 1SUB.SG **angry** DET NOM-3POSS arrive DET John  
 'I was/got angry when John arrived'  
*speaker's comments: "it's because John came in that I'm angry"*
- b. chen **t'a-t'ayak'** kwi s-es tl'ik ta John  
 1SUB.SG **REDUP-angry** DET NOM-3POSS arrive DET John  
 'I was angry when John arrived'
- c. chen **wa t'ayak'** na7 t-kwi 7an'us-k  
 1SUB.SG **wa angry** LOC OBL-DET two-o'clock  
 'I was angry at two o'clock'

A summary of the readings available for sentences containing a CV- reduplicated predicate or *wa* are given in (5):

(5) *Readings associated with Squamish CV- and wa*

	Habitual	Continuous	Stative
<i>wa</i>	✓	✓	✓
<i>CV</i> <sup>5</sup>	✗	✓	✓

The chart in (5) illustrates that the single difference between the two morphemes is the habitual reading available for *wa*, but not for *CV*-; thus, continuous and stative readings are available for both morphemes. The problem is that sentences containing *CV*-reduplicated verbs and sentences containing the auxiliary *wa* are glossed the same by speakers, making it difficult to tease the two interpretations apart. This is true for both continuous readings (6) and stative readings ((4) above):

- (6) a. chen **wa 7ilhen**  
 1SUB.SG **wa eat**  
 'I'm eating'
- b. chen **7i-7ilhen**  
 1SUB.SG **REDUP-eat**  
 'I'm eating'

The goal of this paper is to explain how the various readings for Squamish *wa* and *CV*- are derived. The proposal I put forth in this paper is that *CV*- is the Squamish *progressive* marker and *wa* is the Squamish (*general*) *imperfective* marker. To explain how the readings associated with sentences containing each of these markers arise, I argue that (i) *CV*- removes the first state <e<sub>st</sub>> component of a predicate and (ii) that sentences containing *wa* involve generic quantification.

<sup>5</sup> I have not been able to replicate the 'intensive' readings in elicitation that Kuipers (1967) recorded in his grammar.

This paper is organized as follows: in §3 I outline previous analyses of these two Squamish imperfective morphemes as pluractional markers and discuss the problems associated with them. In §4 I present a cross-linguistic look at progressive aspect, as well as a more detailed examination of CV- reduplication and an analysis that derives the readings it yields. In §5 I present a cross-linguistic look at imperfective aspect, as well as a more detailed examination of *wa*; although I do not present a detailed analysis of how the readings associated with this morpheme are derived, I speculate on a potential avenue to pursue. I conclude in §6 and raise a few remaining questions. I begin in §2 with a brief discussion of aspectual classes in Squamish.

## 2. Assumptions: Squamish Aspectual Classes

To describe the Squamish facts, I draw on an event-structure framework to represent the aspectual classes of predicates (along the lines of Pustejovsky 1991 and many others). The basic intuition of this framework is that predicates describe three different kinds of events; these are illustrated in (7) (<e> indicates eventuality):

- (7) a. Process (e.g., *sing, eat*) <e<sub>pr</sub>>  
 b. State (e.g., *hungry, sitting, tall*) <e<sub>st</sub>>  
 c. Transition (e.g., *build a house, write a book, arrive, win*) <e<sub>pr</sub>, e<sub>st</sub>>

Drawing the parallel with Vendler's (1967) terminology, processes are similar to Vendler's *activities*, and transitions consist of accomplishments and achievements.

The basic classes in Squamish do not exactly parallel the above predicate types. For example, Pustejovsky's framework does not distinguish between stage-level states and individual-level states; in Squamish, however, this distinction is crucial as the two types of predicates behave differently. I will present a few assumptions with respect to the basic Squamish aspectual classes that will act as a stepping stone for the analysis.

