Syntactic Nominalization in Halkomelem Salish

by

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B.A., Rutgers University, 2003

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

in

THE FACULTY OF GRADUATE STUDIES

(Linguistics)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

April 2012

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Abstract

This dissertation is a detailed exploration of two constructions in Halkomelem Salish – Predicate Nominalization and Clausal Nominalization – which I group together as syntactic nominalization. I use these terms throughout to refer to the particular operations, and refer to the results of those operations as nominalized predicates and nominalized clauses, respectively.

The two constructions examined here share some nominal morphological features. Both possess an /s/- nominalizer, identical in shape with the nominalizer used to create (theme) participant nominals. Possessive agreement morphology appears in both nominalized predicates and nominalized clauses, indexing the highest argument in each. Despite these surface similarities and a common source, I argue that these two operations are synchronically distinct, and, as a corollary, that they are formed with distinct, homophonous nominalizers.

In Chapter 3, I address predicate nominalization, which is used to create a predicate whose subject is interpreted as the theme of the non-nominalized predicate. I argue that predicate nominalization forms a reduced relative clause at the edge of the thematic domain, with the nominalizer functioning as a relative pronoun. I further argue that the nominalizer projects after remerge, thus creating a constituent with the internal structure of a relative clause and the external distribution of an NP.

In Chapter 4, I argue that clausal nominalization forms a defective CP, which is used as the default embedded clause and as the dependent clause(s) in a clause chain. I analyze nominalizer in clausal nominalization as a complementizer that cannot convey illocutionary force. My analysis captures the fact that nominalized clauses have the formal properties and distribution of clauses rather than DPs, along with their embedded and clause-chaining uses.

I take a cross-Salish perspective in Chapter 5, showing how attested variation within the family is compatible with my analyses.
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<td>1</td>
<td>first person</td>
</tr>
<tr>
<td>2</td>
<td>second person</td>
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<tr>
<td>3</td>
<td>third person</td>
</tr>
<tr>
<td>ACT</td>
<td>activity intransitive</td>
</tr>
<tr>
<td>APPL</td>
<td>applicative</td>
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<tr>
<td>AUX</td>
<td>auxiliary</td>
</tr>
<tr>
<td>BEN</td>
<td>benefactive</td>
</tr>
<tr>
<td>CAUS</td>
<td>causative</td>
</tr>
<tr>
<td>COMP</td>
<td>complementizer</td>
</tr>
<tr>
<td>COND</td>
<td>conditional</td>
</tr>
<tr>
<td>CONF</td>
<td>confirmative</td>
</tr>
<tr>
<td>CONJ</td>
<td>conjunction</td>
</tr>
<tr>
<td>CS</td>
<td>conjunctive subject</td>
</tr>
<tr>
<td>DAT</td>
<td>dative</td>
</tr>
<tr>
<td>DEM</td>
<td>demonstrative</td>
</tr>
<tr>
<td>DET</td>
<td>determiner</td>
</tr>
<tr>
<td>DIR</td>
<td>directive</td>
</tr>
<tr>
<td>EMB</td>
<td>embedded</td>
</tr>
<tr>
<td>EMPH</td>
<td>emphatic</td>
</tr>
<tr>
<td>ERG</td>
<td>ergative</td>
</tr>
<tr>
<td>EXIS</td>
<td>exists</td>
</tr>
<tr>
<td>FACT</td>
<td>factive</td>
</tr>
<tr>
<td>FUT</td>
<td>future</td>
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<tr>
<td>HAB</td>
<td>habitual</td>
</tr>
<tr>
<td>IMP</td>
<td>imperative</td>
</tr>
<tr>
<td>IMPF</td>
<td>imperfective</td>
</tr>
<tr>
<td>INC</td>
<td>inchoative</td>
</tr>
<tr>
<td>INSTR</td>
<td>instrumental</td>
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<tr>
<td>LCREFL</td>
<td>limited control reflexive</td>
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Acknowledgments

This dissertation has been a long time coming, and the list of people to whom I am grateful for having aided in its creation is commensurably long. There are, of course, many linguists on this list. I consider it appropriate to start with the first of the many teachers I've had over these years, Ken Safir. Ken was my mentor at Rutgers, guiding me through four courses, my first RA-ship, and the process of getting into grad school. I had several other excellent teachers in that period, but Ken deserves the credit (or the blame, depending on how you look at it I suppose) for getting me started on the road to this dissertation.

Since coming to UBC, the number of people who have had a hand in my training has risen considerably. First mention goes, of course, to my committee. My supervisor, Martina Wiltschko, has been such a steady and selfless source of intellectual and emotional support that it is impossible to imagine this dissertation existing without her. If I had been as good at taking her advice as she was at giving it, this would have been a much faster and much less painful enterprise. Henry Davis was far more than the Salish syntactician of the committee, though he certainly performed admirably in that role as well. He also was there to occasionally provide the needed kick in the pants, and the kinds of challenges that lead to a stronger piece of research in the end. Michael Rochemont was only on the committee for a fairly short time, but our conversations were some of the most enjoyable I've had throughout this process. With his fresh perspective and eye for the big picture, Michael was instrumental in generating some of the more interesting insights and connections in this work. Aside from bringing her considerable knowledge of Halkomelem to bear on this dissertation, Donna Gerdts also facilitated my transition from a dissertation about Upriver Halkomelem to one that dives head-first into the Island dialect as well. My external examiner, Jaklin Kornfilt, was unfailingly gracious at the
defense, and the stamp of her ideas can be seen throughout this dissertation.

My friends and peers among the graduate students have also played vital roles in this process. Peter Jacobs, Leora Bar-el, and Carrie Gillon were my partners in crime in the early years, and greatly eased my transition to a new life in a new city. They were pretty darn helpful in my academic growth as well. Jason Brown and Karsten Koch were equally supportive in later years. The Thesis Anonymous support – Solveiga Armokaitė, Heather Bliss, Christiana Christodoulou, Atsushi Fujimora, Peter Jacobs, Olga Steriopolous, and Sonja Thoma – provided a lively forum where many of the ideas in this dissertation were hashed out, and helped create a safe space for all the grumbling and bellyaching that goes into dissertating.

By far, the most rewarding aspect of this graduate program has been the opportunity to work with a number of elders from different communities. I can think of no other circumstance in which some random white kid from New Jersey would have the chance to share stories, and jokes, and meals with such an extraordinary group of people. I had the rare good fortune to work with the late Doreen Jensen, a speaker of Gitksan and an outstanding human being, as part of the field methods class. I hope that she enjoyed our time together as much as I did. It was also my privilege to work with the Squamish Nation language group on a few different projects. Seeing a group of elders joking, telling stories, and gossiping in their language was truly a remarkable and delightful experience. The primary consultants for this dissertation, the late Dr. Elizabeth Herrling, who provided the Upriver data, and Ruby Peter, who provided the Island data, have been joys to work with. I have the deepest admiration for Elizabeth's quiet competence, for the depth of Ruby's knowledge, and for their willingness to share their time with me.

Of course, it takes more than an academic community to survive a dissertation. The support of my family, both biological and acquired, was equally important. My parents weren't thrilled to hear that I'd be moving to the other side of the continent, but they have never failed to
be a source of support and encouragement. That, and an upbringing that equipped me with the
tools to 'make it in the world', inspired the kind of confidence that one needs to pick up and start
a new life like this. My brothers, Tom and John, have provided a fine example of personal
accountability, and have always been good for a night off when I've been back east. I've gotten to
know my sister Mary better as we've moved into adulthood, and one thing is clear – if I had a
fraction of her motivation and work ethic, this PhD would not have taken almost a decade.

After having spent the better part of a decade living in Vancouver, I have also acquired an
extended family out here. Many of the colleagues mentioned above were and are dear friends,
but it wasn't all linguistics. I lived with my ex-roommate Caroline for longer than anyone outside
of my nuclear family, clocking in at over six years. Her most recent, and fairly representative,
expression of support was to format this entire dissertation – I had done everything manually, and
she made it all work anyway. Edna is so much more than the department administrator, and that
is saying something. She pulled my administrative fat out of the fire on any number of occasions,
but it was really her ability to listen, to give good advice, and to just really care about the well-
being of us grad students that made her so special. So many people in the bike community
deserve to be included here as well, but I will limit myself to the Brakes – Jim, Maitland, Sailor,
and Simon. We performed together in parking lots and at international burlesque festivals, from
Vancouver to San Francisco. Certainly the most colorful (and color-coded) stories from these
years involve these guys.

All of these people have played a role in getting me to this point. But there is one person
who put up with the worst of the emotional roller-coaster towards the end, who never judged or
criticized, but offered unconditional support instead. Without Jeanine, my best friend, my
favorite dance partner, and the love of my life, this dissertation would have either broken me or
not happened at all.
To Elizabeth and Ruby, whose words fill these pages.

To Jenn, who didn't make it to the end of this dissertation.

And to my first born, who thankfully waited until the end of this dissertation.
Chapter 1:

Introduction

1.1 Nominalization, in and out of Halkomelem

Halkomelem possesses three distinct nominalization constructions – lexical nominalization (LN), predicate nominalization (PN), and clausal nominalization (CN).¹ This dissertation is an exploration of the latter two constructions, which can be grouped together under the label 'syntactic nominalizations', to the exclusion of lexical nominalization.² These three constructions have in common the morpheme /s-/ and a number of other morphological trappings of nominal constituents. The different nominalizations are not always easy to distinguish from each other, sometimes allowing as much as a three-way ambiguity. The following strings offer examples of this ambiguity, allowing any of three interpretations.³

1)  kʷ s-til-əm-s
    DET/COMP NOM-sing-MID-3POSS
    a. 'his song'
    b. 'what he sang/will sing'
    c. 'that/when/because he sings/will sing'

(Upriver)

¹ This last is typically referred to as 'propositional nominalization' in the Salish literature. My choice of label is intended to capture the syntactic properties of the nominalized constituent.
² See Genetti (2010) for a similar division of nominalization in Tibeto-Burman languages.
³ All data are labeled from language and source. Halkomelem data are listed by dialect – Upriver or Island – and come from my field notes, unless otherwise noted. I have regularized the morpheme analysis and glossing throughout, which has led to some adaptations from original sources. These adaptations are discussed at opportune moments.
2)  kʷ  sʔɪłʔəl-s  
    DET/COMP  NOM-eat-3POSS

a. 'his food'
b. 'what he ate/will eat'
c. 'that/when/because he eats/will eat'

(Upriver)

The (a) interpretations reflect an analysis of the string as lexical nominalization, while those in (b) and (c) arise from predicate and clausal nominalization, respectively. In practice though, the ambiguity displayed in (1) and (2) can usually be resolved through morphological, syntactic, or discourse context.

Part of what distinguishes these constructions from each other is the constituent that is nominalized. At one end, lexical nominalization applies to roots and/or categorized stems, while at the other end, clausal nominalization applies to full IPs. Predicate nominalization applies to an intermediate constituent, which will be identified in Chapter 3 as VoiceP. This is summarized by the following representation.  

3)  Levels of attachment of the nominalizer

\[
\begin{align*}
\text{CN: } & s \rightarrow \text{IP} \\
\text{PN: } & s \rightarrow \text{VoiceP} \\
\text{LN: } & s \rightarrow X
\end{align*}
\]

The picture of nominalization presented in (3) is a familiar one in both the generative and

---

4 Beck (2000), working in the Cognitive Grammar framework, also proposes a three-way division of nominalizations for Lushootseed and Bella Coola, arguing as well that they are distinguished in terms of where they merge in the articulation of the clause. However, his divisions do not map onto those argued for here, and fail to account for the basic facts used by e.g. Kroeber (1999) in distinguishing predicate and clausal nominalization. Bates (1997) similarly fails to draw a distinction between predicate and clausal nominalization in Lushootseed.
typological traditions, where it is common to read about nominalization taking place at different levels of clausal structure. Abney (1987), for instance, proposes to treat the English /-ing/ nominalizer as a phrasal affix, unspecified for the height of the verbal projection it selects as a complement. He derives certain fine-grained distinctions between different gerunds by merging the nominalizer at V, VP, and IP. His system yields a three-way partition into Acc-ing, which assigns accusative case to the subject, Poss-ing, which assigns genitive case to the subject, and ing-of, which requires the generic preposition of to license the internal argument.

4) English gerunds

\[
\begin{align*}
\text{Acc-ing:} & \quad \text{ing} \rightarrow \text{IP} \rightarrow \text{DP}^5 \\
\text{Poss-ing:} & \quad \text{ing} \rightarrow \text{VP} \rightarrow \text{NP} \\
\text{ing-of:} & \quad \text{ing} \rightarrow \text{V} \ldots \rightarrow \text{N}
\end{align*}
\]

(cf. Abney 1987)

While the details of implementation have changed, the core proposal represented in Abney's analysis is still informing generative analyses of nominalization (Kaiser (1999), Borsley and Kornfilt (2000), Alexiadou (2001), Schueler (2005), Ntelitheos (2006), Lundquist (2008),\(^{6}\) to name only a few). Within and across languages, constituents that present a blend of nominal and verbal properties differ in how much of each they display. This generalization is captured within generative analyses by appealing to the amount of verbal phrase structure that has been constructed by the time the nominalizer merges.

Likewise, such mixed-category constituents are recognized within the typological tradition to differ in the degree to which verbal properties are removed and nominal properties

---

\(^{5}\) Several authors have argued that Acc-ing does not create a DP, but rather a defective IP (cf. Reuland 1983, Pires 2001, 2007).

\(^{6}\) Lundquist (2008) proposes a similar analysis for Finnish participles.
are added. Malchukov (2004) provides a general framework for capturing this generalization, arranging verbal/clausal and nominal properties into hierarchical relations.

5) Hierarchy of verbal/clausal categories (adapted from Malchukov 2004:20)

[Illoc [Agrₘ [Mood [Tense [Asp [Val/Agrₙ [V]]]]]]]

6) Hierarchy of nominal projections (adapted from Malchukov 2004:22)

[Case [Det [Pos [Num [Cl [N]]]]]]

Malchukov employs these hierarchies in characterizing implicational restrictions on the kinds of nominalizing and verbalizing operations seen cross-linguistically. Again, the point to be made is that nominalized constituents vary in size both across and within languages.

An assumption that many, though certainly not all, of these analyses share is that nominalization is an essentially uniform process across the three instances shown in (4), and that the differences can all be reduced to some property of the constituent targeted by the nominalizer. At each point, the nominalizer is a nominal head taking a verbal constituent as its complement, and the result of merging the two is either a noun or some constituent in the extended projection of a noun, in the sense of Grimshaw (2000). The conclusion I draw over the course of this dissertation is that neither of these last two statements are necessarily true. That is to say, while some languages may only avail themselves of this “Abneyan” kind of nominalization, there is nothing inherent to Universal Grammar that says all languages must be so restricted. Rather, natural language displays some variety in the mechanisms responsible for syntactic nominalization, and allows lexical categories to play roles in functional projections beyond those specified by Grimshaw (2000). The overarching goal in proposing formal analyses of predicate and clausal nominalization in Halkomelem is to show that both of these claims are
supported by data from one language.

Consider first the issue of how nominalizations are formed. Syntactic accounts in the “Abneyan” mold treat the nominalizer as a head that at some point in the derivation takes a verbal projection as a complement. Even some participant nominalizations – derived nouns whose referent is a participant of the event denoted by the verbal base – receive such an account (e.g. agentive nominalization in Baker and Vinokurova (2009), instrumental nominalization in Van Hout and Roeper (1998)). An alternative has the nominalizer merge in an argument position first, and then remerge higher/later in the structure in order to recategorize the verbal constituent (e.g. Fabregas (2010, to appear)), agentive nominalization in Van Hout and Roeper (1998)). A related kind of analysis treats these nominalizations as relative clauses (e.g. Ntelitheos (2006) for Malagasy). Here again the nominalization results from taking a constituent from an argument position, remerging it above some verbal projection, and projecting the moved element.

Abstracting away from the exact label for the initial verbal constituent or the resulting nominal constituent, the two sources of nominalization can be represented with the following structures. An external source is shown in (7a), and an internal source is shown in (7b).

7) Sources of nominalization

\[ \text{a. } 'N'P \]
\[ \text{b. } 'N'P \]
\[ N \quad 'V'P \]
\[ N(P) \quad 'V'P \]
\[ \ldots \]  

In Chapter 3, I propose an account of predicate nominalization that is modeled on the structure in (7b). The analysis I propose in Chapter 4 for clausal nominalization more closely resembles the structure in (7a). The point here is that Halkomelem is making use of two distinct
strategies to create the morphologically similar nominalizations seen in (1) and (2) above.

The second issue is the role of lexical categories in natural language, and their relation to functional projections. Limiting the discussion to analyses framed roughly within the Principles and Parameters tradition, there are at least three broad camps identifiable in terms of their conception of lexical categories. There are those who treat lexical categories as a kind of formal feature that may or may not be possessed by a given lexical item (e.g. Chomsky (1981), Abney (1987), Grimshaw (2000), Kornfilt (2003), Kornfilt and Whitman (2011a,b)). Another camp is composed of those who treat lexical categories as inherent properties, either syntactic (Baker (2003)) or semantic (Reinhart (2002), Vinokurova (2005)), of lexical items. Lastly, there are those who argue that the category of a lexical item has nothing to do with the item itself, but rather with the syntactic context that it occurs in (e.g. Marantz (1997), Harley and Noyer (1999), Borer (2003, 2004), Panagiotidis (2011)).

Within the 'inherent property' camp, there isn't a great deal to be said about the relationship between lexical categories and functional projections. There are, on the other hand, explicit proposals coming out of both the 'formal feature' and 'syntactic context' camps, displaying both inter-group convergence and intra-group divergence. For instance, though they disagree on where the lexical categories originate, both Abney (1987) and Grimshaw (2000) on the one hand and Panagiotidis (2010) on the other argue that functional projections are equipped with a lexical category feature that specifies the kind of complements they can take. Grimshaw formalizes this relationship by assuming a layered set of functional projections \{F_0, F_1, F_2, \ldots \} that can be divided into verbal and nominal projections in virtue of possessing a lexical category.

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7 The 'Historical Prelude' in Vinokurova (2005) provides an excellent summary of the various sides of the debate.
feature [V] or [N]. These features are responsible for ensuring that clausal projections have a
verb at their root while argumental projections have an noun. They are also crucial in defining a
given functional projection – IP is IP because it is a functional projection of a particular level and
possesses a [V] feature, and DP is similarly defined by the presence of an [N] feature. In these
systems, a nominal functional projection could only be found in an extended projection from a
head specified as [+N] up to DP. Kornfilt (2003) and Kornfilt and Whitman (2011b) take a rather
different approach to lexical category features, allowing, for example, a clausal projection like
Mood or C to bear an [N] feature. Similarly, Jung (2003) argues that clausal gerunds in English
are TPs with an [N] feature. While the nominal versions of these clausal projections are all
defective in some way, relative to their non-nominal counterparts, they are nonetheless
considered clausal, something that is inconceivable in a system like that of Grimshaw (2000).
This is precisely what I argue in Chapter 4 is taking place in clausal nominalization, where the
nominalizer is a complementizer – defective, but still a C⁰. Nominalized clauses have neither the
formal properties nor the distribution of DPs, patterning instead with CPs. And yet the
nominalizer triggers nominal agreement morphology. These facts are best accounted for on a
model where lexical categories are not inherently associated with extended functional
projections.

1.2 Halkomelem

Halkomelem is a language of the Central Salish⁹ branch of the Salish language family,¹⁰

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⁹ This label is based on linguistic categorization, and reflects the current consensus among Salishanists. However, the members of the cultural group within which these languages are or were spoken refer to themselves as Coast Salish. That term is sometimes used within linguistic circles as well to refer to roughly the same group of languages. Kroeber (1999) is an example of this.

¹⁰ See the Appendix for a list and classification of the Salish languages.
spoken by fewer than 200 people in the lower mainland of British Columbia and on Vancouver Island. It is comprised of three main dialects – Upriver, Downriver, and Island – each of which can be further sub-divided into local dialects. The Upriver Dialect is traditionally spoken along the Fraser River, from Sumas up to Spuzzum, while the Downriver Dialect is traditionally spoken from the mouth of the Fraser River up to Matsqui. The Island Dialect is traditionally spoken along the east coast of Vancouver Island, from Malahat to Nanaoos. Like most indigenous languages of the region, Halkomelem is moribund. Most native speakers are older than 60, and there are no children acquiring Halkomelem as a first language. Both the Stó:lō Nation (Upriver) and the Musqueam Indian Band (Downriver) currently have language programs offering courses up to the college level. The Cowichan Tribes (Island) are undertaking a Dictionary Project and a Cultural Program, both aimed at providing resources and training for educators, with a focus on language revitalization. All of these programs have contributed to the small, but growing, pool of L2 speakers of Halkomelem.

While according to my consultants, all three dialects are mutually intelligible, there is a fair amount of variation between them. Gerdts (1977) identifies two separate isoglosses within the Halkomelem dialect continuum, based on shared lexicon and phonological features. Naturally enough, it is the geographically central Downriver dialect that acts as the pivot, sharing some phonological features and lexical items with the Upriver dialect, and others with the Island dialect. For example, the Upriver and Downriver dialects possess a voiceless velar fricative /x/, which has been replaced in the Island dialect by a voiceless palatal fricative /š/. On the other hand, the Island and Downriver dialects maintain a contrast between /n/ and /l/, but this contrast has been neutralized in favor of /l/ in the Upriver dialect.

Data for this dissertation come primarily from two consultants, one each from the Island
and Upriver dialects of Halkomelem. These dialects exhibit the greatest divergence among the three major dialects, as might be expected given the geography. There are considerable lexical differences between these two dialects (cf. Gerds (1977)), but these do not enter the discussion. A number of phonological differences exist as well, with Upriver having made some clear innovations (see Elmendorf and Suttles (1960), Harris (1966), Kava (1972), Gerds (1977), Brown (2004), and Brown and Thompson (2005, 2006) for a few examples). Despite these differences, the dialects are mutually intelligible. Further, and most importantly for this dissertation, the central facts of syntactic nominalization are the same in these dialects. For example, the conditions under which a predicate may undergo nominalization are the same across dialects, and the distribution of nominalized clauses is the same as well. The upshot of this for my purposes is that it is appropriate to propose analyses of predicate and clausal nominalization for the whole language, rather than just for individual dialects.

A number of researchers have provided descriptions of various aspects of the Halkomelem grammar. Galloway (1993) presents a detailed survey of the phonology, morphology, and syntax of the Upriver Dialect, while Suttles (2004) does the same for the Musqueam branch of the Downriver dialect. Leslie (1979) offers a structuralist description of the morphology and syntax of the Cowichan branch of the Island dialect, and Gerds and Hukari (to appear) provide another description of the language. Gerds (1988) provides an overview of the Cowichan grammar, and an analysis of its argument structure based in Relational Grammar. There is also a great deal of information on Halkomelem syntax, and Salish syntax generally, in Kroeber (1999). Gerds and Hukari have produced decades worth of research, primarily on the Island dialect, both individually and jointly, and with both descriptive and theoretical aims. Likewise, Witschko has produced over a decade's worth of research on the Chilliwack branch of
the Upriver dialect. I lean heavily on much of this work throughout the dissertation.

1.3 Outline of the thesis

The core of this dissertation is composed of in depth explorations of the two types of nominalization I have labeled 'syntactic'. The picture that emerges is of two constructions which, despite a number of superficial similarities, are quite different, and are formed by quite different syntactic processes. A corollary of this conclusion is that the nominalizers in these constructions are treated as distinct kinds of syntactic objects. In Chapter 3, I address predicate nominalization, analyzing it as process that creates a reduced relative clause. The nominalizer in this construction is treated as a relative pronoun, merging first in an argument position and then extracting to create a reduced relative clause. Clausal nominalization is the subject of Chapter 4. I argue that the nominalizer is best understood as a complementizer, heading a defective clause. Before embarking on these explorations, I provide an introduction to the morphosyntax of Halkomelem in Chapter 2. This introduction includes an overview of the relevant morphology and constituents needed to navigate through the data in the chapter that follow. I also spend some time discussing the role of lexical categories in the language. This topic has garnered significant attention, and is a natural concern in an investigation of nominalization. In Chapter 5, I examine some of the consequences of the analyses I propose for Halkomelem by looking at similar constructions within the Salish language family. I conclude in Chapter 6 by revisiting the reasons for ruling out a unified analysis of nominalization in Halkomelem. A more thorough (though still brief) discussion of lexical nominalization is incorporated into Chapter 6 as well, both for completeness and to allow for a fuller discussion of all three nominalizations relative to each other.
Chapter 2: Background

2.1 Introduction

This chapter is primarily intended to provide the relevant background on Halkomelem needed to navigate through the rest of the dissertation. As such, it is concerned with general aspects of the syntax and morphology of Halkomelem, and should serve as a basic grammatical sketch of these parts of the language. The topics covered are by no means exhaustive, and in some cases the analysis is far from settled. I do not intend to resolve most of these issues, but aim instead for the much more modest goal of synthesizing the wealth of material that has been generated by many of the authors mentioned in 1.2 and presenting the generalizations in a coherent way.

I also use this chapter to introduce some of the theoretical assumptions that guide this research, presenting them as necessary and appropriate in the discussion of Halkomelem. This dissertation is broadly couched in the Principles and Parameters framework (Chomsky (1981), Chomsky and Lasnik (1993)) and its Minimalist incarnation (cf. Chomsky (1995)). Thus, while I propose language-internal diagnostics for evaluating particular constructions, I assume that Halkomelem is fundamentally constrained by principles universal to natural language. Much of the work of this chapter lies in recasting within the P&P framework generalizations that have been established in previous work within other frameworks.
The layout of the rest of this chapter is as follows. In section 2.2, I discuss several aspects of the morphosyntax of Halkomelem, focusing on argument projection and licensing, with a brief overview of the different clause types and some issues of clause structure as well. The existence and behavior of lexical categories in Halkomelem is taken up in section 2.3. It is now the consensus view that the lexical categories Noun and Verb are needed for an adequate description of Salish grammars, despite early arguments to the contrary. Much of the evidence purported to show the lack of lexical categories hinged on the predicate–argument flexibility of content words. Given this flexibility, the presence of these categories has implications for the role of lexical categories in extended projections, in the sense of Grimshaw (2000), which I also discuss in this final section.

### 2.2 Morphosyntax of Halkomelem

This section is intended to provide an introduction to the parts of the grammar that will be relevant to the discussion in later chapters, rather than to provide an exhaustive analysis of Halkomelem morphosyntax. In the first two sections I deal with those parts of the grammar responsible for argument realization and licensing, including voice and (in)transitive morphology (2.2.1), and agreement and the oblique marker (2.2.2). The next section provides a brief overview of the different clause types in the language (2.2.3). I present the formal criteria by which the different clause types can be distinguished from each other. The role of locative auxiliaries in the clause is taken up in the next section (2.2.4). Lastly, I discuss DP and other nominal projections (2.2.5).
2.2.1 Transitive morphology and argument realization

The interplay of transitive morphology, argument structure, and verb root classes is an ongoing debate in the Salish literature. At one end of the debate, there is only one class of verb roots, which are inherently equipped with a single internal argument, and all deviation from that is accomplished through morphosyntactic accretion of additional structure that is associated with arguments. This position, referred to as the Deep Unaccusativity Hypothesis, is most explicitly argued for by Davis (1997), and reviewed in Davis and Matthewson (2009). While his argumentation is based strictly on data from St'at'imcets (Lillooet; Interior Salish), he speculates that his conclusion can be extended to the rest of the family. At the other end of the debate, verb roots are divided into three categories – transitives and two types of intransitives, unergative and unaccusative. This position has been argued for in a series of papers by Donna Gerdts and Tom Hukari on Island Halkomelem, most recently in Gerdts (2006) and Gerdts and Hukari (2006b). I adopt Deep Unaccusativity as a working hypothesis, but refer the reader to the cited references for a fuller discussion. In this section, I provide a brief introduction to the morphology and syntax of Halkomelem transitivity. I situate this discussion in terms of the P&P framework I have adopted, and in a way that is consistent with Deep Unaccusativity. However, it should be noted that Gerdts and Hukari have provided detailed descriptions of the generalizations for this morphology, and proposed analyses that are couched in the Relational Grammar and HPSG frameworks and are consistent with their view of argument structure. The relevant works are cited throughout this section.

Transitive morphology is expressed by cognate morphology across dialects, with some phonological differences. The inventories of (in)transitivizers for both dialects are provided in
the following table.

<table>
<thead>
<tr>
<th>Valence</th>
<th>Control</th>
<th>Limited Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive</td>
<td>-t, -ex ~ -əš₁</td>
<td>-ləxʷ₂ ~ -nəxʷ</td>
</tr>
<tr>
<td>Causative</td>
<td></td>
<td>-stəxʷ</td>
</tr>
<tr>
<td>Intransitive</td>
<td>-els</td>
<td>-əm</td>
</tr>
<tr>
<td>Reflexive</td>
<td>-ət</td>
<td>-lamət ~ -namet</td>
</tr>
<tr>
<td>Reciprocal</td>
<td></td>
<td>-təl</td>
</tr>
</tbody>
</table>

Table 1. Halkomelem transitive morphology (from Galloway (1980, 1993), Gerdts (1988))

The forms listed above are productive, applying to a considerable percentage of the verbal roots in regular and semantically transparent ways. In the next two sections I present the basic generalizations for these morphemes, and present the analyses I adopt in this work.

2.2.1.1 Transitivity

The core transitivizers in Halkomelem, control /-t/ and limited control /-ləxʷ ~ -nəxʷ/, are by far the most productive, occurring on over 80% of the verbal roots in Gerds and Hukari’s database (cf. Gerds (2006)). Forms with these suffixes typically contrast with intransitive forms. The following examples show bare root–transitive alternations where an agent is added with /-t/.

1) a. nɨʔ yəqʷ kʷʔə əqet
   AUX burn DET tree
   'The tree burned.'

---

1. Where the cognates of a particular morpheme have different shapes in the two dialects, I present the Upriver form first, followed by the Island form (Upriver~Island).

2. Galloway (1993:177, fn.1) and Wiltschko (2003) decompose both the limited control transitive and the causative further, isolating /-əxʷ/ and treating it as object agreement.
b. \text{ni?=cən } yəqʷ-t \text{ tʰə } əqet  \\
\text{AUX=1SG.S burn-TR.3O DET tree}  \\
'I burned the tree.' (Island)

2) a. \text{ni? } ʔaʔʷ \text{ tʰə } ələxtən \text{ ?ə } tʰə \text{ ʔəstən}  \\
\text{AUX hook DET blanket OBL DET nail}  \\
'The blanket got hung up on the nail.'

b. \text{ni?=cən } ʔaʔʷ-ət \text{ tʰə } ələxtən \text{ ?ə } tʰə \text{ ʔəstən}  \\
\text{AUX=1SG.S hook-TR.3O DET blanket OBL DET nail}  \\
'I hung up the blanket on the nail.' (Island)

I take the basic function of the plain transitivizers to be adding an agent and licensing an internal argument. This latter function is taken up in the section on agreement (2.2.2). Here I restrict myself to the role of the transitivizer in adding an agent. I assume, following Kratzer (1996), Chomsky (1995), and a host of others, that agents are not arguments of \( V \), but are instead introduced by the (semi-)lexical head \( v \).\footnote{Kratzer (1996) uses the label Voice for this head. I follow Chomsky (1995) in referring to it as \( v \), though, and reserve Voice for a separate projection in Halkomelem.} Attributing the presence of an agent to the plain transitivizers then means that they ought to be analyzed as \( v \) heads.

3) Syntax of Halkomelem plain transitivizers

\[
\begin{array}{c}
\text{VP} \\
<\text{ag}> \\
\text{v'} \\
\text{v} \\
\text{v} \\
\text{-t/-l~n} \\
\ldots <\text{th}> \\
\end{array}
\]

This analysis has been put forward for Halkomelem (cf. Wiltschko (2001)), and similar claims have been made for other Salish languages as well (e.g., Davis (1997) for Lillooet). There
is a small set of predicates, which will be presented in 2.2.1.2 below, whose behavior is unexpected on this account. I will nonetheless assume this analysis of Halkomelem transitivizers, both because its empirical coverage is otherwise good and because it is in line with standard generative analyses of transitive morphology.

In terms of argument structure, the control and limited control transitivizers share the ability to introduce an agent and license an internal argument. They differ however, in that only the control transitive is capable of appearing with applicative morphology (cf. Gerdts and Kiyosawa (2007:201-202)). This leaves a systematic gap in the distribution of the limited control transitive – it does not occur in ditransitive constructions.

Where there is overlap in their distribution, the choice between the control and limited-control transitivizers appears to be conditioned by the “degree of control” exerted by the agent over the action denoted by the predicate. The initial observation, made by Thompson (1979b, 1985) for Thompson River Salish, is that when the agent has some measure of control over the event taking place, the control transitivizer is used. Conversely, when the agent does not have that same measure of control, the limited control form is used, yielding interpretations such as “manage to V” or “accidentally V”. The minimal pairs offered below illustrate this contrast, with the (a) examples showing control forms and the (b) examples showing the limited control forms.

4) a. nem=cən ləm-ət tʰəšxʷʔəθətən
   AUX=1SG.S see-TR.3O DET cloud
   'I'm going to look at the clouds.'

 b. niʔ=cən ləm-ənxʷ tʰəšxʷʔəθətən
   AUX=1SG.S see-LCT.3O DET cloud
   'I saw the clouds.'

(Island)

---

4  This restriction is not shared by all Salish languages (Gerdts and Kiyosawa (2007:200-203)).
5) a. niʔ=çon ʔikʷ-ət Ɂə-nə yasaʔqʷ
   AUX=1.SG.S lose-TR.3O DET-1.SG.POSS hat
   'I got rid of my hat.'

b. niʔ=çon ʔəkʷ-ənxʷ Ɂə-nə yasaʔqʷ
   AUX=1.SG.S lose-LCT.3O DET-1.SG.POSS hat
   'I lost my hat.'

While this characterization of control is still generally accepted, Gerdts (in prep) argues that the contrast is better characterized in terms of shared expectations. In those cases where the agent is expected to be able to complete the task, the control transitivizer is used. On the other hand, if for some reason the agent is not expected to be able to perform the task, but nonetheless does, the limited control transitivizer is used instead. This is perhaps a more accurate way to characterize the 'manage to' interpretation in particular, as a great deal of control may have been required of the agent in this case.

6) niʔ Ɂqay-t-əs təy̌ sməyəθ
   AUX die-TR.3O-3ERG DEM deer
   'He killed that deer.'

(Island, Gerdts (2008: ex. 2a))

7) s=əw Ɂəy-ənxʷ-əs təy̌ sməyəθ …
   NOM=LNK die-LCT.3O-3ERG DEM deer …
   'He managed to kill that deer …'

(Island, Gerdts (2008: ex. 2b))

Nothing special is being claimed about the killing in (6), but the translation in (7) (manage to) suggests that it might have been more challenging than usual. Noting that the event denoted by a sentence can be viewed in either a positive or negative light, Gerdts proposes that use of the limited control transitivizer signifies that '… the speaker does not hold the agent responsible for a negative outcome, [or] the speaker shows relief, appreciation, or amazement for a positive
outcome.' (Gerdts 2008:15)

For a number of Central Salish languages, the contrast between transitivizers has been shown to encode a telicity contrast as well – the control transitivizer creates an atelic predicate, while the limited control transitivizer creates a telic predicate (Jacobs (2011), Bar-el, et. al (2005) and Bar-el (2005) for Squamish, Kiyota (2008) for Saanich). Gerdts (2008) provides the following evidence, showing that this contrast is encoded by the transitivizers in Halkomelem as well.

8) example of atelic -t

\[
\begin{array}{llll}
\text{ni?}=\text{cən} & \text{qay-t} & t^6 & \text{speʔθ} \\
\text{AUX}=1\text{SG.S} & \text{die-tr.3o} & \text{DET} & \text{bear} \\
?i? & ?əwə & \text{ni?=əs} & \text{qay} \\
\text{AND} & \text{NEG} & \text{AUX}=3\text{CS} & \text{die}
\end{array}
\]

I killed the bear but it didn't die.\(^5\)

(Island, Gerdts (2008: ex. 50a))

9) example of telic -nəxʷ

\[
\begin{array}{llll}
*\text{ni?=cən} & \text{qəy-nəx} & t^6 & \text{speʔθ} \\
\text{AUX}=1\text{SG.S} & \text{die-lct.3o} & \text{DET} & \text{bear} \\
?i? & ?əwə & \text{ni?=əs} & \text{qay} \\
\text{AND} & \text{NEG} & \text{AUX}=3\text{CS} & \text{die}
\end{array}
\]

for: I killed the bear but it didn't die.

(Island, Gerdts (2008: ex. 50b))

In his analysis of Squamish transitivizers, Jacobs (2011) relates the aspectual effects to the 'control' interpretations. He takes the former to be basic, and derives them from a more articulated vP structure that incorporates high and low Aspect projections (cf. Travis (2010)).

This low Aspect projection is associated with the delimitation of an event, while the higher

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\(^5\) This is the literal translation provided in the source material. H. Davis (p.c.) points out that the contradiction in the literal translation can be resolved if the predicate is understood to mean 'injure' or 'try to kill'. He goes on to point out that these less literal interpretations are consistent with similar predicates across the family.
projection is associated with its initiation. Jacobs argues that the choice of (in)transitivizer (and object agreement, for transitivized predicates), 'activates' one or the other of these projections, and uses this to derive telicity. The control interpretations are not encoded directly, but rather arise as an implicature from highlighting either the initiation or completion of the event. While Jacobs (2011) offers some thoughts on how his analysis might be extended to Halkomelem, I take no particular position on this issue, as it is not relevant for the issues addressed here.

