Degreeful Comparison in Secwepemctsín*

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Abstract: In this paper, I present data to show how comparison is expressed in Secwepemctsín (a.k.a. Shuswap: Northern Interior Salish), with specific focus on degree-related comparison. I conclude, based on the availability of specific degree constructions, that Secwepemctsín is a degreeful language. In the terminology of Beck et al. (2009), the language has a positive setting of the *Degree Semantics Parameter* and consequently has gradable predicates of type $\langle d,\langle e,t\rangle\rangle$. This is the same conclusion reached for St'át'imcets (a.k.a. Lillooet: Northern Interior Salish) and ʔayʔaǰuθəm (a.k.a. Comox-Sliammon: Interior Salish) by Davis and Mellesmoen (2019) in a similar investigation of degree-related constructions in these languages. I present three possible ways to extend the analysis proposed for St'át'imcets and ʔayʔaǰuθəm by Davis and Mellesmoen (2019) to the data presented here.

Keywords: Salish, Secwepemctsín/Shuswap, syntax, semantics, degrees, comparison

1 Introduction

There has been substantial research on the syntax and semantics of comparison in Indo-European languages. However, this phenomenon has received relatively little attention in Salish. Specifically, there are two accounts of comparison in the family. Lo and Reisinger (2018; henceforth L&R) undertake an investigation of comparatives in the Central Salish language ʔayʔaǰuθəm (Comox-Sliammon), motivated primarily by research by Beck et al. (2009). In their influential paper, Beck et al. (2009) propose three binary parameters to account for the crosslinguistic variation found in their investigation of comparison constructions in 14 languages. The most significant of which is the *Degree Semantics Parameter*, which is related to the semantic type of gradable predicates in a language. L&R (2018) argue that ʔayʔaǰuθəm has a negative setting of the **DSP** and consequently does not have gradable predicates of type $\langle d,\langle e,t\rangle\rangle$.

Davis and Mellesmoen (2019; henceforth D&M) provide the second account of comparison in Salish. They carry out a systematic comparison of degree-related constructions in St'át'imcets and ʔayʔaǰuθəm. With new data, they reanalyse the conclusion reached by L&R (2018) with respect to the status of ʔayʔaǰuθəm, ultimately concluding that both languages have a positive setting of the **DSP**. In this paper, I provide novel data from Secwepemctsín (a.k.a. Shuswap; Northern Interior Salish; ISO 639-3: shs), a language spoken in Central and Southern British Columbia that has approximately 190 fluent speakers (Dunlop et al. 2018). I argue, like D&M (2019) for St'átimcets and ʔayʔaǰuθəm, that the language is degreeful.

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In Section 2, I provide a brief overview of relevant literature related to degree semantics. In Section 3, I illustrate how basic notions of comparison are expressed in Secwepemctsín (i.e. comparatives, equatives, and superlatives). I then present the degree-related data. In Section 5, I present possible ways to extend the analysis proposed by D&M (2019) for St'át'imcets and ʔayʔaǰuθəm to the data. Finally, I provide some concluding remarks in Section 6.

2 Degrees and comparison

The syntax and semantics of comparison constructions in English and other Indo-European langauges has received significant attention in the literature, as early as the 1970s (see Bresnan 1973; Cresswell 1976; von Stechow 1984; Stassen 1985). However, only more recently has this phenomenon been analysed in any depth in a fieldwork setting (see Pearson 2010; Bhatt & Takahashi 2007, 2011; Hohaus 2012, 2015; Bochnak 2015; Bowler 2016; Deal and Hohaus 2019; amongst others). The seminal paper by Beck et al. (2009) is particularly significant. Their main claim is that languages differ on whether or not their gradable predicates make reference to degrees. They propose a parameter to deal with this variation, specifically the *Degree Semantics Parameter*:

(1) **Degree Semantics Parameter (DSP)**
A language does/does not have gradable predicates (type $\langle d,\langle e,t\rangle\rangle$ and related), i.e. lexical items that introduce degree arguments. (Beck et al. 2009:19)

According to their diagnostics, a language is [+**DSP**] if it can express differential comparatives (e.g. *Bruce is six inches taller than Eve*) and comparisons with degree (e.g. *Eve is taller than 5ft*). As a result, Beck et al. (2009) classify English as a [+**DSP**] language. The benefits of a degreeful analysis for English had been noted as early as Cresswell (1976), and subsequently developed by von Stechow (1984), Heim (1985, 2000), and Kennedy (2007b). A degreeful analysis is typically considered standard. However, some proposals challenge this and call for a degreeless analysis of English comparatives. Notably, Klein (1980:4) argues that degrees introduce 'unjustified complexity' and thus proposes a *vague-predicate* analysis, where gradable predicates are context dependent. More recently, van Rooij (2011) develops an alternative proposal based on scales. His analysis makes use of four sets of scales, each increasingly complex, to account for the English data. Therefore, although a degreeful analysis is commonly adopted, the debate does persist.