At the minimum, the verbs in Squamish that parallel accomplishment verbs (e.g., *build a house, write a book*) and achievement verbs (e.g., *arrive, reach the top*) in English (transitions) must be a separate class from the rest of the predicates in Squamish due to the fact that the stative prefix *7es-* applies only to predicates of this class, as shown in (8) (and not to predicates that correspond to English activities and states, as in (9) a and b, respectively)<sup>6</sup>:

- (8) a. na **7es-tl'ik** ta Peter na7 ta 7an'us-k  
 RL STAT-**get.here** DET Peter LOC DET two-o'clock  
 'Peter was already here at 2'
- b. na **7es-xel'** ten sna7 na7 ta shualh  
 RL STAT-**write** 1POSS name LOC DET door  
 'My name is written on the door'
- (9) a. \*na **7es-7itut** ta John na7 ta 7an'us-k  
 RL STAT-**sleep** DET John LOC DET 2-O'clock

<sup>6</sup> See Bar-el (2003) for further discussion.

- b. \*na **7es-t'ayak'** ta John  
 RL STAT-angry DET John

I follow Pustejovsky in assuming that the predicates in (8) are transitions with the structure  $\langle e_{pr}, e_{st} \rangle$ <sup>7,8</sup>.

The question is then what are the other aspectual classes of predicates in Squamish. Based on their similar interpretations, the remaining stage-level predicates seem to form a class as well; in particular, the basic form of predicates that parallel stage-level states and activities in English are translated as inchoatives in Squamish. This is illustrated for states in (10) and (11) (the basic form is given in the (a) examples while the statives are given in the (b) examples):

- (10) a. chen **t'ayak'** kwi s-es t'l'ik ta John  
 1SUB.SG angry DET NOM-3POSS arrive DET John  
 'I got angry when John arrived'  
*speaker's comments: "it's because John came in that I'm angry"*
- b. chen wa **t'ayak'** kwi s-es t'l'ik ta John  
 1SUB.SG wa angry DET NOM-3POSS arrive DET John  
 'I was angry when John arrived'
- (11) a. chen-t **lhchiws** na7 t-kwi 7an'us-k kwi chel'aklh  
 1SUB.SG-PAST tired LOC OBL-DET two-o'clock DET yesterday  
 'I got tired at 2 o'clock yesterday'
- b. chen-t wa **lhchiws** na7 t-kwi 7an'us-k kwi chel'aklh  
 1SUB.SG-PAST wa tired LOC OBL-DET two-o'clock DET yesterday  
 'I was tired at 2 o'clock yesterday'

For expository purposes, I will refer to this class of predicates as *inchoative states*.

We further observe the same facts for predicates that parallel activities in English (e.g., sing, sleep). When predicates of this type are subordinated by a clause containing a temporal modifier referring to a specific point in time ((a) and (b) below) or a culminating predicate (c), the verb is interpreted as a transition, namely the initial transition/starting point of the event; for expository purposes, I call these predicates *inchoative events*:

- (12) a. chen **lulum** na7 t-kwi 7an'us-k  
 1SUB.SG sing LOC OBL-DET two-o'clock  
 'I sang at two o'clock' = I *started* to sing at two o'clock

<sup>7</sup> I do not assume however, that predicates of this class are exactly parallel to English accomplishment predicates as there is preliminary evidence that their culmination requirement is cancelable (see also Davis and Matthewson (2001) for discussion on this issue in St'át'imcets, another language of the same family).

<sup>8</sup> I am setting aside the issue of the sub-structure of the process sub-event of this event type; that is, in the Pustejovsky framework, a process is made up of individual identical events. I do not necessarily assume this same sub-event structure (see Bar-el 1998 and in prep.).

- b. na **7itut** ta John na7 ta 7an'us-k  
 RL **sleep** DET John LOC DET 2-o'clock  
 'John slept/fell asleep at 2'
- c. chen **lulum** kwi s-es tl'ik ta John  
 1SUB.SG **sing** DET NOM-3POSS arrive DET John  
 'I sang when John got here'<sup>9</sup>

Furthermore, this inchoative reading of bare predicates is also volunteered by speakers in different contexts, such as an irrealis context (a), or an imperative context (b):

- (13) a. ha7lh k **7ilhen** kwayl'-es  
 good IRR **eat** tomorrow-3  
 'It'd be good if I started eating tomorrow'
- b. **7ilhen** ka  
**eat** IMP  
 'Start to eat'<sup>10</sup>