The causative suffix bears certain formal similarities to the plain transitivizers, and so merits inclusion in this section as well. The causative, like the plain transitivizers, creates a formally transitive predicate, capable of licensing an internal argument with object agreement and a transitive subject with ergative agreement.

10) ?ey-sθ-ax-es tu-ƛa
good-CAUS-1sg.o-3ts DET.LNK-3EMPH
'She likes me.'

(Upriver)

All three morphemes are thus responsible for creating formally transitive predicates, suggesting that the causative too should be analyzed as a \( v \) head.

Despite this formal similarity, there are some differences between the plain transitivizers and the causative, opening the door for a different syntactic analysis. The distribution of the causative in the Island dialect is addressed in great detail in Gerdts (2004)\(^6\) and Gerdts and Hukari (2006a), and I assume the generalizations are the same across dialects in this regard. A significant difference between the plain transitivizers and the causative is that the latter, but not the former, can attach to predicates that already have an agent and introduce another argument.

---

\(^6\) This paper incorporates and extends the findings in Gerdts (1994), and so serves as the reference here.
This is true of both unergatives and middles.\(^7\)

11) a. niʔ ?iməʃ t̓ə swiwləs
   AUX walk DET boy
   'The boy walked.'

   b. niʔ=çon ?iməʃ-stəxʷ t̓ə swiwləs
      AUX=1SG.S walk-CAUS.3O DET boy
      'I made the boy walk.'

   (Island; Gerdts (2004:769))

12) a. niʔ ʔəl̓ əm ə sleniʔ ʔə t̓ə səpəl̓ il
    AUX bake-MID DET woman OBL DET bread
    'The woman baked the bread.'

   b. niʔ=çon ʔəl̓ əm-stəxʷ ə sleniʔ ə t̓ə səpəl̓ il
      AUX=1SG.S bake-MID-CAUS.3O DET woman OBL DET bread
      'I made the woman bake the bread.'

   (Island; Gerdts (2004:769))

Gerdts (2004:778) argues that the role of the causative is to increase the valence of the predicate by one, specifically by introducing a causer. Pylkkanen (2008) argues that the introduction of external arguments is not a core function of causatives, but that they are instead responsible for introducing an additional event. It is clear from the examples in (11) and (12) above that the Halkomelem causatives can introduce an additional event, but it is also clear that the causative is responsible for the introduction of an argument. In Pylkannen's terms then, the Halkomelem causative 'bundles' the task of introducing both event and external argument into a single head.

On the assumption that agents are arguments of a semi-functional verbal head (cf. Kratzer (1996)), the clauses in (11) and (12) must have such a head in addition to the causative.\(^8\) If such

\(^7\) I present arguments in 2.2.1.2 for assigning the same syntactic structure to unergatives and middles.

\(^8\) I argue in the following sections that the middle marker is the relevant head in (12), and that there is a null version of the middle in (11) (cf. Davis (1997)).
is the case, and I assume that it is, then the causative must be able to take both VP and vP as
complements. If some limited recursion of vP is allowed, as suggested by H. Davis (p.c.), then
these causatives can be assigned the following structure.

13) Recursive vP analysis of causative

This is the analysis of the causative I will assume here.

2.2.1.2 Intransitivizers

Halkomelem possesses two intransitive suffixes – the activity intransitive /-əls~els/ and
the middle /-əm/ – and two reflexives – control /-ət/ and limited control /-lamət~namət/. There
is also a reciprocal suffix, /-təl/. In each case, there is a single morphosyntactically licensed
argument in the clause, indexed by the appropriate subject agreement and typically
corresponding to an agent. As with the plain transitivizers, I will treat the intransitivizers as v
heads based on their association with agents.

Gerdts and Hukari (1998) point out that the middle suffix /-əm/ is a very old morpheme,
given the range of contexts in which it is used.⁹ Of the contexts discussed in that paper –

---

⁹ As H. Davis (p.c.) also points out, the presence of a cognate across all branches of the family, in essentially the
same contexts, also points to its relative antiquity.
personal/medio-reflexives, antipassive, logophoric reflexives, and passives – I will limit my discussion here to the first two. The logophoric reflexive apparently has limited distribution and is subject to inter-speaker variation, and the passive is a separate construction involving a plain transitivizer. This leaves the personal reflexive and antipassive uses, and the non-agentive intransitives.

The antipassive construction involves a thematically transitive but formally intransitive predicate. An agent is introduced and licensed as a subject, while the internal argument is left unlicensed. It can still surface, but as an oblique argument (see 2.2.2.2 for details).

14) Antipassive

\[
\begin{align*}
&\text{niʔ=çon} & \text{pən-əm} & \text{ʔο} & t^0 & \text{ƛiʔʷən} \\
&\text{AUX=1 SG.S} & \text{plant-MID} & \text{OBL} & \text{DET} & \text{peas}
\end{align*}
\]

'I planted the peas.'

(Island)

This cluster of properties – introducing an agent but not licensing an internal argument – can be modeled by treating the middle as a \( v \) head that lacks the ability to license an internal argument. Licensing can be thought of in Halkomelem as a matter of agreement and case marking. The two are often tied together, with agreement serving as a precondition for case marking in a number of analyses, explicitly so since Chomsky (1995). One way of formalizing this would be to treat certain functional and semi-functional heads as initiators of agreement, allowing them to establish a syntactic relationship with the closest c-commanded DP. Morphological agreement can be seen as an overt consequence of this relationship. The middle suffix differs from the

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10 H. Davis (p.c.) suggests that it would be a mistake to include the passive in this set of constructions anyway, pointing out that passives do not share the same level of correspondence across the family as do middles.

11 H. Davis (p.c.) notes that this analysis has nothing to say about "the non-delimiting semantic properties of intransitive objects." Jacobs (2011) addresses this and other topics related to (in)transitive morphosyntax in Squamish, utilizing Travis's (2010) Inner Aspect projection to differentiate between kinds of internal arguments. I have not attempted to extend his analysis to Halkomelem, but something along those lines may be appropriate.
transitivizers shown above in lacking the ability to license an internal argument through agreement. Like the transitivizers though, they introduce an agent DP into the clause, as shown in (15).

15) Antipassive -\textit{əm}

\[
\begin{array}{c}
\text{DP}_{Ag} \\
\text{\textit{v'}} \\
\text{\textit{v}} \\
\text{\textit{\textit{\textit{-əm}}}} \\
\text{VP}
\end{array}
\]

The activity intransitive /-\textit{els}/ is more productive than the middle in these kinds of environments, but this is still a robustly attested use of the middle (Gerdts and Hukari (1998, 2006c)). Davis (1996, 1997) and Wiltschko (2004b) argue for Lillooet and Halkomelem, respectively, that the intransitivizers are composed with roots in the lexicon, rather than in the syntax. The arguments offered by each author are rather different, and those for Lillooet do not extend to Halkomelem. While the arguments presented by Wiltschko in particular need to be addressed ultimately, this is not the place to undertake such a task. I will continue to assume that these morphemes are introduced in the syntax, as indicated in the structure in (15).

The medio-reflexive use of the middle is also pointed out in Galloway (1993:301). Davis (1996, 1997) notes the existence of a similar set of predicates in Lillooet. A considerable number of the predicates in this class are verbs of grooming, and will often incorporate a lexical suffix. Three of the examples in (16) contain somatic lexical suffixes, for example.\textsuperscript{12,13} Others of this class are bodily processes, or involve a change brought about by an intrinsic process. The

---

\textsuperscript{12} Similar predicates are also built with a non-somatic lexical suffix.

\textsuperscript{13} See Gerds (1999, 2000), Gerds and Hinkson (1996, 2004), and Wiltschko (2009a) for some descriptions and analyses of Halkomelem lexical suffixes.
'intrinsic process' predicates in (17) do not have an agent, but are internally caused (cf. Levin and Rappaport-Hovav (1994)).

16) Medio-reflexives

\[
\begin{align*}
&\text{bathe-mid} & \text{down-face-mid} & \text{wipe-face-mid} & \text{cut-hair-mid} \\
&'\text{take a bath, bathe oneself}' & '\text{stoop down, put one's face down}' & '\text{wipe one's face}' & '\text{cut one's (own) hair}'
\end{align*}
\]

(Chilliwack; from Galloway (1993:301))

17) Non-agentive intransitives

\[
\begin{align*}
&\text{glitter-mid} & \text{cough-mid} & \text{sneeze-mid} & \text{bloom-mid} \\
&'\text{to glitter}' & '\text{to cough}' & '\text{to sneeze}' & '\text{to bloom}'
\end{align*}
\]

(Chilliwack; from Galloway (1993:303-304))

Both Gerdts and Hukari (1998) and Galloway (1993) propose further subcategories of the uses of the middle shown in (16) and (17), but that level of detail is not necessary in this context.

The claim that the role of the middle suffix is to introduce an agent is compromised by the existence of non-agentive intransitives like those seen above. I do not have anything insightful to say about them, except to point out that Gerdts and Hukari (1998) find that most of these pattern at least partially with unergative predicates when subjected to their language internal diagnostics for verb class, which are presented in 2.2.1.2. Thus, while they apparently fail to display what I take to be a core function of the middle suffix, the grammar nonetheless treats them on par with more prototypical instances.

The suffix /-els/ is treated by Galloway as a control intransitivizer (Galloway 193:255). I follow Gerdt (1988) and Suttles (2004) in referring to it as the 'activity' intransitive. Its effects on argument structure and licensing are like those found with the antipassive use of the middle
suffix /-əm/ – it derives an antipassive predicate, with an oblique internal argument.

18) naʔət qʷəsɬəs ?ə tə ƛələm sce:ɬən
AUX pour.IMPF-ACT OBL DET salted salmon
'She is soaking the salted fish.'

(Gerdts and Hukari (1998:19))

The activity intransitive differs from the middle though, in that it carries with it an additional component of meaning. The activity intransitive is used to highlight the activity encoded by the verb, backgrounding the actual participants. It is often used to employ a sense of engaging in some job-like or culturally defined activity. I will assume that the activity intransitive suffix is essentially the same as the middle suffix in terms of its syntactic properties, i.e. that it is a v head that lacks the ability to license an internal argument, as shown for /-əm/ in (15).

The reflexive suffixes, /-θət/ and /-lamət--namət/, are formally intransitive. They, like all the suffixes in this section, do not take object agreement or index a 3rd person subject with ergative agreement. The basic contrast between the forms mirrors the contrast seen in the transitivizers, as can be seen in the minimal pairs below.

19) Reflexive minimal pairs

<table>
<thead>
<tr>
<th>Control</th>
<th>Interpretation</th>
<th>Limited control</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>q̣ay-θət</td>
<td>'kill self'</td>
<td>q̣ay-namət</td>
<td>'accidentally kill self'</td>
</tr>
<tr>
<td>həli-θət</td>
<td>'save self'</td>
<td>həli-namət</td>
<td>'manage to save self'</td>
</tr>
<tr>
<td>qʷəqʷ-θət</td>
<td>'club self'</td>
<td>qʷəqʷ-namət</td>
<td>'accidentally club self'</td>
</tr>
</tbody>
</table>

(Island, Gerdts (2006))

---

14 H. Davis (p.c.) points out that this is true in Lilooet as well, but is not restricted to the active intransitive suffix – the middle can yield the same interpretation when used as an antipassive.

15 H. Davis (p.c.) notes that they cannot have precisely the same syntax, as the medio-reflexive use of the middle is completely absent with the activity intransitive. I do not have anything specific to say about this distinction, but will assume that it can be accommodated within the structure proposed in (15) above.
These morphemes are at least diachronically decomposable, with the plain transitivizers forming the initial element. Gerdts (1989b:270) claims that /-θət/ is diachronically decomposable into the plain transitivizer /-t/ and the Proto-Salish reflexive /*-sut/. Gerdts (1998a) goes further, arguing that both reflexive suffixes are synchronically decomposable into a transitive suffix and a reflexive pronominal form when used as canonical reflexives, but that they are reanalyzed as a single suffix in certain grammaticalized uses. If such a decomposition were to be implemented in the system I assume here, the reflexive portion could be hosted in the projection above vP responsible for hosting ergative agreement and the passive marker, as they are all in complementary distribution. However, there is nothing at stake in this for my analyses of predicate and clausal nominalization, so I will not take a position here.

Gerdts (1989b, 1998b) explores the interaction of the reflexive suffixes with argument structure, while Gerdts (1998a) addresses some of the grammaticalized uses of the reflexive suffixes, showing that certain aspectual interpretations are triggered when the reflexive suffixes are attached to roots from particular semantic classes. I abstract away from these latter uses of the reflexive suffixes, as they do not enter into the discussion of the phenomena at hand. Wiltschko (2002a, 2004b) also examines the role of the reflexive suffixes in argument structure. On Wiltschko's analysis, the reflexive marker both introduces an agent and specifies that it must be coreferent with the internal argument. As with the middle and active intransitive suffixes, Wiltschko places this suffixation in the lexicon, rather than in the narrow syntax.\(^{16}\) However, I will continue to assume that affixation of valence morphology is a syntactic operation, and that the reflexive morphemes are \(v\) heads.

The reciprocal, /-təl/, typically involves multiple arguments which are both agents and

\(^{16}\) Wiltschko's analysis calls to mind Reinhart and Reuland's (1993) notion of a *lexical reflexive.*
patients. Gerdts and Hukari (1998) point out that it can also be used in a comitative construction.

Neither use of the reciprocal plays a role in this dissertation, so I will not propose an analysis for it beyond assuming that it too is located in v.

2.2.1.3 Applicatives

Two applicative suffixes that are shared by all dialects of Halkomelem – the benefactive \/-lç/ and the dative \/-əs/ – are particularly relevant for this dissertation. These morphemes, which are grouped together by Kiyosawa (1999, 2002, 2006) and Gerdts and Kiyosawa (2005, 2007) as the redirective applicatives,\(^{17}\) both introduce a new argument into the clause. The following minimal pairs demonstrate this function.

20) \/-lç/

a. niʔ ləkʷ-\/-lç-t-əs \[kʷθə sčəʃt]\n  AUX break-\/-lç-TR.3O-3ERG [DET stick]
  'She broke the stick.'

b. niʔ ləkʷ-\/-lç-t-əs tə swiʔwəs \[ʔə kʷθə sčəʃt]\n  AUX break-\/-lç\/-TR.3O-3ERG DET boy [OBL DET stick]
  'She broke the stick for the boy.'

   (Island; Gerdts and Kiyosawa (2005))

21) \/-əs/

a. nen=can sen̓-ət \[θə-nə snoxʷəl]\n  AUX=1SG.S sell-TR.3O [DET-1SG.POSS canoe]
  'I'm going to sell my car.'

\(^{17}\) These can be contrasted with a class known as relational applicatives. Their role seems to be one of constraining the interpretation of the internal argument of the predicate, rather than introducing a new argument. However, as they do not feed any of the processes that will be addressed in this dissertation, I will not discuss them further. See Kiyosawa and Gerdts (2010) for a comprehensive examination of applicative constructions of both types, across the entire Salish family.
b. nem=cən sam-əs-t ɬə sleniʔ
det 1SG.S see-DAT.TR.3O DET woman [obl det 1SG.POSS canoe]

'I'm going to sell my canoe to the woman.'
(Island; Gerdts and Hinkson (2004))

In both of the (b) examples, the theme surfaces as an oblique, as indicated by the oblique marker in bold. The applied argument replaces the theme as the registered internal argument.

I will assume then that the (redirective) applicative suffixes merge as heads between VP and vP, and that they introduce the applied argument in their specifier.18

22) Syntax of redirective applicatives

I will also assume the existence of a null redirective applicative, used with predicates like ṣełxʷət ('offer it to him/her'), cset ('tell him/her to V'), and ḏəstxʷət ('tell it to him/her'). When transitive, these predicates formally license an internal object that corresponds to a goal, while the argument expressing the offering, the command, or what was told is an unregistered theme. Adopting this assumption allows for a uniform syntactic analysis of ditransitives.

18 I do not attempt to incorporate the insights of Pylkkanen (2008) on the distinction between high and low applicatives because it seems to be mostly irrelevant in the description of Halkomelem applicatives. Both suffixes are used in 'high' and 'low' applicative contexts, and both undergo processes like predicate nominalization in the same contexts. Thus, introducing a classification of applicatives into high and low varieties is unmotivated for Halkomelem. It should be noted though, that the same was said for the noun-verb contrast, until the relevant language-internal tests were developed.
2.2.2 Agreement, and direct and oblique arguments

The distinction between core and oblique arguments was established for Halkomelem in a series of papers by Gerdts and Hukari through the '70's and '80's, and a number of diagnostics exist for distinguishing members of the two classes. Agreement morphology plays a key role in this partitioning – core arguments are those that have been licensed by agreement (2.2.2.1), while obliques are licensed by the oblique marker (2.2.2.2). In this section I present the agreement morphology of the language, and the other diagnostics used to identify core and oblique arguments. It will also be necessary to address the mechanism through which agreement morphology associates with arguments, as well as how arguments are introduced and licensed in the course of a derivation.

2.2.2.1 Morphological agreement

Typical of Salish languages, Halkomelem has morphological agreement for grammatical subjects and objects. In this section I provide the paradigms and sketch an account of the syntactic mechanism that underlies their use. Briefly, I assume a probe-and-goal account (cf. Chomsky (2000, 2001)), where certain heads are introduced into the clause equipped with uninterpretable φ-features \([uφ]\) (person and number). These φ-features act as a probe, and search their c-command domain for a syntactic object with matching interpretable φ-features \([iφ]\). Valuation of those features leads to spell-out of the corresponding agreement morpheme.
I assume that object agreement, both active and passive, is the spell-out of checked features on $v$, while subject agreement originates in two different loci (cf. Davis (1999, 2000), Wiltschko (2002b, 2006a)). The higher of these – Infl$^0$ – is the source of subject clitics, while the lower – Voice – is the source of subject suffixes.

Island Halkomelem has four series of subject agreement morphemes, reflecting the inventory posited in Davis (1999, 2000) for Proto-Salish. Upriver Halkomelem has three series, having mostly collapsed the distinction between two of those still present on the Island. Three of these series are second-position clitics, while the fourth is suffixal. Each series is limited to a specific clause type. This last point will be illustrated more fully in section 2.2.3, where clause types are specifically addressed. I take the correlation between form of agreement and clause type to indicate that there is a relationship between Comp, where clause-typing takes place, and Infl, where agreement is hosted (cf. Pesetsky and Torrego (2001), e.g.).

The following table shows the subject agreement paradigms. The three clitic series are listed first, followed by the transitive subject suffixes.
Table 2. Subject agreement

There is a great deal of phonological similarity between the different series, particularly between those other than the possessive clitics. In fact, Gerdt’s (1988:33) states that the indicative clitics “...consist of the prefix /c-/ and a reduced form of the [subject] suffixes...”. However, while this is certainly true from a diachronic perspective (cf. Newman (1979), Thompson (1979a)), there are no grounds for any synchronic decomposition (cf. Kroeber (1999:15), Davis (2000)).

The conjunctive clitics and transitive suffixes are phonologically identical in Halkomelem, differing only in their location within the clause. Aside from the 3rd person transitive suffix /-as/, which is at least possible in all clauses, the suffix series is limited to

<table>
<thead>
<tr>
<th>Person/Number</th>
<th>Indicative Clitic(^{19})</th>
<th>Possessive Clitic</th>
<th>Conjunctive Clitic</th>
<th>Transitive Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg</td>
<td>=cel ~ =cen</td>
<td>ōl~ nō=</td>
<td>=al ~ =e:n</td>
<td>-ē:n</td>
</tr>
<tr>
<td>2sg</td>
<td>=čəxʷ ~ =č</td>
<td>a~ ōn=</td>
<td>=ōxʷ</td>
<td>-ōxʷ</td>
</tr>
<tr>
<td>1pl</td>
<td>=cət ~ =ct</td>
<td>=cət ~ =ct</td>
<td>=ət</td>
<td>-ət</td>
</tr>
<tr>
<td>2pl</td>
<td>=čəp ~ =ce:p</td>
<td>(a=...)=ələp ~</td>
<td>=ələp(^{20})</td>
<td>-ələp</td>
</tr>
<tr>
<td>3</td>
<td>Ø(^{21})</td>
<td>=ś</td>
<td>=ś</td>
<td>-ś</td>
</tr>
</tbody>
</table>

\(^{19}\) The indicative subject morphemes are not uniformly treated as clitics by Gerdt and Hukari. I have altered their morpheme break downs and glosses throughout to bring them into line with the clitic analysis.

\(^{20}\) The Upriver dialect also permits a shortened form, /=ep/.  

\(^{21}\) Though I assume a null form is present in indicative clauses with 3rd person subjects, I do not include it in the morpheme breakdown. I treat the null 3rd person object agreement the same way.

\(^{22}\) Davis (2000) points out that this is not true for all Salish languages – a number of languages from different branches of the family distinguish the two series (or their cognates) phonologically, leading him to posit a Proto-Salish /*w-*/ to which the person and number morpheme attached. This would establish a morphological parallel between the conjunctive and indicative clitics in Proto-Salish.

\(^{23}\) I continue with the standard practice within the Salish literature of labeling the 3rd person transitive suffix as 3\(_{\text{ERG}}\) except when it is used in object-centered relative clauses. However, it is not obvious to me that this constitutes a
object-centered relative clauses. The distinction between these two series has mostly disappeared in the Upriver dialect – my consultant used the conjunctive clitics in relative clauses, while retaining the broad distribution of the 3rd transitive suffix.

As noted by Davis (1999, 2000), when there is an auxiliary in an embedded clause, both the transitive suffix and the appropriate clitic surface.

24) Doubled agreement with possessive clitic

\[\text{ni?}=\text{ċən} \quad \text{melq} \quad k^*=s=ə=s \quad i^9q^*-ət-əs}\]
\[\text{AUX}=1\text{SG} \quad \text{forget} \quad \text{COMP}=\text{NOM}=\text{AUX}=3\text{POSS} \quad \text{punch-TR-3O-3ERG}\]
\[t^9ə \quad šəyəł-s \quad \text{DET} \quad \text{o.sibling-3POSS}\]

'I forgot that he punched his older brother.'

(I Island)

25) Doubled agreement with subjunctive clitic

\[\text{č}=uł \quad \text{łqələx}^w \quad \text{hi}=s \quad x^vəməx-x-əs \quad tə \quad xəł\]
\[\text{1SG.S}=\text{PERF} \quad \text{know} \quad \text{when}=\text{3CS} \quad \text{open-TR.3O-3ERG} \quad \text{DET} \quad \text{door}\]

'I know when he opens the door.'

(U Island)

According to Davis' (1999, 2000) reconstruction of Proto-Salish subject agreement, this doubling reflects the older pattern, in which transitive clauses were characterized by a 3rd person expletive clitic and a transitive suffix inflected for the features of the agent. I adopt the general conclusion of Davis and Wiltschko that the clitics are the spell-out of agreement on a higher functional head, while the suffixes are the spell-out of agreement on a lower projection. On the basis of the subsequent discussion of passive agreement, I assume that to be VoiceP.

\[\text{24} \quad \text{See Koch (2009) for a recent discussion of this pattern in Thompson Salish.}\]
26) Subject agreement

```
  IP
    I
    {clitics}
      VoiceP
        Voice
          vP
            DP_{Ag}
              v'
```

Subject agreement targets the argument in Spec-vP when this projection is generated, or the lone argument of an unaccusative predicate. That it is structurally defined\(^{25}\) can be seen in the following alternation between a plain transitive and a causative form of the same predicate.

27) a. məkʷ=ot=č=ceʔ
      tʰ= syał
    pick.up-TR.3o=2sg.s=FUT DET firewood
'You will gather firewood.'

b. nem=can  məkʷ=stəxʷ
      tʰ= sə?ƛqəʔ ʔ  tʰ= qəyeʔəmən,
    go=1sg.s  pick.up-CAUS.3o DET child OBL DET shell
      nem ʔə  tʰ= kʷəƛkʷə  cəmən
      go OBL DET salt.water seashore
'I'm going to get the boy to pick up sea shells by the sea shore.'

(Island; Gerdts and Hukari (2006a))

With the plain transitivizer, object agreement is with the patient, and subject agreement is with the agent. With the causative, the agent now triggers object agreement, and the causer is the argument indexed by subject agreement. The simplest analysis consistent with these data and with the assumption that the causative (and its argument) is structurally higher than the v heads responsible for introducing agents is that subject agreement is with the highest argument DP in

\(^{25}\) This is as opposed to Witschko's (2005a) claim that ergative agreement is thematic agreement with an agent (though agents are themselves restricted to a particular location on her analysis).
Object agreement is divided into active and passive paradigms, and the passive paradigm is itself divided into plain and embedded forms. I deal first with the active paradigm, shown in the following table.

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>-ax ~ -arīš</td>
<td>-alxʷ ~ -'alxʷ</td>
</tr>
<tr>
<td>2nd</td>
<td>-amə</td>
<td>-alə</td>
</tr>
<tr>
<td>3rd</td>
<td>Ø</td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Active object agreement

Object agreement targets the highest VP-internal argument. This can be seen in the following three structures, consisting of a plain transitive, an applicative, and a causative with a separate agent. In the plain transitive structure (28), the only VP-internal argument is the internal argument of the predicate, and so it is the one indexed by object agreement. In the applicative construction in (29), the applied object, rather than the theme, is indexed by object agreement. This is because the applied object is the argument of Appl, a higher predicate than V.

28) Structure for object agreement

```
  vP
 /   \
/     \v
DP_AG v'
  /     \
/       \v
   v     vP   \
-t/-l/-st DP_TH
```
29) Structure for applicatives

Similarly, for causative middles and unergatives, an agent is introduced by the first \( v \) head, one which does not contain a \( \varphi \)-feature probe. The second \( v \) head (the causative), which does have a \( \varphi \)-feature probe, finds the agent DP in Spec-\( vP_1 \) and agrees with it.

30) Structure for causative middle/unergative

Thus, object agreement must be structurally defined, as the highest DP within the c-command domain of \( v \).

The decision to treat passive agreement, shown in Table 6, as object agreement is not trivial. The syntactic status of the argument it indexes – whether it should be analyzed as a
subject or an object – is unclear, with evidence pointing to both conclusions. Indeed, Gerdts and Hukari (2000) present a number of conflicting diagnostics. I will not attempt to resolve this issue here, but will simply assume that the Halkomelem has an impersonal passive, rather than a promotional passive, and that a null pro subject is generated. Passive agreement is located in the same morphological slot as the active object agreement, and the two paradigms are transparently related to each other phonologically. Further, in embedded contexts, where an extra morphological slot is available for subject agreement, the appropriate 3rd person form is always used. The two passive paradigms are virtually identical, with a few pairs differing in vowel length. Each is clearly identifiable by the following morpheme though – the plain passive is suffixed with -em, while the embedded passive is suffixed with -(e)t.

<table>
<thead>
<tr>
<th></th>
<th>Plain-əm</th>
<th>Embedded-t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singular</td>
<td>Plural</td>
</tr>
<tr>
<td>1st</td>
<td>-al-əm ~ -el-əm</td>
<td>-alxʷ-əm ~ -al-əm</td>
</tr>
<tr>
<td>2nd</td>
<td>-a:m²⁷</td>
<td>-al-əm</td>
</tr>
<tr>
<td>3rd</td>
<td>Ø-əm</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Passive object agreement

The distinction between plain and embedded series is only partially conditioned by embedding. While only the plain series is available in matrix clauses, both series occur in embedded clauses.

²⁶ An example of how difficult the issue is to resolve: Gerdts (1989) treats the Halkomelem passive as syntactically promotional, and attributes the form of agreement to a morphological filter. Conversely, Gerdts (1988, 2004:782) argues for an impersonal passive analysis.

²⁷ This form is derived by a phonological process that takes the string -am-em (2sg.o-pass), elides the vowel-medial resonant, and lengthens the full vowel (Gerdts 1988:216, Suttles 2004).
31) Nominalized clause

   a. ni?=cən ?əw š-tatəl-stəxʷ
       AUX=1SG.S LNK NOM.INST-know-CAUS.3O
       kʷ=s  właśc-əθ-a;m=s=ceʔ  ?ə  kʷəw-əθ-əll
       COMP=NOM hear-TR-2SG.PASS=3POSS=FUT OBL DET.LNK-3PL.EMPH
       'I know they will hear you.'

   b. ni?=cən ?əw š-tatəl-stəxʷ
       AUX=1SG.S PART NOM.INST-know-CAUS.3O
       kʷ=s  właś-əθ-ət=ceʔ  ?ə  kʷəw-əθ-əll
       COMP=NOM hear-TR-2SG.PASS-PASS.EMB=FUT OBL DET.LNK-3PL.EMPH
       'I know they will hear you.'

Kroeber (1999) and Davis (2005) both note this alternation and link it to auxiliaries – if one is present, the plain passive is used; if there is no auxiliary the embedded passive is used. It is not clear to me why these facts should be correlated, except that the presence of an auxiliary means that there is a host for a subject clitic. While I cannot propose an analysis based on agreement morphology either, I find it more plausible to attribute the form of passive agreement to the presence or absence of other agreement morphology. The auxiliary is relevant under this analysis, but only in its capacity to host that second agreement marker.

2.2.2.2 The oblique marker

DPs that are not licensed by agreement are formally distinct from those that are, and have been grouped into a class as obliques. DPs in this class can be identified by the oblique marker ?ə, which is sometimes referred to by Salishanists as an all-purpose preposition (e.g. Gerdts and Hukari (to appear)), while others treat it as a case marker (e.g. Suttles 2004:44). I adopt the latter position in this dissertation.

37
The oblique marker is obligatorily present in the Island dialect, completely lost in the Upriver dialect, and optionally present in Downriver dialect (Suttles (2004:45)). DPs that fall into this category are: themes of intransitive predicates (a); themes of ditransitives, including applicatives (b) and causative unergatives (c); passive agents (d); proper noun possessors (e); and a variety of adjuncts, including locations (f), instruments (g), and temporal modifiers (h).

32) Oblique DPs
   a. with-object

   \[
   \text{ni?=cən} \quad qʷɛl-əm \quad [ʔo \ kʷθə \ sce:\textit{tən}] \\
   \text{AUX=1SG.S} \quad \text{bbq-MID} \quad [\text{obl.} \ \text{DET} \ \text{fish}] \\
   \text{'}I barbecued a fish.'
   \]

   b. applicative

   \[
   \text{ni?=cən} \quad ʔiʔq-əc-ət \quad [ʔo \ tə \ yasaʔqʷ] \\
   \text{AUX=1SG.S} \quad \text{buy-BEN-TR.3O} \quad [\text{obl.} \ \text{DET} \ \text{hat}] \\
   \text{'}I bought her a hat.'
   \]

   c. causative unergative

   \[
   \text{nerm=caŋ} \quad məkʷ-əstəxʷ \quad t^0 \quad səʔičʔəl \quad [ʔo \ t^0 \ q̚əyəmən] \\
   \text{GO=1SG.S} \quad \text{pick.up-CAUS.3O} \quad \text{DET} \ \text{child} \quad [\text{obl.} \ \text{DET} \ \text{shell}] \\
   \text{nerm} \quad \text{ʔo} \quad t^0 \quad kʷəkʷə \quad əəmən \\
   \text{go} \quad \text{obl.} \ \text{DET} \ \text{salt.water} \ \text{seashore} \\
   \text{'}I'm going to get the boy to pick up sea shells by the seashore.'
   \]

   (Gerds and Hukari (2006a))

   d. passive agent

   \[
   \text{ni?} \quad ləm-n-a:m \quad [ʔo \ kʷθə \ səwəʔqəʔ?] \\
   \text{AUX} \quad \text{see-LCT-2SG.PASS} \quad [\text{obl.} \ \text{DET} \ \text{man.PL}] \\
   \text{'}The men saw you.' (lit. 'You were seen by the men.')
   \]
Despite sharing the need for the oblique marker, the bracketed constituents in (32) differ in their syntax, as can be seen in extraction possibilities. Oblique arguments (a-c) and adjuncts (f-g) both require predicate nominalization for extraction, but take different nominalizers in doing so (Hukari (1977), Gerdts (1988), etc.).

---

28 Suttles (2004:64) reports that this is possible for some common noun possessors in Musqueam as well.

29 When re-elicited, the consultant could only interpret the morpheme glossed as PST relative to the NP – the sentence was only felicitous if the shovel was broken or gone.

30 The status of passive agents in this regard is unclear – they can apparently be extracted via predicate nominalization in the Upriver dialect (Gillon and Wiltshko (2004)), but cannot be extracted at all in the Island dialect (Gerdts 1988:198). Nevertheless, I include them in the set of oblique arguments for thematic purposes. Extraction of possessors is possible, but, as argued by Gerdts (1988), only from absolutive positions (objects of transitives, subjects of intransitives). Thus, possessor extraction will only trigger nominalization if the possessee is an oblique.

31 By this measure (syntax of extraction), temporal adjuncts must be kept separate from both arguments and the other adjuncts - neither form of predicate nominalization is used to extract a temporal adjunct. Rather, the temporal phrase is used as a predicate and is modified by a nominalized clause.
33) Oblique object extraction

stem \( k^w\theta \) ni? \( ?\omega n-s-q^w\omega l-\omega m \)
what DET AUX 2SG.POSS-\textsc{nom}-bbq-MID
'What did you barbecue?'

(Island)

34) True oblique extraction

stem \( k^w\omega \) ni? \( s-q\text{-}\text{ay-}\text{t-ew}\omega t \)
what DET AUX \textsc{nom,inst}-die-\text{tr-3pass.emb} DEM bear
'tWhat was used to kill this bear?'

(Island)

The fact that these extraction facts are identical for all three dialects means that the loss of the oblique marker in Upriver dialect and its optionality in the Downriver dialect has not resulted in any syntactic changes in those dialects.\(^{32}\) I assume therefore that there is a null oblique marker in the other two dialects.

In essence, the oblique marker syntactically licenses DPs that are semantically licensed but cannot trigger agreement. As such, I will assume that it is a formal licensing mechanism along the lines of English \textit{of}-insertion. While nothing hinges on the exact implementation, I will assume for concreteness that the oblique marker provides lexical content to a licensing projection KP above DP.

35) Oblique marker

\[
\begin{array}{c}
\text{KP} \\
\text{K} \\
\?\beta \\
\triangle
\end{array}
\]

A DP that has not entered into an Agree relationship with a licensing head will not be a

\(^{32}\) A possible exception to this could be the ability of proper noun agents to serve as grammatical subjects in the Upriver dialect. Examples of this are given in 2.2.5 below.
legitimate object at the LF interface. The oblique marker can be thought of as an instruction to the interface to integrate the DP into the interpretation of the clause.

### 2.2.3 Clause types

Halkomelem possesses a number of clause types, distinguishable by subject morphology and complementizers, and by the syntactic contexts in which they occur. There is a non-embedded clause type – indicative – and three formally distinct embedded clause types – conjunctive, nominalized, and relative. As noted by Kroeber (1999), the division of labor between conjunctive and nominalized clauses does not appear to be completely predictable for any given language in the Salish family. The contexts in which they occur vary among the languages that distinguish the two types morphologically.

The basic word order in Halkomelem is PSOX, where P is the predicate and X is any phrasal modifier (locative or temporal adjuncts, for example). Post-predicate word order is not rigid though – in principle, any ordering of constituents is possible.

36) a. niʔ c-kʷəɬəs [S kʷθə swaːˈwələs] [O ?ə kʷθə sməyəθ]
   AUX VRB-shoot [S DET boy.PL] [O OBL DET deer]
   [X ?ə kʷəɬəna səxəɬənet] [X OBL DEM Sunday]

'The boys shot the deer on Sunday.'

b. niʔ c-kʷəɬəs [S kʷθə swaːˈwələs] [X ?ə kʷəɬəna səxəɬənet]
   AUX VRB-shoot [S DET boy.PL] [X OBL DEM Sunday]
   [O ?ə kʷθə sməyəθ] [O OBL DET deer]

c. niʔ c-kʷəɬəs [O ?ə kʷθə sməyəθ] [S kʷθə swaːˈwələs]
   AUX VRB-shoot [O OBL DET deer] [S DET boy.PL]
   [X ?ə kʷəɬəna səxəɬənet] [X OBL DEM Sunday]
There is also a general dispreference for overt expression of multiple DP arguments.

When a single DP appears in a clause with a formally transitive predicate, it is interpreted as an object. This is known as One Nominal Interpretation (ONI) constraint, first identified by Gerdts (1988).

A variety of pre-predicate material is also available, including auxiliaries, which will be taken up in section 2.2.4, and some complementizers. There are a number of particles typically analyzed as second-position clitics in the language that serve to convey a wide range of information. These includes temporal particles, evidential and clause-typing particles, and subject clitics. Leslie (1979) provides an extensive discussion of these particles and their relative ordering in Cowichan. Galloway (1993) and Suttles (2004) also provide thorough discussions of many of these particles.

With this basic description of clause structure in place, I turn now to an overview of the different clause types in the language.
2.2.3.1  Indicative clauses

Indicative clauses are typically matrix clauses. They are morphologically identifiable in virtue of their subject agreement, the indicative clitic series presented in 2.2.2.1. These clauses have the greatest freedom in terms of illocutionary force – they are used for matrix declaratives, for imperatives, and for questions.

37) Indicative declarative

\[
\begin{align*}
?i=1=c & y=2\text{imɛx} \\
\text{AUX=PAST}=1\text{SG.S} & \text{SER-walk} \\
'I was walking.'
\end{align*}
\]

(Upriver)

38) Indicative imperative

a. \[
\begin{align*}
?əmət=le & \\
\text{sit.down}=\text{IMP} \\
'(You) sit down.'
\end{align*}
\]

(Upriver; Galloway (1993:310))

b. \[
\begin{align*}
\text{xəl-mə-θət}=čəxʷ & \\
\text{look.after}-\text{RED-REFL}=2\text{SG.S} \\
'(You) take care of yourself.'
\end{align*}
\]

(Upriver; Galloway (1993:311))

39) Indicative questions

\[
\begin{align*}
\text{li } & =e^{33}=čəxʷ \\
\text{AUX}=\text{Q}=2\text{SG.S} & \text{laugh-MID} \\
'Are you laughing?'
\end{align*}
\]

(Upriver; Galloway (1993:313))

Indicative clauses are almost always root clauses – they are generally not embedded.