Beck et al. (2009) propose two additional parameters to account for further variation. These parameters are the *Degree Abstraction Parameter* (**DAP**) and the *Degree Phrase Parameter* (**DegPP**), they follow from the **DSP**. In other words, only languages with a positive setting of the **DSP** can have a positive setting of the **DAP** and only languages with a positive setting of the **DAP** can have a positive setting of the **DegPP**, at least according to this typology. The additional parameters are stated in full below:

(2) **Degree Abstraction Parameter (DAP)**
A language does/does not have binding of degree variables in the syntax. (Beck et al. 2009:11)

(3) **Degree Phrase Parameter (DegPP)**
The degree argument position of a gradable predicate may/may not be overtly filled. (Beck et al. 2009:24)

To classify a language as [+/- **DAP**], Beck et al. (2009) examine the scope behaviour and Negative Island effects in a language. To classify a language as [+/- **DegPP**], they check the availability of degree questions (e.g. *How tall is Bruce?*) and measure phrase constructions (e.g. *Bruce is 6ft tall*). There is ongoing debate as to whether these parameters are the best way to characterise variation crosslinguistically. The **DSP** is a fairly radical macroparameter and the **DAP** has also come under scrutiny, principally due to more extensive research in Japanese (see Hayashishita 2009; Kennedy 2007a; Shimoyama 2012; Sudo 2015). In particular, Shimoyama (2012) argues that some Japanese clausal comparatives show island sensitivities. As a result, Japanese is not necessarily [-**DAP**] and this parameter does not effectively account for the differences from English. Additionally, the way in which the settings on the parameters are ordered does not match some crosslinguistic data. For example, in Kunbarlang (non-Pama-Nyungan; Australia) measure phrase constructions are available, but they are the only degree constructions found in the language (Kapitonov 2019). This could suggest that the language has a positive setting of the **DegPP** but negative settings of the **DSP** and **DAP**, which should not be possible within this typology. More generally, languages like Kunbarlang will be classified as degreeless, on the basis of the diagnostics of the **DSP**, but later will be found to have degrees in other ways, by the availability of other constructions.

I will not make any further comments regarding the validity of these parameters, as this issue is beyond the scope of this paper. Nevertheless, the work by Beck et al. (2009) has successfully incited lines of research into comparison crosslinguistically. Furthermore, the survey used in their investigation is a useful starting point for fieldwork on this topic in languages like Secwepemctsín, for which no formal attempt has yet been made to analyse their comparison constructions.

3 Basic notions of comparison in Secwepemctsín

In this section, I present data to show how simple comparatives, equatives, and superlatives are formed in Secwepemctsín and explain the basic properties of such constructions.

3.1 Comparatives in Secwepemctsín

Comparatives in Secwepemctsín typically use the comparative word *p'7e7cw* 'more', which acts as the main predicate, taking a nominalized subordinate clause as its syntactic argument, see (4):[1]

(4) a. P'7e7cw s-t'ext-s re Bruce te Eve.
more NMLZ-tall-3POSS DET Bruce DET.OBL Eve
'Bruce is taller than Eve.' DC/LC

b. P'7e7cw s-qeyt-s re speqpéq te ápels.
more NMLZ-sour-3POSS DET berries DET.OBL apples
'The berries are more sour than the apples.' DC/LC

[1] The data comes from original fieldwork via Zoom with speakers of the western dialect (Skeetchestn) of Secwepemctsín. The examples are written using the practical orthography developed in Kuipers (1974), which is widely employed in Secwépemc territory. I use the following abbreviations: DEM = demonstrative, DET = determiner, DIM = diminutive, EVID = evidential, EXCLAM = exclamative, INDP = independent pronoun, INTS = intensifier, IRR = irrealis, LOC = locative, MID = middle, NCTRL = non-control, NMLZ = nominalizer, OBL = oblique, SG = singular, SUBJ = subjunctive, POSS = possessive. An asterisk (*) is used to mark ungrammaticality.

P'7e7cw is not restricted to the adjectival comparatives shown in (4). It can also be used in nominal comparatives, e.g. with amounts, times, distances, often using *cwi7t* 'much, many', as shown in (5) with an amount, as well as in verbal comparatives, see (6).[2]

(5) P'7e7cw re s-cwi7t-s te syelt te sten ne letép te
more DET NMLZ-many-3POSS DET.OBL plate DET.OBL be.there on table DET.OBL
cllúqwen'.
cup
'There are more plates on the table than cups.' (RI)

(6) a. P'7e7cw re s-qwetséts-(s) te Tk'emlups te-n ntsétswe7.
more DET NMLZ-set.off-3POSS DET.OBL Kamloops OBL-LOC 1SG.INDP
'He goes to Kamloops more than I do.' (RI)

b. Re Toby p'7e7cw s-xwent-s re (s)-secmúy'e-s te
DET Toby more NMLZ-fast-3POSS DET NMLZ-swim-3POSS DET.OBL
s-k'wétem-s re Eve.
NMLZ-walk-3POSS DET Eve
'Toby swims faster than Eve walks.' (RI)

In Secwepemctsín, the standard phrase (i.e. the *than*-phrase in English) is introduced by the oblique determiner *te*. Some speakers show a preference for inserting the conjunction *ell* 'and' before *te*, so the standard phrase for (4a), for example, would be *ell te Eve* as opposed to simply *te Eve*. However, this has no effect on the meaning of the comparative.