Given these facts, I assume that these two groups of predicates form a single class, which I call *inchoatives*, and are of the event type  $\langle e_{st}, e_{st} \rangle$ . Notice, however, that although his classification does not make reference to an event of this type, Pustejovsky's framework does allow for it as transitions can consist of any event variable. Although I will not discuss the class of individual-level states here, it is worth noting at this point that they behave the same as the class of states in Pustejovsky's system<sup>11</sup>. A summary of the Squamish system is given in (14)<sup>12</sup>:

- |      |    |                        |  |
|------|----|------------------------|--|
| (14) | a. | Inchoative             | $\langle e_{st}, e_{st} \rangle$       |
|      | b. | Transition             | $\langle e_{pr}, e_{st} \rangle$       |
|      | c. | Individual-Level State | $\langle e_{st} \rangle$ <sup>13</sup> |

Now that the basic aspectual classes have been established, I now turn to the analyses of *CV-* and *wa*. I begin in the next section with a brief overview of previous analyses of these two morphemes.

<sup>9</sup> In out-of-the-blue contexts, and without any additional clauses, these sentences are translated in the simple past. This issue is under investigation and is beyond the scope of this paper.

<sup>10</sup> Smith (1999) suggests that English activities presented in the perfective viewpoint are not inchoatives; examining temporal *before* and *after* clauses, she claims that durative, terminative readings are natural for perfective activity sentences. Initial examination of parallel data in Squamish suggests that predicates of this class do indeed get inchoative readings rather than terminative readings.

<sup>11</sup> See Bar-el (1998, 2003) for further discussion.

<sup>12</sup> A crucial consequence of this assumption is that the initial sub-event of transitions is different from activities/processes, which differs drastically from Pustejovsky. I leave this aside here (see Bar-el in prep).

<sup>13</sup> I am using this framework as a means of describing the Squamish facts. What is crucial is that this system allows me to allude to the endpoints of the events (especially initial endpoints), something that is obviously important for Squamish events, and something that some systems take for granted. However, I assume that the same facts could be explained in a different framework.

### 3. Previous Analyses

Both *wa* and the *CV*-reduplicant have been previously analyzed as pluractional markers à la Lasersohn (Bar-el 1998, 2001). As Lasersohn states, pluractional markers “attach to the verb to indicate a multiplicity of actions, whether involving multiple participants, times, or locations...[they] do not reflect the plurality of a verb’s arguments so much as the plurality of the verb itself” (1995). A simplified definition for pluractional markers is given in (15):

$$(15) \quad V\text{-PA}(X) \Leftrightarrow \forall e \in X[P(e)]$$

where V=verb

PA=pluractional marker

X=ranges over sets of events

P=free variable ranging over properties of events

If the event denoted by the verb is pluralized, P is the verb itself; if a sub-event is pluralized, P is lexically fixed. In Bar-el (1998), I proposed that *wa* was a pluractional marker; I accounted for the habitual readings by claiming that P is the verb itself in those cases. For the continuous readings, I proposed that P is lexically fixed. As the *CV*-reduplicant is not associated with habitual readings, I proposed in Bar-el (2001) that the continuous readings result when P is lexically fixed.

There are two problems with these analyses. First, the pluractional marker analyses not only analyze the continuous readings of *CV*- and *wa* as being the same, they leave no possibility for analyzing them differently. Although the readings are difficult to tease apart and further research is required to determine the exact difference between the two, the possibility of a difference should be left open. Second, if *wa* and *CV*- were the same type of morpheme, we might not expect them to co-occur, as they often do:

- (16) a.    **wa kw’a-kw’ay’** kwa John  
           **wa REDUP-hungry** DET John  
           ‘John is hungry’  
           *speaker’s comments: “it’s just like the other one [without reduplication]”*
- b.    chen    **wa 7i-7imesh**  
           1SUB.SG **wa REDUP-walk**  
           ‘I am walking’

Since the readings associated with both *CV*-reduplication and *wa* parallel the readings associated with imperfectivity cross-linguistically, in this paper I approach the data from the perspective of aspect rather than plurality; we begin in the next section with the progressive.<sup>14</sup>

<sup>14</sup> The morpheme that I would argue is correctly analyzed as a pluractional marker in Squamish is the *CVC*-reduplicant, which prefixes to both nouns and verbs and yields plural individuals and events (see Bar-el 2001 and Bar-el, Jacobs and Wiltschko 2001).