There is one context, though, in which an indicative clause has what may be an overt

---

33 Galloway actually gives this form as liye, which I take to be glide insertion between i and e as a hiatus resolution strategy. He also notes that for many speakers, the separate Q particle is being replaced by vowel length in these contexts, so that liye surfaces as liː.
complementizer, when it serves as the *if* clause in the indicative conditional construction in the Island and Downriver dialects. In this case it is headed by the conditional particle *ha*.

40)  **Indicative conditional**

\[
\text{[ha}=?\text{ə}=\text{cən} \quad \text{təw} \quad \text{s}\text{e}=\text{cən}] \quad \text{?i}\text{ʔ} \quad \text{swəʔqe}=\text{cən} \\
\text{[COND}=\text{PAST}=1\text{SG.S} \quad \text{very} \quad \text{old}] \quad \text{CONJ} \quad \text{man}=1\text{SG.S}
\]

If I were older I'd be a man.

*(Island)*

This clause is then conjoined with another indicative clause with the conjunction *ʔiʔ*, which then serves as the consequent of the conditional. I am unaware of any semantic distinctions between this construction and one involving a conjunctive clause.\(^{34}\)

### 2.2.3.2 Conjunctive clauses

As with indicative clauses, conjunctive clauses can be identified by their subject morphology, which was also introduced in 2.2.2.1. These clauses are used in several embedded contexts, often with the polarity complementizer *wə*. This is the case with embedded questions, conditionals, and modal contexts, for example.

41)  **Embedded y/n question**

\[
\text{cəl} \quad \text{pətəm} \quad \text{wə} \quad \text{li-s} \quad \text{ʔiyal-əm} \quad \text{[k}=\text{əl}=\text{s} \\
\text{1SG.S} \quad \text{ask} \quad \text{[COMP} \quad \text{AUX-3CS} \quad \text{alright-MID} \quad \text{[COMP}=1\text{SG.POSS}=\text{NOM} \\
\text{may-t} \quad \text{yu-ɬələm}] \\
\text{help-TR.3O} \quad \text{DET,LNK-3PL.EMPH}]
\]

'I asked if I could help them.'

*(Upriver)*

\(^{34}\) Montler (2003) points out a parallel construction in Straits Salish. He treats the cognate *hu* as an auxiliary, though his use of that term does not coincide with mine. Montler also notes that this is the only case where a clause with an indicative subject clitic can not stand in isolation, but must instead be conjoined with another clause.
42) Embedded wh-question

\[
\begin{align*}
&\text{cəl} & \text{pətməm-ət} & \text{kʷ} & \text{Strang} & \text{[wə səlčím-əs} \\
&1\text{SG.S} & \text{ask-TR.3o} & \text{DET} & \text{Strang} & \text{[comp how-3CS} \\
& & & & \text{[kʷ=əl=s} & \text{əl=-ls]} \\
& & & & \text{[comp=1SG.POSS=NOM} & \text{write-ACT]} \\
\end{align*}
\]
'I asked Strang how to write.'

(Upriver)

43) Embedded conditional

\[
\begin{align*}
&\text{[wə li=s} & 1\text{-sƛi} & \text{kʷ=əl=s} & \text{ləm]} \\
&\text{[comp aux=3CS} & \text{1SG.POSS-NOM-want} & \text{comp=1SG.POSS=NOM} & \text{go]} \\
&\text{ləm=əl=} & \text{go=1SG.S} \\
\end{align*}
\]
'If I want to go, I will go.'

(Upriver; Galloway (1993:451))

44) Modal context

\[
\begin{align*}
&\text{li=təwə} & \text{?iyal-əm} & \text{[wə} & \text{?i=əl} & \text{č-xilčə} \\
&\text{aux=mod} & \text{can-MID} & \text{[comp aux=1SG.cs=past} & \text{vbl-catch} \\
& & & \text{kʷ} & \text{st'aqw'i]} & \text{det fish]} \\
\end{align*}
\]
'It would be good if I caught a fish.'

(Upriver)

Sentential negation in Halkomelem also involves a conjunctive clause. Following Davis (2005), I adopt a bi-clausal analysis of negation, in which a negative predicate selects a conjunctive clause complement.\(^{35}\) Typically, this embedded clause does not have an overt complementizer, as in (45). It is possible for one to appear though, as seen in (46).

---

\(^{35}\) But see Wiltschko (2002b) for a mono-clausal analysis.
45) [ʔəwə=ɕən ʔiː=ŋ36 ʔiłəq-ʔəs ʔə kʷ šukʷə]  
[NEG=1SG.S [AUX=1SG.CS buy-_ACT OBL DET sugar]]
'I didn't buy any sugar.'  
(Island)

46) [ʔəwə [wə=li=s yə-hiθ kʷ-uł xʷəʔi]]  
[NEG [SUBJ=AUX=3CS ser-long anyway-PERF arrive]]
'It wasn't long before she arrived.'  
(Upriver; Milo (1964a, ln.32))

In the Upriver dialect at least, the temporal complementizer li also selects a conjunctive clause. Such clauses often receive a 'when...' interpretation, serving as a temporal adjunct, and can be found in other Salish languages, such as Lillooet.

47) Temporal conjunctive

cəl əxəx-els [li=1 la ʔətəl]  
1SG.S write-ACT [WHEN=1SG.CS AUX eat]
I write when I go and eat.  
(Upriver)

The translation suggests a habitual interpretation, which would be consistent with the modal flavor of the other uses of conjunctive clauses shown above. However, more work needs to be done to establish any firm semantic distinctions between temporal conjunctives and nominalized clauses used as temporal modifiers.

2.2.3.3 Nominalized clauses

Nominalized clauses, which were briefly introduced in 1.1.2.2, are the focus of Chapter 4, so I will not spend much time on them here. They are primarily distinguished from the other

36 The length on this vowel is a result of hiatus resolution, where the schwa of the agreement marker merges with the full vowel of the auxiliary (/i + ə → [iː]).
37 Data from Milo (1964a,b) were initially transcribed by Brent Galloway and Ralph Maud, and translated by Galloway and Edna Bobb. I am grateful to B. Galloway for making these texts available to me.
clause types by the presence of the nominalizer, and by the use of possessive clitics to index the grammatical subject. When an overt complementizer is called for, the only one available is the complementizer \( /k^w/ \), which is diachronically related to the distal/hypothetical determiner (cf. Kroeber (1999:175-176)). While some linguists (e.g. Hukari (1981:93), Galloway (1993:453), Suttles (2004:101), Gerdts (1988, p.c.)) maintain that this \( /k^w/ \) is still better analyzed as a determiner, I argue against this claim in Chapter 4.

There are syntactic means to distinguish nominalized clauses from the other clause types as well. Nominalized clauses can be distinguished from indicative clauses, in that the latter but not the former can be free-standing. Conjunctive clauses are, like nominalized clauses, embedded, but for the most part in a complementary set of environments. However, there is some overlap in the distribution of nominalized and conjunctive clauses, in which case a meaning contrast arises. Leslie (1979:224) and Suttles (2004:124) report that nominalized clauses can serve as complements to the negative predicate \( ?əwə \), in which case a habitual interpretation arises.

48) Nominalized clause complement to Neg

\[
\begin{align*}
?əwə & [k^w=nə=s] \\
NEG & [COMP=1SG.POSS=NOM]
\end{align*}
\]

\[
\begin{align*}
?ək^w-nəx\] & lose-LCT.3O
\end{align*}
\]

'I never lose it.'

(Island; Leslie (1979:225))

This is the typical form, though not the typical interpretation, for negation in what Davis (2005) terms the 'Pattern A' languages within the Salish family, but is marked in Halkomelem, a 'Pattern B' language.
2.2.3.4 Relative clauses

Relative clauses are heavily utilized in Halkomelem, as is typical in the Salish language family.\textsuperscript{38} Relativization is the standard means for extraction in the language, showing up in (most) \textit{wh}-questions and clefts, for example.

49) łət t\textsuperscript{3}ə swəʔqe? [RC niʔ] kʷiʔ-ət t\textsuperscript{3}ə sce:ʔən
who DET man [RC AUX butcher-TR.3Ø DET salmon]
'Who is the man who butchered the salmon?'
(Island; Hukari (1981:91))

50) níł ɋə sleniʔ [RC niʔ] Ʉil-əm
3EMPH DET woman [RC AUX sing-MID]
'It's the woman who sang.'
(Island; Gerdts (1988:62))

Their role in the grammar then, goes far beyond serving as modifiers to NPs, though they are of course used in that capacity as well.

Relative clauses are often headless (51), a fact that will be explored in detail in 2.3. However, when there is an overt head, it can either precede (52) or follow (53) the relative clause. Internally-headed relative clauses are not attested in the language (54) (cf. Gerdts (1988:61)).

51) Headless relative

\[
\begin{array}{c}
\text{[DP kʷəθə]} \\
\text{[RC niʔ]} \\
\text{le'yəx-t-əxʷ} \\
\text{[DP DET]} \\
\text{[RC AUX]} \\
\text{eat-TR.3Ø-2SG.TS OBL DEM yesterday]} \\
\text{'the stuff you ate yesterday'}
\end{array}
\]

(Island)

\textsuperscript{38} Kroeber (1999:Ch. 4-6) provides an overview of the construction across the language family.
52) Head-initial relative clause

\[
\begin{array}{l}
\text{[DP } k^\omega\theta \text{ s-ʔəłtən] [RC ni? Ɂəłtən]} \\
\text{[DP DET nom-eat] [RC AUX eat-tr.3o-2sg.ts OBL DEM cəleqəł]]} \\
\text{yesterday)]]
\end{array}
\]

'\text{the food you ate yesterday}'

(Island)

53) Head-final relative clause

\[
\begin{array}{l}
\text{[DP } k^\omega\theta \text{ s-ʔəłtən] [RC ni? Ɂəłtən]} \\
\text{[DP DET nom-eat] [RC AUX eat-tr.3o-2sg.ts OBL DEM yesterday]}
\end{array}
\]

'\text{the food you ate yesterday}'

(Island)

54) *Head-internal relative clause

\[
\begin{array}{l}
\text{*[DP } k^\omega\theta \text{ s-ʔəłtən] [RC ni? Ɂəłtən]} \\
\text{[DP DET nom-eat] [RC AUX eat-tr.3o-2sg.ts DET DEM cəleqəł]]} \\
\text{yesterday)]]
\end{array}
\]

for: '\text{the food you ate yesterday}'

(Island)

Halkomelem lacks relative complementizers and relative pronouns, so these cannot be used to distinguish relative clauses formally. This is not to say that there are no formal mechanisms for distinguishing relative clauses. As noted in 2.2.2, the extraction of direct arguments of transitive predicates triggers specific agreement facts, while the extraction of other constituents leads to nominalization (cf. Hukari (1977), Gerdts (1988)). Transitive subject-centered relatives trigger anti-agreement, where subject agreement is obligatorily absent.
55) Transitive subject-centered relatives

a. tə swəʔqeʔ? [niʔ ʔam-əs-t-(*əs)]
   DET man [AUX give-DAT-TR.3O-(*3ERG)]
   "the man that gave it to him"
   (Island)

b. te swiyəqə [la ʔiya-t-(*əs) Ɂəlqətə]
   DET man [AUX chase-TR.3O-(*3ERG) DET deer]
   "the man that chased the deer"
   (Upriver)

The generalizations are quite different for object-centered relatives in the two dialects.

The Upriver dialect has collapsed the transitive suffix and subjunctive clitic series in this context, indexing the subject with a clitic.

56) Upriver object-centered relatives

   te stəaqʷi [ʔi=xʷ kʷukʷ-t]
   DET fish [AUX=2SG.CS cook-TR]
   "the fish that you cooked"
   (Upriver)

Thus, even when the embedded clause has an auxiliary, the subject agreement surfaces attached to the predicate.³⁹

57) Island object-centered relatives

   tə ƛ̱ɬpiwən [niʔ hakʷ-əš-e:ə=ceʔ]
   DET shirt [AUX use-TR-1SG.TS=FUT]
   "the shirt I'm going to wear"
   (Island)

As was pointed out in 2.2.2.2 above, DPs that are not registered by agreement cannot be

³⁹ Hukari (1975) does provide an example of a Cowichan object-centered relative clause where the subject agreement appears on the auxiliary rather than the predicate. This is the only such example I have come across, including my own elicitation.
extracted directly. This restriction applies to relativization as well. Rather, the extraction must be preceded by a separate operation of predicate nominalization, which results in the formation of an intransitive predicate whose grammatical subject corresponds to the unregistered DP of the non-nominalized predicate (Hukari (1977), Gerdts (1988), etc.). Thus, the DP that gets extracted is a registered argument. This operation is the subject of Chapter 3, so I will not discuss it further here.

Relativization is employed in Halkomelem for long-distance extraction as well. In these cases, the morphology is determined by the grammatical role of the embedded clause within the root clause. Thus, in the following example, the embedded clause is the direct object of a formally transitive predicate, and the use of transitive subject agreement morphology (/-əxʷ/) in the root clause indicates extraction from the object position.

58) ḥwet kʷθə [ni? meḷq-t-əxʷ] [kʷ=ən=s tem-ət]
   who DET [AUX forget-TR.3O-2SG.TS [COMP=2SG.POSS=NOM call-TR.3O]]
   'Who did you forget to call?'

The embedded clause in (58) does not show any signs of extraction, which would come in the form of a transitive subject suffix. It is possible that a dispreference for two overt subject agreement morphemes can account for this gap (cf. Wiltschko (2005a), Koch (2009)), but further research is certainly needed.

For the purposes of this dissertation, I will assume that relative clauses are CP adjuncts that modify an NP. A'-movement has taken place inside that CP, moving an operator from the position of the gap to a c-commanding position in the CP domain. That operator is coindexed with the head of the NP, resulting in the following structure.
That Halkomelem RCs must be adjoined to NP can be seen in their ability to occur in a nominal predicate. If they were instead an argument of D, as in the analyses proposed in Vergnaud (1974) or Kayne (1994), examples like the following would be ungrammatical. The bolded constituent is a nominal predicate, obligatorily lacking the determiner predicted by Vergnaud and Kayne.

The man that's fishing is going to feed me. (lit. The one who is going to feed me is the man who is fishing.) (Island)

Relative clauses play an important role in the syntax of Halkomelem, and figure in discussions of several different aspects of the grammar. I leave further discussion of these clauses to 2.3.2.1, where I make explicit their role in the lexical category debate.
2.2.4 Auxiliaries

Halkomelem has two sets of simple auxiliaries – the locatives ?i ('here/now') and li–ni? ('there/then'), and the directionals læm\(^{40}\)='em ('go') and mi ('come'). There is also a set of complex auxiliaries in at least the Island dialect – eʔat ('here') and naʔat ('there')\(^{41,42}\) – which are in complementary distribution with the simplex locative auxiliaries. This last set I will leave aside, despite the interesting facts discussed in Gerdts (2010).

Like auxiliaries in other languages, the Halkomelem auxiliaries can be used as main predicates, where their locative semantics are clearly on display.

61) 'Auxiliaries' as main predicates

\[
\begin{array}{ccc}
\text{?i} & = \text{cən} & ?i & ?= \text{θ} & \text{ne} \text{-} \text{ə} \text{wtx}^w \\
\text{AUX} = 1 \text{SG.} & \text{here} & \text{OBL} & \text{DET} & \text{other-house} \\
\end{array}
\]

'I'm in the other room.'

(Island)

Perhaps because of their locative semantics, they are also well suited for use as locative prepositions, as the following examples show.

62) 'Auxiliaries' as secondary predicates

\[
\begin{array}{cccc}
c\text{əl} & \text{laq-ex} & \text{t}= \text{θ} & \text{θl} \\
1 \text{SG.} & \text{put.out-TR.3} & \text{DET} & \text{dish} \ [\text{there DET table}] \\
\end{array}
\]

'I put the dish on the table.'

(Upriver)

These are not, however, the uses of auxiliaries which are of interest to me here. Instead I

---

\(^{40}\) In the Upriver dialect, this form is often reduced to la or lə, particularly when used as an auxiliary.

\(^{41}\) Gerdts (2010) reports that these forms are used as locative predicates in the Downriver dialect, but only argues for their use as auxiliaries in the Island dialect.

\(^{42}\) Also reported by Gerdts (2010), these auxiliaries agree in gender with the (obligatorily 3\(^{rd}\) person) subject as well, surfacing as eʔəθ and naʔəθ when the subject is feminine.
focus on their behavior when used as auxiliaries. In this capacity, I claim they head a verbal functional projection in the IP domain. Ritter and Wiltschko (2005, 2009, to appear) offer an explicit analysis to that effect, arguing that locative auxiliaries head IP itself. While this position is controversial on theoretical and empirical grounds, as pointed out in Matthewson (2004, 2006), I adopt arguments from Ritter and Wiltschko, and Bar-el, et al. (2004) showing that auxiliaries play roles that are generally attributed to IP-domain functional projections. After discussing the role of auxiliaries in the morphology and syntax of the clause (2.2.4.1), I argue in the latter part of this section (2.2.4.2) that that projection is MoodP, following proposals made in Bar-el, et al. (2004).

2.2.4.1 Auxiliaries in the clause

Auxiliaries play a number of important roles in Halkomelem clauses, ranging from morphological to semantic. They are the initial word in the predicate complex and serve as hosts for the language's many second-position clitics. Leslie (1979:143-162) provides an extensive inventory of these clitics and their ordering restrictions in the Island dialect, while Suttles (2004:367-393) does the same for the Downriver dialect. A similar list can be extracted from Galloway's (1993:437-444) discussion of adverbial elements in the Upriver dialect, though his discussion is organized on semantic, rather than distributional grounds. These elements are used to express a range of information, including temporal deixis, speaker certainty/evidentiality, and illocutionary force. As noted in 2.2.2.1, the indicative, conjunctive, and possessive clitics that are used to index grammatical subjects are also second-position clitics. When an auxiliary is present, all of these elements will encliticize to it rather than the main predicate.

Another point concerns the appearance of auxiliaries in nominalized clauses. When the
subject is 3rd person or 1st person plural, the auxiliary does not typically occur in its full form. Rather, it is reduced to schwa, as shown in the following examples.\(^43\)

\[
\text{63) } \begin{array}{lllllllllll}
\text{ni?}=\text{cən} & \text{melq} & [k^w=s=ə=ct]\text{\(44\)} & ?\text{ex}^\text{v}e?\text{-t} & t^\theta & \text{Jim} \\
\text{AUX}=\text{1 SG.S} & \text{forget} & [\text{COMP}=\text{NOM}=\text{AUX}=\text{1 PL.POSS} & \text{give-TR.3O} & \text{DET} & \text{Jim} \\
\text{OBL} & \text{DET} & \text{salmon} \\
\end{array}
\]

'I forgot that we (already) had given Jim the fish.'

(Island; Gerdts and Hukari (to appear))

\[
\text{64) } \begin{array}{lllllllllll}
\text{ni?}=\text{cən} & \text{melq} & [k^w=s=ə=s] & ?\text{ex}^\text{v}e?\text{-t}s & t^\theta & \text{Jim} \\
\text{AUX}=\text{1 SG.S} & \text{forget} & [\text{COMP}=\text{NOM}=\text{AUX}=\text{3 POSS} & \text{give-TR.3O-3ERG} & \text{DET} & \text{Jim} \\
\text{OBL} & \text{DET} & \text{salmon} \\
\end{array}
\]

'I forgot that he (already) had given Jim the fish.'

(Island; Gerdts and Hukari (to appear))

As noted by Gerdts and Hukari (to appear), the claim that contracted auxiliaries are still syntactically present is supported by the existence of certain semantic effects, which are triggered by the presence versus absence of auxiliaries. While this will be explored in more detail in the following section and in Chapter 4, a brief illustration here will suffice. The relevant contrast is apparent in the following minimal pair. The nominalized clause in (63) has an auxiliary, and receives a finite interpretation, whereas the nominalized clause lacking an auxiliary in (64) receives a non-finite interpretation.

\[
\text{65) } \begin{array}{lllllllllll}
\text{cəl} & \text{məq-əs} & [k^w=ə=sl] & ?i=t & \text{xəq}^\text{w}əl-t & t^\sigma & \text{heyəq}^\text{v} \\
\text{1SG.S} & \text{forget-RED.3O} & [\text{COMP}=\text{1 SG.POSS}=\text{NOM} & \text{AUX}=\text{PAST} & \text{put.OUT-TR.3O} & \text{DET} & \text{fire} \\
\text{OBL} & \text{DET} & \text{salmon} \\
\end{array}
\]

'I forgot that I put out the fire.'

(Upriver)

\(^{43}\) Suttles (2004:99) makes the same observation for Musqueam.

\(^{44}\) These morpheme clusters are left unparsed in the source material.
Compare the following example to (64) above. Where the latter example receives a past interpretation like that seen in (65), the following example receives the non-finite interpretation seen in (66).

67) ni? meľq [kʷ=s ?exʷe?-t=s tʰə Jim
aux forget [comp=nom give-tr.3o=3poss det Jim
?ə tʰə see:tən]
obl det salmon]
'She forgot to give Jim the fish.'
(Island; Gerdts and Hukari (to appear))

The interpretive contrast between (64) and (67) supports the claim that there is an auxiliary in the former example. In the next section I look further at the interpretive effects that auxiliaries have, and propose a syntactic analysis for them.

2.2.4.2 Auxiliaries in MoodP

As has been pointed out in a number of places (Galloway (1993:359); Suttles (2004:35,36); Wiltschko (2006b:289); Gerdts (2010:177)), locative auxiliaries are used to locate the event in space, relative to the speaker, though Galloway (1993:359) points out that they are rarely translated as 'here' or 'there'. Gerdts (1988:23) further points out that auxiliaries can be used to convey temporal information as well, particularly in conjunction with aspectual morphology. The proximate auxiliary, when used with an imperfective predicate, is typically interpreted as a present, ongoing activity (68), while the distal auxiliary and a perfective predicate are typically given a past interpretation (69).
This is not to say that either auxiliary is inherently associated with a particular temporal interpretation. The following examples illustrate how both can be used in conjunction with the future particle to trigger a future interpretation. The difference in auxiliary choice conveys the relative 'distance' in time between the speaker and the event denoted by the VP.

The directional auxiliary *læm/nem* (go) is often found in clauses denoting future eventualities (72), though it too is not inherently linked to that temporal specification. It can, for example, be used in conjunction with the past particle to convey a past counterfactual interpretation (73).
72) nemissão səmon
   go walk
   'He's going to walk.'

(Island; Gerdts (1988:23))

73) neḿ=əł=çon həye?
   go=PAST=1SG.S leave
   'I was going to leave.'

(Island)

It seems then that auxiliaries are relevant to the temporal interpretation of a clause, but do not strictly determine it.

Wiltschko (2006b) is the first to specifically argue that the ability of auxiliaries to play this kind of role can be accounted for by treating them as the head of a functional projection in the clausal domain. Noting their obligatory absence in most contexts where languages like English require a tenseless clause (e.g. imperatives, non-finite subordinates), she proposes to treat them as a different instantiation of Infl. This hypothesis is, as mentioned above, developed extensively in Ritter and Wiltschko (2005, 2009, to appear), and leads to some interesting predictions, but I will not pursue it here. Rather, I adapt an older analysis put forward in Bar-el et al. (2004). These authors note that in both Upriver Halkomelem and Squamish, there is a difference in interpretation between clauses where subject clitics precede the main predicate and those where the clitic follows the main predicate. Where the clitic precedes the predicate, a past tense interpretation is preferred, though others are possible, particularly if supported by a temporal morpheme or modifier.
74) clitic > predicate = past\textsuperscript{45}

\begin{align*}
a. \text{cəl} & \text{ t̥il-əm} & b. \text{cəl} & \text{ʔəlt̥əl} \\
& \text{sing-MID} & & \text{eat} \\
& 'I sang.' & & 'I ate.' \\
\end{align*}

(Upriver; Bar-el, et al. (2004:13))

75) clitic > predicate = non-past

\begin{align*}
\text{cəl=} & \text{c̆a} & \text{ʔəlt̥əl} \\
& \text{FUT} & \text{eat} \\
& 'I will eat.' \\
\end{align*}

(Upriver; Bar-el, et al. (2004:12))

The reverse order of clitic and predicate, however, does not display the same flexibility.

In clauses where the predicate precedes the clitic, the past tense readings are no longer available, even with the help of a temporal morpheme or modifier. Instead, either a future interpretation, or, with a 2\textsuperscript{nd} person subject, an imperative interpretation arises.\textsuperscript{46}

76) predicate > clitic = future

\begin{align*}
a. \text{t̥il-əm=} & \text{cəl} & b. \text{ʔəlt̥əl=} & \text{cəl} \\
& \text{sing-MID=} & \text{1SG.S} & \text{eat=} \text{1SG.S} \\
& 'I am going to sing.' & 'I am going to eat.' \\
\end{align*}

(Upriver; Bar-el, et al. (2004:15))

77) predicate > clitic = imperative

\begin{align*}
\text{t̥il-əm=} & \text{cəxʷ} \\
& \text{sing-MID=} & \text{2SG.S} \\
& 'You sing.' \\
\end{align*}

(Upriver; Bar-el, et al. (2004:15))

\textsuperscript{45} A present interpretation is also possible for these sentences, though the past is preferred.

\textsuperscript{46} Bar-el, et al. note that, given a suitable context, the future interpretation is available with 2\textsuperscript{nd} person subject clitics as well. They note further that this effect does not happen with nominal predicates. Neither the authors nor I have an explanation for this distinction.
Bar-el, et al. (2004) argue that the interpretive contrast displayed in (87-91) reflects a mood distinction, with the clitic>predicate order conveying realis mood, and the predicate>clitic order conveying irrealis mood.

Wiltschko (2006b) takes the empirical generalization a step further. Noting that the clitic>predicate order displays the same range of interpretations found in clauses with the distal auxiliary *li, she argues for the presence of a null distal auxiliary. The predicate>clitic order is the result of head movement of the verb from its base position up to the functional projection that hosts the locative auxiliaries, while the clitic>predicate order arises when an auxiliary, null or overt, is present.47 Because verbs lack the featural content of the auxiliaries, they are unable to support realis interpretations. Putting all of this together, we get the following picture of the interaction between auxiliaries and interpretation.

The generalization that emerges is that when a locative auxiliary is present, the clause receives a realis interpretation. Conversely, in the absence of a locative auxiliary, an irrealis interpretation is triggered. This can be captured by treating auxiliaries as the heads of a Mood

47 H. Davis (p.c.) points out that there is no independent evidence for verb movement in these cases.
Auxiliaries are thus ideally situated to interact with the tense information originating in IP and the aspectual information originating in lower verbal projections.

2.2.5  **DP and other nominal projections**

Halkomelem is typical of the Salish language family in requiring NPs that are not employed as main predicates to be selected by a determiner. That is to say, NPs used as arguments must project a DP, and NPs used as adjuncts must do so as well.

81)  **Argument**

\[
\begin{array}{c}
\text{niʔ=ʷəɬ} \\
\text{AUX=PERF} \\
\text{James} \\
\text{?itət} \\
\text{sleep} \\
\text{James} \\
\text{* (k*θə)} \\
\text{DET} \\
\text{James} \\
\end{array}
\]

James already went to bed.'

Adjunct DPs require an oblique marker as well. As pointed out in 2.2.2.2, this oblique marker is obligatorily overt in the Island dialect, optionally so in the Downriver dialect, and unpronounced in the Upriver dialect. I assume a null marker is available for both the Upriver and Downriver dialects.
The issue of lexical categories and their relationship to functional projections will be taken up in detail in section 2.3. In the meantime I will simply assume, as is standard, that DP is a nominal functional projection, and that it must have an NP as its lexical core. Ritter (1991), among others, opened the door to further nominal functional projections with the introduction of NumP, and there has since been some work arguing for a richly articulated set of functional projections in the nominal domain. I limit the discussion in this section to determiners, number, and possessors. I assume that numerals, adjectives, relative clauses, and even quantifiers are modifiers, in that they do not seem to affect the formal properties or external distribution of NPs. Likewise, the mass/count distinction does not seem to be relevant to any grammatical processes in the languages (Wiltschko (2005c)).

2.2.5.1 Determiners

Halkomelem is like other Central Salish languages in having a rich inventory of determiners. The paradigms, which are largely the same across dialects, are organized around gender and spatial deixis.
<table>
<thead>
<tr>
<th></th>
<th>Male/unmarked</th>
<th>Female/marked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present + visible</td>
<td>tə</td>
<td>θə</td>
</tr>
<tr>
<td>Near + not visible</td>
<td>kʷθə</td>
<td>sə, kʷsə</td>
</tr>
<tr>
<td>Distant</td>
<td>kʷə, kʷθə, kʷsə</td>
<td></td>
</tr>
<tr>
<td>Plural</td>
<td>yə</td>
<td></td>
</tr>
<tr>
<td>Oblique</td>
<td>ƛ</td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Upriver determiners (from Galloway (1980))

<table>
<thead>
<tr>
<th></th>
<th>Plain</th>
<th>Feminine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximal</td>
<td>t⁰θ</td>
<td>θə</td>
</tr>
<tr>
<td>Non-proximal</td>
<td>kʷθə</td>
<td>tə</td>
</tr>
<tr>
<td>Remote</td>
<td>kʷθ</td>
<td>kʷsə</td>
</tr>
<tr>
<td>Indefinite</td>
<td>kʷ, kʷ</td>
<td></td>
</tr>
<tr>
<td>Oblique</td>
<td>ƛ</td>
<td></td>
</tr>
</tbody>
</table>

Table 6. Island determiners (from Gerdts (1988:31-32))

The oblique determiner is, in both dialects, restricted to proper noun agents and possessors. Speakers of the Island dialect strongly resist proper nouns as transitive subjects (Gerdts 1988:85), preferring instead to use formally intransitive constructions like the passive or antipassive as a repair strategy. This restriction does not extend to the Upriver dialect though, which readily allows proper noun transitive subjects.

---

48 The categories along which these paradigms are organized are those assumed in the source materials, and thus differ slightly from each other.
83) Island proper noun passive agent

ni? x̣ə̌-ʔə-ʔəm ?ə̌ ƛ̣ Tully kʷə ǒ pipə
 AUX write-TR-PASS OBL DET Tully DET paper
'Tully wrote a letter.'

84) Upriver proper noun agent

mεy-ʔə-ʔəs ƛ̣ Bill
help-TR-1SG,O=3ERG DET Bill
'Bill helped me.'

These DPs obligatorily occur with the oblique determiner in the Island dialect, but only preferentially so in the Upriver dialect – other determiners are also possible. Upriver also possesses a plural determiner, which does not encode gender or deictic features.

There are also rich sets of morphologically complex demonstratives that are formed using the determiners. Unlike the determiners, Halkomelem demonstratives can but need not take an NP complement. Demonstratives do not enter into the analysis of the constructions I am concerned with though, so I will not develop any explicit account of them.

2.2.5.2 Number

Plurality can be expressed in Halkomelem in a number of ways, and on a number of different word classes. The primary morphological exponent of plurality in both dialects is the CVC- reduplicant (85a). Plurality can also be marked by a series of vowel changes that Galloway (1993) refers to collectively as 'ablaut'. This includes vowel change (b) and lengthening (c). It is also possible to pluralize with an -l- infix (d).
Plural marking on nouns

<table>
<thead>
<tr>
<th>Base</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. silɛ ~ grandparent</td>
<td>əlsilɛ ~ grandparent.pl</td>
</tr>
<tr>
<td>b. swiwsələs ~ boy</td>
<td>swəwsələs ~ boy.pl</td>
</tr>
<tr>
<td>c. siyæm ~ respected.elder</td>
<td>si:yæm ~ respected.elder.pl</td>
</tr>
<tr>
<td>d. swæqəθ ~ husband</td>
<td>swələqəθ ~ husband.pl</td>
</tr>
</tbody>
</table>

Galloway (1993) argues that the distribution of these forms is primarily conditioned by phonotactic considerations, and does not reflect any semantic contrast.\(^{49}\)

When a speaker intends a plural interpretation, there are some options for where to encode it morphologically. The noun can, and in some cases on the Island, must, be marked with the appropriate form out of the list shown in (85). The Upriver dialect has a plural determiner, as shown in Table 5, and both dialects can form a plural demonstrative by combining the appropriate determiner with the 3\(^{rd}\) person plural emphatic pronoun (yuƛaləm ələwneʔəl̓). It is also possible to use explicitly plural modifiers, like numbers or quantifiers.

Interestingly, despite having similar morphological resources, there are differences in how the two dialects employ them. When a plural interpretation is intended for a Upriver DP, it can be marked on the determiner (86a), on the noun (b), or on both (c). Most importantly, Wiltschko (2004a) shows that a DP is still compatible with a plural interpretation without overt marking for plurality on either noun or determiner (d).

---

\(^{49}\) For instance, there isn't a dedicated form for a collective or distributive interpretation, or for mass vs. count noun bases.
86) Upriver plural DP (cf. Wiltschko (2008b))

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>yə</td>
<td>(ʔisəɬə)</td>
<td>swiyəɬə</td>
<td>DET.PL</td>
<td>(two)</td>
<td>man</td>
</tr>
<tr>
<td>b.</td>
<td>tə</td>
<td>(ʔisəɬə)</td>
<td>si:wiyəɬə</td>
<td>DET</td>
<td>(two)</td>
<td>man.PL</td>
</tr>
<tr>
<td>c.</td>
<td>yə</td>
<td>(ʔisəɬə)</td>
<td>si:wiyəɬə</td>
<td>DET.PL</td>
<td>(two)</td>
<td>man.PL</td>
</tr>
<tr>
<td>d.</td>
<td>tə</td>
<td>(ʔisəɬə)</td>
<td>swiyəɬə</td>
<td>DET</td>
<td>(two)</td>
<td>man</td>
</tr>
</tbody>
</table>

The fact that the unmarked form is consistent with a plural interpretation means that plural entities must be present in the denotation of the root. Plural marking on D or N forces a plural interpretation by removing the singular entities from the denotation.\(^{50}\)

The Island dialect behaves quite differently, however. Gerdts (2012) shows a complex pattern of plural marking that reveals sub-classes of nouns. Some, her Class B nouns, behave like nouns in the Upriver dialect, in that the plain form is compatible with a plural interpretation. Her Class A nouns, which include humans, differ from Upriver nouns, in that the bare form is not compatible with a plural interpretation.

87) Island Class A nouns

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>qəx̌</td>
<td>səwəyqe</td>
<td>man PL</td>
<td>b.</td>
<td>*qəx̌</td>
<td>swəyqə</td>
</tr>
<tr>
<td>c.</td>
<td>qəx̌</td>
<td>qəle:q</td>
<td>baby PL</td>
<td>d.</td>
<td>*qəx̌</td>
<td>qeq</td>
</tr>
</tbody>
</table>

(Island; Gerdts (2012:2))

\(^{50}\) See Thompson (2005) for a semantic analysis of Upriver Halkomelem plural morphology in the verbal domain. The analysis there may also extend to the nouns in that dialect.
Gerds (2012) goes on to detail the interactions between plural marked nouns and modifiers, and uncovers a systematic contrast between Class A and Class B nouns that she uses as evidence for number agreement mediated by a functional projection. For my purposes, a structure like that in (89) captures the kind of structure proposed by Gerds (2012).51

89)  NumP in Island Hlk

The fact that the Upriver Hlk determiner does not obligatorily encode plurality suggests that treating Number as a functional projection in this dialect would be a mistake. Wiltschko (2005b, 2008a,b) proposes an alternate account, arguing that the [plural] feature that surfaces on nominal elements in Upriver Hlk (nouns and determiners) merges as instead as a modifier.52 This is shown in the structure in (90).

51 The actual structure proposed by Gerds (2012:5) includes a projection below NumP for diminutive marking.
52 Wiltschko (1998) does argue for a functional projection NumP, as well as Pers(on)P for the Upriver dialect, but does so to explain facts about possessive agreement. It seems to me that the number agreement for a possessor is quite different from the number marking for the head noun, so this should not be thought of as the same NumP posited by Ritter (1991). It might instead be likened to the verbal NumP proposed in Ritter (1995), which reflects agreement with an argument DP rather than some property of the head V.
Wiltschko (2005b, 2008b) argues that the plural marker modifies precategorial roots, rather than NP. Her arguments do not affect the status of NumP as a modifier in Upriver Hlk though. The level of attachment is irrelevant for my analysis of nominalization as well, so I will not take a stand on the issue here.

### 2.2.5.3 Possessors

There are two possessive constructions in Halkomelem. The most common involves the use of possessive agreement morphology, which is identical in form to the possessive clitic series presented in Table 2. If the possessor is 1<sup>st</sup> or 2<sup>nd</sup> person, the position of the affix varies by number – affixes for 1<sup>st</sup> and 2<sup>nd</sup> singular precede the head noun, while the plurals follow it. The singular affixes will suffix onto a preceding determiner is there is one, but will prefix onto the following noun when there is no determiner (e.g. when the noun is used as a predicate).

91) Possessive agreement with determiner

```
 tə-1 me:l
 DET-1SG.POSS parent
 'my father'
```

(Upriver; Galloway (1993:180))
92) Possessive agreement without determiner

\[
\begin{array}{c}
\text{na-men} \\
\text{1sg.poss-father} \\
\end{array}
\begin{array}{c}
t\end{array}
\begin{array}{c}
swəyqe? \\
\text{DET man} \\
\end{array}
\]

'The man is my father.'