The standard phrase can be either phrasal or clausal in nature, see (4) and (5) for examples of phrasal standards and (6) for examples of clausal standards.

In addition, the standard phrase alone is sometimes sufficient to induce a comparative reading. In other words, *p'7e7cw* can be dropped from the sentence, but we still understand that there is greater than relation between the argument and the standard. This is possible in adjectival comparatives, like those in (4), where the gradable predicate belongs to an open scale (see Kennedy & McNally 2005; Kennedy 2007b). *P'7e7cw* can be omitted in the comparative with the open scale adjective *ts'kéwelc* 'old', see (7). This is not possible in (8) with the closed scale adjective *piq* 'white'.

(7) Yi7éne te tsrep (p'7e7cw) s-tsk'éwelc-s te-n yerév.
DEM DET.OBL tree (more) NMLZ-old-3POSS OBL-LOC DEM
'This tree is older than that [other] one.' (RI)

(8) Yi7éne te stektíts'e7e *(p'7e7cw) s-piq-s te-n yerév.
DEM DET.OBL shirt more NMLZ-white-3POSS OBL-LOC DEM
'That shirt is whiter than that one.' (RI)

[2] Canonical word order for comparatives is shown in (4). It is also fairly common to find comparatives with the argument fronted in a focus position, e.g. *re Bruce p'7e7cw st'exts te Eve* for (4a).

It is also possible to have a comparative where the standard of comparison is not explicitly mentioned at all, so-called contextual comparatives. In these cases, the standard is deduced purely from context, see (9):

(9) *Context: Imagine that we can finally come to Skeetchestn to elicit in person. You've seen our faces on Zoom, so you know what we look, but a lot of attributes, e.g. height, you have no way of knowing before you meet us in person:*

P'7e7cw (nukw) s-t'ext-s re Bruce.
more EVID NMLZ-tall-3POSS DET Bruce
Intended: 'Bruce is taller than I expected.'
Literally: 'Bruce is (evidently) taller.' (RI)

Kuipers (1974) reports that *p'7e7cw* is not the primary strategy used to express comparative meaning; it is in fact multiple reduplication. However, my consultants have never volunteered sentences of this form during elicitation sessions. When I have presented them with these sentences, I have received varying judgements, indicating that further elicitation is required.[3]

3.2 Equatives

Turning to equatives, these expressions are realised using either *ts'ílem* 'same as, likeness, similarity' or *tsellts'ílle* 'same' in the position of *p'7e7cw*. The standard is introduced by *te*, as in comparatives.

(10) a. Yi7éne spúl'ten ts'ílem s-qwetqwét-s ell te yi7éne spúl'ten.
DEM bed same.as NMLZ-soft-3POSS and DET.OBL DEM bed
'This bed is as soft as this [other] bed.' (DC/LC)

b. N-sqé⟨q⟩xe ts'ílem s-yugwyúgwt-s te kenkéknem.
1SG.POSS-dog⟨DIM⟩ same.as NMLZ-strong-3POSS DET.OBL bear
'My dog is as strong as a bear.' (DC/LC)

(11) a. Ri7éne tsetsrép tsellts'ílle ri7 s-tsk'éwelc-s.
DEM trees same DEM NMLZ-old-3POSS
Literally: 'These tress are the same oldness.'
Intended: This tree is as old as that tree. (DC/LC)

[3] An example of these judgements can be seen below. The consultant was presented with (ia) and later offered (ib):

(i) a. * ⟨Xe⟩xyú⟨ye⟩m re Bob te Mary.
⟨INTS⟩big⟨DIM⟩ DEM Bob DET.OBL Mary
Comment (RI): 'It's not a sentence, there's no comparison there.'

b. ⟨Xe⟩xyum-7uw'i re Bob te Mary.
⟨INTS⟩big-INTS DEM Bob DET.OBL Mary
'Bob is much bigger than Mary.' (RI)

b. Re John tsellts'ílle s-t'ext-s te Bill.
DET John same NMLZ-tall-3POSS DET.OBL Bill
Literally: 'John and Bill are the same tallness.'
Intended: 'John is as tall as Bill.' (DC/LC)

The specific difference between *tsellts'ílle* and *ts'ílem* is a topic for further research. Reisinger (2020) notices a similar pattern in equatives in ʔayʔaǰuθəm and suggests that the difference is linked to the notion of reciprocity. To illustrate this point, we can compare the examples *Eve is as old as Bruce* and *Eve and Bruce are the same age*, the idea being that we find different equative words in these two examples. In principle, this could be what we find in Secwepemctsín, where *tsellts'ílle* is used in the former example with a collective unary form and *ts'ílem* is used in the latter, where we find a binary form. I have reflected this suggestion in the glosses, though it requires further testing.