#### 4. Squamish CV- as a Progressive Morpheme

In this section, I first present a brief cross-linguistic look at progressive aspect and propose that Squamish CV- is a progressive morpheme. I then provide an analysis of how this reduplicant derives the observed readings.

##### 4.1. Progressive Aspect

Bertinetto, Ebert and de Groot (2000) suggest the following test to determine whether a language has a dedicated progressive form that is independent of an imperfective form. Speakers are asked to consider a context (given in the square brackets below) and then give a translation of sentences. The sentences are given in (17):

- (17) a. [somebody on the phone wants to know about Ann- she is next to me]  
She WORK right now
- b. What does Ann do every Saturday morning?  
She CLEAN THE HOUSE/READ

To say that a language has a specific progressive form, Bertinetto et al. suggest that either of the following statements must be true:

- (i) it should be possible to use a different form in the two sentences, or
- (ii) the language must at least have available an alternative form in the (a) sentence that is not available in the (b) sentence.

By this test, Squamish CV- is a progressive form since CV- or *wa* is available for (a) but *wa* must be present in (b) type sentences. In fact, this is precisely the distinction between the two morphemes: *wa* can create habituals, where CV- cannot.

Comparing Squamish CV- with Smith's (1997) typological study of the progressive, CV- seems to parallel the English progressive in deriving both continuous and stative readings. In the table below, *stative* refers to the stative reading that arises when the progressive is added (note that my *continuous* parallels Smith's term *internal stage*, my *stative* parallel's Smith's *resultative stage*)<sup>15</sup>:

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<sup>15</sup> I am setting aside Smith's *preliminary stage* reading here as the Navajo data that best describes this reading has not yet been replicated in Squamish.

(18) *Readings associated with the progressive cross-linguistically*

	Habitual	Continuous	Stative
English progressive	✗	✓	✗/✓ <sup>16</sup>
Navajo progressive	✗	✓	✗
Chinese progressive	✗	✓	✗
Squamish CV-	✗	✓	✓

Let us now examine the way in which CV- interacts with predicates of different classes.

In their base form, transitions, predicates consisting of an initial process and a final state <e<sub>pr</sub>, e<sub>st</sub>> seem to denote a completed event (a), but when prefixed with CV-, they denote continuous events/events in-progress (b):

- (19) a. chen **sikw'**-nit ten yekway'  
1SUB.SG **tear**-TR 1POSS dress  
'I tore my dress'
- b. chen **sí-sikw'**-nit ten yekway'  
1SUB.SG **REDUP-tear**-TR 1POSS dress  
'I'm tearing my dress'
- (20) a. na **p'ayak**-an-t-as ta snexwilh-s  
RL **fix**-TR-TR-3 DET canoe-3POSS  
'He fixed the canoe'
- b. na **p'a-p'ayak**-an-t-as ta snexwilh-s  
RL **REDUP-fix**-TR-TR-3 DET canoe-3POSS  
'He's in the process of fixing it'
- (21) a. na **tl'ik** ta Peter na7 ta 7an'us-k  
RL **get.here** DET Peter LOC DET two-o'clock  
'Peter arrived at 2'
- b. %na **tl'i-tl'ik** ta John  
RL **REDUP-arrive** DET John  
'John's arriving right now'<sup>17</sup>

<sup>16</sup> Smith argues that the stative readings that arise via the progressive marking in English, such as "sitting", are not uses of the progressive viewpoint, but rather a separate viewpoint, *resultative imperfective*, which are limited to positionals or locatives (thus her chart would have an ✗ in this box). I have listed it here with a ✓ as well to show the parallel with Squamish derived states where CV- does yield stative readings of verbs but are not limited to positionals or locatives.

<sup>17</sup> This is accepted by some speakers but rejected by others. I would suggest that this difference is attributed to whether or not the context or the speaker can stretch the event out long enough to refer to it as an event that has not culminated.