(Islan; Hukari (2010:61))

The use of possessive agreement is standard for 3rd person possessors as well, with the possessive affix surfacing as a suffix on the head noun. Overt DP possessors are optional.

93) Possessive agreement for 3rd person

\[
\begin{array}{c}
t\end{array}
\begin{array}{c}
siye:ýə-s \\
\text{DET friend.pl-3poss} \\
\end{array}
\begin{array}{c}
t\end{array}
\begin{array}{c}
swəyqe? \\
\text{DET man} \\
\end{array}
\]

'the man's friends'

(Islan)

Optional copies of the possessive agreement may appear on adjectival modifiers as well (cf. Wiltschko (1998)).

There is another option for expressing possession with a 3rd person possessor, utilized to varying degrees across (and probably within) the Downriver and Island dialects. In this construction, the possessor is not indexed by possessive agreement, and must instead appear with the oblique marker. In the Island dialect, this is primarily used for proper noun possessors.

94) Oblique possessor

\[
\begin{array}{c}
t\end{array}
\begin{array}{c}
siye:ýə \\
\text{DET friend.pl} \\
\end{array}
\begin{array}{c}
?ə \\
\text{obl} \\
\end{array}
\begin{array}{c}
λ \\
\text{DET Tully} \\
\end{array}
\]

'Tully's friends'

(Islan)

This resembles the familiar contrast between direct and oblique arguments, and reflects the general licensing conditions on Halkomelem DPs. If it is not done by agreement, it must be done

---

53 The same cannot be said of possessive agreement in nominalized predicates or clauses, which are limited to exactly one instantiation.
Halkomelem possessors are quite unlike those of English. Standard analyses of English possessors places them in SpecDP, but this cannot be the case in Halkomelem. Recall from 2.2.5.1 that determiners create arguments in Halkomelem. An NP that is serving as a predicate cannot have a determiner. It can however have an oblique DP possessor (a) and/or possessive agreement (b,c).

95) Nominal predicate with possessors

a. [yasaʔqʷ ] [ʔə Ɂə Tully]] təʔ i ḥakʷ-əš-eːn
   [hat [OBL det Tully]] det aux use-tr.3o-1sg.ts
   What you're wearing is Tully's hat.

b. [nił s-ʔətən-s ] [təʔ pus]] təʔ i teʔ-ƛ-əxʷ
   [3EMPHM nom-eat-3poss [det cat]] det aux eat-tr.3o-2sg.ts
   It's the cat's food that you're eating.

c. [nił nə-šxʷʔəɁəqʷʔaʔ] ] təʔ niʔ qʷəɁi:ɁqʷəɁ-təł
   [3EMPHM 1sg.poss-sibling.pl ] det aux talk.pl-rCP
   It's my brothers who are talking.

(Island)

It must be the case then that both possessors and possessive morphology are independent of DP. Davis and Wiltschko (1999) and Wiltschko (2000) propose an analysis of possessive constructions in Halkomelem and Lillooet in which the possessors are introduced by one projection, labeled PossP, and licensed by another, labeled FP. PossP can be headed by the emphatic possessive swəʔ-sweʔ ('own'), in which case it must host possessive agreement (a). If

54 Zribi-Hertz (2003) proposes a similar analysis of possessive constructions in French.
55 The location of this particle relative to modifiers does not seem to be fixed, nor is possessive agreement restricted to it (adjectival modifiers can also bear a copy of possessive agreement, e.g.), so it looks like just another modifier. However, swəʔ-sweʔ is the only element that must bear possessive agreement, and can serve as a nominal predicate without a lexical noun. I take this to indicate that it is not a modifier, but instead heads a nominal functional projection.
Poss is null, the noun must host possessive agreement (b).

96) Possessive agreement

a. tə mæ:l-s
   DET father-3POSS
   his/her father

b. tə swæ-s mæ:l
   DET own-3POSS father
   his/her own father

(Upriver; Davis and Wiltschko (1999))

In the (a) example, possessive agreement surfaces on the head noun because it has undergone head movement to adjoin to F. However, when swæ is present, it not only blocks the movement of the noun, but also moves itself. Head movement facts like these motivated Ritter's (1991) postulation of a functional projection between N and D. While the evidence here does not motivate a NumP, the structural parallel applies. The structure for a possessive construction then is as follows.

97) Syntax of Halkomelem possessors (Davis and Wiltschko (1999))

I will assume that something like this structure is the correct analysis for Halkomelem possessives. A possible variant is the structure proposed in Wiltschko (1998), which makes use of separate projections for person and number features. While this offers a way to address certain complications of the possessive agreement paradigm, the basic idea is the same and a single projection will suffice for my purposes here.
The structure in (97) can be selected by a determiner, in which case the nominal constituent will surface as an argument or adjunct. It may, on the other hand, be selected by Infl, in which case the nominal constituent will surface as a predicate. The flexibility this represents has raised questions about the existence and role of grammatical categories in Salish, questions to which I will now turn.

2.3 Nouns, verbs, and extended projections

Any discussion of nominalization in a Salish language must first address the debate surrounding the nature of lexical categories in the relevant language. If the name of these constructions is to have anything more than morphological significance, it will be necessary to develop an independent notion of lexical category. Since Kinkade (1983) and Demers and Jelinek (1982, 1994), the idea that traditional categories such as noun and verb are not relevant in the description of Salish languages has become a defining issue in Salish syntax. This possibility had in fact been raised already by Kuipers (1967) for Squamish, and by Leslie (1979) for Halkomelem, though neither author situates the hypothesis in any broader theoretical context. While most of the consensus has since developed around the existence of distinct categories (Demirdache and Matthewson (1995), Montler (2003), Jelinek and Demers (2002)), it is still important to establish clear benchmarks for category membership before embarking on a discussion of a potentially category-changing operation. The arguments against the existence of noun and verb as discrete categories come from two sources: morphological and syntactic. I address both of these in turn, and compile a number of counter-arguments developed in the Salish literature showing that the grammar of Halkomelem does indeed make use of the...
categories *noun* and *verb*. This section is an overview and language-specific, but the reader is referred to the works cited for a more complete picture of the arguments that have been deployed in this debate and data from the languages for which they were originally proposed.

### 2.3.1 Establishing category distinctions in Halkomelem

In this section I present several arguments for the existence of category distinctions in Halkomelem. These arguments come from both morphological and syntactic facts, and are presented in that order.

#### 2.3.1.1 Morphological arguments for categories

Common diagnostics for syntactic category membership are often found in morphological subcategorization. In English, for example, only nouns are compatible with plural morphology, only verbs with tense and agreement morphology, and only adjectives with comparative morphology.

98) Morphology and categories in English

<table>
<thead>
<tr>
<th></th>
<th>Noun</th>
<th>Verb</th>
<th>Adjective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plural</strong></td>
<td>cat-s</td>
<td>*spot-s</td>
<td>*happy-s</td>
</tr>
<tr>
<td><strong>Tense</strong></td>
<td>*cat-ed</td>
<td>spot(t)-ed</td>
<td>*happy-ed</td>
</tr>
<tr>
<td><strong>Comparative</strong></td>
<td>*cat-er/est</td>
<td>*spot-er/est</td>
<td>happi-er/est</td>
</tr>
</tbody>
</table>

While such morphological criteria can be established for English, they do not fare as well in Halkomelem. Here, plural morphology (CVC- reduplication) and what appears to be past tense morphology (-əl) is not restricted to (likely candidates for) nouns and verbs, respectively.
99) Morphology and categories in Halkomelem

<table>
<thead>
<tr>
<th>Noun</th>
<th>Verb</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plural</strong></td>
<td></td>
</tr>
<tr>
<td>səlsileʔ</td>
<td>ɬəɬəɬəm</td>
</tr>
<tr>
<td>grandparent.PL</td>
<td>sing.PL</td>
</tr>
<tr>
<td>grandparents</td>
<td>sing (repeatedly, a lot, ...)</td>
</tr>
<tr>
<td><strong>Tense</strong></td>
<td></td>
</tr>
<tr>
<td>sɪleɬ-ɬ</td>
<td>ɬɨɬəm-əɬ</td>
</tr>
<tr>
<td>grandparent-PAST</td>
<td>sing-PAST</td>
</tr>
<tr>
<td>(deceased) grandparent</td>
<td>sang</td>
</tr>
</tbody>
</table>

Thus, in simple distributional terms, neither of these morphological operations can be used to categorize lexical items. The relevance of the data in (99) to the category debate depends crucially though on the assumption that plurality and temporal morphemes operate in Halkomelem the same way as their counterparts in English, namely, as the heads of functional projections like NumP and TP. However, there is an alternative hypothesis to account for the distinction between the English and Halkomelem data in (98) and (99). Rather than assume that differs in its treatment of lexical categories, one could attempt to locate the difference in the morphology and syntax of plurality and temporal marking.

Indeed, such proposals have been explored. Wiltschko (2005b, 2008b) for instance, assumes that the normal lexical categories are present and active in the syntax of Halkomelem, and argues instead that the cross-categorial behavior of the Halkomelem plural morpheme ought to be attributed to properties of the morpheme itself. She argues that the plural morpheme's apparent cross-categorial behavior is better understood as *pre*-categorial behavior, with the plural morpheme adjoining to bare roots before categorial heads merged (cf. Marantz (1997), Borer (2004), etc.). In contrast, the English plural marker merges as a functional head, lexicalizing the Num(ber) projection.
Similarly, where English tense morphology heads its own functional projection T, the 'tense' morphemes in Halkomelem receive a different treatment in Ritter and Wiltschko (2008). In their model, tense features are not obligatorily associated with Infl cross-linguistically, and so can be found associating with other projections instead. In a language that chooses not to associate tense morphology exclusively with Infl, tense morphology then is expected to have a wider surface distribution than it would in languages that do. Neither of these hypotheses are uncontroversial, but they demonstrate that it is possible to explain the generalizations illustrated in (99) without abandoning nouns and verbs.

Worse still for a noun- and verb-less model of Halkomelem, there are examples of morphology that are sensitive to what can only be thought of as syntactic categories. For instance, Hess and van Eijk (1985) point out for Lushootseed and Lillooet that possessive morphology is limited to nouns and nominalized verbs. This is true of Halkomelem as well.

100) Possessive morphology

<table>
<thead>
<tr>
<th>Possessive</th>
<th>Stative</th>
</tr>
</thead>
<tbody>
<tr>
<td>apple-3POS</td>
<td>*eat-3POS</td>
</tr>
<tr>
<td>'his/her apple'</td>
<td>for: 'his/her eating'</td>
</tr>
</tbody>
</table>

There are other morphemes whose distribution does not seem to distinguish between different categories, but which, on closer inspection, are sensitive to the familiar categories. The differences become apparent when considering interpretation. Burton and Davis (1996) show that the stative prefix /s-/ only triggers a stative interpretation when attached to a verbal base.\(^56\)

When attached to a noun, it leads to a possessive interpretation ('have/get N').

\(^56\) H. Davis (p.c.) points out that at least in Lillooet, there is a distributional difference between the /ʔas-/ prefix on verbs and the one on nouns that suggests they are synchronically distinct morphemes, rather than different uses of the same morpheme. Note that if this is the correct analysis for Halkomelem, the particular argument still goes through, as the distinction between morphemes is still stated in terms of a noun–verb contrast.
101) $s + \text{verb} = \text{stative interpretation}

\begin{align*}
?i\text{k}^w & = \text{'to get lost'} \\
?i:\text{k}^w & = \text{'getting lost'} \\
s-?i:\text{k}^w & = \text{'to be lost'}
\end{align*}

(Upriver; Burton and Davis (1996))

102) $s + \text{noun} = \text{possessive interpretation}

\begin{align*}
cæx^w & = \text{'wife'} \\
s-cæx^w & = \text{'got a wife'}
\end{align*}

(Upriver; Burton and Davis (1996))

Thus, there are clear morphological grounds for positing distinct lexical categories. Of course, for these last sets of data to be meaningful, some independent diagnostics for noun-hood and verb-hood are needed. These diagnostics will emerge in the following discussion of the syntactic arguments for a noun–verb contrast.

2.3.1.2 Syntactic arguments for categories

In most versions of the Principles and Parameters framework, syntactic categories provide the labels that the structure building component references when assembling a constituent. Thus, given a label for a constituent, one should be able to predict the kinds of environments it will be found in, and what its licensing restrictions will be. What seems clear from the data in (103) is that calling something a noun or a verb does not enable one to restrict the distribution of that item to predicate or argument position. Rather, the ability to function as the main predicate of a clause or as an argument is dependent on the type of particle, or functional head, that selects the major class word.
The man is walking.

The one who is walking is a man.

The predicate–argument flexibility on display in (101) provides the primary syntactic motivation for Kinkade (1983) and Jelinek and Demers (1982) to argue that nouns and verbs are not relevant for modeling the grammars that allow it. Instead, on their view, the lexicon is split into predicates, a class which subsumes all the traditional lexical categories, and particles, which consists of the functional items that determine the role a lexical item will play in the clause. Specifically, they argue that all lexical items project a full clause, and a determiner can select any of these clauses to create an argument. This view has, as stated above, been abandoned among Salishanists. Demirdache and Matthewson (1995) proposed the first syntactic arguments for their existence, arguing first for the 'bare' predicates – ones that do not project to IP – and then for distinct categories of nouns, verbs, and adjectives within this set. Subsequent studies have reaffirmed the syntactic reality of lexical categories in Lilooet (Davis, Lai, and Matthewson (1997), Davis (2002, 2003, 2010)), Saanich (Montler 2003), and Lushootseed (Beck (to appear)).

I propose that the following data provide evidence for the existence of a separate category of nouns in Halkomelem. These data illustrate ordering restrictions within complex NPs that contain both a relative clause and an adjectival modifier. The sentence in (104a), which is the preferred form, has a pre-nominal adjective and a post-nominal relative clause. The next two sentences show that when both modifiers are pre-nominal, either order is acceptable. This situation changes, though, when there is no overt head for the relative clause, as can be seen by

(Upriver)
comparing (104d) and (104e). Only the order adjective → relative clause is grammatical.

104) a. ?i=con  hakʷ-əš  t⁰  ḥeis  yasaʔqʷ  
    AUX=1 SG.S  use-tr.3O  DET  new  hat  
    [ʔi  ?ən-s-xtəʔ-ełc-θ-amš]  
    ['I'm using the new hat that you made me.']

b. ?i=con  hakʷ-əš  t⁰  ḥeis  [ʔi  ?ən-s-xtəʔ-ełc-θ-amš]  
    AUX=1 SG.S  use-tr.3O  DET  new  [AUX  2 SG.PSS-NOM-do-BEN-TR-1SG.O]  
    yasaʔqʷ  hat  
    'I'm using the new hat you made for me.'

c. ?i=con  hakʷ-əš  t⁰  [ʔi  ?ən-s-xtəʔ-ełc-θ-amš]  
    AUX=1 SG.S  use-tr.3O  DET  [AUX  2 SG.PSS-NOM-do-BEN-TR-1SG.O]  
    ḥeis  yasaʔqʷ  hat  
    'I'm using the new hat you made for me.'

d. ?i=con  hakʷ-əš  t⁰  ḥeis  [ʔi  ?ən-s-xtəʔ-ełc-θ-amš]  
    AUX=1 SG.S  use-tr.3O  DET  new  [AUX  2 SG.PSS-NOM-do-BEN-TR-1SG.O]  
    'I'm using the new one you made for me.'

e. *?i=con  hakʷ-əš  t⁰  [ʔi  ?ən-s-xtəʔ-ełc-θ-amš]  ḥeis  
    AUX=1 SG.S  use-tr.3O  DET  [AUX  2 SG.PSS-NOM-do-BEN-TR-1SG.O]  new  
    for: 'I'm using the new one you made for me.' (Island)

While the mechanisms responsible for regulating the distribution of adjectival modifiers, relative clauses, and head nouns remain to be worked out, there is a clear distinction to be made in terms of linear ordering – while a head noun may freely follow a relative clause, an adjectival modifier can only do so if an overt head noun is present. This restriction cannot be explained in the absence of distinct lexical categories, and so can be taken as an argument for their syntactic reality.
2.3.2  Re-visiting predicate–argument flexibility

On the basis of the above argumentation, it can be concluded that Halkomelem syntax has access to at least the category noun – I will not argue whether non-nouns can be further divided into verbs and adjectives, but Bar-el et al. (2004) suggests that behavior with respect to some second position clitics warrants such a division in Squamish and Upriver Halkomelem. The question now becomes one of accounting for the predicate–argument flexibility demonstrated above. On Grimshaw's (2000) notion of extended projections, where the choice of higher functional projections is conditioned by the lexical category of the lexical item at the base of the structure, data like those in (116) are unexpected – verbs should not be able to project up to DP, and nouns should not be able to project up to IP. The fact that they appear to do so needs some explanation, which can take several forms. It could be argued that nouns and verbs, while present in Halkomelem, are just different from nouns and verbs in other languages. Another possibility would be to locate the difference in the functional categories. Davis and Matthewson (1996) explore an account along these lines for Lillooet, though with a different set of issues in mind. One could also attempt to show that the predicate–argument flexibility in (114) is only apparent. In this section, I show that a combination of the latter two strategies is necessary to explain the data.

2.3.2.1  Verbs and predicate–argument flexibility

The ability of verbs to function as predicates is unsurprising, and does not require any further attention. The interesting situation is when the verb appears to be functioning as an argument. Davis and Matthewson (1995, 1999:53) claim that argument-hood in Salish languages
is entirely dependent on the presence of a determiner. This formulation leaves the syntactic category of the determiner's complement unspecified, potentially opening the door for a verbal complement of D, as shown in (105).

105) \[ [DP D [VP V]] \]

However, there is an alternative analysis which treats such constructions as headless relative clauses (cf. Hukari (1983, 1994), Kroeber (1999), Davis (2003, 2010) for Lillooet). This argument rests on analogy with headed relative clauses. On the analysis of relative clauses presented in 2.2.3.4 above, they consist of a CP adjoined to an NP head. On the analysis I adopt here, the 'headless' relative clause contains a null pro head that is syntactically identical to a lexical head. The adjoined CP will have an operator in its specifier that binds a gap in the clause, and is coindexed to the NP head. This is shown schematically and illustrated below.

106) Relative clause analysis

\[ [DP D [NP N/pro] [CP Op, [IP V \ldots t]]]] \]

107) ḥwet [DP ḥa [NP sleni], [CP Op, [IP ni? ɬəm-xʷ-e:ni t]]]
who [DP DET [NP woman], [CP Op, [IP AUX see-LCT.3O-1SG.TS t]]]

Who was the lady I saw?

(ISland)

Showing the existence of headed relative clauses only does part of the work needed here – it provides an alternative analysis of D-V sequences, but it does not force that alternative. I propose that the following two arguments show the headless relative clause analysis to be the correct one. The first is to show that there is clausal structure embedded under D, as opposed to a...

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57 Clausal arguments and proper names in some Salish languages are potential exceptions to this.
58 Davis and Matthewson (1995), Matthewson and Demirdache (1995), and Davis (2010) propose different structures for relative clauses in Lillooet. However, we share the contention that D-V sequences, but not D-N sequences, are best analyzed as relative clauses.
verb. This follows straightforwardly from the assumption that morphemes like the applicative and transitive suffixes head their own projections. The presence of subject agreement morphology also crucially depends on the presence of clausal structure – on the analysis adopted here, either VoiceP or IP is required, as these are the projections from which subject agreement originates. The following example shows that these morphemes are indeed found in the D-V sequence.

108) ʔi=cm lm-nəxʷ tə ([ʔi] ƛə-ənəp-təxʷ]
    AUX=1SG.S see-LCT.3O DET [(AUX) plow-ground-tr.3O-2SG.TS]
I see what you're plowing.

The next step is to show that these constructions involve an obligatory gap. I propose an argument based on the ungrammaticality of internally headed relative clauses presented in 2.2.3.4 above. Overt DPs are always optional in Halkomelem clauses, but, following arguments furnished by Davis and Matthewson (2009), I assume that where overt DPs are possible, they alternate with pro. If, however, an overt DP is not possible in a given context, then neither is pro. There is instead an A'-bound gap in that position. In the following three examples of a ditransitive predicate under D, the ability of the three arguments to appear are shown. Arguments that are not interpreted as the head of the relative clause are possible (109a,b), but crucially, as pointed out in the section on relative clauses above, the argument that is interpreted as the head is not permitted to surface inside the relative clause (109c).

59 Though see Davis and Matthewson (2003) for arguments that not all oblique DPs in Lilooet alternate with pro. I do not have the data to extend their arguments to Halkomelem. It is not actually relevant to this debate though, as obliques cannot be directly relativized anyway.
109) Relative clause-internal arguments

a. niʔ=cən ləm-n-əxʷ kʷθə niʔ ?exʷeʔ-t ?ə tə yasaʔqʷ
   AUX=1SG.S see-LCT-3O DET AUX give-TR.3O OBL DET hat
   'I saw the one who gave the hat to him.'

b. niʔ=cən ləm-n-əxʷ kʷθə niʔ ?exʷeʔ-t tθ puš
   AUX=1SG.S see-LCT-3O DET AUX give-TR.3O DET cat
   'I saw the one who gave it to the cat.'

c. #niʔ=cən ləm-n-əxʷ kʷθə niʔ ?axʷ-əs-t⁶⁰ tθ swəʔqeʔ?
   AUX=1SG.S see-LCT-3O DET AUX offer-DAT-TR.3O DET man
   ?ə tə yasaʔqʷ
   OBL DET hat
   for: 'I saw the man who offered him a hat.'⁶¹

I conclude then that such obligatory gaps indicate the presence of a relative clause. A further argument can be made from the fact that it is in practice hard to find an example of a D-V sequence that is not interrupted by an auxiliary. To the extent that the presence of an auxiliary reflects clausal structure, the preference to include one in these constructions can be taken as evidence of clausal structure.

On the strength of the above arguments, I claim that predicate-argument flexibility is only apparent for verbs. Despite the existence of D-V sequences, verbs cannot project directly to DP. Put differently, VPs cannot be selected by D. Rather, verbs must project to IP, and VPs can only be selected by Infl.⁶²

2.3.2.2 Nouns and predicate-argument flexibility

Having argued above that Halkomelem verbs do not display genuine predicate-argument

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⁶⁰ D. Gerdts (p.c.) observes that this form is not typical in the Island dialect, but is common in the Downriver and Upriver dialect.

⁶¹ The sentence is grammatical on the unintended interpretation 'I saw the person who gave the man a hat'.

⁶² See Davis (2002) for a similar claim for Lillooet.
flexibility, I turn to nouns in this section. I assume that [D-N] sequences have the structure proposed in (110).

110)  \[ \text{DP to [NP swiyəqə]} \]
     \[ \text{DP DET [NP man]} \]
     'the man' (Upriver)

It has been argued, though, that nominal complements to D are in fact headless relative clauses, where the noun serves as an intransitive predicate. On these analyses, the DP in (111) would have the complex internal structure corresponding to the translation given in that example.

111)  \[ \text{DP to [RC Op [Pred swiyəqə e]I]} \]
     \[ \text{DP DET [RC [Pred man]} \]
     'the one who is a man' (Upriver)

This kind of analysis has been proposed for Salish languages (Jelinek and Demers (1982) and Hukari (1983)), and has been put forward more recently for other languages as well (e.g. Ntelitheos (2006) for Malagasy, and Koopman (2005) for Kisongo Maasai). However, the fact that nouns have a distinct distribution within clear instances of relative clauses, as seen in (104) above, shows that there must be a noun in a DP. Given the need for a noun in those cases, there is need to posit the additional structure for D-N sequences seen in (111).

But what of the nominal predicates? Certain accounts of lexical categories advance the notion that nouns cannot serve as predicates unaided (cf. Reinhart (2002), Baker (2003), Vinokurova (2005)). I argued in the previous section that verbs only apparently function as arguments, and that they are able to appear to do so as part of a headless relative clause. Similarly, nouns could be functioning as predicates with the aid of some covert verbalizer or
copula, perhaps corresponding to Bowers (1993) Pred. However, there are language-internal reasons to believe that Halkomelem nouns (and by extension, Salish nouns) truly do function as predicates, without the aid of any verbalizer or copula.

I propose that the absence of a covert verbalizer can be seen from the behavior of NPs that have been selected by one of the overt verbalizers. For example, as seen in 2.2.5.3, it is perfectly acceptable to have possessive agreement and overt DP possessors in nominal predicates. However, as pointed out in Gerdt and Hukari (2004), when a noun has been verbalized, possessors are no longer an option.

112) Possessors in verbalized predicates

a. *ʔi c-teło-s
   AUX VBL-money-3 POSS
   for: 'She has his/her money.'
   (Island, Gerdt and Hukari (2004:209))

b. *ʔey=č c-yasaʔqʷ ?o ƛ Tully
   Q-2 SG.S VBL-hat OBL DET Tully
   'Do you have Tully's hat?'

 c. *ʔey=č c-yasaʔqʷ-s tə Tully
    Q-2 SG.S VBL-hat-3 POSS DET Tully
    'Do you have Tully's hat?'
   (Island)

This distributional difference clearly distinguishes between nominal predicates and verbalized predicates, a distinction that is straightforwardly captured in terms of category. It follows then that nominal predicates have not been covertly verbalized.

The lack of a null copula follows from the fact that the nominal predicate does not include a determiner. If there were a null copula, the NP 'predicate' would be one of its arguments. But then, if it were an argument it would require a determiner. The obligatory lack of
a determiner in these cases can therefore be taken as evidence against the presence of a null copula. Jelinek (1997) makes a similar argument against the presence of a copular verb in Lummi, though we arrive at very different conclusions on a number of other issues (including, incidentally, the existence of lexical categories).

I take the preceding arguments to have established the ability of determiner-less nominal projections to be selected by Infl, without the mediation of a verbal projection. It is worth inquiring about the extent of those nominal projections, i.e. what sort of nominal material can appear inside a nominal predicate? Put differently, at what point can a nominal projection no longer function as a predicate? The answer, it seems, is that anything short of a determiner is permissible inside a nominal predicate. DP possessors and possessive agreement were shown in this context already, so it should be no surprise that sweʔ is also possible.

113) sweʔ

a. [nə-sweʔ nə-ʃəʔəɋ] tʰəʔ i qʰaqʷəɄ
[1SG.POSS-own 1SG.POSS-sibling] DET AUX talk
'The one talking is my own older brother.'

b. [ʔən-sweʔ ʔən-sʔəɋəʔəɋ] tʰəʔ i ɋəʔəɋ-əɋtən
'What you're eating is your own food.'
(Island)

Somewhat surprising from a pan-Salish perspective is the ability of relative clauses to appear in nominal predicates. Demirdache and Matthewson (1995) show that this is not possible in Lillooet, but the following example, repeated from above, shows that it can be done in Halkomelem.
114) Relative clause

[[swəʔqe?] [ni? cecaʔətəʔa?]] t⁰ ni? i=ce? ɬəʔas-θ-ənɪś
[[man] [AUX fish.IMPF.PL]] DET AUX=FUT feed-TR-1SG.O
'The one that's going to feed me is the man that's fishing.' (Island)

Numerals and quantifiers are also possible in Halkomelem nominal predicates.

115) Numeral

[yeysələ nə-ʃxʷʔaɭqʷa?] t⁰ ni? qʷəli:ɬqʷəl-təɬ
[two.people 1SG.POSS-sibling.PL] DET AUX talk.PL-rcp
'My two brothers are talking.' (Island)

116) Quantifier

[məkʷ səwəʔqe?-əl] kʷθə ni? həye?
[all man.PL-young] DET AUX leave
'The ones who left are all the boys.' (Island)

The generalization that emerges is that the only nominal projection that is incompatible with being a predicate is DP.

2.3.3 Consequences for extended projections

In review, Halkomelem, like other Salish languages, possesses nouns and verbs as discrete lexical categories. Also, it turns out that nouns, but not verbs, display the predicate–argument flexibility that motivated arguments against nouns and verbs. Put together, this means that determiners can only take nominal complements, but Infl can take complements of any lexical category. This is not the kind of behavior predicted by Grimshaw's (2000) theory

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63 Beck (to appear) reaches the same conclusion when examining the basis for category distinctions in Lushootseed, another Coast/Central Salish language.
of Extended Projections. This theory starts from the observation that cross-linguistically, there is a strong correlation between nouns and arguments on the one hand, and verbs and clauses on the other. It seems that, in this sense, it makes sense to talk about DPs in Halkomelem as nominal functional projections, but not to talk about IPs or CPs as verbal projections. These latter projections are, in that sense, a-categorial. That is not to say they lack categories – Infl is still Infl, and Comp is still Comp.

Panagiotidis (2010) formalizes Grimshaw’s (2000) Extended Projections by employing category features. He assumes a version of Marantz’s idea of categorizing heads, and claims that a root must combine with one of these heads in order to be legitimate syntactic object (i.e. one that can participate in syntactic operations like phrase building, and interpreted at the interfaces). These categorizers, for Panagiotidis, serve as the basis for constraining Extended Projections – functional projections enter the derivation with an uninterpretable category feature that needs to be checked, and it is the interpretable version of that feature carried by the categorizer that is responsible for checking it.

By way of example, consider the following derivation of the DP 'the cats'. It starts by merging a (category-less) root with the categorizer $n$.

$117) \ [NP \ n_{[N]} \ [\text{Root} \ cat]]$

In the next step, a Num head merges. This head, in addition to bearing a [plural] feature, is equipped with a [$uN$] feature. I assume that [plural] is interpretable, so nothing more needs to be said about it. The [$uN$] feature is the one that is relevant – it can only be checked by an interpretable [N] feature, which means it must select a constituent that bears one.
Lastly, the D head merges. It too bears a \([uN]\) feature in addition to its own interpretable features. Again, the \([uN]\) feature imposes a selectional restriction. In Panagiotidis' system, the \([uN]\) feature on D will check itself against the \([N]\) feature on \(n\), leading to an instance of Multiple Agree.

\[\text{DP the}_{\text{def, ...}, aN} \left[ \text{NumP Num}_{\text{plural, uN}} \left[ \text{NP n}_{\text{N}} \left[ \text{Root cat} \right] \right] \right] \]

Essentially the same operation applies in the verbal/clausal domain. A \(v\) head (here meant to be the categorizer, not Kratzer's Voice head) introduces a \([V]\) feature into the derivation, which creates an LF-interpretable object. It simultaneously provides the interpretable feature needed to check the \([uV]\) features on the clausal heads.

If something like this system is responsible for the widely attested restrictions on the kinds of functional projections that dominate a given lexical category, something extra must be said for languages like Halkomelem, which clearly possesses lexical nouns and verbs, and equally clearly allows nouns to serve as main predicates without the aid of a copular verb, or indeed any verbalizing morphology at all. The generalization appears to be this, that verbs may only project to CP while nouns may project to either DP or CP. Recast in Panagiotidis' terms, Halkomelem D, Num, and Poss heads are specified for the category of their complement by a \([uN]\) feature, but Comp and Infl heads do not have a comparable \([uV]\) feature. I will thus assume throughout the dissertation that Infl does not employ a lexical category feature at all in Halkomelem in order to restrict the kinds of predicates it can select for. This dissociation of lexical categories and functional projections already suggests a break from Grimshaw's (2000)
conception of an inherent link between the two. It is important to point out that Panagiotidis' system for constraining selection can be employed without necessarily adopting Grimshaw's analysis of the relationship between lexical categories and functional projections. This observation plays a role in the analysis of nominalized clauses in Chapter 4.

This concludes my discussion of the general syntax and morphology of Halkomelem, in which I have laid the groundwork for the following chapters. The analysis I propose for predicate nominalization in Chapter 3 depends crucially on an understanding of the projection and licensing of arguments. My analysis of clausal nominalization in Chapter 4 relies on knowledge of clause structure, and is informed by the discussion of the relationship between lexical categories and functional projections. With these pieces in place, I now turn to the core of the dissertation – a discussion of Halkomelem's two syntactic nominalizations.
Chapter 3:

Predicate Nominalization

3.1 Introduction

Recall from 1.1 that of the three nominalizations in Halkomelem, nominalized predicates are the intermediate structure, in terms of the size of the targeted constituent. The following structure, repeated from Chapter 1, situates it relative to the other two constructions.

1) Levels of attachment of the nominalizer

\[
\begin{align*}
\text{CN: } & \quad s \rightarrow \text{IP} \\
\text{PN: } & \quad s \rightarrow \text{VoiceP} \\
\text{LN: } & \quad s \rightarrow X
\end{align*}
\]

While merging the nominalizer at VoiceP accounts for some of the properties of predicate nominalization, this only goes part of the way. Nominalized predicates are puzzling constructions, simultaneously displaying properties of relative clauses and of predicates. As noted in 2.2.2.2, predicate nominalization enables the extraction of non-core DPs (oblique arguments and certain true obliques). It can be found then in oblique object-centered relative clauses, as in (2).
2) PN in oblique-centered relative clause

   a. niʔ=̓cən  qʷəl-əm [ʔə  kʷəθə sce:ltən]
      AUX=1SG.S  bbq-MID  [obl  DET  fish]
      'I barbecued the/a fish.'

   b. kʷθə  [NP [CP niʔ  nə-s-ʔəl-əm]  [NP sce:ltən]]
      DET  [NP [CP AUX  1SG.POSS-NOM-bbq-MID]  [NP fish]]
      'the fish that I barbecued'

   (Island)

Hukari (1977) was the first to point out that nominalized predicates appear in root clauses as well. He argues that this construction, of which (3) is an example, underlies the relativization seen in (2).

3) PN in root clause

   niʔ  [nə-s-qʷəl-əm  [kʷθə  sce:ltən]]
   AUX  [1SG.POSS-NOM-bbq-MID  [DET  fish]]
   'I barbecued the fish.'

   (Island)

Rather than a single extraction operation signaled by nominalization, Hukari (1977) proposes a voice-type analysis for predicate nominalization. For Hukari, the purpose of this operation, which creates a new, nominal predicate, is to promote an oblique theme to grammatical subject and demote the agent to a possessor role. Theory-neutrally, a voice-type analysis treats examples like (3) as mono-clausal, and the nominalizer as a functor that alters the mapping of arguments to grammatical roles. The functional motivation for such an operation appears to be a ban on direct extraction from a position that is not licensed by agreement, perhaps for issues having to do with recoverability. The relative clause seen in (2) is formed by

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1 Gerdts (1988:71) explicitly adopts this analysis as well, but is primarily interested in predicate nominalization as a diagnostic in a number of tests designed to prove that the ergative/absolutive distinction is relevant in the syntax of the language.
extraction of what is now the subject of a formally intransitive predicate, and so can be accomplished using the same mechanism employed for extracting intransitive subjects generally.

Despite the plausibility of a voice-type analysis for predicate nominalization, Kroeber (1999:314) argues that it cannot be right, at least for Thompson River Salish and possibly for Halkomelem as well. He argues that the voice-type analysis cannot accommodate the fact that transitive subject suffixes are not replaced by possessive affixes in Thompson. If predicate nominalization truly demoted agents, he argues, then they should not trigger normal subject agreement. While the subject agreement paradigms are not exactly the same in Halkomelem, the following data show that ergative agreement is possible when a (di)transitive predicate has been nominalized.

4) Ergative agreement

a. Base

?axʷ-əs-t-es tə swiyəqə tə sqʷəmay tə smeyəθ
offer-DAT-TR.3O-3ERG DET man DET dog DET meat
'The man offered the dog some meat.'

b. Nominalized predicate

stəm kʷ s-?axʷ-əs-t-es tə swiyəqə tə sqʷəmay
what DET NOM-offer-DAT-TR.3O-3ERG DET man DET dog
'What did the man offer the dog?'

(Upriver)

This is the preferred form in the Upriver dialect, and is at least possible in the Island dialect, suggesting that a straightforward voice-type analysis might not be adequate after all.

In this chapter I propose an analysis intended to walk the line between the voice-type and relativization accounts of predicate nominalization, and to resolve the tension between the
conflicting properties. My analysis accounts for the fact that nominalized predicates have the external distribution of NPs but the internal structure and morphology of a relative clause. The analysis I propose in this chapter treats nominalized predicates as free relatives formed by extracting the nominalizer from an argument position and remerging it above VoiceP. Further, I adopt a Merge-and-Project analysis of free relatives (cf. Bury (2003), Donati (2006), Ceccheto and Donati (2010, 2011)), in which the moved element, rather than the landing site, contributes its label to the newly formed constituent. With the additional stipulation that the nominalizer is an NP, this produces the following structure for nominalized predicates.

5) Syntax of Halkomelem predicate nominalization

This analysis has antecedents in Ntelitheos' (2005) analysis of participant nominalization in Malagasy, as well as Fabregas' (2010, to appear) analysis of certain nominalizations in Spanish. With the former, it shares the notion that nominalization involves some form of relative clause formation. With the latter, it shares the idea that a nominal element can be recycled from within the clause, remerging above the thematic domain and creating an NP.

This analysis shares an important feature with the only other formal analysis proposed for Halkomelem predicate nominalization, namely that of Hukari (1994, 2010), in that both

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2 This represents a significant departure from the analysis proposed for the other relative clauses in the language in 2.2.3.4.
accounts the nominalized predicate is an NP. There is also a shared weakness to both our accounts, in that neither are able to directly extend to cases where predicate nominalization is used in cases of long-distance extraction. Thus, a great deal of ground can be covered without finding an empirical basis for distinguishing between the two types of analysis. However, there are some facts that I present over the course of the chapter, concerning the internal structure and morphology of nominalized predicates, that are more naturally explained by my relativization analysis.