3.3 Superlatives

Kuipers (1974) reports that a bound morpheme, specifically the prefix *sen-*, is the most common way to induce a superlative reading. My consultants have never volunteered a superlative form with *sen-* and I have not yet asked them to judge sentences with this morpheme. There are other strategies that I have encountered during elicitation sessions. The first is the use of the general purpose intensifier *úy* (also spelled as *7uw'i*), see (12).[4] However, in my experience, the preferred way to express superlative meaning is using *p'7e7cw*. Superficially, superlatives with *p'7e7cw* look very similar to comparatives, since they contain the same comparative predicate and involve comparison of the argument to the standard.[5] Crucially, they differ in the way that the standard is restricted. Notice in (13), the standard is restricted to 'than everyone' and 'than all the children', which essentially gives the same meaning as a bound morpheme (e.g. *-est* in English).[6]

(12) (Ta7cwell) le7⟨e7⟩-úy yi7éne te s-7íllen re-n
(EXCLAM) good⟨INTS⟩-INTS DEM DET.OBL NMLZ-food DET-1SG.POSS
s-7í⟨7⟩llen.
NMLZ-eat⟨DIM⟩
Literally: 'Oh my goodness, this food I've eaten is so good'
'This is the best food I've eaten.' (RI)

(13) a. Re Bruce p'7e7cw s-lexléx-s ell te xwexwéyt-es.
DEM Bruce more NMLZ-intelligent-3POSS and DEM.OBL all-3SUBJ
Literally: 'Bruce is more intelligent than everyone.'
'Bruce is the most intelligent.' (DC/LC)

b. Re Bruce p'7e7cw s-lexléx-s ell te xwexwéyt te
DEM Bruce more NMLZ-intelligent-3POSS and DEM.OBL all DET.OBL
stsmémelt.
children
Literally: 'Bruce is more intelligent than all the children.'
'Bruce is the most intelligent child.' (DC/LC)

[4] This is the most common strategy to express superlative meaning in St'át'imcets, see D&M (2019).
[5] As in comparatives, the standard can be introduced by *te* alone or *ell te*, with no difference in meaning.
[6] This is a relatively common crosslinguistic strategy to form the superlative, see Bobaljik (2012).

The standard phrase in these constructions is often *te xwexwéytes* or *te xwexwéyt + NP*, but speakers also make use of *te s7i7llcw* 'than the rest', see (14). The examples in (15) and (16) show how the standard can be further modified.

(14) Yerév swewll p'7e7cw s-xyum-s ell te s7i7llcw.
DEM fish more NMLZ-big-3POSS and DET.OBL rest
Literally: 'That fish is bigger than the rest.'
'That is the biggest fish.' (DC/LC)

(15) Re skem'cís p'7e7cw s-xyum-s ell te xwexwéyt te
DET grizzly.bear more NMLZ-big-3POSS and DET.OBL all DET.OBL
stem t'7élye.
thing around.here
Literally: 'Grizzly bears are bigger than all the things around here.'
'Grizzly bears are the biggest animals around here.' (DC/LC)

(16) Yerév swewll p'7e7cw s-xyum-s ell te xwexwéyt-es
DEM fish more NMLZ-big-3POSS and DET.OBL all-3SUBJ
te-n s-wi⟨w⟩k-em.
DET.OBL-1SG.POSS NMLZ-see⟨DIM⟩-MID
Literally: 'That fish is bigger than all I've seen.'
'That fish is the biggest I've seen.' (DC/LC)

4 Degreeful comparison

In this section, I will argue that Secwepemctsín makes use of degrees due to the availability of specific degree-related constructions. I will first look at differential comparatives and comparisons with degree, as these are considered robust diagnostics by Beck et al. (2009) for the setting of the *Degree Semantics Parameter*. I will then provide data for degree questions, measure phrases, and subcomparatives. The availability of the latter set shows, according to Beck et al. (2009), that Secwepemctsín not only has gradable predicates of type $\langle d,\langle e,t\rangle\rangle$ but also has binding over degree variables, i.e. is [+**DAP**], and can overtly fill the degree argument position, i.e. is [+**DegPP**].

4.1 Differential Comparatives

Examples of differential comparatives in English are sentences like *Bruce is six inches taller than Eve* or *Eve is three years older than Bruce*. In these constructions, we are comparing two sets of degrees on the same scalar dimension. In the former example, we are comparing the degree to which Bruce is tall and the degree to which Eve is tall. The difference between these degrees is specified as being six inches. The fact that this difference is explicitly stipulated is what allows these constructions to be used as a diagnostic for degrees.