On the other hand, inchoatives, predicates consisting of an initial state and a final state  $\langle e_{st}, e_{st} \rangle$ , denote a completed change-of-state in their base form (a), but when prefixed with CV-, they denote a final state (b):

- (22) a. na **7itut** ta John na7 ta 7an'us-k  
 RL **sleep** DET John LOC DET 2-o'clock  
 'John slept/fell asleep at 2'
- b. chen-t **7i-7itut** na7 t-kwi 7an'us-k  
 1SUB.SG-PAST **REDUP-sleep** LOC OBL-DET two-o'clock  
 'I was sleeping at 2 o'clock'
- (23) a. chen **7ilhen**  
 1SUB.SG **eat**  
 'I ate'
- a. chen **7i-7ilhen**  
 1SUB.SG **REDUP-eat**  
 'I'm (continuously) eating'
- (24) a. chen **t'ayak'** kwi s-es tl'ik ta John  
 1SUB.SG **angry** DET NOM-3POSS arrive DET John  
 'I got angry when John arrived'  
*speaker's comments: it's because John came in that I am angry'*
- b. chen **t'a-t'ayak'** kwi s-es tl'ik ta John  
 1SUB.SG **REDUP-angry** DET NOM-3POSS arrive DET John  
 'I was angry when John arrived'
- (25) a. na **lhxilsh** ta John  
 RL **stand.up** DET John  
 'John stood up'
- b. na **lhi-lhxilsh** ta John  
 RL **REDUP-stand.up** DET John  
 'John is standing up'  
*speaker's comments: "he's already standing [but not in the process]"*

These facts are summarized in (26) below:

- (26) *Readings associated with CV- reduplicated verbs*

	$\langle e_{pr}, e_{st} \rangle$ <i>tear, fix, arrive</i>	$\langle e_{st}, e_{st} \rangle$ <i>get angry, fall asleep, stand up</i>
CV-	continuous	stative

#### 4.2. Analysis: How the CV- Readings are Derived

To account for the readings associated with Squamish *CV-* that arise with the two stage-level predicate classes, I argue that *CV-* is the Squamish *progressive* morpheme and propose that *CV-* derives the continuous and stative readings in the following way:

- (27) *CV-* removes the first state component  $\langle e_{st} \rangle$  of a predicate consisting of 2 eventualities  $\langle e, e \rangle$ <sup>18</sup>

This means for  $\langle e_{st}, e_{st} \rangle$  predicates, *CV-* removes the initial state, leaving the final state  $\langle e_{st} \rangle$  and for  $\langle e_{pr}, e_{st} \rangle$  predicates, *CV-* removes the final state, leaving the initial process  $\langle e_{pr} \rangle$ <sup>19</sup>:

- (28) a.  $\langle e_{st}, e_{st} \rangle \rightarrow \langle e_{st} \rangle$   
 b.  $\langle e_{pr}, e_{st} \rangle \rightarrow \langle e_{pr} \rangle$

This derives the correct result that *CV-* prefixed to a predicate consisting of  $\langle e_{pr}, e_{st} \rangle$  does not yield a *stative* reading, but an *in-progress* reading:

- (29) na **tl'i-tl'ik** ta John  
 RL **REDUP-arrive** DET John  
 'John's arriving right now'  
 \*'John arrived/John was here'

The question that arises then, is how are stative readings for predicates consisting of an initial process and final state derived  $\langle e_{pr}, e_{st} \rangle$ . It is the stative prefix (*7es-*) that derives these readings<sup>20</sup>:

- (30) na **7es-tl'ik** ta Peter na7 ta 7an'us-k  
 RL **STAT-get.here** DET Peter LOC DET two-o'clock  
 'Peter was already here at 2'

The table in (31) summarizes this proposal:

<sup>18</sup> It remains to be explained why this should be the case, or rather, why is it that the progressive looks for a state component only.

<sup>19</sup> This is similar to the analysis that Burton and Davis (1996) propose for deriving stative aspect in St'át'imcets; however, they claim that the stative prefix removes the initial process and leaves the final state.

<sup>20</sup> Another important question that has not yet been addressed is how are 'getting angry' or 'falling asleep' derived in Squamish. This is a complicated issue as it is not quite clear what it means to be in the process of becoming angry or falling asleep, and thus it is often difficult to elicit; what is clear is that the *CV-*reduplicant does not seem to yield these readings. However, more work needs to be done to address this question more thoroughly.