I concern myself in this chapter almost exclusively with predicate nominalization involving the $s$- nominalizer, but there is another nominalizer used in a similar construction. As mentioned in 2.2.2.2, Hukari (1977) and Gerdts (1988) show that the instrumental nominalizer /šxʷ-/> is employed when a location or instrument is to be extracted. Where relevant, I point out differences between this construction and predicate nominalization using the /$s$-/ nominalizer. However, I reserve substantive discussion of this second nominalization until 5.2.2, where it is situated in a broader discussion of systems that make use of two nominalizers.

The rest of this chapter is organized as follows. In the next section, 3.2, I discuss the basic generalizations that must be accounted for by any analysis of predicate nominalization. Many of these facts have been established already in Hukari (1977, 1981) and Gerdts (1988), but some new material is added as well. I present my analysis in 3.3 before moving on to the challenge posed by long-distance extraction in 3.4. Two alternative analyses are considered in 3.5 before I conclude in 3.6.

3 Hukari (1994:7, 2010:65) and Gerdts (1988:71) refer to the nominalized predicate as a 'predicate nominal'. Hukari's representation of predicate nominals – $S \rightarrow N_{x0}$ (NP) (Hukari 2010:60) – and his use of simple nouns to exemplify predicate nominals (ibid.:61,62) suggest that he intends to analyze nominalized predicates as nouns, rather than NPs. However, D. Gerdts (p.c.) claims that this is not the intended analysis, and I believe it is fair to reinterpret Hukari's rule as Gerdts suggests.
3.2 Basic generalizations

This section contains an overview of nominalized predicates, and provides the data that will serve as the basis for the analysis presented in 3.3. I begin in 3.2.1 with a discussion of the conditions governing the ability of a predicate to undergo predicate nominalization. In 3.2.2 I look at the subject of nominal predicates, while 3.2.3 is concerned with the possessive argument. The results of this overview are summarized in 3.2.4.

3.2.1 Argument structure requirements

Hukari (1977) and Gerdts (1988), who identify most of the important properties of predicate nominalization constructions, point out that extraction of an oblique theme argument is impossible without first nominalizing the predicate. The situations in which a theme surfaces as an oblique can be reduced to two general classes – unergatives and ditransitives – and each one requires nominalization for extraction of the oblique argument.

Starting with the morphologically simplest form, unergative roots contain an internal argument (cf. Deep Unaccusativity Hypothesis), but do not have any of the morphosyntactic scaffolding needed to license that argument (i.e. transitive morphology). Thus, as shown in (6a), the theme of q'elac' ('spin') can surface only if it is licensed by the oblique marker. Its subject though can be relativized without any additional morphology. In (6b), it is the theme that is relativized, as can be seen by its position following the relative clause. Doing so requires nominalizing the predicate.
6) Unergatives (no overt transitive or intransitive morphology)

a. Base

\[ \text{niʔ=}cən \quad \text{ləm}-\text{nəx}^* \quad t^\circ \quad \text{niʔ} \quad \text{qələc} \quad [?^c \quad t^\circ \quad \text{ləmətu-lqən}] \]

AUX=1SG.S see-LCT:3O DET AUX spin [OBL DET sheep-wool]

'I saw the one that spins wool.'

b. Nominalized

\[ \text{niʔ=}c \quad \text{x}^*\text{-cə-stəx}^* \quad \text{k}^\circ \text{θə} \quad \text{niʔ} \quad \text{ʔə-h-s-qələc} \]

AUX=2SG.S OBL.REL-put.where-CAUS:3O DET AUX 2SG.POSS-NOM-spin

\[ [\text{ləmətu-lqən}] \]

\[ [\text{sheep-wool}] \]

'Where did you put the wool that you spun.'

Following Davis (1997), I assume that 'bare' unergatives have a null middle suffix, which, like its overt counterpart, introduces an external argument but does not license an internal argument. I assume that these morphemes (the middles and active intransitive) should be analyzed as vs that lack the ϕ-features necessary to license their internal argument via agreement.

One of the arguments Davis (1996, 1997) offers in support of the unified analysis of 'bare' and affixed unergatives is that both leave their internal argument unlicensed, and must be nominalized before that argument can be extracted. These overtly derived unergatives, called 'antipassives' by Gerdts and Hukari, involve the suffixation of an intransitive suffix (either /-els/ or /-əm/) on the predicate. The DP surfaces as an oblique, as seen in (7a). In (7b) it is no longer an oblique, surfacing instead as the grammatical subject of the now nominalized predicate.
7) Active intransitives (intransitivizer that introduces an agent)

a. Base

\[
\text{ni?}=\text{cən} \quad \text{həq-els} \quad ?\varepsilon \quad t^\theta \quad \text{sc:ltən} \\
\text{AUX}=\text{1SG.S} \quad \text{bake-ACT} \quad \text{OBL} \quad \text{DET} \quad \text{fish}
\]
'I baked a fish.'

b. Nominalized

\[
\text{ni?} \quad \text{le'yy-x-təm} \quad ?\varepsilon \quad \hat{T}\quad \text{Tully k^\theta\varepsilon} \quad \text{sc:ltən} \\
\text{AUX} \quad \text{eat-TR.3O-PASS} \quad \text{OBL} \quad \text{DET} \quad \text{Tully} \quad \text{DET} \quad \text{fish} \\
\text{ni?} \quad \text{na-s-həq-els} \\
\text{AUX} \quad \text{1SG.Poss-NOM-bake-ACT}
\]
'Tully ate the fish that I baked.'

Clauses with ditransitive predicates provide another context where predicate nominalization is required for extraction. These ditransitives can be built with the redirective applicative suffixes or with causativized unergatives. Recall from 2.2.1.1.3 that the applicatives contain a morpheme (/-əs/, /-əlc/, -Ø) that introduces an applied argument, and when that argument is introduced it absorbs the licensing ability of the transitivizer (cf. Gerdts (1988), Gerdts and Kiyosawa (2005)). As a result, the theme argument does not get licensed by agreement, but instead must resort to licensing by the oblique maker. Similarly with causativized unergatives, the theme is separated from the licensing head (\(v_{\text{cun}}\), in this case) by an intervening argument. The relevant configurations are shown in (8), with the licensing head and licensed internal argument bolded.
8) Ditransitives
   a. Redirctive applicative
   b. Causativized unergative

   This situation is exemplified below. The predicate in (9a) contains the applicative
   suffix /-əs/, and introduces the applied object tθ swiwsəds ('the man'). Nominalization of the
   predicate allows the oblique argument to extract, as shown in (9b).

9) Applicatives
   a. Base

   My Upriver consultant consistently produced examples with ergative rather than possessive agreement when
   asked for a nominalized predicate with an applicative base, as shown in (i).

   Ergative agreement is sometimes possible in these contexts in Cowichan as well, but is not preferred even when
   possible. H. Davis (p.c.) points out that ergative agreement is obligatory under predicate nominalization in
   Norther Interior Salish languages. Kroever (1999:314) finds in this fact the motivation for his rejection of a
   Voice-type account of predicate nominalization.

   (Upriver)
b. Nominalized

\[\text{niɁ} \text{ nə-s-ʔaxʷ-əs-t} \quad \text{t}^6 \quad \text{swiwləs} \]
\[\text{AUX} \quad 1\text{SG.POSS-NOM-offer-DAT-TR.3O} \quad \text{DET} \quad \text{boy} \]
\[\text{t}^6 \quad \text{š-ʔəm-ləm-ə} \]
\[\text{DET} \quad \text{NOM.INST-smoke-MID-container} \]

'I offered the young man a pipe.'

Gerdts (1988) further points out that when an applicative predicate is passivized, extraction of the theme still requires nominalization. The following data show two patterns that are available when nominalizing a passive applicative. The construction shown in (10a) is the default, available for all predicates I have tested, and the first offered when there is a choice between the two options. In this case, the embedded form of the passive is used, and possessive agreement is not possible. The construction in (10b) is only available for a few predicates, and is the inverse of (10a) – the non-embedded form of the passive is used and possessive agreement is obligatory.  

10) Passive ditransitive

a. Embedded passive, no possessive agreement

\[\text{niʔ=čən} \quad \text{cəl-əm} \quad ?ə \quad kʷθə \quad \text{niʔ} \]
\[\text{AUX=1SG.} \quad \text{hear-MID} \quad \text{OBL} \quad \text{DET} \quad \text{AUX} \]
\[\text{s-yəθəs-θ-am-ət(*-s)} \]
\[\text{NOM-tell-TR-2SG.PASS-PASS.EMB(*-3POSS)} \]

'I heard what you were told.'

---

5 Gerdts (1988) gives several examples of non-embedded passives lacking possessive agreement, but my consultant regularly rejects such constructions. I assume this is a point of intra-language variation.
b. Non-embedded passive, possessive agreement

\[
\begin{align*}
\text{AUX} & =1 \text{SG.S} \quad \text{hear-MID-TR.3O} & \text{DET} & \text{AUX} & \text{NOM-tell-TR-2SG.PASS-*(-3POSS)} & \text{(-s)} \\
\text{ni?} & =cən & \text{čel-əm-ət} & \text{kʷθə} & \text{ni?} & \text{s-yəθəs-θ-a:m*(-s)} \\
\end{align*}
\]

'I heard what you were told.'

(Island)

Here too nominalization is required to extract the unregistered theme. These examples are of further import, in that they determine the extent of the structure that can be targeted by predicate nominalization – in 2.2.2.1 I introduced the assumption that the passive marker heads VoiceP, the projection above vP.

In each case above, the argument extracted is both a theme and unregistered. The following data show that neither of these conditions are individually sufficient to warrant nominalization. That is, a predicate with a licensed internal argument cannot be nominalized, nor can a predicate with an unlicensed non-internal argument. First, an attempt to use predicate nominalization in extracting a theme that is registered by object agreement fails.

11) *Predicate nominalization for registered theme

a. Base

\[
\begin{align*}
\text{AUX} & =1 \text{SG.S} \quad \text{buy-TR.3O} & \text{DET} & \text{hat} & \text{yasa?q} & \text{*}
\end{align*}
\]

'I bought a hat.'

b. Normalized

\[
\begin{align*}
\text{what} & \quad \text{anyway} & \text{DET} & \text{AUX} & \text{NOM-buy-TR.3O} & \text{for: 'What did you buy?'}
\end{align*}
\]

\footnote{My consultant has accepted this sentence on some occasions and rejected it on others.}
c. Correct form

```
stem   ?ałə  kʷθə  niʔ   ?ən-s-ʔiłq-əls
what   anyway   DET   AUX   2sg.poss-nom-buy-act
'What did you buy?'
```

A theme that is registered by subject agreement, as happens with unaccusative predicates, is also able to extract without the benefit of predicate nominalization.

12) *Predicate nominalization for unaccusative subjects

a. Base

```
qəx  tʰə  yaʔlsaʔqʷ
much   DET   hat.pl
'There's a lot of hats.'
```

b. Nominalized

```
*stem  kʷθə  niʔ   s-qəx
what   DET   AUX   nom-much
for: 'What is there a lot of?'
```

c. Correct form

```
stem  kʷθə  niʔ   qəx
what   DET   AUX   much
'What is there a lot of?'
```

This last example highlights another constraint on predicate nominalization – assuming Davis (1997) is correct in arguing for zero-derivation in Salish unergatives, there must be a \textit{v} that introduces an external argument for predicate nominalization to take place. This would be true even if, as with the passives in (10), the external argument does not surface as a core argument like grammatical subject. This is consistent with my analysis of predicate nominalization as
relativization, in that all argument introducing heads must be merged, along with their arguments, before predicate nominalization can take place. That is to say, predicate nominalization operates on a predicate with all of its argument positions filled/saturated.

Having ruled out the presence of a theme as an individually sufficient condition for predicate nominalization, it must be shown that the presence of any other kind of oblique is not individually sufficient either. The following data, showing attempts to extract other unlicensed DPs via nominalization, also fail. One such DP is the agent of a passive predicate. As was pointed out in 2.2.2.2, Gerdts (1988:198) establishes that this argument cannot be extracted via nominalization, or any other mechanism, for that matter.7 This generalization is shown again for the Island dialect in the examples below.8

13) Failure of predicate nominalization with passive agent

a. Base

    ni? ləm-n-a:m ʔə kʷθə əwəʔqeʔ-əll
    AUX see-LCT-2SG,PASS OBL DET man,PL-young

    'The boys saw you.'

7 This marks a point of distinction between Halkomelem and Lillooet, which, as shown by Davis and Matthewson (2003), allows direct extraction of passive agents, with no accompanying morphological marker of extraction.

8 Also pointed out in 2.2.2.2, Gillon and Wiltschko (2004:222, ex.25b) offer the following evidence suggesting that predicate nominalization can be used to extract a passive agent in the Upriver dialect.

i. təwæt kʷə sʔaxʷ-əθ-am kʷə kyapi
   who DET NOM-give-TR-2SG,PASS DET coffee

   'Who gave you coffee?' ('Who were you given coffee from?)

   (Upriver)

If this reflects a robust generalization, it has implications for how the construction is analyzed, and may point to a significant difference between predicate nominalization in the different dialects. Unfortunately, given the state of the Upriver dialect, further testing is unlikely.
b. Nominalized

* (nił) țwet kʷθə ni? s-ləm-n-a:m-s

(3EMPH) who DET AUX NOM-see-LCT-2SG.PASS-3POSS

for: 'Who were you seen by?'

c. Nominalized

* (nił) țwet kʷθə ni? s-ləm-n-am-ət

(3EMPH) who DET AUX NOM-see-LCT-2SG.PASS-3POSS.EMB

for: 'Who were you seen by?'

d. Correct form

(nił) țwet kʷθə ni? ləm-n-amə

(3EMPH) who DET AUX see-LCT-2SG.O

'I saw you.' (Island)

There are also the true obliques such as locations or instruments, which are not themes but require the oblique marker. These DPs can be extracted, but require instrumental nominalization rather than the /s/- nominalization seen in above.

14) Failure of plain nominalization with true obliques

a. Base

ni?=cən kʷi? ?ə kʷθə qət

AUX=1SG.S climb OBL DET tree

'I climbed a tree.'

b. Nominalized (/s/-)

*stem kʷθə ni? ʔən-s-kʷi?

what DET AUX 2SG.POSS-NOM-climb

for: 'What did you climb?'

Recall from 2.2.2.2 that temporal adjuncts are not extracted via predicate nominalization, which means that there is more to be said about .
c. Correct form (/šxʷ-/)

stem kʷθə niʔə ʔən-š-kʷiʔ
what DET AUX 2SG.POSS-NOM.INST-climb
'What did you climb?'

The fact that the instrumental nominalizer is used to extract (a subset of) modifiers, rather than unregistered themes, means that this kind of nominalization can effect a wider range of predicates. Where /s-/ nominalization can only target unergatives, middles, and ditransitives – predicates whose morphosyntax is such that the internal argument is left unregistered – /šxʷ-/ nominalization can target transitives (15) and unaccusatives (16) as well.

15) Transitives and /šxʷ-/ nominalization

a. niʔ=çən ləkən-t tθə sɬəŋə-s tθə swiwləs
   AUX=1SG.S medicate-TR.3O DET leg-3POSS DET boy
   ?ə tə ʔiʔqəʔiʔas
   OBL DET snowberry.PL
'I put the snowberries on the boy's leg.' (lit. I medicated the boy's leg with the snowberries.)

b. ʔiʔqəʔiʔas tə niʔə nə-š-ləkən-t kʷθə sɬəŋə-s
   snowberry.PL DET AUX 1SG.POSS-NOM.INST-medicate-TR.3O DET leg-3POSS
   kʷθə swiwləs
   DET boy
'Snowberries are what I put on the boy's leg.'

16) Unaccusatives and /šxʷ-/ nominalization

a. niʔ=çən pas-aʔqʷ ʔə tənə ʃɬəmələ
   AUX=1SG.S hit10-lead OBL DEM bottle
'I got hit on the head with this bottle.'

---

10 This 'hit' is used when the object (here, 'the bottle') is thrown.
b. kʷθə šləmeɬə ni? nə=š=paš-aʔə
DET bottle AUX 1SG.POSS-NOM.INST-hit-head
'the bottle which I got hit on the head with'

(Island; Hukari 1981:89)

Given the above discussion, it is clear that the relevant constraint on the applicability of /s-/ nominalization is the presence of an unregistered theme. Because it can be formulated strictly in terms of the licensing and projection of arguments, this constraint is clearly syntactic in nature, motivating a syntactic analysis. Further, the ability of passive morphology to occur under predicate nominalization shows that the boundary of the operation is at least as high as VoiceP in ditransitives. Given the fact that auxiliaries cannot occur under the scope of the nominalizer in predicate nominalization (i.e. the nominalizer attaches to the predicate, not the auxiliary), I conclude that the nominalizer can go no higher than VoiceP in predicate nominalization.

3.2.2 The subject of a nominalized predicate is interpreted as a theme

In the previous section, I showed that the presence of an unregistered theme is the prerequisite for the application of predicate nominalization, and that this requirement can only be met in a structure that includes all argument-introducing heads and their arguments. The analyses proposed by Hukari (1977, 1994, 2010) and Gerdts (1988) are intended to capture a second empirical observation, namely that the grammatical subject of the nominalized predicate is interpreted as the theme of the non-nominalized counterpart of that predicate. The lack of an oblique marker on this DP shows that it is a direct argument (see 2.1.2), and, as Gerdts and Hukari point out, there is a functional motivation for an operation mapping the oblique onto a
subject position – on the scale for ease of extractability proposed by Keenan and Comrie (1977), subjects are cross-linguistically the most likely argument to be extracted. Treating predicate nominalization as an operation that allows an unregistered internal argument to map onto the grammatical subject position is thus plausible.

In this section, I provide new evidence from subject agreement that this well-established empirical generalization is correct. Recall from 2.2.2.1 that (non-PRO) subjects are obligatory in all Halkomelem clauses (with the exception of subject-centered relatives), and that grammatical subjects are indexed by clitics. The prediction is that if a nominalized predicate appears in one of these contexts, the argument identified by the subject clitic will be interpreted as the theme. In the discussion that follows I show that this prediction is indeed borne out.

As has been amply documented, when a clause is nominalized, the grammatical subject is indexed by a possessive subject clitic (Newman (1977), Davis (1999, 2000), Kroeber (1999), etc.). If a nominalized predicate is embedded under clausal nominalization, there should be two instances of possessive agreement morphology, one for each nominalization. Compare then the (a) and (b) examples below. Where only clausal nominalization has taken place in the (a) examples, the agent argument introduced by $v$ surfaces as a grammatical subject and is indexed by the possessive subject clitic. In contrast, the (b) examples display both clausal and predicate nominalization, and there are indeed two separate instances of possessive morphology. Note as well that the appearance of two nominalizers and two separate instances of possessive agreement can be taken as further evidence of the need for a distinction between the two kinds of nominalization.
Further, in the (b) examples, possessive suffixes induced by predicate nominalization index the agent, while possessive clitics triggered by clausal nominalization index the theme. This is precisely what is predicted on an analysis in which predicate nominalization results in a theme that surfaces as a grammatical subject.

The same kind of reasoning leads to the expectation that when predicate nominalization takes place in a root clause, the theme should be indexed by an indicative clitic. Because there is no overt 3rd person indicative clitic, testing this hypothesis requires examples in which the theme
is 1st or 2nd person. The data in (18-20) show that it is possible to construct the relevant examples with predicate nominalization.

19) \( ?i=cən \ s-qʷəl-əm \ ?c \ ƛ \ Tully \)
\[ \text{AUX}=1\text{SG}.s \ \text{NOM-bbq-MID} \ \text{OBL} \ \text{DET} \ \text{Tully} \]
'Tully bbqed me.' (lit. 'I am Tully's barbecuing.')

(Islanld)

20) \( \text{nem}=c=(ce?) \ \text{nə-s-pən-əm} \)
\[ \text{AUX}=2\text{SG}.s=(\text{FUT}) \ \text{1SG.POSS-NOM-plant-MID} \]
'I'm going to plant you.' (lit. 'You will be my planting.')

(Islanld)

21) \( \text{nem}=c=ce? \ \text{nə-s-ʔiw-əs-t} \ \text{kʷθə} \ \text{xʷəlməxʷ} \)
\[ \text{AUX}=2\text{SG}.s=(\text{FUT}) \ \text{1SG.POSS-NOM-show-DAT.TR.3O} \ \text{DET} \ \text{people} \]
'I'm gonna go and show you to those Indians.' (lit. 'You will be my showing to those Indians. ')

(Islanld)

If I were to be the unfortunate individual on Tully's fire (19), or was in the habit of directly addressing the seeds I am about to plant (20), the preceding nominalizations are felicitous and allow for a 1st or 2nd person theme. As expected, these themes are indexed by indicative clitics, confirming that they are indeed the grammatical subject of the clause. The sentence in (21) would be plausible before an introduction.

This is, of course, another area where /šxʷ-/ nominalization behaves differently, creating a predicate that assigns a role associated with a true oblique – instrument or location – to its grammatical subject.

### 3.2.3 The possessive argument

One of the salient nominal features of nominalized predicates is the use of possessive
agreement. In this section I claim that the argument indexed by possessive agreement, which I term the *possessive argument*, differs in a number of significant ways from true possessors. In 2.2.5.3 I adopted the analysis of possessors put forward in Wiltschko (1998) and Davis and Wiltschko (1999), who argue that possessors are introduced in Spec-PossP and licensed by a functional projection FP. Though they are arguments of Poss\(^0\), possessors are entirely optional within the NP. They also display the freedom of interpretation typically associated with possessors (cf. Williams' (1980) R-relation). Possessive arguments differ from true possessors in that they are obligatory\(^{11}\) and they can only receive an agentive interpretation. The examples in (22) demonstrate the obligatoriness of the possessive argument.

(22) Obligatory present

a. *θəy-t kʷ [s-ʔexʷeʔ-t]  
   fix-TR.3O DET [NOM-give-TR.3O]  
   for: 'Prepare something to be given away.'

b. *niʔ=cən ɭəm-Ṉaxʷ tʰo [s-ʔiləq-ət-ōt tʰo Ɂemʔ]  
   AUX=1SG.S see-LCT.3O DET [NOM-buy-BEN-TR.3O DET girl]  
   for: 'I saw what can be bought for a young lady.'
   – RP: There’s something wrong with this sentence, you’re not saying who is buying it. (Island)

The bracketed constituents in the above sentences are lacking possessive agreement and overt DPs for the agents. The consultant’s remark in (22b) is particularly revealing in this regard.

The difference in interpretation between the possessive argument and possessors can be seen in the following examples, each of which has a possessed NP modified by a nominalized predicate. The possessors are italicized, while the possessive arguments are in bold. While the

\[^{11}\text{This is not true when the predicate has been passivized, but this gap is still consistent with assigning separate analyses to possessive arguments and true possessors – the absence of a possessive argument attributable to the Voice morphology of the predicate, rather than the optionality of a true possessor.}\]
relationship between the fish and the 1st person possessor in (23a) is free – it could be the fish that I caught, or paid for, or brought to the barbecue, etc. – the relationship between the 2nd person possessive argument and the barbecuing can only be that of agent. This same pattern is holds for the rest of the examples in (23) as well.

23) Agentive interpretation

a. niʔ=çon ɬéyx-t kʷθə ʔən-s-qʷəl-əm nə-s-ce:ltən
   AUX=1SG.S eat-TR.3O DET 2SG.POSS-NOM-bbq-MID 1SG.POSS-NOM-fish
   'I ate my fish that you barbecued.'

b. niʔ=çon ɬéyx-t kʷθə nə-s-ʔwəl-əm nə-s-ce:ltən
   AUX=1SG.S eat-TR.3O DET 1SG.POSS-NOM-bbq-MID 1SG.POSS-NOM-fish
   'I ate my fish that I barbecued.'

c. niʔ=çon ɬéyx-t kʷθə nə-s-ʔwəl-əm ʔən-s-ce:ltən
   AUX=1SG.S eat-TR.3O DET 1SG.POSS-NOM-bbq-MID 2SG.POSS-NOM-fish
   'I ate your fish that I barbecued.'

(Island)

These properties (obligatory presence, interpretation as agent) follow if they are introduced in Spec-vP, as I have assumed to be the case.

Some further evidence can be marshaled for treating the possessive argument as the argument introduced by v. I proposed in 2.2.1.1.2 to treat the reflexive suffixes as vs, which introduce an agent and binding the direct object to it. In the following examples, the concealed ditransitive predicate qʷilqʷəl (tell) is reflexivized. That the possessive argument is interpreted as the binder of the reflexive is consistent with treating it as the argument of v.
24) Reflexives and predicate nominalization
   
a. Base

   ?i=caŋ qʷi:ɬqʷəɬ-θət ?ə tθ sə̈xʷiʔem
   AUX=1SG.S tell.PL-REFL OBL DET story
   'I am telling myself stories.'

b. Nominalized

   ni? nə-s-qʷiɬwəɬ-θət tθ sə̈xʷiʔem
   AUX 1SG.POSS-NOM-tell.PL-REFL DET story
   'I'm telling myself stories.' (lit. 'Stories are my telling to myself.')

Collectively, these generalizations establish the possessive argument as an argument of $v$, distinct from true possessors. This last piece of evidence, concerning reflexives, is also expected on a relative clause analysis. Given Gerdts' (1988:55) observation that reflexives are clause-bound in Halkomelem, the fact that the possessive argument, and not the grammatical subject binds the reflexive in (24b) suggests that the possessive argument is inside a clause that does not include the subject.

3.2.4 Interim summary

Putting this section together, the generalizations are these:

1) the grammatical subject is interpreted as a theme;
2) the agent is registered as a possessive argument;
3) there is a gap corresponding to the VP-internal unregistered argument; and
4) the possessive argument is an argument of $v$, licensed by agreement within the nominalized predicate.

In the next section I present a formal analysis of predicate nominalization as relativization.
3.3 Predicate nominalization as relativization

In the preceding section, I presented the basic facts of Halkomelem predicate nominalization. I present my analysis of predicate nominalization as relativization in 3.3.1. In 3.3.2, I show how the nominalized predicate can be linearized on my analysis. I close the analysis in section 3.3.3 with a discussion of a lingering issue concerning the licensing of the possessive argument, and a suggestion about where an answer to this issue might lie.

3.3.1 The relativization account

In many respects, Halkomelem predicate nominalization resembles cross-linguistically attested instances of reduced relatives. As Keenan (1985) points out, it is common for predicates in such constructions to surface in nominalized or participial forms. There is some initial motivation for adopting a relativization approach here in the form of the passive typically taken by nominalized predicates. As I showed above, the embedded form of the passive is the default form for a nominalized predicate. Crucially, this is true even when the nominalized predicate is not being used inside a DP.

25) Embedded passive on nominalized predicate

<p>| | | | | | |</p>
<table>
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</thead>
<tbody>
<tr>
<td>a.</td>
<td>ni?</td>
<td>s-ʔam-ʔəs-θ-e:l-t</td>
<td>ĭə</td>
<td>yasaʔqʷ</td>
<td></td>
</tr>
<tr>
<td>AUX</td>
<td>NOM</td>
<td>give-DAT-TR-1SG.PASS-PASS.EMB</td>
<td>DET</td>
<td>hat</td>
<td></td>
</tr>
<tr>
<td>'I was given a hat.'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>ni?</td>
<td>s-ʔam-ʔəs-θ-am-宪</td>
<td>ĭə</td>
<td>yasaʔqʷ</td>
<td></td>
</tr>
<tr>
<td>AUX</td>
<td>NOM</td>
<td>give-DAT-TR-2SG.PASS-PASS.EMB</td>
<td>DET</td>
<td>hat</td>
<td></td>
</tr>
<tr>
<td>?ə</td>
<td>ʔə</td>
<td>swawləs</td>
<td>OBL</td>
<td>DET</td>
<td>boy.PL</td>
</tr>
<tr>
<td>'You were given a hat by the boys.'</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This would be a very curious fact on a Voice analysis, which, as mentioned above, would assign a mono-clausal analysis to the sentences in (25). However, it falls out naturally when predicate nominalization is viewed as relativization, as the nominalized predicate is treated as a subordinate clause. Taking this as a starting point, what would such an analysis look like?

The specific implementation of this insight that I propose here involves treating the nominalizer itself as a kind of relative pronoun, which merges as the complement of V before raising to an operator position above the predicate. In this respect, my analysis resembles a proposal made in Fabregas (2010, to appear), where certain nominalizers in Spanish are argued to originate in argument positions of the corresponding predicate, before remerging and projecting their label over the entire construction. This process is referred to as N-feature recycling, as opposed to N-feature embedding. The two terms are defined as follows.

26) Sources of nominal features in nominalization  (Fabregas 2010:87)
   a. N-feature Recycling:

   Nominal features in one of the argument positions of the verbal domain remerge on top of the verbal structure.

   b. N-feature Embedding:

   Nominal features come from a nominal head under which the (verbal) structure embeds.

Recall the preconditions identified in 3.2 for the application of predicate nominalization – the base form has to have a position for a theme but be unable to license that theme for one of two different reasons having to do with higher verbal projections. There must be some form of v,
though the passive data suggest that there does not have to be an agent DP. This is shown in (27), where *theme is meant to represent the unlicensed argument position.

27) Structural preconditions for PN

\[
\begin{array}{c}
...vP \\
  \downarrow \\
  v \quad ...VP \\
  \downarrow \\
  V \quad *theme
\end{array}
\]

Because the external argument of the nominalized predicate is interpreted as a theme, the nominalizer must merge as the complement of V. I assume that the nominalizer is ambiguous between a minimal and maximal projection, which allows me to construct an analysis similar to that proposed by Chomsky for argument clitics (Chomsky 1995:249). I also treat the nominalizer as an N(P), as it lacks any of the formal features associated with other nominal projections (e.g. deictic features, φ-features, ability to bear case). This produces the structure in (28).

28) Initial merge of s

\[
\begin{array}{c}
VP \\
  \downarrow \\
  V \quad N(P) \\
  \downarrow \\
  s-
\end{array}
\]

The restriction of the nominalizer to theme position must be encoded somewhere. I propose that this must be encoded as a part of the lexical entry of the nominalizer.\(^\text{12}\) Treating the nominalizer as an N(P) offers a way to account for the fact that these are unregistered theme positions, if case is something that requires a DP.

\(^{12}\) This restriction is no doubt related to the fact, mentioned in 1.1, that productive lexical nominalization typically creates nouns whose referent corresponds to the internal argument of the unergative base. More will be said about lexical nominalization in Chapter 6.
From this point the verbal projection continues at least as far as vP. The fact that passives are able to occur under predicate nominalization and that ergative agreement is possible at least in the Upriver dialect (see ex.4) sets the lower bound for the target of movement at VoiceP – minimally, this much must be generated. The upper bound for movement can be inferred from the fact that neither auxiliaries nor aspectual prefixes can intervene between the nominalizer and the predicate. This narrows the target for movement down to VoiceP. Once there, the nominalizer must project, rather than VoiceP, creating an NP predicate with an unsaturated argument slot corresponding to the theme. The structure created by remerging and projecting the nominalizer is given in (29).

29) 

```
NP
  /\ 
 N(P) VoiceP
   /\ 
  s-Voice
     \   \ 
      Voice vP
         \  
          \ __ N(P)
```

This operation successfully generates an NP predicate, but an unusual one, in that it readily occurs with auxiliaries, something that is not common with underived NPs.\(^ {13} \) However, the rarity of auxiliaries with underived NP predicates is not an absolute ban, as the following example illustrates.

30) 

```
2i=t=cəl [NP swiyɨʔəqəʔ-all]
AUX=PAST=1SG.S [NP man-young]
'I was a boy.'
```

(Upriver; Bar-el, et al. (2004:22))

\(^{13} \) Suttles (2004) observes a similar absence of auxiliaries with Musqueam NP predicates, noting that they '… have not been recorded with nominal predicates in simple sentences' (ibid. 61).
It is clear that the dispreference for auxiliaries with NP predicates is not based on category. Likely the restrictions have to do with temporal structure – most Halkomelem nouns are individual-level predicates, lacking any kind of temporal structure. The NP predicate in (30) is a stage-level predicate though, and easily co-occurs with the auxiliary. Presumably, the NP formed by predicate nominalization inherits the temporal structure of its verbal base, and so can be selected by an auxiliary.

The appearance of aspectual morphology is likewise not unique to NPs formed by predicate nominalization. The following examples show that both these NPs (31) and underived NP predicates (32) can be selected by an aspectual prefix.

31) Ɂi xʷ-nə-s-hekʷ Ɂiməθ
    AUX INCH-1SG.POSS-NOM-remember DET-1SG.POSS grandchild
    niʔ taːn-θ
    AUX leave-TR.1SG.O
'I keep thinking about my granddaughter that left me.' (Island; Hukari (2010:80))

32) nem=əl=čən xʷ-yəwənəʔqʷ
go=PAST=1SG.S INCH-leader
'I was going to be a leader.' (Island)

Thus, the Merge-and-Project model of relativization correctly produces a constituent with the internal syntax and morphology of a relative clause, and the external syntax of an NP predicate. It also ensures that the subject of this predicate is interpreted properly, as the theme of the underlying predicate. With the basic analysis in place, I turn in the next section to a discussion of the linearization of the predicate and possessive agreement morphology, before a closer look at the agreement morphology itself in 3.3.4.

---

14 Examples like this, where the possessive agreement sits inside an aspectual prefix, show that the agreement in nominalized predicates affixes to the predicate.
3.3.2 Word formation

Recall from 1.1 that one of the distinguishing features of predicate nominalization is that the nominalizer attaches as a prefix to the verb. In the structure I have proposed here though, it merges as a specifier. How then does it surface as a prefix? I assume that the predicate is assembled by head movement, with successive stages adding the next suffix (Travis 1984, Baker 1985). Thus, by the time the nominalizer remerges in Spec-VoiceP, the (in)transitive and Voice morphology has been composed with the verbal root. The relevant structure is provided below.

In this structure, the nominalizer does not form a constituent with the predicate. This creates a potential issue in locating possessive agreement, which also surfaces as an affix on the nominalized predicate. Like possessive agreement in NPs, the position of the agreement morphology differs depending on person and number - 1\textsuperscript{st} and 2\textsuperscript{nd} person singular affixes both surface as prefixes, 2\textsuperscript{nd} plural incorporates a prefix and suffix, and the remainder of the series surfaces as suffixes.
With the structure I have proposed, it might be expected that the agreement affixes would attach to either the nominalizer in Spec-VoiceP or the assembled predicate in Voice. However, the agreement prefixes precede the nominalizer, rather than the verb with its suffixes, while the agreement suffixes follow the verb, rather than the nominalizer.

What is needed is a way to create a single word out of the nominalizer and the predicate. I propose a solution that folds the creation of a morphological constituent into the derivation. It depends on the nominalizer being ambiguous between a minimal and maximal projection, an ambiguity assumed by Fabregas (2010a,b) for N-feature recycling. In its guise as a head, the nominalizer is eligible to undergo m-merger (Marantz 1984), an operation employed by Matushansky (2006) and Vincente (2007) to unify head and phrasal movement. Head movement as formulated by Travis (1984) differs from phrasal movement, in that the former targets the next higher head, while the latter targets the root node. These operations also differ in terms of the resulting structure. As Matushansky (2006:71) points out, “[t]he probe and the target act as one constituent after head movement, but not after phrasal movement”. Matushansky and Vincente both aim to reduce the inventory of syntactic operations by eliminating head movement as a separate operation. This means head movement targets the root of the tree, but fails to create a constituent, as shown in (34a). Matushansky and Vincente apply m-merger to the bracketed

<table>
<thead>
<tr>
<th>Person</th>
<th>Singular</th>
<th>Plural</th>
</tr>
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<tbody>
<tr>
<td>1st</td>
<td>l-/nə-</td>
<td>-cet</td>
</tr>
<tr>
<td>2nd</td>
<td>?a-/ʔən-</td>
<td>?a-/ʔən- -cəp</td>
</tr>
<tr>
<td>3rd</td>
<td>-s</td>
<td></td>
</tr>
</tbody>
</table>

Table 7. Possessive agreement in nominalized predicates
nodes in (34a) to create a complex head, as in (34b).

34) M-merger, Spec–head

\[
\begin{align*}
&\text{a.} & \quad \text{XP} \\
& & \quad \{Z^0, X'\} \\
& & \quad \{X^0\} \ldots t_i \\
&\text{b.} & \quad \text{XP} \\
& & \quad \{Z^0, X^0\} \\
& & \quad \{X^0\} \ldots t_i
\end{align*}
\]

Applying this to Halkomelem predicate nominalization offers a solution to the issues raised above, both concerning the placement of the nominalizer and the possessive agreement, so long as the nominalizer is viewed as both a minimal and maximal projection at the same time. The following structures show how m-merger can be applied to the structure in (33), modulo changes in projection brought on by the Merge-and-Project analysis, to create the needed constituent. In (35a), the nominalizer has remerged in Spec–VoiceP, projecting its label as indicated above, while the predicate has undergone successive head movement up to Voice.\textsuperscript{15} M-merger applies in (35b), resulting in the nominalizer surfacing as a prefix.

35) M-merger of nominalizer in predicate nominalization

\[
\begin{align*}
&\text{a.} & \quad \text{NP} \\
& & \quad \{\text{s-}\text{VoiceP, vP}\} \\
& & \quad \{\text{Voice, vP, v}\} \quad \text{\ldots } \\
& & \quad \{V_{ij}\} \quad \text{\ldots } \\
&\text{b.} & \quad \text{NP} \\
& & \quad \{\text{s-}\text{Voice}\} \\
& & \quad \{\text{predicate}\}
\end{align*}
\]

\textsuperscript{15} I assume that m-merger takes place in these cases of head movement as well. However, since it is the predicate that merges in each specifier position, the new head surfaces as a suffix.
At this point, the nominalizer + predicate has formed a constituent, which eliminates the
potential difficulty in placing the possessive agreement. It now reduces to saying that the
agreement surfaces as an affix on the predicate, with independently needed constraints on prefix
vs. suffix accounting for the linear order.