Under a *vague*-predicate analysis, the argument *Bruce* and the standard *Eve* would be partitioned into groups of 'tall' and 'not tall' respectively. However, we need to be able to calculate the specific difference between them in the semantics, which is not possible under this style of analysis. Therefore, if a language has these constructions available, we must propose a degreeful analysis.

Although this difference needs to be explicit, it does not necessarily have to come in terms of a measure phrase like *six inches (taller)*. Differential comparatives can also be formed with modifiers like *a little (bigger)* or *a lot (more intelligent)*, or even those that use demonstratives in English like *this much (thicker)* or *that much (taller)*, which are accompanied by gestures.

These constructions are available in Secwepemctsín and they take a very similar form to the basic comparative. The measure phrase slot is directly preceding *p'7e7cw* and the nominalized gradable predicate.

(17) Re John nek'ú7 te sk'epqen (p'7e7cw) s-t'ext-s ell te
DET John one DET.OBL head more NMLZ-tall-3POSS and DET.OBL
ntsétswe7.
1SG.INDP
'John is a head taller than me.' (DC/LC)

(18) Yi7éne te tsrep nek'wlltyénecwem (p'7e7cw) s-tsk'éwelc-s te-n yerév.
DEM DET.OBL tree one.year more NMLZ-old-3POSS OBL-LOC DEM
'This tree is one year older than that one.' (RI)

The examples above also show that in differential comparatives in Secwepemctsín, *p'7e7cw* can be dropped and we still get a comparative reading.[7] It is worth noting that elicitation of measure terms and degree constructions is challenging in Salish; Secwepemctsín is no different. Many common measure terms (e.g. *miles* for distance or *degrees* for temperature) do not have direct translations and in my experience, Secwepemctsín consultants are resistant to use these English loan words in degree constructions. However, this varies across speakers and languages. D&M (2019) report that whilst their ʔayʔaǰuθəm consultants typically resisted using English loan words, St'át'imcets consultants tended to be less conservative. In Secwepemctsín, some speakers are happy to use direct translations of English measure terms (e.g. *sk'epqen* 'head' as in (17)), but others are not entirely comfortably with this either. This does not mean that we should conclude that the language is degreeless. It is possible to find differentials that speakers prefer (e.g. *nek'wlltyénecwem p'7e7cw s.tsk'ewelcs* 'one year older') and as mentioned above, differential comparatives with demonstratives are also valid constructions to demonstrate the existence of degrees. These are significantly easier to elicit.

4.2 Comparison with degree

A comparison with degree is a construction where the standard of comparison is specified as a degree, as opposed to an entity. An example in English would be *Eve is taller than 5ft*. In terms of the semantics, the standard denotes either a degree, d, a set of degrees, $\langle d,t \rangle$, or potentially even intervals (von Stechow 1984; Heim 2000; Schwarzschild 2002, 2005). An example of a Secwepemctsín comparison with degree is shown below:

(19) Ri7éne letép p'7e7cw s-yect-s ell te nek'ú7 te sq'wext.
DEM table more NMLZ-long-3POSS ell DET.OBL one DET.OBL foot
'This table is longer than one foot.' (DC/LC)

[7] I assume this also related to why we find subject-intial word order with these constructions. I have not yet tested whether canonical word order is acceptable in these cases.

Typically, these constructions are more challenging to elicit. However, the example in (19) shows how the direct translation of an English measure term can be used as the standard.

I conclude from the data presented in Sections 4.1 and 4.2 that Secwepemctsín has a positive setting of the *Degree Semantics Parameter* and therefore has gradable predicates of type $\langle d,\langle e,t\rangle\rangle$. In the following two sections, I provide data to show other degree-related constructions in Secwepemctsín, specifically degree questions, measure phrase constructions, and subcomparatives.

4.3 Degree questions and measure phrase constructions

Degree questions are particularly relevant for Beck et al.'s (2009) typology. Their semantics not only requires gradable predicates with degree variables, but it additionally requires explicit quantification over this variable. This explicit quantification is what separates a true degree question (e.g. *How (many feet/inches) tall is Bruce?*) from its paraphrase (e.g. *What is the height (in feet/inches) of Bruce?*). Degree questions in Secwepemctsín are formed using the WH-quantifier *k'winc*, which is found across Salish, followed by the irrealis determiner *k*, the nominalised gradable predicate, and relevant DP.

Measure phrases are also important to the typology as their availability demonstrates that the degree argument of the gradable predicate can be filled overtly. An example of an English measure phrase is *Bruce is 6ft tall*, where *6ft* explicitly fills the degree argument slot. As we have seen above, the measure phrase typically consists of a number plus unit of measurement, but examples with demonstratives and their accompanying gestures (e.g. *Bruce is this tall*) are also possible. In Secwepemctsín measure phrases, the degree measure precedes the nominalised gradable predicate.

The examples below show degree questions along with a possible measure phrase answer.