(31) *Proposal: CV-*

	<e <sub>pr</sub> , e <sub>st</sub> > <i>tear, fix, arrive</i>	<e <sub>st</sub> , e <sub>st</sub> > <i>get angry, fall asleep, stand up</i>
<b>CV-</b>	<e <sub>pr</sub> > continuous	<e <sub>st</sub> > stative

A consequence of this proposal is that predicates like *7i-7tut* ‘sleeping’ and *7i-7ilhen* ‘eating’ are states in Squamish, parallel to *t’a-t’ayak* ‘angry’ and *lhe-lhchiws* ‘tired’. This may not be surprising given Vlach’s (1981) claim that progressives *are* statives.<sup>21</sup> This would account not only for the fact that progressive activities pattern like states in Squamish, but also for the fact that the statives surface with the progressive CV-marker.

### 5. Squamish *wa* as an Imperfective Morpheme

In this section, I first present a brief cross-linguistic look at imperfective aspect and propose that Squamish *wa* is a (general) imperfective morpheme. I then provide discussion of a possible avenue of analysis for this morpheme that derives the observed readings.

#### 5.1. (General) Imperfective Aspect

In a variety of languages, the imperfective denotes both progressive and habitual readings (Comrie 1976). Bhat (1999) suggests that “Languages that differentiate between perfective and imperfective aspects generally express habitual and iterative meanings with the help of their imperfective forms. In Kiowa, for example, the imperfective verb covers a variety of non-completed events that include general statements, habitual or repeated activities, and events in progress”.

Comparing Squamish *wa* with Smith’s (1997) typological study of the imperfective viewpoint, it seems that *wa* does not exactly parallel any of the imperfective viewpoints in the languages examined; the point of departure is the stative reading:

(32) *Readings associated with the imperfective cross-linguistically*

	Habitual	Continuous	Stative
<b>French general imperfective (past only)</b>	✓	✓	✓
<b>Russian general imperfective</b>	✓	✓	✗
<b>Navajo imperfective</b>	✗	✓	✗ <sup>22</sup>
<b>Squamish <i>wa</i></b>	✓	✓	✓

<sup>21</sup> See, however, Bennet (1981) who claims that present progressive always describes an activity.

<sup>22</sup> This chart represents the Navajo imperfective as identical with the Navajo progressive (see (18)); this is due to my simplification of Smith’s terminology, that is, I have expressed “continuous” in place of her “internal stage” and “preliminary stage”.

Squamish *wa* seems to parallel the French general imperfective (*imparfait*), though the morpheme in Squamish is not restricted to past tense and in French the stative is not derived by the imperfective, but simply compatible with it (this imperfective seems to be common across all the Romance languages)<sup>23</sup>. As well, Squamish may parallel Navajo in having (potentially) both an imperfective and progressive viewpoint; however, in Navajo, only the in-progress reading is available for both morphemes, while in Squamish, all readings except for the habitual overlap. Let us now turn to a more detailed look at how *wa* interacts with predicates from the different aspectual classes in Squamish.

When *wa* surfaces in sentences containing transitions, predicates consisting of an initial process and a final state  $\langle e_{pr}, e_{st} \rangle$ , they can denote habitual events:

- (33) a. Peter na **wa teh-im'** ta lam' nilh s-ts'its'ap'-s  
Peter RL **wa make-TR** DET house FOC NOM-work-3POSS  
'Peter builds houses, that's his job'
- b. new **wa 7us-un'-t-es** ta s-taw'xwlh ta Skwxwu7mesh  
you **wa teach-TR-TR-3** DET NOM-child DET Skwxwu7mesh  
'Peter teaches the children Squamish'
- c. chen **wa wi7xwem**  
1SUB.SG **wa fall**  
'I'm making a habit of falling'
- d. chen **wa tl'exwenk**  
1SUB.SG **wa win**  
'I win all the time' / 'I am a winner'

However, with *wa*, predicates of this class can also denote continuous events, like the CV- reduplicant:

- (34) a. chen **wa teh-im'** ta lam'  
1SUB.SG **wa make-TR** DET house  
'I am making a house'
- b. chen **wa yakw-nexw kwetsi mit**  
1SUB.SG **wa find-TR** DEM dime  
'I'm finding a dime right now'

When *wa* surfaces in sentences containing inchoatives, predicates consisting of an initial state and a final state  $\langle e_{st}, e_{st} \rangle$ , they can also denote habitual events<sup>24</sup>:

<sup>23</sup> Squamish *wa* also parallels the French simple present (which may be thought of as an imperfective though it lacks any additional morphology); both the habitual and progressive reading are available:

Je chante  
'I sing [habitually]'  
'I am singing'

<sup>24</sup> Note that these do not get translated as 'habitually start to x', which might be predicted based on the event structure I am suggesting. This is somewhat complicated and requires further elicitation and analysis.