3.3.3 A problem with the account – licensing the possessive argument

I showed in 3.2.3 that the possessive argument is licensed by agreement within the
nominalized predicate. This is potentially problematic, particularly for one class of nominalized
predicates, namely those formed on unergative bases. Consider first nominalized predicates
formed on ditransitives. These all contain VoiceP, as evidenced by the presence of ergative
agreement and the possibility of passivization inside predicate nominalization.

36) Ergative agreement

a. Base

?axʷ-os-t-es tə swiyəqə tə sqʷəməy tə smeyəθ
offer-DIR-TR.3o-3ERG DET man DET dog DET meat
'The man offered the dog some meat.'

b. Predicate nominalization

stæm kʷ s?-axʷ-os-t-es tə swiyəqə tə sqʷəməy
what DET NOM-offer-DIR-TR.3o-3ERG DET man DET dog
'What did the man offered the dog?'

(Upriver)
37) Passivization

a. Base

\[
\begin{array}{lllllllll}
\text{ni?} & \text{?am-\text{-th-a:m}} & \text{ʔ} & \text{ʔ} & \text{yasaʔqʷ} & \text{ʔ} & \text{kʷθə} & \text{səwəɣqəʔ?-all} \\
\text{AUX} & \text{give-\text{-DIR-\text{-TR-2SG.PASS}}} & \text{OBL} & \text{DET} & \text{hat} & \text{OBL} & \text{DET} & \text{man.pl.-young} \\
\end{array}
\]

'The boys gave you a hat.'

b. Predicate nominalization

\[
\begin{array}{llllllllll}
\text{stem} & \text{kʷə} & \text{niʔ} & \text{s-?am-\text{-th-\text{-am-\text{-at}}}} & \text{ʔ} & \text{tʰə} & \text{səwəɣqəʔ?-all} \\
\text{DET} & \text{AUX} & \text{NOM-give-\text{-DIR-\text{-TR-2SG.PASS}.EMB}} & \text{OBL} & \text{DET} & \text{man.pl.-young} \\
\end{array}
\]

'What did the boys give you?'

(Island)

I take these examples to indicate the presence of a licensing head inside the nominalized predicate, namely Voice (cf. 2.2.2.1). The fact that agreement always surfaces as a possessive affix in the case of 1\textsuperscript{st} and 2\textsuperscript{nd} person subjects, and at least possibly so with 3\textsuperscript{rd} person subjects, can be seen as a consequence of movement of the nominalizer, which presumably bears an [N] feature, into the specifier of this licensing head. The m-merger operation described in the preceding section would allow that [N] feature to affect the form of agreement triggered by the Voice head.

However, it is not clear how this mechanism could be extended to the nominalized predicates formed on unergative bases. Recall that these predicates are formally intransitive, which means that they lack transitive suffixes and that they cannot serve as the base for passivization. On the assumptions I have adopted for Halkomelem clause structure, this means unergatives lack a Voice projection, and the argument in Spec-\text{-vP} is licensed by Infl. Since the reduced relative clause formed by PN does not include Infl, this means that there is no licenser for the argument in Spec-\text{-vP}.

So what is responsible for licensing the possessive argument inside a nominalized
predicate? Assume for a moment that the analysis I proposed above for licensing in ditransitive nominalized predicates is correct, and that Voice is responsible for licensing the possessive argument. If licensing in unergative nominalized predicates is to receive the same account, then there must be a Voice in those cases as well. This is not ideal however, as there is simply no other evidence for such a Voice head. Another alternative then might be to give up on a single analysis of possessive agreement for both categories of nominalized predicate. This is hardly an ideal solution however, and on grounds of parsimony should be viewed as at best a last resort.

The question remains though, of whether it is possible to offer a uniform account of possessive agreement in predicate nominalization without stipulating the presence of a Voice head in unergative nominalized predicates. I do not believe it can be done without some sort of stipulation, so I offer one that folds possessive agreement into the system I assume for subject agreement in the language generally. Assume that licensing in both types of nominalized predicate is done with a licensing head that projects above $vP/VoiceP$. In the absence of motivation for a particular label, I simply refer to this as $F$ in the structure below. On this account the nominalizer would merge with $FP$, performing the same relativizing function and conditioning the form of agreement just as proposed above.

38) Licensing by $F$
An advantage of this analysis is that it makes agreement inside the nominalized predicate look very much like agreement in main clauses in some interesting respects. Recall from 2.2.2.1 that Halkomelem, like most of the rest of the Salish language family, licenses subjects from two positions, namely Infl and Voice, and that clitics are associated with the higher position while suffixes are associated with the lower. Assuming the existence of this licensing projection above vP/VoiceP allows the contrast between a lower and higher locus of agreement to be recreated inside the reduced relative clause formed by predicate nominalization. Once this move is made, Voice is able to maintain its dedicated function of licensing the 3rd person subject of a formally transitive predicate, while all the possessive affixes are responsible for licensing the subjects of intransitive predicates and 1st and 2nd person subjects of transitives. This strongly resembles the situation in subjunctive and nominalized clauses, though it differs from indicative clauses in having an overt form for the 3rd person subject of intransitive predicates.

There is another parallel between nominalized predicates and full clauses that finds explanation under this analysis, concerning the alternation between plain and embedded passives. I showed in 3.3.1 that passives under predicate nominalization typically surface in their embedded form, and presented this as an argument in favor of a relativization analysis, as the embedded form is otherwise restricted to subordinate clauses. Recall though from 2.2.2.1 that the passives in subordinate clauses do not obligatorily surface in their embedded form, but rather alternate with the plain form. I argued that the relevant factor in determining this alternation was the presence vs. absence of the higher subject agreement, correlating with the plain vs. embedded form of the passive, respectively.
Plain vs. embedded passive alternation in nominalized clauses

a. niʔ=con ʔəw š-tatəl-stəxʷ
   AUX=1SG LNK NOM,INST,know-CAUS,3O
   kʷ=ɬəm-əθ-a:الم-ث=ςʔəkʷθəw-neʔəʔl
   COMP=NOM hear-MID-TR-2SG,PASS-3POSS=FUT OBL DET,LNK-3PL,EMPH

   'I know they will hear you.'

b. niʔ=con ʔəw š-tatəl-stəxʷ
   AUX=1SG LNK NOM,INST,know-CAUS,3O
   kʷ=ɬəm-əθ-am-ət=ςʔəkʷθəw-neʔəʔl
   COMP=NOM hear-MID-TR-2SG,PASS-3POSS=FUT OBL DET,LNK-3PL,EMPH

   'I know they will hear you.'

If I am correct in attributing this alternation to the presence of a subject clitic, this means that there must be a licensing projection above VoiceP that can host that clitic.

Because it involves the presence of a licensing projection above VoiceP, the analysis of predicate nominalization I present in (38) predicts that a similar alternation might be possible inside nominalized predicates. I propose that the following data show that, at least for some predicates, this predication is borne out. While not every predicate allows the plain passive, for those that do the alternation is contingent on the presence of the 3rd person possessive suffix. The (a) and (b) examples in (40) and (41) show the possible configuration – plain passive and possessive agreement, or embedded passive and no agreement – while the (c) and (d) examples show the failure of the converse pairings.

40) a. stem tə stem tə niʔ sʔaxʷ-əς-θ-a:الم-ث=ςʔəsʔeləxʷ
    DET AUX NOM-offer-DAT-TR-2SG,PASS-3POSS OBL DET old.person

    'What did the old lady offer you?'

b. stem tə stem tə niʔ sʔaxʷ-əς-θ-am-ət=ςʔəsʔeləxʷ
    DET AUX NOM-offer-DAT-TR-2SG,PASS-PASS,EMB OBL DET old.person
The alternation here falls out naturally from the stipulation of a higher licensing head inside a nominalized predicate, and allows Voice to function in essentially the same way, regardless of whether it is located in a reduced relative clause or not.

This stipulation then, does a lot of work in service of my analysis. It is however, still a stipulation, and one that is not necessarily motivated beyond its ability to address these agreement issues. For instance, it is not obvious how to confine this projection to nominalized predicates, or indeed, how to account for its presence in nominalized predicates in the first place. It is also unclear how or if this head interacts with the remerge of the nominalizer. Nevertheless, the fact that otherwise puzzling facts about predicate nominalization fall out naturally from this
stipulation suggests to me that something along these lines is probably correct, and that it at the very least represents a worthwhile line of inquiry to be taken up in future research.

### 3.4 Long-distance extraction

Hukari (1994, 2010) notes that in certain cases, when an argument is extracted past a bridge verb, the bridge verb undergoes predicate nominalization.

42) Predicate nominalization in long-distance extraction

a. ?i=çon əsə=ə-əniə  [əw kʷič-ət-əx₇] tʰ see:ltən
   AUX=1SG.S tell.IMPF-TR-2SG.O [COMP butcher-TR.3O-2SG.CS DET salmon]
   'I told you to butcher the salmon.'

b. stem kʷə  niʔ  s-cse-t-alx₇-s  [əw kʷič-ət-ət]
   what DET [AUX NOM-tell-TR-1PL.O-3POSS [COMP butcher-TR.3O-1PL.CS]]
   'What did he tell us to butcher?'

(Island; Hukari 2010:76)

Hukari argues for a Voice-type analysis of predicate nominalization as it appears in local extraction contexts, but does not endorse that analysis for long-distance extraction. Instead, he favors a wh-agreement analysis like that proposed by Chung (1998) for Chamorro, thus creating a disjunctive analysis of predicate nominalization. While some cases that appear to be long-distance extraction can be reanalyzed as only involving local extractions (3.4.1), there are other cases that truly do appear to be long-distance extraction (3.4.2). The shared flaw of both Hukari's account and mine is their inability to extend directly to these instances of genuine long-distance extraction. Thus, the desired reduction of both kinds of predicate nominalization to a single operation/construction remains currently out of reach.
3.4.1 Putative cases of long-distance extraction

In his discussion of the long-distance extraction of transitive subjects, Hukari (2010) offers the following example, and suggests that it is better analyzed as a stranded relative clause than as a case of true long-distance extraction out of a complement clause.

43) nił ṭwet kʷə ni? ?ən-s-heʔkw [niʔ=əł ćew-ət-axʷ]
   3EMP who DET AUX 2SG.POSS-NOM-remember [AUX=PAST help-TR-1PL.O]
   'Who do you remember that helped us?'

   (Island; Hukari 2010:79)

The embedded clause has the form of a relative – as discussed in 2.2.3.4, the lack of ergative agreement signals transitive subject extraction. As can be seen in the following two examples, this possibility is not limited to cases of transitive subject extraction, nor to cases where the putative intermediate predicate is nominalized. The bracketed clauses in both (44) and (45) exhibit the transitive subject suffixes associated with object extraction, as does the 'intermediate' predicate in (45).

44) nił ṭwet kʷθə ni? ?ən-s-məɬq [niʔ tem-ət-əxʷ]
   3EMP who DET AUX 2SG.POSS-NOM-forget [AUX call-TR.3O-2SG.TS]
   'Who did you forget that you had called?'

   (Island)

45) stem kʷ ni? ləm-nəxʷ-əxʷ [niʔ hakʷ-əʃ-əxʷ=ceʔ]
   what DET AUX see-LCT.3O-2SG.TS [AUX use-TR.3O-2SG.TS=FUT]
   'What did you see that you're going to put on?'

   (Island)

Assuming these are indeed relative clauses, rather than complement clauses, what might they be modifying? A logical candidate, given the available interpretations for these sentences, is the wh-predicate. This is consistent with the ability of Halkomelem relative clauses to modify nominal

16 I thank H. Davis (p.c.) for suggesting this solution. He also suggests that the extraposed relative could have
predicates, as demonstrated in 2.2.3.4. On this analysis, the sentence in (44) could be paraphrased as “Who, that you called, did you forget?”. The relative clause is base-generated inside the NP predicate, and extraposed rightward, presumably adjoining to IP, and producing a structure like that in (46).

46) \[ [\text{IP} [\text{IP} [\text{NP wh-predicate} \, e_i] [\text{DP} \, \ldots ]] [\text{CP relative clause}]] \]

This analysis accurately reflects the morphology of the 'embedded' clause, relies on an independently attested construction (relative clause in NP predicate), and is semantically appropriate. I currently lack the last piece of data needed to complete the argument, which would show the extraposed relative clause in its base position. Nevertheless, it is a reasonable analysis, and the one I assume in this case.

3.4.2 Genuine cases of long-distance extraction

Having explained away one putative case of long-distance extraction, it remains to be shown that predicate nominalization does indeed surface in cases of genuine long-distance extraction. As a starting point, recall from 2.2.3.4 that long-distance extraction is independently attested in Halkomelem, as the following examples from the Upriver dialect show. The intermediate predicates take clausal complements, from which an argument is extracted. While no extraction morphology is required in the clausal complement, the intermediate clause has the form of a relative.\(^{17}\)

\(^{17}\) Recall from 2.2.2.1 that the distinction between subjunctive clitics and transitive suffixes has been neutralized in that dialect in favor of the clitics.
The crucial observation to make with these examples is that the bridge verb is formally transitive, and that the embedded clause is plausibly analyzed as its direct object. The relative clause morphology in the intermediate clause – the subject is indexed by a conjunctive clitic – indicates object extraction. I take this to mean that the language does not distinguish formally between extraction of a constituent and extracting from a constituent in the same position, here the complement of V. The examples in (47) and (48) thus show there must be long-range extraction of the relative operator out of the complement clause.

In the next set of examples, though, the intermediate clauses have nominalized predicates. As in the two previous examples, the bridge predicate is formally transitive. However, the following data differ in that the direct object position is occupied by a DP. This can be seen in the presence of 1SG.O agreement in (49) and (50), and the overt DP (to Strang) in (51).

18 The lack of a determiner with the possessor is odd in this example.
On the assumption that these predicates contain a null applicative head responsible for introducing thoseDP arguments, the clausal complements are located in an unlicensed position.

It has already been established that extraction from a constituent triggers the same morphological response as extraction of a constituent, so in a sense the data in (49-51) are not surprising. They are, however, quite unexpected on a Voice-type analysis, as noted by Hukari (1994, 2010). The problem is that the extractee that corresponds to the *wh*-predicate is not an argument, unlicensed or otherwise, of the bridge predicate, so the nominalization cannot have taken an unlicensed argument and turned it into an extractable subject. The account I propose cannot address this issue either, as it relies on initially merging the nominalizer in the unlicensed theme position.

It is possible to salvage a local extraction account mechanically with a 'smuggling' analysis, as shown in (52). This could be accomplished by treating the unlicensed clausal

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19 Hukari (1994, 2010) does initially propose such an analysis, providing the following example as evidence that such a structure is possible.

i. Ɂəsə-θəs Ɂətən [Ɂəw nem=ən kʷic-ət]
    AUX tell.IMPF=TR.1SG.O-3ERG OBL DET fish [COMP=1SG.cs butcher-TR.3O]
    'She is telling me of the salmon to go butcher it.' (lit. She is telling me to go butcher the salmon.)
    (Island; Hukari (2010:72))

He goes on to argue that this is no longer a viable analysis as the crucial data are no longer judged grammatical by his consultants. This means that there is no stage in the derivation where the extracted argument is an oblique in the intermediate clause, and that a straightforward local movement or promotion cannot be the correct analysis.
complement of the base predicate (a) as the subject of the nominalized predicate (b), and then extracting from the periphery of what is now an absolutive CP (c).

52) Extraction from clausal subject of nominalized predicate

a. \([vP [DP [v_1' [Appl [DP [Appl [V cP [CP]]]]]]]]\)

b. \([iP [CP [NP \sim [\text{VoiceP} \ldots]]]]\)

c. \([iP [CP [\ldots e_i \ldots [NP \sim [\text{VoiceP} \ldots]]]]\]

This recalls the argument from Gerdts (1988:73-78), where she shows that extraction of oblique DPs is ungrammatical. In her discussion of possessor extraction, she presents the following examples showing that extraction of possessors \textit{from} oblique DPs is banned as well, but that after application of PN, such an extraction is possible. These extractions could be modeled as in (52), clearly paralleling the structure in (52c).

53) a. \(\text{ni}=\text{cən} \text{ nem} \ ?\wedge \ k^{\wedge}\theta \\text{ leləm-s} \to \text{sleni?} \)
\(\text{AUX=1 SG.S} \ \text{go} \ \text{OBL} \ \text{DET} \ \text{house-3POSS} \ \text{DET} \ \text{lady}\)
'I went to the woman's house.'

b. \(*\text{nił} \ \text{to} \ \text{sleni?} \ \text{ni?} \ \text{nem}-\text{e}:\hat{n} \ ?\wedge \ k^{\wedge}\theta \ \text{ leləm-s} \)
\(3^{\text{EMPH}} \ \text{DET} \ \text{lady} \ \text{AUX} \ \text{go=1 SG.TS} \ \text{OBL} \ \text{DET} \ \text{house-3POSS}\)
fors: 'It's the woman whose house I went to.'
(Island; Gerdts (1988:77))

54) a. \(\text{ni?} \ \text{na}-\text{š-nem} \ k^{\wedge}\theta \ \text{ leləm-s} \to \text{sleni?} \)
\(\text{AUX = 1 SG.POSS-NOM.INST-go} \ \text{DET} \ \text{house-3POSS} \ \text{DET} \ \text{lady}\)
'I went to the woman's house' (lit: 'The woman's house was my going to.')

b. \(\text{nił} \ \text{to} \ \text{sleni?} \ \text{ni?} \ \text{na}-\text{š-nem} \ k^{\wedge}\theta \ \text{ leləm-s} \)
\(3^{\text{EMPH}} \ \text{DET} \ \text{lady} \ \text{AUX = 1 SG.POSS-NOM.INST-go} \ \text{DET} \ \text{house-3POSS}\)
'It's the woman whose house I went to.'
(Island; Gerdts (1988:77))
Extraction from DP subject of nominalized predicate

\[ [\text{cp Op}_i [\text{ip [dp e, ... e_i]] [\text{np s- [v ... ]}]]) \]

While this mechanical fix may suffice to explain the use of predicate nominalization in (49-51), the following examples are much less amenable to this solution. The pair of sentences in (56) show extraction past multiple embeddings. The relative clause morphology in the root clause is expected, but the nominalization in the intermediate clause isn't.

56) a. 
\[ [?i=cən \text{šte:woə-mə-t} [kʷ=s=ə=s \text{yəθəs-t-əs} \text{AUX}=1 \text{SG.} \text{think-dir-tr.3o} \text{COMP=nom=aux=3poss tell-tr.3o-3erg} \text{lo } \text{Mary} [kʷ=s \text{əɬəy-stəxʷ=s} \text{lo } ?\text{apəs}]]] \]
\[ \text{DET } \text{Mary} [\text{COMP=nom good-caus.3o=3poss det apples}]] \]
'I think that John told Mary he likes apples.'

b. 
\[ \text{stem=əwəxʷ=ʔaɬə kʷə } [\text{niʔ } \text{šte:woə-mə-t-əx} \text{what=dub=anyway det aux think-dir-tr.3o-2sg.ts} \text{[niʔ s-əɬəs-t-ewət } ?\text{ə } \text{John } \text{lo } \text{Mary} \text{[aux nom-tell-tr-3pass.emb obl det john det mary [ʔəɬəy-stəxʷ-əs] [good-caus.3o-3erg]]}]] \]
'What do you think that John told Mary he likes?'

At least at first glance, this appears to require a wh-agreement style analysis (cf. Chung (1998, 2010)), as Hukari (1994, 2010) ends up suggesting for the simpler cases. There are some outstanding issues with the sentence in (56b), particularly the lack of subordinating morphology – note that both embedded clauses in (56a) are nominalized, but neither the nominalizer nor possessive clitics are present in either clause in (56b). However, an analysis that treats the intermediate clause as an extraposed relative along the lines proposed in 3.4.1 does not seem plausible given the semantic requirements of the root clause predicate, which presumably selects for a clausal complement. The possibility that examples like (56b) raise is that an embedded
clause can have the form of a relative clause without the external syntax of one – i.e. merged as a complement of V rather than as a modifier of an NP. Regardless of how examples like (56b) are accounted for, it is clear that this use of predicate nominalization is not constrained by local argument configuration, as it is in the basic cases.

Further testing needs to be done to determine, among other things, whether embedded clause morphology (e.g. complementizers, possessive/conjunctive clitics) can co-occur with extraction morphology. It also needs to be determined if examples like those in (43-45) above, which also display extraction morphology in a putative embedded clause, are ambiguous between true long-distance extraction and extraposed relative clause readings.

3.5 Alternative analyses

I have proposed an analysis that blends the need to account for the predicative function of nominalized predicates with the properties of relative clauses. In this section I lay out two alternative analyses, and argue that they are not empirically superior to the analysis I have proposed. The first of these, discussed in 3.5.1, is also a relative clause analysis that differs from mine in treating the nominalizer as a relative complementizer rather than as a relative pronoun. In 3.5.2 I address Voice-type analyses.20

3.5.1 The nominalizer as a relative complementizer

I have argued that nominalized predicates should be analyzed as relative clauses, with the nominalizer functioning as a relative pronoun. An alternative to this relativization analysis would be to treat the nominalizer as a relative complementizer that attracts the operator merged as

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20 Montler (2010) also offers a voice-type analysis for the cognate construction in Klallam, treating predicate nominalization as a kind of passive. This is will be discussed, along with the data that motivate the analysis, in 5.2.3.
complement to V. Before presenting this alternative, I will point out that neither relativization analysis offers a satisfactory account of why the nominalizer merges so low (i.e. why the nominalized predicate is a reduced relative clause). The analysis I have adopted for the rest of the relative clauses treats them as full CPs, while the relative clause formed by predicate nominalization is truncated, only projecting to VoiceP. This fact does not follow from anything I have said so far, and would not follow from anything in a relative complementizer analysis either. Further, on either analysis, the nominalizer is playing a role not seen in any other relative clause in the language – there are no dedicated relative pronouns\(^{21}\) or relative complementizers. This alternative is represented below, with the label for the nominalizer reflecting some agnosticism about the label for the resulting construction.

57) Nominalizer as relative complementizer

![Diagram of Nominalizer as Relative Complementizer]

Like the relativization analysis I propose above, this analysis can explain the relative clause properties displayed by nominalized predicates – the embedded form of the passive, the obligatory gap, the locality of reflexive binding, and the additional licensing projection. A fundamental difference between the two analysis lies in the relationship between the nominalizer

\(^{21}\) Davis (2010) argues that determiners serve this function in Lillooet relative clauses, and suggests that this might be possible in other Salish languages as well. If his arguments were to go through for Halkomelem, it would make the relative pronoun use of the nominalizer somewhat less anomalous.
and the gap, which is both a strength and a weakness for the relative complementizer analyses. By not requiring the nominalizer to originate in the position of the gap, this analysis may offer a way to unify the long and short-distance extraction uses of predicate nominalization.

However, there are some serious drawbacks to this analysis as well, again having to do with divorcing the nominalizer from the position of extraction. The first of these is how to account for the ability of this relative clause to serve as the main predicate of a root clause, something no other relative clause can do. That is handled on the relative pronoun analysis by assuming that Merge-and-Project creates an NP, thus assimilating the ability of nominalized predicates to function as predicates to the independently needed ability of NPs to do so. On the relative complementizer analysis though, it can only be stipulated that a relative clause headed by this complementizer can be a predicate. H. Davis (p.c.) suggests that the [N] feature that would be independently necessary to account for the use of possessive agreement morphology might suffice to explain this possibility.

A further complication is that there is now no plausible way to restrict predicate nominalization to cases of extraction from/through unregistered theme positions. Put differently, it is unclear why this complementizer cannot attract/provide a landing site for operators from other positions. This must be stipulated in the relative pronoun analysis as well, but I proposed above that this restriction be built into the nominalizer itself. It is a non-trivial matter determining how this can be built into the nominalizer's lexical entry, but something of this nature is needed anyway for theories that account for participant nominalizations by first inserting the nominalizer in an argument position (e.g. Van Hout and Roeper (1998), Fabregas (2010, to appear)). Further, my relative pronoun analysis supplies a syntactic object that is capable of 'bearing' the stipulation – the restriction to appear as a complement of V is a property.
of the nominalizer itself, rather than, say, some additional flavor of null operator.

**3.5.2 The nominalizer as nominal Voice**

The other class of analyses that must be considered treats predicate nominalization as a Voice-type operation. Such analyses have been proposed for participant nominalizations – nominalizations whose referent is a participant in the event denoted by the underlying predicate – in other languages (e.g. Baker and Vinokurova (2009)), and for predicate nominalization in other Salish languages as well (e.g. Montler (2010) for Klallam). Hukari (1977) observed that nominalized predicates could serve as the main predicate of a clause, and that the subject of that clause would be interpreted as the theme of the underlying predicate. The formal analysis he proposes in Hukari (1994, 2010), couched in the HPSG framework, treats predicate nominalization as an operation affecting the mapping between thematic and grammatical roles and creating what he terms a 'nominal predicate'. It is thus perfectly capable of accounting for the generalizations presented in sections 3.2.1 and 3.2.2, as well as the ability of the nominalized predicate to function as a predicate. Because Hukari's operation begins with a predicate that has a fully articulated argument structure, the obligatory agentive interpretation of the possessive argument may also have an explanation in his account.

A Voice-type analysis for the nominalizer within the P&P framework could be proposed, based on proposals from Guilfoyle, et al. (1992) for Austronesian. These authors argue that promotion to grammatical subject is essentially a process of elimination. Arguments are generated within vP, and all but one are licensed in that domain. The last argument raises out of the vP in search of a case assigner. Applied to Halkomelem predicate nominalization, this would mean that the primary function of the nominalizer is to license the highest argument in the vP,
locking it in place and leaving the unregistered theme free to raise out of the \( \nu P \) to subject position.\(^{22}\)

58) The nominalizer as an Austronesian-style Voice head

\[
\begin{array}{c}
\text{Voice}_N \text{P} \\
\text{Voice}_N \\
/_{S-}/ \\
[\mu \varphi] \\
\text{DP} \\
[\iota \varphi] \\
\nu' \\
\text{VP} \\
\text{V} \\
[\iota \varphi] \\
\text{DP} \\
[\iota \varphi] \\
\end{array}
\]

This analysis is superior in some respects to any version of a relative clause analysis. For instance, it easily handles the attachment height of the nominalizer – as a Voice head, it would have to merge below the IP domain. This analysis also apparently gets past the need to stipulate some special relationship between the nominalizer and an unregistered theme.

However, there are some flaws in this analysis as well, particularly in reference to the interaction of predicate nominalization and passivization. When the embedded form of the passive is being used, the nominalizer does not trigger agreement with, and therefore is not licensing, anything inside the \( \nu P \). This is problematic for two reasons, both having to do with the fact that the unregistered theme is still apparently being promoted. This promotion is essentially a side effect of the nominalizer having locally licensed a higher argument in situ, but, as noted, nothing has been licensed. This suggests that some other mechanism must be driving that movement. Further, assuming the nominalizer is equipped with a set of uninterpretable \( \varphi \)-

\(^{22}\) H. Davis (p.c.) suggests a variant of this analysis that treats the nominalizer as a nominal counterpart to \( \nu \) which he refers to as \( n \). This analysis would offer the same benefits and suffer the same drawbacks as treating the nominalizer as a nominal Voice head.
features and is looking to discharge them, it is unclear why it would not do so with the unregistered theme.

There are also a couple of facts that remain unexplained on any kind of Voice analysis. I have already pointed out the preferred use of the embedded form of the passive. On a voice-type analysis, there is only a single clause in the following example repeated from above, and the nominalized predicate is functioning as the main predicate.

58) ni? sʔam-ʔəs-t ewət \ yasaʔqʷ \ kʷθə swawɬəs
    AUX NOM-give-DAT-TR-PASS.EMB DET hat OBL DET boy.PL

'He was given a hat by the boys.'

(ISland)

Since the embedded form of the passive is otherwise unavailable in root clauses, its use here cannot be accounted for on a straightforward voice-type analysis.

The fact that the possessive argument, rather than the grammatical subject, controls the reflexive argument likewise goes without an immediate explanation on a voice-type analysis.

59) ni? nə-s-qʷtɬqʷ-ʔəθət \ tʰə \ sxʷiʔem
    AUX 1SG.POSS-NOM-tell.PL-REFL DET story

'I'm telling myself stories.'

(ISland)

D. Gerdts (p.c.) suggests that a simple ordering statement would suffice to account for the facts – if the reflexive binding is computed before nominalizing, the correct relationships would be established. If one adopted a lexical analysis of reflexivization and a syntactic analysis of predicate nominalization, that would suffice to ensure the correct ordering. However, if one assumes as I do that reflexivization is a syntactic process, some other kind of explanation must be found to save it from being another stipulation.

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23 I thank H. Davis (p.c.) for pointing this out.
Both of these generalizations come for free on any kind of relativization account though. The embedded passive is available in the other relative clauses, so its presence is accounted for if the nominalized predicate is one of these. Treating the nominalized predicate as a relative clause also provides a way to maintain the generalization that reflexivization is a clause-bound operation.24

3.6 Conclusion

In this chapter, I have argued that nominalized predicates display a blend of clausal and nominal properties. Specifically, they have the internal structure of a relative clause, but the external distribution of an NP. These properties are summarized in the following table.

<table>
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<tr>
<th>Relative clause properties</th>
<th>Nominal properties</th>
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<tr>
<td>Desaturated argument structure</td>
<td>NP distribution (predicate)</td>
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<tr>
<td>Fully licensed internal argument (in ditransitives)</td>
<td>Form of agreement for highest argument</td>
</tr>
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<td>Embedded passive morphology</td>
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Table 8. Relative clause and Nominal properties of nominalized predicates

The specific analysis I have proposed is inspired by Kroeber's (1999:314-315) suggestion that nominalized predicates might be better analyzed as relative clauses, but seeks to address the primary question he is left with, namely, why this kind of relative clause, but no other, can

Note as well that treating nominalized predicates as embedded (relative) clauses offers a way to salvage Gerdt's (1993:597) claim that Halkomelem allows at most two morphosyntactically licensed argument positions per clause (MAPs, in the Mapping Theory framework she presents in that paper). Otherwise, in a nominalized ditransitive predicate, the presence of a licensed applied argument, possessive argument, and grammatical subject would translate to three MAPs in one clause.

24
function as a predicate. I have attempted to resolve this issue by appealing to a particular analysis of labeling in relativization that permits the moved element to project, and by assuming that the nominalizer is an NP.

It is, I believe, a virtue of this analysis that it brings Halkomelem predicate nominalization into line with other analyses that treat at least some nominalizations as instances of relativization (e.g. Matisoff (1972), Weber (1983), Moore (1989), Herring (1991), Noonan (1997), DeLancey (2002), Ntelitheos (2006), Salanova (2007), Genetti (2010)), but does so in a way that respects the language-specific facts discussed in this chapter. On the face of it, though, my analysis violates another widely held principle, namely Phrasal Coherence (cf. Bresnan (1997), Malouf (1998a,b)).

60) Phrasal Coherence (Malouf (1998a:3))

Mixed projections must have a single point of articulation between their nominal and verbal parts.

This principle formalizes the observation that nominalizations are verbal below the nominalizer and nominal above it. However, as I have characterized it, predicate nominalization involves (re)merging a nominalizer above a verbal projection, VoiceP, creating an NP, and then proceeding along the clausal projection line up to CP.

However, this is only an issue if one assumes that clausal projections truly are 'verbal', only capable of appearing as the extended projection of a verbal head. I specifically addressed this assumption though in 2.3, arguing that it cannot be true for Halkomelem – the clausal projections are perfectly capable of appearing with nominal and adjectival predicates as their lexical core, without the intercession of a verbalizer or copula. I concluded in 2.3 that projections
like MoodP, IP, and CP in Halkomelem are not inherently associated with any lexical category feature, a conclusion that once again rears its head in regards to Phrasal Coherence. It also serves as a suitable bridge topic into the next chapter, where I discuss the consequences of introducing a lexical category feature into a clausal projection.

There are some remaining issues that I have not addressed in this chapter. One that I have mentioned already is that this is a reduced relative clause, a fact does not follow from anything I have said. This claim is based on the nominalizer's position – it appears below auxiliaries and aspectual markers, prefixed to the verb stem. In this way, predicate nominalization resembles lexical nominalization, a resemblance that likely has a diachronic source (cf. Kroeber 1999:314).

Another potential issue arises from the claim that predicate nominalization forms an NP. The analysis I have presented predicts that nominalized predicates should be directly selectable by determiners to form DPs, since this is a defining characteristic of NPs. It is, however, not obvious how to test for this. As the following example shows, it is at least possible to have a nominalized predicate inside a DP without an overt head noun or auxiliary.

61) \[\text{niʔ=con} \quad \text{leʔx-t} \quad [kʷθə \quad [s-qʷələm-s \quad Ɋ-o-nə \quad stələs]] \]
\[\text{AUX=1.SG.S} \quad \text{eat-TR.3O} \quad [\text{DET} \quad \text{[NOM-bbq-3POSS} \quad \text{DET-1.SG.POSS spouse]}] \]
'I ate what my wife barbecued.'

This is, however, only consistent with the nominalized predicate being directly selected by D, but does not force the issue. Headless relative clauses are quite common, and, though rare, it is possible to get a plain relative clause without an auxiliary.

\[25 \quad \text{‘Root’ should here be understood morphologically.}\]
It remains then to determine what sort of data would tease apart a headless relative analysis and one in which the nominalized predicate is directly selected by D. The prediction on this analysis at least is clear – any such tests ought to fall on the side of the latter hypothesis.
Chapter 4:

Clausal Nominalization

4.1 Introduction

Halkomelem makes extensive use of nominalized clauses, employing them in virtually every clause embedding context and even some non-embedding contexts as well. The range of uses defies easy categorization. To get a sense of it, consider the variety of embedded clauses English uses to cover the same range. On the verbal side (i.e. clauses analyzed as CPs or IPs), there are 'that' clauses and infinitives, and a variety of adjunct clauses headed by an array of complementizers like when, since, because, etc. On the nominal side (i.e. clauses analyzed as DPs) there are the gerundive constructions, as differentiated by Abney (1987). These clauses all have distinct formal properties, denotations, and distributions in English. Halkomelem uses nominalized clauses in all of these contexts. To be sure, there are additional mechanisms that can force or facilitate a particular use, but in each case the clause is nominalized. Consider the following examples. The nominalized clause in (1) is the complement of a verb of saying, while the nominalized clause in (2) is the complement of a perception predicate.
The clause in English that corresponds to the nominalized clause in (1) is a 'that' clause denoting a proposition, while the clause corresponding to the nominalized clause in (2) denotes an event.

Nominalized clauses are also used as clausal modifiers. Particularly common are temporal adjuncts (3) and purpose/rationale clauses (4).
The nominalized clause in (4) is additionally marked with ƛa,’ a morpheme that surfaces in a number of different constructions. Rather than get into the complex issue of accounting for the distribution of this morpheme, I will just point out here that its presence in this case ensures a purpose/rationale interpretation. This interpretation is available even in the absence of ƛa, though. Indeed, as the following example shows, nominalized clauses can be interpreted in a number of ways. In the absence of any restrictions imposed by selecting predicates (like those in (1) and (2) above) or particles like ƛa, the relationship between the nominalized clause and the matrix clause is fluid.

5) Freedom of interpretation

\[
\begin{align*}
\text{col} & \quad \text{lo} & \quad ?\text{eyol} & \quad [k^w=s^\ominus=s] & \quad x^\ominus mae-x^\ominus s \\
1SG.S & \quad AUX & \quad \text{leave} & \quad [\text{COMP}=3\text{POSS}=\text{AUX}=\text{NOM}] & \quad \text{open-TR.3O-3ERG} \\
\text{tə} & \quad \text{pus} & \quad \text{tə} & \quad xæl] \\
\text{DET} & \quad \text{cat} & \quad \text{DET} & \quad \text{door}]
\end{align*}
\]

'I left because/when/after the cat opened the door.' (Upriver)

The nominalizer is a constant across the examples in (1-5), which means that it does not force a clause to merge as an argument or adjunct, and does not force a particular interpretation.

In fact, the nominalizer does not even force a clause to be syntactically embedded. Hukari (1982) identifies two uses of nominalized clauses that can plausibly be unified as instances of clause-chaining. The first of these (6) is treated as a type of coordination by Gerdts and Hukari (to appear), while the second (7) appears in extended discourses such as stories. In both cases the complementizer seen in (1-5) is obligatorily absent, and the linking particle ʔəw’ is obligatorily

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1 The full vowel is often reduced, as it is in (4).

2 The Island dialect makes use of the particle nil in every environment where ƛ'a can be found Upriver.
Present.

6) Coordinating clause-chain

\[x^wələk\text{-}t=ce:p\quad ?ə \quad k^w \quad ?əw \quad stem=?əl \quad ləx^wən\]
\[\text{wrap-TR.3o-2PL.S} \quad \text{OBL} \quad \text{DET} \quad \text{LNK} \quad \text{what=just} \quad \text{blanket}\]
\[?ən=s=əw \quad yəq^w\text{-}t\]
\[2\text{SG.POSS=NOM=LNK} \quad \text{burn-TR.3o}\]

'Wrap it up with something or a blanket and burn it.'

(Island, Hukari 1982)

7) Discourse level clause-chain

\[s=əw \quad c^λ-əm=s \quad t^θe\text{-}y \quad \text{swiwləs}\]
\[\text{NOM=LNK} \quad \text{jump-MID=3POSS} \quad \text{DEM} \quad \text{young.man}\]

'Then this young man jumped.'