(20) a. K'winc k s-yect-s re peqwél'cwten?
how.many DET.IRR NMLZ-long-3POSS DET book
'How long is the book?' (DC/LC)

b. Ri7éne peqwél'cwten kellés te sxetspqíqenkst s-yect-s.
DEM book three DET.OBL hundred NMLZ-long-3POSS
'That book is 300 (pages) long.' (DC/LC)

(21) a. K'winc k s-t'ext-s re Leona?
how.many DET.IRR NMLZ-tall-3POSS DET Leona
'How tall is Leona?' (DC/LC)

b. T'7éne ts'ílem s-text-s.
DEM same.as NMLZ-tall-3POSS
'She's this tall.' (accompanied by gesture) (DC/LC)

4.4 Subcomparatives

Subcomparatives are constructions that involve a comparison of two sets of degrees across two distinct dimensions, e.g. in *the table is longer than the door is wide*, we are comparing the degree to which the table is long with the degree to which the door is wide. Such comparatives are

only available in languages that allow clausal standards, which Secwepemctsín does. We find that subcomparatives are available in the language, as shown in (22):

(22) P'7e7cw s-yect-s yi7éne te tsrep te s-xyum-s
more NMLZ-long-3POSS DEM DEM.OBL tree DEM.OBL NMLZ-big-3POSS
re tswec.
DEM creek
'The tree is longer than the creek is large.' (RI)

In (22), we are comparing the degree to which the tree is long and the degree to which the creek is large, or wide. I will return to an analysis of this construction in Section 5.1.

It is also relevant at this point to discuss 'amount' subcomparatives; an example of this construction in English would be *Eve has written more essays than she has written poems*. Intuitively, we are comparing the amount of essays and poems that Eve has written, i.e. she has written *d*-many essays vs. *d*-many poems. However, these constructions are not true subcomparatives as they contain the gradable predicate 'many' within the standard phrase. It is just obligatorily deleted in English. If it could be left overt, this would be a mark of a true subcomparative, but this would result in ungrammaticality (Kennedy & Alrenga 2014). Nevertheless, (23) and (24) show how 'amount' subcomparatives are expressed in Secwepemctsín.

(23) P'7e7cw s-q'iyem-s re Julie te stsq'ey' ell te Ann re
more NMLZ-write-3POSS DET Julie DET.OBL letter and DET.OBL Ann DET
s-q'iyem-s te setsínten.
NMLZ-write-3POSS DET.OBL song
'Julie writes more songs than Ann writes letters.' (RI)

(24) Re Eve p'7e7cw s-kwen-wéllen'-s te swewll ell te
DET Eve more NMLZ-catch-NCTRL.MID-3POSS DET.OBL fish and DET.OBL
Natália s-q'wléwem-s te speqpéq.
Natália NMLZ-pick.berries-3POSS DET.OBL berry
'Eve caught more fish than Natália picked berries.' (RI)

4.5 Summary

The data presented in this section indicate that Secwepemctsín is a degreeful language. This is in accordance with the claim that both St'át'imcets and ʔayʔaǰuθəm are also degreeful (D&M 2019). The table below summarises the degree constructions available in these languages:

(25)

Table 1: Degree-constructions in Secwepemctsín, St'át'imcets, and ʔayʔaǰuθəm.

	Secwepemctsín	St'át'imcets	ʔayʔaǰuθəm
Differential comparatives	**Yes**	**Yes**	**Yes**
Comparison with degree	**Yes**	**Yes**	**Yes**
Degree questions	**Yes**	**Yes**	**Yes**
Measure phrase constructions	**Yes**	**Yes**	**Yes**
Subcomparatives	**Yes**	**Yes**	**Yes**

Having established these facts, we can turn to a preliminary analysis in Section 5.

5 Analysis

A complete analysis of the data presented here is beyond the scope of this paper. However, it is important to see what such an analysis might look like. We know from the availability of differential comparatives and comparisons with degree that Secwepemctsín has gradable predicates of type $\langle d, \langle e, t \rangle \rangle$ (*Degree Semantics Parameter*). As a result, I will not pursue a *vague*-predicate analysis in the style of Klein (1980). Furthermore, I have provided data to demonstrate that Secwepemctsín has binding of degree variables in its syntax. This is relevant as it means that the language makes use of comparative operators, as we find in English, i.e. is [+**DAP**]. These operators are scopally active and interact with other quantifiers, e.g. modals.[8] These two facts are also true of St'át'imcets and ʔayʔaǰuθəm. In their paper, D&M (2019) present an analysis of measure phrase constructions and subcomparatives. Using elements of their analysis, I will present three possible analyses for subcomparatives. These three options are dependent on the semantic type of the comparative operator and status of the standard marker. Where relevant I will comment on the assumptions made by D&M (2019), but I refer the reader to Section 5 of their paper for the specific details.