- (35) a. na **wa lhelh-sp'utl'em** kwa John  
 RL **wa ingest-smoke** DET John  
 'John smokes/is a smoker'
- b. na **wa cha7t-wilh** kwa John  
 RL **wa carve-canoe** DET John  
 'John carves canoes/is a carver'
- c. **wa7-t tskw'atsut** kwa John  
**wa-PAST run** DET John  
 'John used to run'

Again, like the CV- reduplicant, they can denote statives:

- (36) a. chen **wa t'ayak'** na7 t-kwi 7an'us-k  
 1SUB.SG **wa angry** LOC OBL-DET two-o'clock  
 'I was mad at two o'clock'
- b. chen **wa lhchiws**  
 1SUB.SG **wa tired**  
 'I am tired'

These facts are summarized in (37):

- (37) *Readings associated with sentences containing wa*

	<e <sub>pr</sub> , e <sub>st</sub> > <i>tear, fix arrive</i>	<e <sub>st</sub> , e <sub>st</sub> > <i>get angry, sleep, stand up</i>
<b>wa-</b>	habitual continuous	habitual stative <sup>25</sup>

## 5.2. Analysis: How the *wa* Readings are Derived

I propose that *wa* is the Squamish (*general*) *imperfective* and speculate that *wa* derives the habitual, stative and in-progress readings in the following way:

- (38) Sentences containing *wa* involve generic quantification; they are characterizing sentences derived from episodic sentences (Krifka et al. 1995).

<sup>25</sup> There are cases where it seems that *wa* is yielding a continuous reading for predicates of this class:

na **wa lhxlsh** ta John  
 RL **wa stand.up** DET John  
 'John is standing'

*speaker's comments: he's in motion of standing*

I would suggest that this predicate can be interpreted as either an accomplishment or an achievement; this same predicate shows this behaviour with other morphemes in Squamish (see Bar-el 2003).

This may be the correct avenue of analysis to pursue given Dahl's (1995) observation that "[t]here is a tendency for generics to be marked with imperfectives". Furthermore, it is worth noting that a generic analysis might also explain why *wa* is **obligatory** with *always*<sup>26</sup>:

- (39) a.    *lhik'*    \*(**wa**) (**kw'a-**) **kw'ay'** ta John  
           always **wa** **REDUP-hungry** DET John  
           'John is always hungry'
- b.    *lhik'*    \*(**wa**) **paym**  
           always **wa** **rest**  
           'She's resting all the time'

This would explain the habitual reading that arises in sentences containing *wa* in Squamish, but does not address the fact that *wa* also yields a progressive reading.

To address this issue, I suggest that Bonomi (1997) may shed some light. He proposes a *unifying principle* to account for the two readings (progressive and habitual) associated with the imperfective in Italian. This is given in (40):

- (40) (i)    The progressive reading of the imperfective and the habitual reading originate from the *same* logical form based on universal quantification over circumstances.
- (ii)    The context can have a crucial role in determining which, of these two readings, is admissible.

(Bonomi 1997:491)

The intuition is that with the habitual reading of an imperfective sentence, an extended period of time is characterized by the occurrence of a series of events; for the progressive reading, a local interval is characterized by a series of events<sup>27</sup>. The question, however, is whether Bonomi's analysis can derive the third reading of the imperfective in Squamish, namely, the stage-level stative reading. Individual-level statives (*John knows French*) are described as involving generic quantification (Krifka et al.); but it is not yet clear whether we can extend this analysis to stage-level statives.<sup>28</sup>

## 6. Conclusions and Remaining Issues

In this paper I have argued that the two morphemes that give rise to imperfective readings in Squamish, *CV-* and *wa*, are the Squamish *progressive* marker and (*general*) *imperfective* marker, respectively. I proposed that *CV-* derives the continuous and stative

<sup>26</sup> Gillon (2002) shows that under negation, *wa* is no longer obligatory with *lhik'*, but *-alh*, which she argues is an adverb that quantifies over times, is (ex. 50):

haw chen k=alh    *lhik'*    lulum  
 neg *Indic irr=adv* always sing  
 'I don't always sing' = 'I rarely sing'

<sup>27</sup> Note that this is beginning to look a lot like Lasersohn's (1995) analysis of pluractional markers.