(Island, Hukari 1982)

Particularly in the case of the discourse level clause-chain, it would be very hard to argue for an embedding analysis, a point which Hukari (1982:111) also makes. This is not to say that the nominalized clause in (7) is an independent clause – there must be a preceding clause in relation to which the nominalized clause is ordered. Nominalized clauses need another clause for more than a reference point for temporal ordering though. Kroeber (1996:7), in his examination of a parallel construction in Thompson Salish, notes that these clauses lack their own illocutionary force, and derive it instead from another clause. This is particularly clear in (6), where the nominalized clause is interpreted as part of a sequence of instructions, with the imperative force coming from the indicative clause. This observation is crucial for the analysis I propose in this chapter.

Clearly then, nominalized clauses can enter into a variety of syntactic configurations.

This is not to say that they are without restrictions. What nominalized clauses cannot do is stand alone. Out of the blue, free-standing nominalized clauses are ungrammatical, even when some
previous discourse or common-ground would provide a context allowing for the correct interpretation of such a clause. These examples are ungrammatical whether the D-complementizer is present or not.

8) Out of the blue free-standing nominalized clause

  (COMP=)1SG.Poss=NOM AUX sleep-MID
  for: 'I am sleepy.'

b. * (kʷ=)s=ə=s ni? wel-ət-ewət ?ə ə ƛ Tully
  (COMP=)Nom=Aux=3Poss AUX chase-TR-3Pass.EmB OBL DET Tully
  Ɂə Mabel ?ə təʔəsmən-ct
  DET Mabel OBL DET front.yard-1Pl.Poss
  for: 'Tully chased Mabel out of our yard.'

c. *(kʷə=)nə=s yəθəs-θ-amə ?ə kʷθə ɬiʔ? s-qʷal
  (COMP=)1SG.Poss=NOM tell-TR-2SG.O OBL DET important NOM-talk
  for: 'I'm going to tell you something important.'

They must either be embedded as an argument (9a) or adjunct (9b), or be immediately preceded by a clause relative to which they are temporally ordered (9c).

---

3 Gerds and Hukari (to appear) do identify a highly restricted use of free-standing nominalized clauses like the following.

i. kʷə=ŋə=s ?əʔ qʷal=ʔəl̓ ?ə kʷ ʔəxʷi:ɬiʔ nə-siʔəm
  COMP=1SG.Poss=NOM LNK speak=just OBL DET small 1SG.Poss-respected
  no-si:yeʔəq ?ə təʔtʔiʔ qiʔqələs
  1SG.Poss-friend.PL OBL DEM sad
  'I just want to say a few words, my honored friends, regarding the bereaved ones.'

(Island; Gerds and Hukari, to appear)

This use of nominalized clauses is restricted to formal speech settings, such as in the long house, or at the beginning or end of a story, where it serves as a title or summary. I assume, following D. Gerds (p.c.) that this is an idiomatic use of this construction, and hence falls outside the scope of this discussion. Cable (2009) refers to this use of nominalized clauses, as well as the clause-chaining construction, as 'insubordination', and discusses it as an areal feature.
9) Distribution of nominalized clauses

   a. argument – \([XP \ldots [NC \ldots ]]\)

   b. adjunct – \([XP [XP \ldots ]] [NC \ldots ]]\)

   c. \([CP \ldots ][NC \ldots ]\)

I attribute this restricted distribution to the inability of nominalized clauses to encode their own illocutionary force, something that has been argued to be necessary for a clause to stand on its own (cf. Cheng 1991). This falls in line with the typological generalizations proposed by Malchukov (2004), in which illocutionary force is the likeliest clausal property to be lost in syntactic nominalization. In turn, I attribute the inability to generate illocutionary force-encoding C projections to the presence of the nominalizer. The analysis I propose links the distribution of nominalized clauses to the syntax of the nominalizer itself. The questions I address thus concern the internal and external syntax of nominalized clauses. In particular, I ask the following:

   I) Where in the clause does the nominalizer merge?

   II) How does the nominalizer merge into the clause?

   III) What is the lexical entry for the nominalizer?

While there is some initial plausibility to the claim that at least the nominalized clauses in (1-5) are DPs, and that Halkomelem clausal nominalization operates much like Abney and his successors have posited for English, data like those in (6) and (7) suggest that this cannot be the case. These nominalized clauses behave nothing like DPs, or NPs either. The question then, is what sort of linguistic object the nominalizer is, and what its role in clausal nominalization is? I argue in this chapter that the nominalizer is a defective complementizer, one which is devoid of any illocutionary force specification and must acquire one from a c-commanding antecedent or
be assigned one by a selecting head. The nominalizer has thus become a means of clause-typing in the language, creating a clause that cannot be free-standing, but is instead uniquely suited to embedding. The structure I propose is shown in (10).

10) Syntax of Halkomelem clausal nominalization

\[
\begin{array}{c}
\text{CP} \\
\text{N} \\
\text{C} & \text{IP} \\
\text{s} & \text{[N]} \\
\end{array}
\]

Adopting such an analysis leads me to posit a split-CP, in order to accommodate /kʷ/, which I also analyze as a complementizer. I show in this chapter that adopting such an analysis allows for an account of the distribution of nominalized clauses, the form of agreement, and other clause-like behaviors of nominalized clauses.

The rest of the chapter is laid out as follows. In section 4.2, I explore the structure below the nominalizer. I provide a number of morphological, syntactic, and semantic arguments showing that the nominalizer merges with an IP. The nominalizer does not select for any particular features of IP, but is instead compatible with a variety of such features. In 4.3, I turn to the projections above the nominalizer. I show on the basis of morphological and syntactic facts that, despite the appearance of nominal morphology, Halkomelem clausal nominalization still results in a CP. That is to say, the nominalized constituent is a clause, and it does not project to DP. I propose a formal analysis of clausal nominalization in section 4.4, and rule out some alternatives in section 4.5. I conclude in section 4.6.
4.2 The nominalizer merges with IP

In this section I show that the constituent that the nominalizer merges with is an IP. Arguments for this come from three different areas. In each, the nominalized clause is shown to display properties that can only be accounted for if there is an IP present under the nominalizer. I show first that nominalized clauses possess a grammatical subject, using evidence from expletives and passive constructions (4.2.1). I show next that nominalized clauses permit the full range of mood contrasts and spatio-temporal anchoring found in matrix clauses, and that the same morphological material is used to make these contrasts (4.2.2). I conclude by examining control-type constructions (4.2.3). I show that these clauses, which are clearly not restructuring infinitives, display a number of dependencies that can be stated in terms of a defective Infl.

4.2.1 Grammatical subject in nominalized clauses

In 2.2.2.1, I adopted the analysis of Salish subject agreement proposed by Davis (1999, 2000), which locates the suffixes in the thematic domain and the clitics in the domain of grammatical relations. The relevant structure is repeated below.

11) Subject agreement by domain

![Diagram of Subject Agreement by Domain]

IP
  └── VoiceP
      ├── Voice'
      │    └── νP
      └── {clitics}
          └── {suffixes}
              └── ν′
By definition then, the presence of possessive clitics requires an IP. However, on the assumption that grammatical subjects are associated with IP, rather than the lower thematic domain, any evidence showing that the possessive agreement indexes a grammatical subject, rather than a thematic one, will provide some independent support for this claim. In this section, I use weather predicates and certain morphological facts concerning passive predicates in nominalized clauses to argue that the argument indexed by possessive agreement is indeed a grammatical subject.

That possessive agreement is used in nominalized clauses to index a grammatical subject can be shown with weather predicates. The subjects of these predicates do not bear a theta role, and so are only present to satisfy formal requirements (e.g. the EPP). The following two examples show nominalized clauses with weather predicates, and both require possessive agreement.

12) ʔi=cən ćičəl-əm-ət kʷ=s=ɔ=s ɬəməxʷ
    AUX=1.SG.S hear.IMPF-MID-TR.3O COMP=NOM=AUX=3.POSS rain
    'I can hear it raining.'

13) ʔi=cən ʰə-ʔəs-θ-əmə kʷ=s=ɔ=s yiyəq
    AUX=1.SG.S IMPF-tell-TR-2SG.O COMP=NOM=AUX=3.POSS snow.IMPF
    'I told you it is snowing.'

A useful comparison can be drawn between these two examples of nominalized clauses and the following example, which shows the lexical nominalization of ɬəməxʷ.

14) ʔi=cən=ceʔ Ɋxʷi:ɨneː-мо-t kʷ s-ɬəməxʷ
    AUX=1.SG.S=FUT listen-DIR-TR.3O DET NOM-rain
    'I will listen for the rain.'
The crucial point is that in (14), where lexical nominalization has created an NP, no possessive agreement occurs. Both (12) and (14) involve 'raining' events, neither of which have a thematic argument. They are formally distinct though, in that the former obligatorily has a possessive clitic. What (14) shows is that this agreement morphology cannot be present for semantic purposes. I suggest that it is instead there to satisfy a syntactic requirement of a clause by indexing a grammatical subject.

The other argument for the presence of grammatical subject agreement, and thus for an IP, comes from certain alternations in passive morphology. The embedded passive is most commonly employed in nominalized clauses. In these cases, as in indicative clause passives, there is no subject agreement morphology.

15) Embedded passive

a. nə-s-ƛi  k*=s  ce:l-t-ewət  tʰə  maʔəqʷ-əlł
   1SGPOSS-NOM-want  COMP=NOM  follow-TR-3PASS.EMB  DET  duck-young
   'I want the ducklings to get followed.'

b. *nə-s-ƛi  k*=s=a=s  ce:l-t-ewət
   1SGPOSS-NOM-want  COMP=NOM=AUX=3POSS  follow-TR-3PASS.EMB
   tʰə  maʔəqʷ-əlł
   DET  duck-young
   (Island)

However, it is also possible for a possessive clitic to surface in two distinct situations. The first of these, reported in Gerdts (1988, 1989a) and Gerdts and Hukari (2000), suggests that Halkomelem may be undergoing a transition from an impersonal to a personal passive. They show that in embedded clauses, some speakers allow the passive patient to be indexed by a subject clitic, as well as the normal passive object agreement.
16) Passive doubling

s-ḵʷey kʷ=na=s xiʔ-nel-t  
NOM-impossible COMP=1SG.POSS=NOM catch-LCT-1SG.PASS-PASS.EMB  
'They can't catch me.'  
(Island, Gerdts and Hukari 2000:11)

While this restriction is limited in ways that are not yet clear, and its availability with full DP passive patients has not been explored, it is possible to analyze it as a kind of A-movement of the object to a grammatical subject position.

The other circumstance in which a possessive clitic is possible cannot be analyzed as an instance of promotion. Unlike the case seen in (16), the possessive clitic in these environments does not agree with the passive patient, but is instead always 3rd person. Also unlike the previous example, the clitic is possible just in case the plain form of the passive is used.

17) Possessive clitic with plain passive

a. nə-s-ƛɨ kʷ=s nem=s ce:l-t-əm  
1SG.POSS-NOM-want COMP=NOM go=3POSS follow-TR-PASS  
DET duck-young  
'I want the ducklings to get followed.'

b. *nə-s-ƛɨ kʷ=s nem ce:l-t-əm tə maʔəqʷ-əłł  
1SG.POSS-NOM-want COMP=NOM go follow- TR-PASS DET duck-young  
(Island)

It might be proposed that this clitic is agreeing with the passive agent, which is, after all, 3rd person. However, this cannot be the case, as that DP still requires the oblique marker if it is overt.
Passive agent is oblique

\[
\begin{align*}
\text{nə-s-ƛi} & \quad \text{kʷ=s} \quad \text{mi=s} \quad \text{ce:l-θ-a:m} \\
1\text{SGPOSS-NOM-want} & \quad \text{COMP=NOM} \quad \text{come=3POSS} \quad \text{follow-TR-2SG.PASS} \\
[?ə \quad t'ə \quad \text{maʔqʷ-əll}] & \quad [\text{obl} \quad \text{det} \quad \text{duck-young}] \\
\end{align*}
\]

'I want the ducklings to follow you.'

A more likely explanation is that the possessive clitic in (17) and (18) is agreeing with an expletive pro subject.⁴

In both situations – the passive doubling in (16) and the expletive subject in (17) and (18) – the presence of the clitic can be explained using processes that implicate a grammatical subject position. I take this as further support for an IP inside Halkomelem nominalized clauses.

### 4.2.2 Mood and spatio-temporal anchoring

In this section I show that the mood and spatio-temporal anchoring contrasts that are seen in matrix clauses can also be found in nominalized clauses, and that the same morphological material is used to encode those contrasts. Halkomelem nominalized clauses differ in this regard from well-known examples for nominalized clauses from languages like Turkish, which are restricted in the kinds of temporal contrasts they are capable of expressing, and possess a different set of morphemes for encoding the limited contrasts that can be made (cf. Kornfilt (1984, 2003), Kornfilt and Whitman (2011)).

Spatio-temporal anchoring of events is achieved through a variety of mechanisms in Halkomelem. A combination of auxiliaries, temporal and aspectual morphemes, and word order conspire in a manner not fully understood to force particular interpretations. In the following set

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⁴ H. Davis (p.c.) points out that this is the pattern seen in the Northern Interior Salish languages for embedded active transitives and passives alike. See Davis (2000) and Koch (2009) for discussion.
of data, these grammatical components are assembled to force a future (19a), past (b), and present (c) interpretation of the embedded clause.

19) a. Ɂəy-stəxʷ=çon  kʷ=ən=ə  Ɂəy-ən=ce?
good-CAUS.3O=1SG.S  COMP=1SG.POSS=NOM  sing-mid=FUT
'I like that I'm going to sing.'
   – RP: happy now that I'm going to sing later

b. Ɂəy-stəxʷ=çon  kʷ=ən=ə  ?i=Ɂəy-ən=ce?
good-CAUS.3O=1SG.S  COMP=1SG.POSS=NOM  AUX=PAST  sing-MID
'I liked it when I sang.'

   c. Ɂəy-stəxʷ=çon  kʷ=ən=ə  ?i  Ɂəy-ən=ce?
good-CAUS.3O=1SG.S  COMP=1SG.POSS=NOM  AUX  sing.IMPF-MID
'I like singing.'
   – RP: I'm doing it right now and I like doing it

In 2.2.4 I argued that Halkomelem auxiliaries head a functional projection between VoiceP and IP, specifically MoodP. As pointed out in Gerdts (2010:177), ‘...they serve to anchor the clause in space and/or time.’ Locative auxiliaries are found in nominalized clauses, where they serve the same sort of function, anchoring the event in the nominalized clause either to the event in the matrix clause or to the utterance situation. Consider the following data, which consist of minimal pairs contrasting in auxiliary choice.

20) a. ?i=çon  Ɂəy-stəxʷ=çon  kʷ=ən=ə  niʔ  həyeʔ?
AUX=1SG.S  think  [COMP=2SG.POSS=NOM  AUX  leave]
'I thought you left/I was thinking that maybe you left.'

b. ?i=çon  Ɂəy-stəxʷ=çon  kʷ=ən=ə  ?i (wəɬ)  həyeʔ?
AUX=1SG.S  think  [COMP=2SG.POSS=NOM  AUX (PERF)  leave]
'I thought that you already left (to come here).' 
   – RP: only if you're on the phone talking

(Island)
The (a) example contains the distal auxiliary, while the (b) examples contain the proximate auxiliary. The contrast between (20a) and (20b) apparently tracks the location of the leaver relative to the speaker, and the choice between distal and proximate auxiliary is crucial to the interpretive contrast.

The Mood analysis of auxiliaries is intended to capture their role in determining realis vs irrealis interpretations, and this contrast is apparent in nominalized clauses as well. Where the examples in (20) possess auxiliaries and receive realis interpretations, the absence of an auxiliary is expected to yield an irrealis interpretation. Two likely interpretations are non-finite (21a) and future (21b).

21) Aux-less nominalized clauses

a. non-finite

\[
\begin{array}{llllllllll}
\text{niʔ=con} & \text{ʔo} & \text{w-s-c} & \text{wet} & [kʷə=na=s] & \text{ce:ltən]} \\
\text{AUX=1SG.S} & \text{LNK} & \text{ST-know} & [\text{COMP=1SG.POSS=NOM fish}] \\
\end{array}
\]

'I know how to catch fish.'

b. future

\[
\begin{array}{llllllllll}
\text{ʔi=ćə} & \text{ʔi:nə-m} & kʰə & \text{Tully [kʰə=na=s həye?]}} \\
\text{AUX=EVID} & \text{sing.IMPF-MID DET Tully [COMP=1SG.POSS=NOM leave]} \\
\end{array}
\]

'Tully is singing because I'm going to leave.'

Recall too that in root clauses the directional auxiliary laem-nem often induces a future interpretation, here reinforced by the optional temporal modifier, or a past counterfactual interpretation, in conjunction with the 'past' morpheme /=əll/. These constructions and interpretations are available in nominalized clauses as well, as shown in (22) and (23).
These data then, confirm that nominalized clauses permit the full range of Mood and spatio-temporal interpretations available in root clauses, and that the same material is utilized to do so.

It important to note as well that all of these elements are located within the constituent selected by the nominalizer. Thus, this offers a way to translate Kroeber's (1999) observation that “... the whole clause is nominalized, not just its predicate” (ibid. 100-101) into a specific claim about the constituent selected by the nominalizer, as well as another way to distinguish between predicate and clausal nominalization.

### 4.2.3 Nominalized clauses under control predicates

Thompson (2008) presents a number of diagnostics that show the existence of a set of control predicates in Upriver Halkomelem, based on the restrictions they impose on their complement clauses. Halkomelem employs nominalized clauses in these contexts, and while they differ from the non-finite clauses selected by English control predicates they still form a

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5 I am not referring here to the notion of ‘control’ seen in 2.2.1.1, but rather to the more widely familiar notion dealing with obligatory coreference relations between embedded clause subjects and matrix arguments.
discrete class, with control-like behaviors. I will therefore continue to refer to these as control constructions. I show first that these constructions are characterized by obligatory co-reference between a matrix argument and the embedded subject, inability of the nominalized clause to appear to the left of the matrix clause, and restrictions on the use of auxiliaries. Having identified these restrictions, the next step is to determine the kind of structure that can support them. I argue that the nominalized clauses in these constructions have not undergone restructuring, in the sense of Wurmbrand (1998), but are instead full clauses. The kinds of restrictions that are displayed by nominalized clauses in these cases are better accounted for by assuming a non-finite Infl.

In this section, I show that there are syntactic and semantic grounds for distinguishing a set of predicates that fall within the cross-linguistically common set of control predicates. Halkomelem lacks a distinct non-finite clause-type of the sort familiar from Indo-European languages (cf. Kroeber (1999)). There are no special complementizers, like English for...to. Nor does Halkomelem license PRO in these contexts, as is commonly assumed for English. There is no special infinitival inflection, like that found in Portuguese and Galician. However, there is a cluster of properties that do hold of nominalized clauses in this context that do not hold elsewhere. The first of these is obligatory coreference between the nominalized clause subject and a matrix argument. Examples of subject control predicates are given in (24) and (25), while examples of object control are given in (26) and (27).

24) Subject control – try

\[\begin{align*}
\text{a. } & \text{col} \quad \text{tæ-Ø} \quad [k^w=\text{col}=s \quad x^w\text{æmæl}^w=\text{om}] \\
& \text{1sg.s trial-TR-3o} \quad [\text{COMP}=1\text{sgposs}=\text{nom} \quad \text{run-MID}] \\
& \text{‘I tried to run.’}
\end{align*}\]

---

6 Though see Bowers (1981, 1986, 2008) and Horstein (1999, 2001) and subsequent work for examples of movement analyses of subjects of infinitives, which do not involve PRO subjects.
b. *cəl ʔiɣə-θə[t kʷ=əl=s xʷəmxæl-əm=s]  
1sg.s try-TR-3o [comp=nom run-MID=3poss] (Upriver)

25) Subject control – start

a. cəl ʔiɣə-θə[t kʷ=əl=s xʷəmxæl-əm]  
1sg.s start-REFL [comp=1sgposs=om run-MID]  
'I started running/to run.'

b. *cəl ʔiɣə-θə[t kʷ=əl=s xʷəmxæl-əm=s]  
1sg.s start-REFL [comp=nom run-MID=3poss] (Upriver)

26) Object control – order

a. cəl cəʃæ-θə[t kʷ=əl=s xʷəmxæl-əm]  
1sg.s order-TR-3o det man [comp=nom go=3poss]  
'I told the man to go.'

b. *cəl cəʃæ-θə[t kʷ=əl=s xʷəmxæl-əm=s]  
1sg.s order-TR-3o det man [comp=2sgposs=nom go] (Upriver)

27) Object control – invite

a. cəl hiqʷ-θə[t kʷ=əl=s xʷəmxæl-əm]  
1sg.s invite-TR.3o det woman [comp=nom come=3poss  
�ə-ɪmex-as-əm]  
ser-walk-face-MID]  
'I invited the woman to go for a walk.'

b. *cəl hiqʷ-θə[t kʷ=əl=s xʷəmxæl-əm]  
1sg.s invite-TR.3o det woman [comp=2sgposs=nom  
�ə-ɪmex-as-əm]  
ser walk-face-MID] (Upriver)

---

7 I assume that start is a control predicate in this example, rather than a raising one, as it assigns a theta role to its subject (cf. Perlmutter (1970)).
This restriction on the identity of the embedded clause subject should not be surprising, given the selecting predicates. It might be thought then that nothing more than the meaning of the selecting predicates is needed to characterize this construction. However, Thompson (2008) provides evidence that nominalized clauses in these constructions can be distinguished syntactically as well. Jacobs (1992) distinguishes between argument and adjunct nominalized clauses in Squamish, showing that only adjunct nominalized clauses can appear to the left of the matrix clause. Thompson (2008) shows that this preposing of nominalized clauses is less restricted in the Upriver dialect, in that the only nominalized clauses that cannot be preposed are those selected by control predicates. The following examples show that arguments (28a,b) and adjuncts (28c) can be preposed. In contrast, the data in (29) show that nominalized clauses select by control predicates cannot be preposed.

28) Preposed non-control nominalized clauses

a. \[[k^w=əl=s \quad Ɂe\text{-}stxʷ=cə]\quad \text{良好-CAUS.}3=1\text{SG}.

\[\text{COMP}=1\text{SG.POSS}=\text{NOM} \quad \text{sing.IMPF-MID} \quad \text{good-CAUS.}3=1\text{SG}.

'I like singing.'

cf. ?eystxʷcəl \[\text{NC} k^wəls \text{tɪɬəm}] \]

b. \[[k^w=aʔ=s=Ɂ \quad xʷəxʷæ] \quad cəl \text{ɪəm-ət} \quad \text{COMP}=2\text{SG.POSS}=\text{NOM}=\text{FACT} \quad \text{hungry} \quad 1\text{SG.S} \quad \text{guess-TR.}3\text{O}

'I guessed you were hungry.'

cf. cəl \text{ɪəm-ət} \[\text{NC} k^wəʔs \quad xʷəxʷæ] \]

c. \[[k^w=aʔ=s \quad mə \quad kʷətxʷil-əm] \quad cəl \text{ɬəm-əθ-əmə} \quad \text{COMP}=2\text{SG.POSS}=\text{NOM} \quad \text{go enter-MID} \quad 1\text{SG.S} \quad \text{hear-TR.2S}\text{O}

'I heard you come in/when you came in.'

cf. cəl \text{ɬəməθəmə} \[\text{NC} k^wəʔs \quad mə \quad kʷətxʷiləm] \quad \text{(Upriver)}
29) *Control preposing

a. *[[k*=əl=sʔa] lə ?əyəl] cəl Ɋə-t

[COMP=1SG.POSS=NOM=FACT AUX leave] 1SG.S try-TR.3O

for: 'I tried to leave.'

cf. cəl Ɋə-t [nc k*=əlsʔa lə ?əyəl]

b. *[[k*=əl=s] ?imɛx] cəl Ɋiya-θət

[COMP=1SG.POSS=NOM walk] 1SG.S start-REFL

for: 'I started to walk.'

cf. cəl Ɋiyaθət [nc k*=əlsʔimɛx]

c. *[[k*=s] lə=s] ?əyəl tu-Ɋə]

[COMP=NOM AUX=3POSS leave DET.LNK-3SG.EMPH] 1SG.S order-TR.3O

for: 'I ordered him to leave.'

cf. cəl Ɋə-shət [nc k*=s ləsʔəyəl tuɊə]

(Upriver)

Note that the subjects in the embedded clauses in (28) are co-referent with a matrix argument in each case. This means that this restriction can't be a matter of simple co-reference between a matrix and an embedded argument. These sentences show then that there is a genuine syntactic contrast between nominalized clauses that are in control constructions and those that are not.

The last diagnostic that separates these constructions from other cases of embedding concerns the role of locative auxiliaries. As shown in 2.2.4, locative auxiliaries are restricted in nominalized clause complements to obligatory control predicates – the distal auxiliary is completely ungrammatical, while the elicitation of the proximate auxiliary yields mixed results.

30) Distal auxiliary under control

\[
\begin{align*}
\text{cəl} & \quad Ɋə-t & \quad [\text{k*=əl=s}] & \quad (*)\text{li} & \quad x^*\text{əmxəl-əm} \\
1\text{SG.S} & \quad \text{try-TR.3O} & \quad \text{COMP=1SG.POSS=NOM} & \quad (*)\text{aux} & \quad \text{run-MID}
\end{align*}
\]

'I tried to run.'

(Upriver)
Data such as these figure heavily in Ritter and Wiltschko’s (2005, 2009) argumentation, and in fact are somewhat easier to explain on their model, which places the locative auxiliaries in Infl.

Given that control predicates commonly select for non-finite complements, if locative auxiliaries are located in Infl, then their use in these cases is predicted to be restricted. In 4.2.2 I showed that nominalized clauses that receive irrealis interpretations, of which non-finite interpretations are a sub-type, do not permit locative auxiliaries. The marginal acceptability of the proximate auxiliary in sentences like (31) is thus unexpected. Ritter and Wiltschko equate this to a requirement in Italian for subjunctive clauses to bear tense morphology that agrees with the matrix clause tense, arguing that this is not real tense, but rather an instance of temporal agreement. Perhaps a better analogy, within their system, would be languages like Russian or Japanese, where an embedded present tense signals simultaneity of matrix and embedded events regardless of matrix tense. Regardless of the specific mechanism used to account for the marginal acceptance of the proximate auxiliary, the restrictions on the use of auxiliaries in these contexts are robust, and provide another diagnostic for distinguishing a separate obligatory control construction.

Nominalized clause complements of control predicates are thus constrained in terms of their subject, their inability to prepose, and the limits on auxiliary use. One potential account for these restrictions might be to treat these nominalized clauses as cases of restructuring infinitives,
which have a truncated clause structure. This is made highly unlikely though by the obligatory presence of the D-particle and the nominalizer, which I argue below are complementizers.

Likewise, the obligatory presence of a possessive clitic suggests that this cannot be the case, on the assumption that clitics are hosted in Infl. Therefore I find the restructuring analysis untenable, and resort instead to a non-finite IP analysis of these constructions.

This concludes my arguments for the first part of the analysis of Halkomelem nominalized clauses, namely identifying the constituent selected by the nominalizer as an IP, as shown in (10) above. I have provided evidence from embedded passives to support the analysis of possessive clitics I adopted in 2.2.2.1, namely that they are located in Infl. I have shown that auxiliaries and temporal markers combine in nominalized clauses to produce a range of spatio-temporal interpretations and mood distinctions much as they do in indicative clauses. And I have shown that there is a class of control-like predicates in Halkomelem that select nominalized clause complements that are not RIs, but full CPs with non-finite Infls. With this piece of the analysis in place, I turn now to the identity of the constituent that results from merging the nominalizer with an IP.

4.3 Nominalized clauses are CPs, not DPs

I argued in the previous section that the nominalizer merges with an IP in Halkomelem. As mentioned in 1.1, most generative and typological accounts of syntactic nominalization argue that merging a nominalizer with a verbal/clausal projection results in a nominal functional

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8 I thank Henry Davis for bringing this possibility to my attention.
9 It is worth noting in this regard that Lilooet and Thompson both possess constructions that have been analyzed as infinitives (Davis and Matthewson (1996), Kroeber (1999), Matthewson (2003)), and which obligatorily lack both the nominalizer and subject agreement. Matthewson (2003) argues convincingly that even these cannot be treated as RIs, but rather must be treated as full clauses with PRO subjects.
projection that either is a DP or will project to one. There is then some typological and theoretical support for the hypothesis that clausal nominalization in Halkomelem will produce a DP, and indeed some Salishanists maintain essentially this proposal (e.g. Suttles 2004, Gerdts 1988, Leslie 1979). In this section, I explore and ultimately reject that hypothesis. An initial observation that motivates rejecting the identification of nominalized clauses with DPs is that they share with conjunctive clauses, but not DPs, the inability to function as subjects of transitive predicates (cf. Kroeber 1999:87). That is to say, there is no direct correlate in any Salish language to sentences like “[That you insist on coming late] shows your lack of consideration.,” or “[Whether you go first or second] depends on the straw you pull.”. One might wish to attribute this to a general dispreference for non-agentive subjects of transitives, but I show in the rest of this section that according to a number of formal diagnostics, nominalized clauses pattern with CPs and not DPs.

Kroeber (1999) explicitly raises the issue of the categorial identity of nominalized clauses as well, and proposes a number of diagnostics that can be employed on a language-by-language basis to determine the answer. Applying Kroeber's diagnostics to Halkomelem, I argue that nominalized clauses are best analyzed as CPs. The first part of this argument is to show that the D-complementizer does not encode the kind of semantic information that the homophonous determiner carries (4.3.1), and the second part is to show that it does not have the same formal licensing requirements as the determiner (4.3.2). In making this second point, a new generalization emerges concerning the role of the oblique marker in nominalized clauses, or perhaps of a homophone of the oblique marker. Lastly, I show that the D-complementizer can be

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10 As H. Davis (p.c.) points out, this kind of solution is ruled out by other languages in the family, like Lillooet and Squamish, which do permit non-agentive subjects of transitives and yet still robustly prohibit clausal subjects of transitives.
omitted in contexts where determiners cannot (4.3.3). The conclusion to be drawn from these observations is that nominalized clauses are clauses that do not project to DPs.11

4.3.1 Semantic content of the D-complementizer

Most of the nominalized clauses seen above occur with the D-complementizer, $k^w$, homophous with the distal/hypothetical determiner. Both Galloway (1993) and Leslie (1979) assume that this $k^w$ is the determiner, and that nominalized clauses are DPs in Upriver and Island, respectively, and there is some initial plausibility to this claim.12 One prediction of this analysis is that nominalized clauses ought to have the same or a similar distribution to DPs, and to an extent this appears to be so. Nominalized clauses with $k^w$ in their extended projection are obligatorily embedded, and are able to serve both as arguments and adjuncts. While the canonical use of DPs is as arguments, certain kinds of modification can be done with DPs as well. Consider the following use of a DP as a temporal modifier in the Upriver dialect.

32) DP adjunct – temporal modifier13

\[
\begin{align*}
\text{\text{?ey } k^w=əl=s?=a} & \quad \text{\text{$k^wəc-l-amə$ [DP $k^w \ əcəqəl-əl]$}} \\
\text{\text{good} COMP=1SGPOSS=NOM=FACT} & \quad \text{\text{see-LCT-2SG.O [DP DET yesterday-PAST]}} \\
\text{'It was good to see you yesterday.'}
\end{align*}
\]

(Upriver)

The following examples of DPs used as instrumental and locative modifiers are provided by Gerdts (1988). Notice that, as expected, these DPs appear with the oblique marker.

11 Kroeber (1999:83) adopts the same conclusion for Salish nominalized clauses more generally, though he acknowledges that it can in practice be very difficult to determine the truth of the matter for a given language on the basis of available data.

12 These authors don't use the term “DP”, but it is a correct restatement of their analysis in the framework I adopt.

13 This is an oblique DP, and would appear with an overt oblique marker in the Island dialect.
33) DP adjunct – instrument

\[ \text{niʔ=con \ qʷaqʷ-\t \ ?n \ kʷθ-ən \ šapəl-əl} \]
\[ \text{AUX=1.sg,s \ club-tr.3o \ OBL \ DET-2sg.poss \ shovel-past} \]

'I hit him with your shovel.'

(Island, Gerdts (1988:70))

34) DP adjunct – location

\[ \text{niʔ \ yaθ \ ?əw \ yə-ƛənən-əm \ ?n \ tənaʔ \ šeł} \]
\[ \text{AUX \ always \ LNK \ SER-run-mid \ OBL \ DEM \ road} \]

'He always ran on that road.'

(Island, Gerdts (1988:70))

There is another distributional similarity between nominalized clauses and DPs – both can occur clause-initially, modulo certain restrictions. That nominalized clauses, even those functioning as complement clauses, can do so was seen (29) above, and the following example shows a DP doing the same.

35) Fronted argument DP

\[ \text{tə \ swiyəqə \ kʷukʷ-t-əs \ tə \ smeyəθ} \]
\[ \text{DET \ man \ cook-tr.3o-3erg \ DET \ meat} \]

'The man cooked the meat.'

(Upriver)

It seems then on these criteria – ability to function as an argument or adjunct, ability to occur clause initially – that the behavior of nominalized clauses is like that of DP, something that is predicted if the \(k^w\) heading an nominalized clause is the distal or hypothetical determiner.

However, a closer look shows that nominalized clauses are not DPs, and that \(k^w\) is not a determiner. If it were, it would be predicted to alternate with other determiners in appropriate

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14 This sentence is interesting in providing an example of SVO word order without the (anti-)agreement that is obligatory with A'-extraction of subjects. I speculate that it reflects the presence of a preverbal A-position, though I am not aware of the conditions under which it may be filled, the conditions on what constituents can fill it, or the semantic effects of it being filled. Gardiner (1993) discusses such a position in the NIS language Shushwap.
circumstances. However, as pointed out by Kroeber (1999), the D-particle that introduces Halkomelem nominalized clauses is restricted to $k''$, while true DPs have access to the entire inventory presented in 2.1.2. If one were to try to defend a DP analysis of nominalized clauses, the argument could be made for some of these gaps that nominalized clauses are semantically incompatible with a particular determiner. Recall that Halkomelem determiners encode gender, number (in Upriver), and visibility or deixis. It would not make sense to classify a proposition or event as female, so the feminine determiners would be a predictable gap. A similar argument could possibly rule out the plural determiner in Upriver.\footnote{It is conceivable that a nominalized clause selected by a verb of perception might satisfy the semantic requirement of plurality, if there were multiple instances of the same (kind of) event being witnessed simultaneously. I do not have the relevant data though, and none of the available sources mention anything of the sort.} The oblique determiner can also be ruled out independently, as it is only ever used with names. However, none of this necessarily rules out the determiners that encode visibility but are unmarked for gender, number, and case. The nominalized clause complement of a perception predicate might denote an event that was/is visible to the speaker, for instance. If the particles introducing embedded nominalized clauses were actually determiners, the prediction should be that they would be used to encode that contrast. This means that $tə/t'ə$, which minimally contrasts with $k''$ in terms of location, ought to be possible, and ought to convey this information. This kind of contrast is in fact displayed in Lushootseed nominalized clauses (Hess (1995), Kroeber (1999:181)), so there is nothing in principle that would rule out the use of different determiners in this environment. However, the $tə/t'ə$ contrast is unavailable in Upriver and Island nominalized clauses,\footnote{Suttles (2004) reports that the use of the unmarked determiner $te$ as an introductory particle was attested with some Musqueam speakers. This appears to be marginal though, and no indication is given as to whether those speakers employed it to capture a semantic contrast.} and $k''$ does not carry any of the expected contrasts.
It is clear then that deixis is not encoded in the D-particle that introduces nominalized clauses.

Given that deixis is one of the crucial components in structuring the determiner system, the fact that it is not encoded by the D-particle in these contexts strongly suggests that it is not a determiner.

### 4.3.2 Formal licensing and nominalized clauses

In the preceding section I showed that the D-complementizer can be distinguished from the homophonous determiner on the basis of their semantic properties. In this section I argue that formal licensing considerations also distinguish the two. Recall from 2.2.2 the formal licensing requirements for DPs – they must either be registered by agreement, or by an oblique marker as a last resort.
The general thrust of Kroeber's (1999) argument is that if nominalized clauses are DPs, they ought to share this licensing requirement. Conversely, if nominalized clauses are clauses, and the kʷ that introduces them is a complementizer, then no such licensing constraints are expected.

The examples shown so far of nominalized clauses in unregistered positions have all lacked an oblique marker, and targeted elicitation supports this general observation. In the following sentences, two formally intransitive predicates are shown with a nominalized clause complement, and the oblique marker is judged ungrammatical.

39) \( ?i=cən \ q^\text{en}:\text{i}q^\text{en}l \ (*?ə) \ k^w=s=ə=s \ \text{həye}^e? \ k^wθə \ Tully \)
\( \text{AUX}=1 \text{SG}, \text{S} \ \text{talk.about.IMPF} \ (*\text{OBL}) \ \text{COMP}=\text{NOM}=\text{AUX}=3 \text{POSS} \ \text{leave} \ \text{DET} \ \text{Tully} \)
'I'm talking about Tully leaving.'
(Island)

40) \( ni?=cən \ məlq \ (*?ə) \ k^w=s=ə=s \ \text{həye}^e? \ k^wθə \ Tully \)
\( \text{AUX}=1 \text{SG}, \text{S} \ \text{forget} \ (*\text{OBL}) \ \text{COMP}=\text{NOM}=\text{AUX}=3 \text{POSS} \ \text{leave} \ \text{DET} \ \text{Tully} \)
'I forgot that Tully left.'
(Island)

The predicates above are not formally transitive, and yet take an agent/experiencer subject and clausal internal argument. These predicates are able to take DP complements as well, but then the expected licensing mechanisms are employed – either the predicate is transitivized (41) or the argument occurs with the oblique marker (42).