5.1 Determining a subcomparative analysis

Subcomparatives are constructions that require a clausal standard of comparison, as such the composition will take place with a clausal comparative operator. It is beyond the scope of this paper to discuss an analysis of phrasal comparatives in Secwepemctsín and so they will not be discussed here.[9] There are two possible denotations for this comparative operator:

(26) $[\![\text{-er}_{clausal}]\!] = \lambda \mathrm{d}_d.\lambda \mathrm{D}_{\langle d,t \rangle}.\ [\mathrm{MAX(D)} > \mathrm{d}]$ Heim (2000)

(27) $[\![\text{-er}_{clausal}]\!] = \lambda \mathrm{D1}_{\langle d,t \rangle}.\lambda \mathrm{D2}_{\langle d,t \rangle}.\ \mathrm{max(D2)} > \mathrm{max(D1)}$ Beck (2011)

These two operators differ in the nature of their first argument. The operator proposed in Heim (2000), (26), takes a degree, type d, followed by a set of degrees, type $\langle d,t \rangle$. The operator proposed in Beck (2011), (27), simply takes two sets of degrees. In their analysis, D&M (2019) make use of (26). Depending on the denotation of the comparative operator and status of the standard marker, there are three possible analyses for the subcomparative in (22). In all of these analyses, gradable predicates are of type $\langle d, \langle e,t \rangle \rangle$, given the [+**DSP**] status of the language. As proposed by D&M (2019), I will also assume that in both clauses the nominalization of the relevant gradable predicate marks lambda abstraction over the degree argument. Finally, the standard is extraposed at PF to yield the correct surface word order. I repeat the relevant subcomparative example below, followed by the three options for the analysis.

[8] The interaction of the comparative operator *p'7e7cw* with scope is an active topic of future research.

[9] There is significant debate surrounding the analysis of phrasal standards. In particular, whether they should be analysed as purely phrasal (i.e. a DP) or whether they are underlyingly clausal (i.e. an elided CP), see Lechner (2004), Bhatt and Takahashi (2007), and Bhatt and Takahashi (2011). The analysis of phrasal standards in Secwepemctsín is an area for future research.

(28) P'7e7cw s-yect-s yi7éne te tsrep te s-xyum-s
more NMLZ-long-3POSS DEM DEM.OBL tree DEM.OBL NMLZ-big-3POSS
re tswec.
DET creek
'The tree is longer than the creek is large.' (RI)

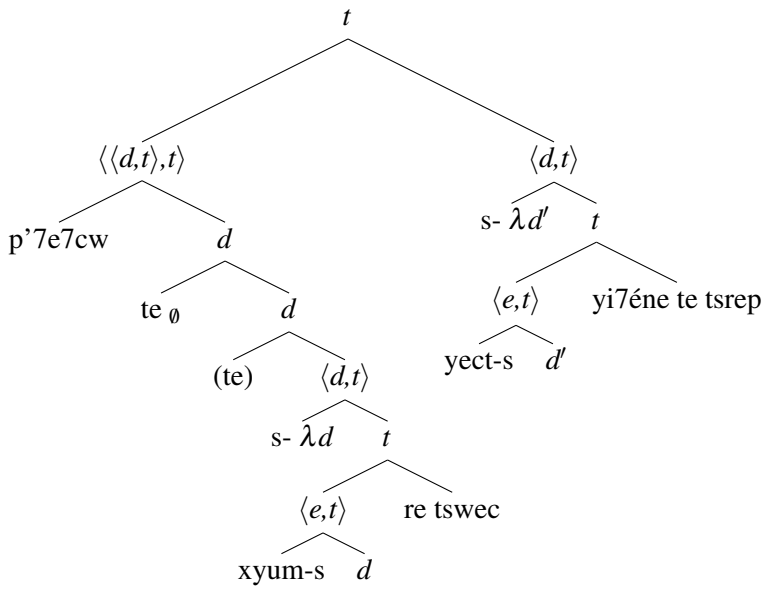
Option 1: Heim (2000) operator / semantically vacuous standard marker

Under this proposal, the comparative word *p'7e7cw* is of type $\langle d,\langle\langle d,t\rangle,t\rangle\rangle$. It takes the clausal standard of comparison *sxyums re tswec*, type d, as its first argument and the nominalized clause containing the gradable predicate *syects yi7éne te tsrep*, type $\langle d,t\rangle$, as its second. The lexical entry is shown below:

(29) $[\![p'7e7cw]\!] = \lambda d_d.\lambda D_{\langle d,t\rangle}.[\text{MAX}(D) > d]$

We assume that the standard marker *te* is semantically vacuous, as is commonly proposed for the standard marker *than* in English. I additionally assume the presence of a covert determiner of type $\langle\langle d,t\rangle,d\rangle$. This is in accordance with the analysis of Salish determiners by Matthewson (2008) and the proposal that such determiners can range over predicates of degrees, as well as individuals (D&M 2019). The relevant LF is shown in (30):