<sup>28</sup> Menéndez-Benito (2002) points out that Bonomi's analysis has no way of accounting for adverbial quantified sentences where both perfective and imperfective sentences express generalizations. If I am correct in assuming that *wa* is an imperfective, this may not be a problem in Squamish since adverbially quantified sentences obligatorily contain *wa* (but see footnote 25).

readings by removing the first state  $\langle e_{st} \rangle$  component of a predicate. For predicates of the event type  $\langle e_{st}, e_{st} \rangle$ , that leaves  $\langle e_{st} \rangle$ , and yields a stative translation. For predicates of the event type  $\langle e_{pr}, e_{st} \rangle$ , that leaves  $\langle e_{pr} \rangle$ , and yields a continuous translation. In regards to the habitual, continuous and stative readings derived by Squamish *wa*, I suggested that an avenue of analysis to pursue would be that sentences containing *wa* involve generic quantification. A summary of the proposal is given in (41):

(41) *Summary*

	$\langle e_{pr}, e_{st} \rangle$ <i>tear, fix, arrive</i>	$\langle e_{st}, e_{st} \rangle$ <i>get angry, fall asleep, stand up</i>
<b>CV-</b>	$\langle e_{pr} \rangle$ continuous	$\langle e_{st} \rangle$ stative
<b><i>wa</i></b>	GEN habitual continuous	GEN habitual stative

There are a few remaining issues that have not yet been addressed. In particular, it is not yet clear why the continuous translations for *CV-* and *wa* and the stative translations for *CV-* and *wa* are the same in English even though they are analyzed differently. It remains to be understood whether the readings available for the two morphemes are truth-conditionally distinct from each other.

Second, as noted in (16) above, both *wa* and the *CV-* reduplicant can co-occur, and in many cases are preferred. Again, the translations given by native speakers are the same as those given for reduplicated verbs and auxiliary *wa* alone:

- (42) a. chen **wa t'a-t'ayak'**  
1SUB.SG **wa REDUP**-angry  
'I am mad'
- b. **wa kw'a-kw'ay'** kw John  
**wa REDUP**-hungry DET John  
'John is hungry'  
*speaker's comments: "it's just like the other one [without reduplication]"*
- c. chen **wa 7i-7imesh**  
1SUB.SG **wa REDUP**-walk  
'I am walking'
- d. na **wa p'a-p'ayak-an-t-as**  
RL **wa REDUP**-fix-TR-TR-3  
'He's fixing it'.

- e. **wa 7i-7tut** ta Peter  
**wa REDUP-sleep** DET Peter  
 ‘Peter is asleep’

Thus a remaining question is how do the proposals put forth in this paper explain this (preferred) co-occurrence? Under the pluractional marker analysis, where both morphemes are analyzed in the same way, this is a problem as this co-occurrence would not be expected.<sup>29</sup> Under the proposal suggested here, *wa* and *CV-* are different types of morphemes that do different things so we might expect them to co-occur. However, this proposal does not yet explain why this co-occurrence is preferred. We might predict that since a habitual reading is available for *wa*, we would expect to get a habitual reading of a continuous predicate when they co-occur, for example:

- (43) ?na **wa te-thim'** ta lam' welh haw k-es 7i huy-nexw-as  
 RL **wa REDUP-make** DET house CONJ NEG IRR-3 7i finish-TR-3  
 ?‘He’s always building a house (but never finishes)’

Unfortunately, it is difficult to elicit this data as speakers usually respond that there are better ways to say the given sentence. These issues will remain as questions for further research.

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<sup>29</sup> As far as I can tell, Lasersohn (1995) does not discuss co-occurrence of pluractional morphemes.

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