(30)

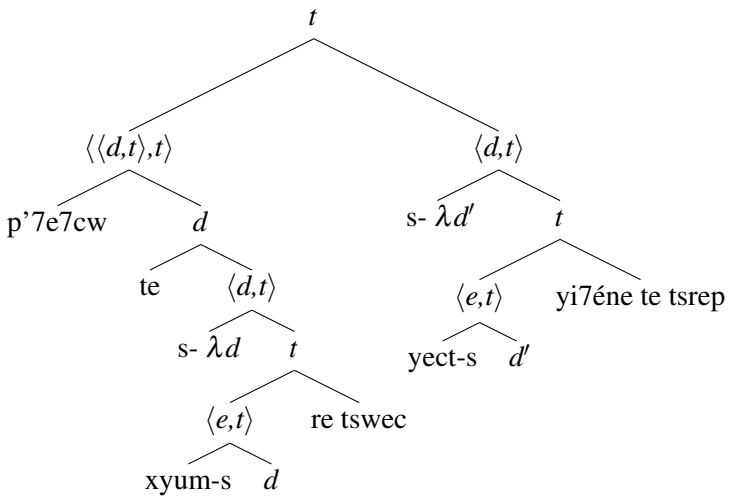


Option 2: Heim (2000) operator / standard marker has determiner semantics

Under this proposal, the semantics of *p'7e7cw* are the same as (29). The difference is that here we do not assume that the standard marker *te* is semantically vacuous, instead we assume that it carries out its role as a standard determiner. Therefore, its semantics are identical to the covert determiner proposed in **option 1**.[10] The LF is shown below:

[10] Although it is typical to assume that the standard marker is vacuous, some proposals claim that it is in fact crucial to the composition of the comparative, e.g. Alrenga and Kennedy (2014).

(31)



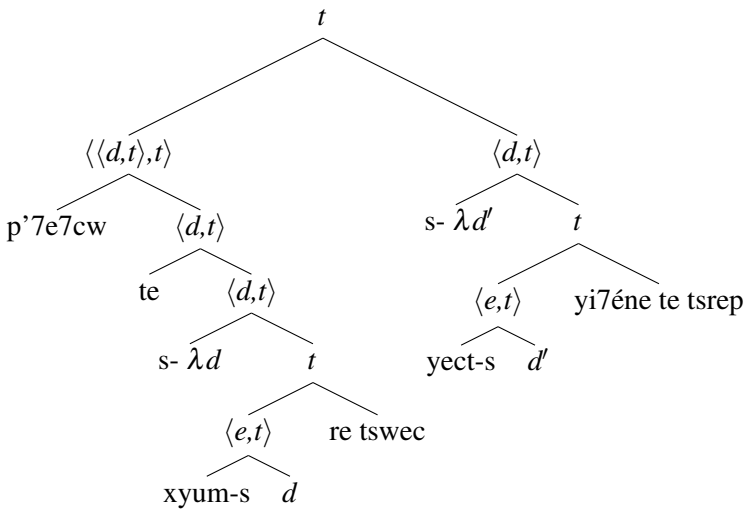
Option 3: Beck (2011) operator / vacuous standard marker

The third option uses an alternative operator, based on Beck (2011). Here *p'7e7cw* would have the semantics as stated in (32). This operator simply takes two sets of degrees.

(32) $[\![p'7e7cw]\!] = \lambda D1_{\langle d,t\rangle}.\lambda D2_{\langle d,t\rangle}.\ \max(D2) > \max(D1)$

Under this analysis, we do not need to assume a covert determiner, nor do we have stray from the typical assumption that the standard marker is vacuous.[11] The LF is shown below:

(33)



There are implications for choosing this operator, which I will mention here but not comment on in depth. Namely, under **option 2**, the oblique *te* is treated as though it contains a determiner. However, in **option 3**, it is treated as a pure oblique.

[11] Though this will not be a deciding factor for the analysis of Secwepemctsín, there is evidence against this approach for St'át'imcets, namely the fact that there is an overt determiner following the standard marker.

In this section, I have presented three possible analyses for subcomparatives in Secwepemctsín. At this point, current research does not indicate which of these options is to be preferred. Further tests and future elicitation will provide evidence to decide on the best analysis.

6 Conclusion

In conclusion, I have provided data to show that Secwepemctsín has a positive setting of the *Degree Semantics Parameter*, *Degree Abstraction Parameter*, and *Degree Phrase Parameter*. This conclusion is based on the availability of specific degree-related constructions in the language. I have also presented three possible analyses for subcomparatives in the language. Though there is still much more research to be done on the specific properties of these constructions and degree semantics more generally in the language, this paper can be seen as a starting point.

More generally, this paper contributes to the limited, but growing, body of work on comparison in Salish (L&R 2018 and D&M 2019) and reaches the same conclusions for Secwepemctsín as D&M (2019) for St'át'imcets and ʔayʔajuθəm.

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