41) \( ni?=cən \ məlq-t \ (*?ə) \ k^wθə-nə \ yasə?q^w \)
\( \text{AUX}=1 \text{SG}, \text{S} \ \text{forget-TR.3O} \ (*\text{OBL}) \ \text{DET}-1 \text{SG.POSS} \ \text{hat} \)
'I forgot my hat.'
(Island)

Though, if Reuland (1983) and Pires (2001, 2007) are correct concerning English clausal gerunds, even TPs can be subject to a case requirement.
Further, extracting the internal DP argument of the formally intransitive *melq* requires nominalization (43a). Extraction of the internal DP argument from the transitivized version of the same predicate results in the normal object-centered relative clause morphology (43b).

43) a. stem Ɂəkʷθəniʔon-melq
what anyway DET AUX 2SG.POSS-NOM-forget
'What did you forget?'

b. stem Ɂəkʷθəniʔme miglior-o₃-2SG.TS
what anyway DET AUX forget-TR.3O-2SG.TS
'What did you forget?'

The ability of nominalized clauses to occur in this unlicensed environment is not consistent with a DP analysis, but is unsurprising if nominalized clauses are instead a type of clause, since clauses do not trigger agreement on the predicate.

It seems clear then that nominalized clauses do not have the same formal licensing constraints that DPs do. However, it has been observed that nominalized clauses do sometimes occur with the oblique marker. Kroeker (1999:181), citing Hukari, White, and Peter (1977), offers a clear example of a temporal adjunct nominalized clause with the oblique marker.

44) Ɂənan=ct Ɂəwow-tsas [ʔə kʷ=ʔəniʔon-melq Ɂəwow niʔ=ʔəxʷ
very=1PL.S LNK-pitiful OBL COMP=2SG.POSS=NOM NEG be.there=2SG.CS
niʔ tʰeʔ] at OBL DEM
'We are so pitiful when you are not there.'

(Island; Hukari, Peter, and White 1977:334f.)
Though it is clear from (39) and (40) that nominalized clauses do not require an oblique marker for formal licensing when they are used as an oblique object, the following example shows that it is at least possible for the oblique marker to occur.

45) yaʔ ?əw heʔkʷ kʷθə Tully always LNK remember DET Tully
[ʔə kʷ=ŋ=s=ŋ=s ?exʷeʔ-t-əs iθ Gin
[obl comp=nom=aux=3poss give-tr.3o-3erg det Gin
ʔə kʷθə see:ʌtən]
obl det fish]
'Tully always remembers when he gives Gin a fish.' (Island)

If the oblique marker is not functioning as the last resort licenser when used with nominalized clauses, what then is its function? The following examples show nominalized clauses functioning as temporal adjuncts and occurring with the oblique marker. In each case, the use of the oblique marker results in a habitual or generic interpretation.

46) niʔ Ɂiʔ-ət-əm kʷθə Tully [ʔə kʷ=ŋ=s yə-xʷančəŋ-əm=ŋ=s]
aux slip-tr-pass det Tully [obl comp=nom ser-run.impf-mid=3poss]
'Tully slips every time he is running.' (Island)

47) niʔ=ən Ɂitət-əm [ʔə kʷ=ŋ=ŋ=s ?iʔltən]
aux=1sg.s sleep-mid [obl comp=1sg.poss=nom eat.impf]
'I get sleepy when I eat.' (Island)

48) niʔ Ɂəm-ŋəxʷ-əs əθə Gin [ʔə kʷ=ŋ=s nem=ŋ=s
aux see-lct.3o-3erg det Gin [obl comp=nom go=3poss
həməmat iθə Tully]
be.home det Tully]
'When Tully goes home, he sees Gin.' (Island)
'Every time the dance finished Tully left.'

The consultant's comment in (49) is quite revealing in this regard. The previously unrecognized generalization that seems to emerge from the preceding data is that nominalized clauses do not need to be formally licensed, but that the oblique marker can be used to force a generic or habitual interpretation. If the oblique marker's function in these cases has nothing to do with licensing, then it should be possible to use it in cases where the nominalized clause is a direct argument, and its use should trigger the same kind of interpretive effect. The following data show that this is indeed the case.

In these the nominalized clause is the lone argument of an intransitive predicate, which is a direct argument position. There should be no need for an oblique marker from a licensing perspective, and yet it is allowed in (50), and obligatorily present in (51).

Taken together, these data show that the oblique markers that occur in these constructions do not serve the same morphosyntactic licensing function that they do with DPs. It seems instead
to force a generic or habitual interpretation of the nominalized clause. This is not to say that the oblique marker is not still a case morpheme in these examples though. In a number of languages, case marking can be used to indicate a semantic contrast, either in the interpretation of the case marked constituent or of the predicate. The term differential object marking (DOM) has been used to identify the link between case marking on objects and specificity (cf. Bossong (1985, 1991), Aissen (2003)). It might be possible to interpret these genericity effects as a similar phenomenon. There is some sense to associating the oblique marker with a less specific interpretation, given its use in 'with-object' constructions, which often involve a non-specific interpretation of the oblique object. Further support for this idea comes from a marginal construction involving DPs in information questions. The following examples of wh-questions all possess an oblique-marked DP that corresponds to the wh-predicate. Use of the oblique marker here results in a 'kind-of' interpretation.

52) a. stem kʷθə ni? ən-s-ʔəłən ?ə kʷθə səpələl
   what DET AUX 2SG.POSS-NOM-eat OBL DET bread
   'What kind of a bread did you eat?'

   b. stem kʷθə ni? ən-pən-əm ?ə kʷθə səpəqəm
   what DET AUX 2SG.POSS-NOM-plant MID OBL DET flowers
   'What kind of flowers did you plant?'

   c. stem kʷθə ?aʔ-stəxʷ-əxʷ ?ə ə st̕u:m
   what DET good-CAUS.3O-2SG.TS OBL DET berry
   'What kind of berries do you like?'

Examples of this sort have not been elicited for Halkomelem before, and may not represent a robust phenomena. My consultant's acceptance of this construction is sporadic and inconsistent, and I have only been able to elicit a grammatical sentence with this construction in a wh-
question. Any attempts to use this to create a 'kind of' interpretation with a licensed argument have been ungrammatical, for example. I take this to mean that it is marginal and/or highly restricted. However, whenever it is accepted, it is given this 'kind-of' interpretation which can perhaps be unified with the nominalized clause cases above as a sort of generic reading. Assuming this is the case, the use of the oblique marker to trigger a generic reading can potentially be interpreted as a kind of reverse-DOM, used to derive generic interpretations. Generic DPs are conspicuously absent from Salish languages in general (Matthewson (1998), Gillon (2006)), and difficult to elicit even in the information questions seen above. It is clear though that nominalized clauses do not require the oblique marker for morphosyntactic licensing as DPs do.

4.3.3 'Bare' nominalized clauses

In the previous section I presented an argument from formal licensing constraints showing that the $k^w$ that often introduces nominalized clauses is not the same lexical item as the $k^w$ that can introduce DPs, and that, by extension, nominalized clauses are clauses, not DPs. In this section I present further arguments to the same effect.

Davis (2005) argues that in some Salish languages, including Halkomelem, the negative predicate typically selects a bare subjunctive clause (53), though the polarity complementizer $wə$ is possible at least in the Upriver dialect (54).

53) $\overline{?əwə=con} \ [nî:=n \ ?iəq-əls \ ?ə \ k^w \ šuk^wə]$  
$\text{NEG=1SG.S} \ [\text{AUX=1SG.CS buy-ACT OBL DET sugar}]$  
'I didn't buy any sugar.' (Island)
'It wasn't long before she arrived.'

(Upriver; Milo 1964a, ln.32)

Without delving into the arguments he presents, I will simply assume that this is the correct analysis. The generalization then is that certain predicates are able to select a clausal complement without any overt C-domain material. Similarly, Halkomelem relative clauses completely lack complementizers, which means that it is possible to have a clause embedded as an adjunct without a complementizer.

Conversely, there are no examples of predicates selecting an NP argument without a determiner. Recall from 2.2.5 that quantifiers, numerals, possessors, relative clauses, and adjectives are all insufficient to license the use of an NP as an argument in the absence of a determiner. The prediction, if nominalized clauses are DPs, is that they should not be able to occur in argument positions without kʷ. If this prediction is not borne out, and nominalized clauses are able to function as arguments without kʷ, they will pattern with clauses instead of DPs. As it happens, there are a handful of predicates in both dialects that select or permit a nominalized clause lacking kʷ. Citing Suttles (1984), Kroeber (1999) identifies “...a small set of adverb like elements: yel 'just now', wənay 'only', məkʷ 'all, every [whenever?]', λa...wl- '[start] now', and perhaps a few others” (ibid. 180) that occur with a bare nominalized clause in Musqueam. It is not clear that the inventory of such elements are the same across all three dialects, and there are some dialectal differences in the constructions in which they occur. For instance, the lexical items for 'why' in both the Upriver (xʷəɁit) and Island dialects (nəcim) select

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18 See Wilmshko (2002b) for an opposing view.
19 Though Davis (2010) does argue that determiners move to Spec-C in Lillooet relative clauses, functioning as relative pronouns.
a bare nominalized clause complement, but use the plain and instrumental nominalizers, respectively. I concentrate on one of these predicates, \( yəł/yəl \), in the discussion that follows.

\( yəł/yəl \), which has cognates in most neighboring languages, is often translated as 'just' or 'only', in a temporal sense (i.e. 'just now' or 'just this instant'). Leslie (1979:221) claims that it only appears with nominalized clauses, to the exclusion of both DPs and other clause types. However, it is attested in the Upriver dialect as an adverbial particle in an indicative clause, apparently as a restricted option (Galloway 2010:1022). I leave that use aside, and focus instead on its behavior with nominalized clauses. The following example shows a typical use of \( yəl \), where I argue it is a predicate selecting a nominalized clause complement.

55) \[ \text{\texttt{yəł}}=[nə=s i \text{ tecəl}] \]
\[ \text{\texttt{just}}=[1\text{SG.POSS=NOM AUX arrive}] \]
'I just arrived.'

That (55) is bi-clausal can be seen clearly in the following, related example. Here, the nominalized clause is introduced by the D-complementizer \( kʷ \), and there is an auxiliary in the matrix clause.

56) \[ \text{\texttt{i yəł}} [kʷə=nə=s i \text{ tecəl}] \]
\[ \text{\texttt{AUX just}} \ [\text{comp}=1\text{SG.POSS=NOM AUX arrive}] \]
'I just arrived.'

The second prediction that follows from this analysis concerns embedding – if \( yəl \) is really a predicate in examples (55), then it ought to behave as one in embedded contexts. One such diagnostic is the location of the possessive clitic in the absence of an auxiliary. If \( yəl \) is indeed functioning as a predicate, then in the absence of an auxiliary it ought to host clitics. The

\[ \text{\texttt{H. Davis (p.c.) points out that the likely cognate in Lillooet – ayəl – is either an adverb or auxiliary.} \]
following two examples show that this is indeed the case – when embedded under a predicate that selects an nominalized clause complement, 3rd person possessive agreement morphology surfaces attached to yeł, just as expected on the predicate analysis.

57) i=cəntəl-nəxʷ [kʷ=s yeł=s [ʔəñ=s
AUX=1SG.S discover-LCT.3O [COMP=NOM just=3POSS [2SG.POSS=NOM
ʔi tecəl]]
AUX arrive]
'I found out that you just arrived.' (Island)

58) i=cəntəl-nəxʷ [kʷ=s yeł=s
AUX=1SG.S discover-LCT.3O [COMP=NOM just=3POSS
[kʷ=əñ=s ʔi tecəl]
[COMP=2SG.POSS=NOM AUX arrive]
'I found out that you just arrived.' (Island)

On the basis of these data, it is reasonable to conclude that yeł can function as a predicate that selects a nominalized clause complement, and that this is the correct analysis of the example in (55). A consequence of this is that there are cases where an embedded nominalized clause can appear without an overt D-complementizer. This could mean that some predicates can select for a bare nominalized clause that lacks a complementizer altogether, or that there is a null complementizer that is available in certain lexically defined contexts. These possibilities are presented in (59).

59) a. Bare nominalized clause

[IP yeł [NC]]

b. Null D-complementizer

[IP yeł [CP Ø [NC]]]
I adopt the structure in (59b) for two reasons. First, it allows for a uniform syntax for embedded clauses – they are all headed by a D-complementizer. Second, it will allow me to distinguish between 'bare' complement nominalized clauses and clause-chained nominalized clauses, which also lack an overt D-complementizer. These latter constructions will be analyzed in 4.4.2.1.

Ultimately though, regardless of which structure in (59) turns out to be the correct one, it aligns nominalized clauses with clauses to the exclusion of DPs, in that the former two can occur in argument positions without an overt complementizer, while the latter cannot occur in such positions without an overt determiner.

4.3.4 Interim summary

In the past two sections, I have argued that clausal nominalization is a syntactic operation that targets an IP and produces a nominal CP, rather than a DP. Arguments for the former claim come from data concerning the presence of grammatical subjects (as opposed to thematic subjects), the availability of the full range of mood and spatio-temporal contrasts, and the existence of a control-type construction. Arguments for the latter claim come from the semantic and syntactic properties of the kʷ particle that introduces (most) nominalized clauses and the fact that nominalized clauses pattern with CPs rather than DPs in their ability to serve as arguments without an overt D-type particle. In the next section I propose a formal analysis of nominalized clauses that accounts for these facts, and extends naturally to further observations.
4.4 Analysis

In the preceding two sections I have presented evidence showing that clausal nominalization in Halkomelem targets an IP, and that the resulting constituent is a CP rather than a DP. My claim in this chapter is that the nominalizer functions as a complementizer, specifically as the head of ForceP. I treat the D-complementizer as a simple subordinator, consistent with its lack of semantic features and restriction to embedded contexts. This analysis will be spelled out in the next subsection, 4.4.1. In 4.4.2, I extend the analysis to the other frequent use of nominalized clauses seen in (6) and (7), namely clause-chaining constructions. I show how treating the nominalizer as a complementizer opens the door to using an analysis of co-subordination proposed by Kwon (2004) and Kwon and Polinsky (2009).

4.4.1 The nominalizer as Force

The objective of section 4.2 was to show that nominalized clauses contain a complete IP. Evidence for this position came from the presence of a grammatical subject, indexed by possessive clitics as a rule, with exceptions that are predicted on the current analysis (e.g. the alternation between plain and embedded passive forms). Further, spatio-temporal anchoring and mood alternations were shown to be possible in nominalized clauses, and were determined by the same morphemes (primarily the locative auxiliaries, but also temporal markers). Lastly, a control-type construction was presented, which under many approaches to control requires at least the presence of an IP.

My claim is that the nominalizer functions as a complementizer, selecting an IP complement to form a nominalized clause. My proposed structure is repeated from above.
As mentioned at the outset, this means adopting a split-CP (cf. Rizzi 1997) in order to accommodate the presence of the D-complementizer. The standard breakdown in a split-CP involves a higher ForceP and a lower FinP, interspersed with a single FocP and potentially iterated TopPs.\footnote{By making use of Rizzi's structure, I do not mean to commit myself to a cartographic approach to clause structure. What is important is the notion that the IP and CP domains can contain a number of projections. I adopt Rizzi's terminology for explicitness and ease of exposition.} Following a suggestion made by Bhatt and Yoon (1991), Rizzi also suggests that there may be need for one more projection above ForceP, for dedicated subordinators (Rizzi 1997:328, fn. 6). This is shown below.

I propose to treat the nominalizer as the head of ForceP and the D-complementizer as the head of SubP. The complete structure for the left periphery of the Halkomelem nominalized clause then is as follows.
None of the other embedded clause types in Halkomelem possess two complementizers, and so do not require a split-CP. Nor do any of the Halkomelem complementizers, including /s-/ and \( k^\omega \), display a sensitivity to finiteness contrasts (unlike English *for* vs. *that*, e.g.), so I assume there is no independent projection headed by a Fin(iteness).

Once the move is made to put the nominalizer in Force, it might seem reasonable to suggest that the nominalizer encodes declarative force, similar to English *that*. Certainly, in those contexts where English requires *that*, Halkomelem uses nominalized clauses. This would set it up in opposition to the polarity complementizer *wa/əw',* which is used for, among other things, embedded questions. There is also perhaps an intuitive connection between encoding declarative force and the observation in the typological literature that nominalization often has the effect of reifying some event or process so that it can be referred to. However, the claim that the Halkomelem nominalizer encodes declarative force can only be defended at the cost of accounting for the use of clause-chained nominalized clauses in commands, as seen in (6), repeated here for convenience. The observation is that the nominalized clause is interpreted as (a part of) a command.
63) Coordinating clause-chain

\[
\begin{align*}
&x^w \text{əl} \text{ək}^w-t=cc:p \quad \text{ʔə} \quad k^w \quad \text{ʔəw} \quad \text{stem}=?\dot{ə} \quad ləx^w\text{ən} \\
&\text{wrap-TR.3o-2pl.s} \quad \text{obl} \quad \text{det} \quad \text{lnk} \quad \text{what}=\text{just} \quad \text{blanket} \\
&[?\text{ən}=s=\text{əw} \quad yəq^w-t] \\
&[2SG.POSS=NOM=LNK \quad \text{burn-TR.3o}] \\
&'\text{Wrap it up with something or a blanket and burn it.}'
\end{align*}
\]

(Island, Hukari (1982:110))

If the nominalizer truly encoded declarative force, it would be difficult at best to account for the ability of nominalized clauses to be used in such contexts. If, on the other hand, the nominalizer is unspecified for force, then not only is the inability of nominalized clauses to be free-standing accounted for, but so too is the compatibility of nominalized clauses with different illocutionary force specifications.

But what of the D-complementizer? Setting aside the nominalizer for a moment, there seems to be good reason to treat the D-complementizer as a Force head itself, encoding declarative force. Embedded interrogatives are always headed by the polarity complementizer, and jussive clauses (embedded commands) typically are as well.

64) Embedded interrogative

\[
\begin{align*}
&\text{cəl} \quad \text{pətæm} \quad [\text{wə} \quad \text{li-s} \quad ?\text{iyal-əm} \\
&1SG.S \quad \text{ask} \quad [\text{comp} \quad \text{aux-3cs} \quad \text{can-mid} \\
&k^w=\text{əl}=s \quad \text{məy-t} \quad \text{yu-ƛələm}] \\
&\text{comp}=1SG.POSS=NOM \quad \text{help-TR.3o} \quad \text{det,lnk-3pl.emph}] \\
&'I asked if I could help them.'
\end{align*}
\]

(Upriver)
In contrast, the embedded clauses denoting propositions are always nominalized clauses headed by the D-complementizer. Again though, evidence suggests that it would be a mistake to endow the D-complementizer with any Force-encoding features, but rather to treat it as a default embedder. While subjunctive clauses are most frequently used in embedded interrogatives and jussives, the following examples shows that nominalized clauses are acceptable at least in jussive contexts as well.²²

66) Nominalized clauses as embedded request

<table>
<thead>
<tr>
<th>cəl</th>
<th>pətæm-ət</th>
<th>kʷ</th>
<th>Martina</th>
<th>[kʷ=s  mæy-θ-ax-əs]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG.S</td>
<td>ask-TR.3O</td>
<td>DET</td>
<td>Martina</td>
<td>[COMP=NOM help-TR-1SG.O-3ERG]</td>
</tr>
</tbody>
</table>

'I asked Martina to help me.'

(Upriver)

67) Nominalized clauses as jussive clauses

<table>
<thead>
<tr>
<th>cəl</th>
<th>θət-stəxʷ</th>
<th>tə</th>
<th>Strang</th>
<th>[kʷ=s  qaqə-t-əs]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG.S</td>
<td>tell-CAUS.3O</td>
<td>DET</td>
<td>Strang</td>
<td>[COMP=NOM drink.IMPF-TR.3O-3ERG]</td>
</tr>
<tr>
<td>tə</td>
<td>qa</td>
<td>DET</td>
<td>water</td>
<td></td>
</tr>
</tbody>
</table>

'I told Strang to drink the water.'

(Upriver)

The other complementizers are illicit in declarative contexts not because the D-complementizer is the head that encodes declarative force, but because their own features are incompatible with that use. Conversely, the D-complementizer is possible in (66) and (67) because it lacks features

---
²² Kroeger (1999) notes that this is not an uncommon use of nominalized clauses across the family.
that would clash with the demands of the selecting predicate.

Ultimately, the use of the D-complementizer is conditional on the presence of the nominalizer, which might be unexpected on an analysis that treats it as a plain subordinator. Rather, one might expect it to (be able to) occur with all embedded clauses. In fact, Montler (1986:239) provides examples of the cognate complementizer in the Saanich dialect of Straits Salish, showing that it is not sensitive to the presence of the nominalizer at all. Embedded nominalized clauses (those with the nominalizer and possessive clitics) are introduced by $k^ω$, but so are subjunctive clauses, which lack the nominalizer and index the subject with subject suffixes.

68) Saanich nominalized clause

\[\text{xč-i-t=sən} \quad [k^ω \quad \text{nə-s-léʔ?-ət}]\]
\[\text{figure.out-persis-tr.30=1sg.s} \quad [\text{comp} \quad 1\text{sg.poss-nom-repair-tr.30}]\]
'I know how to fix it.'

(Saanich, Montler (1986:239, ex. 26))

69) Saanich subjunctive clause

\[\text{[k^ω \quad č-téloʔ-ən]} \quad \text{?i?} \quad \text{?əλq-ələʔ?} \quad \text{sən} \quad ?ω \quad k^ω \quad ?έλəŋ}\]
\[\text{[comp} \quad \text{have-money-1sg.ss]} \quad \text{conj} \quad \text{buy-struct} \quad 1\text{sg.s} \quad \text{obl} \quad \text{dem} \quad \text{house}\]
'If I had money, I'd buy a house.'

(Saanich, Montler (1986:240, ex. 34))

In contrast, as pointed out before, the Halkomelem D-complementizer is only possible when the clause has been nominalized. I take this to mean that in Halkomelem the D-complementizer has retained at least this one formal property of its diachronic source - like determiners, it must be in the extended projection of a nominal constituent. This can be captured in Panagiotidis' system by exploiting the nominalizer's [N] feature – assigning an [$uN$] feature to the D-complementizer restricts its complementation options to the CP$_N$ headed by the nominalizer. The fully articulated
structure the I am proposing for a nominalized clause is as follows.

70) Left-periphery of Halkomelem nominalized clause

```
   Sub_N P
  / \    /
 Sub_N Force_N P
  /   \  /  \
 k"/Ø  Force_N IP
   /  \\ /
   /   /S-
```

Note that in a system like that proposed in Grimshaw (2000), where the lexical category feature plays a crucial role in determining the identity of a functional projection, assigning an [N] feature to $k''$ would be impossible without also analyzing it as a determiner. However, all of the generalizations from 4.3 show that adopting such an analysis would be a mistake. In a system, like that of Kornfilt (2003, 2011), which does not maintain such a strict view of the relationship between lexical categories and functional projections, it is possible to account for the nominal character of this construction without having to ignore the clear differences between nominalized clauses and DPs.

Notice though that there is something of Grimshaw's insight still present in my analysis of clausal nominalization. I have argued that the nominalizer is a defective complementizer, incapable of bearing an illocutionary force specification. Likewise, in her analysis of Turkish nominalized clauses, Kornfilt (2003) proposes nominal Mood heads that can only convey a subset of the distinctions available to their non-nominal counterparts. Clearly then, there is still some sense in which the inclusion of an [N] feature in a clausal projection is a limiting factor, even if it does not convert that projection into one of Grimshaw's extended nominal projections.
4.4.2 Extending the analysis – clause-chained nominalized clauses

I have argued that the nominalizer is best analyzed as a defective complementizer, which lacks the ability to express illocutionary force. In this section, I address the clause-chaining use of nominalized clauses first introduced in (6) and (7) above, showing that this use follows from my analysis.

The nominalized clauses discussed so far have all been embedded, either as an argument or an adjunct. There is a productive use of nominalized clauses that does not involve embedding, which I analyze as clause-chaining. There has not been much work done on the syntax of clause chaining from a generative perspective. Clause combining is generally thought to be managed either by coordination or subordination. Clause chaining constructions don't fall neatly into either category though, displaying properties of both. While some have proposed a larger inventory of clausal relations (e.g. Foley and Van Valin (1984), Good (2003)), others have argued that any given instance of clause chaining can be reduced to one or the other relation (e.g. Kwon (2004), Kwon and Polinsky (2008)). In these latter accounts, the blend of subordination and coordination is accounted for in two ways. First, the constructions in question can be structurally ambiguous in some languages. Thus, the Korean *ko*-clauses analyzed in Kwon (2004) and Kwon and Polinsky (2008) display behaviors characteristic of coordination when morphologically marked for tense, and behaviors characteristic of subordination in the absence of such marking. However, even in those cases where *ko*-clauses appear to be coordinated, they still lack the functional projections necessary for a clause to be free-standing.

As noted in the introduction, Hukari (1982) suggests that the use of these clauses at the discourse level makes it unlikely that they are subordinate clauses. He does note however, that
“purely syntactic considerations do not decide between coordinate conjunction and subordination.” (ibid.109) There are however, a number of considerations that distinguish clause chained nominalized clauses from subordinated (argument and adjunct) nominalized clauses. Gerdts and Hukari (to appear) treat this as a kind of sentential conjunction, with the added sense of temporal sequence. Nominalized clauses used in this way are formally distinct from embedded nominalized clauses in that they cannot occur with the D-complementizer.

71) niʔ kʷon-m ?ə ƛ Tully ḥe kʷełən
AUX catch-MID OBL DET Tully DET mouse

[*kʷ=s=s=əw am-əs-t-əs ḥo Juniper]

[*COMP=NOM=AUX=3POSS=LNK give-DAT-3O-3ERG DET Juniper]

'Tully caught a mouse and then gave it to Juniper.'

Note that the lack of a complementizer here is distinct from the lack seen in the nominalized clause complement to yeł in (57). While the complementizer was optional there, it is ungrammatical examples like (71). I take this to mean that clause chained nominalized clauses are truncated structures, relative to embedded nominalized clauses, in that they fail to project the higher SubP needed to host kʷ.

72) Clause chained nominalized clause

[CP  s  [IP]]

Discourse-level clause chains in the Upriver dialect typically employ a conjunctive lexical item. Both qə and a can be used to conjoin DPs. In the following examples they serve to link the clause chained nominalized clause to the preceding clause.
73) ... qə=s=əw lə=s qə-ələxʷ xʷləem tis
    ... CONJ=NOM=LNK AUX=3POSS 'live' from/over arrive
    li kʷə kʷəly qəya stəm s-məməyəθ
    there DET ?? go what NOM-animal.DIM
    'And they were going to live over yonder, whatever animals were going on by.'
    (Upriver; Milo (1964b. ln.15))

74) ... ?a=s=ə=s=əw kʷət-(t)-əs ?o
    ... CONJ=NOM=AUX=LNK=3POSS let.go-TR.3O-3ERG just
    'So she let it go at that.'
    (Upriver; Milo (1964a. ln.14))

Chained clauses are linearly ordered relative to each other, with the nominalized clause following the indicative clause it depends on. This order is rigidly enforced, marking another distinction between clause-chained and embedded nominalized clauses.

75) *[s=ə=s=əw ?am-əs-t-əs tə Juniper] [NOM=AUX=LNK=3POSS give-dir-TR.3O-3ERG DET Juniper]
    niʔ kʷən-əm ?ə kʷələm
    AUX catch-MID OBL DET Tully tə kʷələm
    for: 'Tully caught the mouse and gave it to Juniper.'
    (Island)

Both argument and adjunct nominalized clauses have been analyzed as embedded in a matrix clause. When attempting to formulate a syntactic analysis of clause-chained nominalized clauses, this is the relevant comparison class. On the assumption that argument nominalized clauses are selected and adjunct nominalized clauses are not, clause-chained nominalized clauses could be analyzed as a kind of adjunct. However, temporal adjunct nominalized clauses and clause-chained nominalized clauses differ from each other on morphological, syntactic, and interpretive grounds. Two diagnostics have already been introduced – the presence/absence of the D-complementizer and the constraints on linear ordering. A third distinction between embedded and
clause-chained nominalized clauses can be seen in the temporal ordering relative to the clause it is dependent on. The event denoted by a clause-chained nominalized clause is obligatorily ordered sequentially after that of the preceding clause. A sequential ordering is possible in a temporal adjunct nominalized clause, provided the (lexical or pragmatic) context is appropriate, but the default interpretation is one of temporal overlap. The following table summarizes the contrasts between clause-chained nominalized clauses and temporal adjunct nominalized clauses.

<table>
<thead>
<tr>
<th>Diagnostic</th>
<th>Temporal adjunct</th>
<th>Clause-chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>kʷ</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td>Preposing</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td>Temporal relation</td>
<td>Variable/overlapping</td>
<td>Sequential</td>
</tr>
</tbody>
</table>

Table 9. Clause-chained vs. temporal adjunct nominalized clauses

On the basis of the above comparison, I agree with Hukari's (1982) assessment that clause-chained nominalized clauses should not be treated as subordinate clauses. That this conclusion is correct can be seen in the following examples, where use of the embedded passive in the nominalized clause leads to ungrammaticality.

76) a. *niʔ=ʔə təkʷ kʷθə Tully [s=əw yəθəs-θ-am-ət
AUX=Q return.home DET Tully [nom=lnk tell-TR-2SG.PASS-PASS.EMB
kʷθə s-qʷəlqʷəl]
DET NOM-talk.pl]
for: 'Did Tully go home and tell you the message?'

b. *niʔ=ʔə təkʷ kʷθə Tully [s=ə=s=əw
AUX=Q return.home DET Tully [nom=aux=3poss=lnk
yəθəs-θ-am-ət kʷθə s-qʷəlqʷəl]
tell-TR-2SG.PASS-PASS.EMB DET NOM-talk.pl]
While the embedded form of the passive is not obligatory in argument and adjunct nominalized clauses, it is at least possible. Its ungrammaticality here provides another formal distinction between the two types of nominalized clause, and one that is directly correlated with subordination. However, while it is clear that clause-chained nominalized clauses are not embedded, it is equally clear that they are not free-standing clauses. A potential solution would be to treat Halkomelem clause-chaining as coordination below the highest CP (cf. Kwon (2004) for Korean). The structure I propose is in (77).

77) Halkomelem clause-chained nominalized clause

By treating clause-chaining as coordination, this analysis predicts that it should be a recursive operation, allowing for a string of coordinated nominalized clauses. It also ensures that the nominalized clause is c-commanded by a clause containing a suitable antecedent for the nominalizer, namely a fully specified complementizer.
4.5 Conclusion

I have argued in this chapter that nominalized clauses are CPs, rather than DPs. This argument depends on a number of observations showing that the formal properties of nominalized clauses are those of clauses, both internally and externally. In contrast, the nominal properties of nominalized clauses appear to be limited to morphological facts. The following table briefly summarizes these findings.

<table>
<thead>
<tr>
<th>Clausal Properties</th>
<th>Nominal Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability to serve as transitive subject</td>
<td>Form of subject agreement (possessive)</td>
</tr>
<tr>
<td>Location of subject agreement (mobile clitics)</td>
<td>Form of outermost complementizer (k*)</td>
</tr>
<tr>
<td>Lack of oblique marker in unlicensed positions</td>
<td></td>
</tr>
<tr>
<td>Mood and spatio-temporal interpretations and morphology</td>
<td></td>
</tr>
<tr>
<td>Ability to serve as complement w/o D-element</td>
<td></td>
</tr>
</tbody>
</table>

Table 10. Clausal and nominal properties of nominalized clauses

Clearly, on balance, nominalized clauses display far more clausal properties than nominal ones. Further, the clausal properties are more obviously syntactic, while the obvious nominal properties don't go beyond the form of the outermost functional projections.

There are, perhaps, less obvious nominal properties to this construction though. I have
analyzed the nominalizer as a defective complementizer, in line with typological observations about nominalized constituents (cf. Malchukov (2004)). I have attempted to model this by treating the nominalizer as a Force head that is unspecified for force. The clauses they head must either be embedded as an argument, in which case their force specification is assigned by the selecting predicate, or used as an adjunct or coordinated with a preceding clause. In these latter cases, the force specification is inherited, perhaps anaphorically, from the c-commanding C head. This opens the door to the possibility of treating the nominalizer as, in a sense, an anaphoric complementizer, which would be in keeping with its nominal nature.\footnote{I thank M. Rochemont for bringing this point to my attention.} The precise details of such an analysis need to be worked out, and would have to be compatible with the fact that, in the case of complement clauses, the force appears to be determined by the selecting predicate rather than the c-commanding complementizer. It is, nonetheless, an interesting hypothesis for future exploration.

I also argued that the fact that the D-complementizer is restricted to nominalized clauses can be accounted for by invoking a category feature in the selection of its complement. Assuming the nominalizer does possess an [N] feature, including an [uN] feature in the lexical entry for the D-complementizer would prevent it from selecting any complement that lacks an [N] feature. As I noted above, this is highly suggestive of the situation with determiners, which, unlike IP, must have an NP at the base of their extended projection.

One final point that is worth considering is the fact that nominalized clauses are, on my analysis, alone among the clause types in Halkomelem in having a split-CP, with the nominalizer functioning as a defective Force head and the D-complementizer as a plain Subordinator. This seems like a lot of work on the part of the grammar, work that should be motivated somehow.
can only speculate on this, but I would like to suggest that this too can be attributed to the
nominal character of the nominalizer. Recall from 2.3 that nouns are not inherently embedded as
arguments or adjuncts in Halkomelem (or in Salish generally). Rather, they are free to act as
predicates, without the aid of a verbalizer or copular verb, and there is a one-to-one
correspondence between the presence of a determiner and the ability to be embedded as an
argument or adjunct. Perhaps there is a similar requirement at work in nominalized clauses.
Despite the fact that the nominalizer leaves a clause unable to stand on its own, it does not
provide it with the ability to directly embed in another clause. The subordinator then does for the
nominalized clause what a determiner does for an NP – it makes it an embeddable object. This
argument depends on the postulated existence of a null D-complementizer to account for those
cases dealt with in 4.3.3, but given the distinction between 'bare' nominalized clauses and those
in clause chains, I believe this to be a reasonable claim.
Chapter 5:

Syntactic Nominalization Elsewhere in Salish

5.1 Introduction

In the preceding chapters, I have presented analyses of the two syntactic nominalizations in Halkomelem. On my analysis of predicate nominalization in Chapter 3, the nominalizer is an oblique object clitic that remerges at the edge of the thematic domain, forming a reduced relative clause. This differs from my analysis of clausal nominalization in Chapter 4, where the nominalizer is a defective complementizer. In this chapter I evaluate these analyses relative to other languages in the family.

Halkomelem nominalizations do not stand in a vacuum – these nominalizations are pervasive features of at least some branches of the Salish language family – and any analyses of these constructions should reflect their shared history. Predicate and clausal nominalizations can be expected to vary across these genetically related languages in predictable ways, arising from an interaction between the role of the nominalizer and independent differences in the grammars of the individual languages. In this chapter I look at some of that variation, focusing on languages for which the available material permits interesting comparison. Maintaining the order of presentation from the body of the dissertation, I address predicate nominalization first, in section 5.2. I turn to clausal nominalization in 5.3, and conclude in 5.4.
5.2 Predicate nominalization

I have analyzed Halkomelem predicate nominalization as a kind of relative clause formation in which the nominalizer is an oblique object clitic that functions like a relative pronoun. It merges initially as an NP complement of V, and then remerges above the predicate complex, providing a mechanism for getting around restrictions on extraction. Central and Northern Interior Salish languages have restrictions on what kind of constituents can be directly extracted, and utilize some form of nominalization in order to facilitate extraction of unlicensed arguments. The observation appears to be that if a language does not permit full relativization from a position, it may allow reduced relativization from that position. The variation appears to be largely a matter of how to characterize the licensing constraints that permit direct extraction, as well as the kinds of voice and agreement morphology that appear inside the nominalization. In this section I begin with a look at the kinds of arguments that require predicate nominalization as a precursor to extraction in Lilooet (5.2.1), which can be phrased on my account as constraints on where the nominalizer merges initially. This leads to a discussion of Salish languages that make use of a second nominalizer in the extraction of unregistered DPs (5.2.2). Halkomelem, like a number of other Salish languages, makes use of another nominalizer to extract true obliques – instruments and locations. Lushootseed and Bella Coola are two of those languages that make use of a different form, but with some interesting differences from Halkomelem. These differences also speak to variation is where the nominalizer merges initially. I follow this up with a discussion of predicate nominalization in Klallam, a Salish language with a robustly promotional passive (5.2.3). I show that the two processes interact in a way that is consistent with treating predicate nominalization as a kind of A'-movement distinct from the A-movement
that is presumably involved in the promotional passive.

5.2.1 Initial merge of the nominalizer

Halkomelem presents a fairly straightforward picture when it comes to the licensing of DPs: they must either be licensed by agreement morphology or by the oblique marker. DPs that are licensed by some agreement morphology can be directly extracted, while DPs that are not licensed by agreement cannot be directly extracted. Restricting the distribution of the nominalizer in Halkomelem predicate nominalization then, amounts to saying that it can only be merged in a position that is not indexed by agreement. The picture for Lillooet is similar, but not quite the same. Davis and Matthewson (2003) show that the straightforward mapping between agreement and extraction that can be maintained for Halkomelem does not hold in Lillooet. A brief review of the extraction facts will help show why.

Lillooet allows direct extraction of transitive and intransitive subjects, and of transitive objects, much like Halkomelem. There are differences in the agreement left behind, but no additional operations like predicate nominalization are required. Extraction of an intransitive subject, as shown in (1), does not involve any overt changes to morphology. However, Davis (2003) argues that (1a) and (1b) differ in that the argument position occupied by the DP subject in the former is a gap left by extraction in the latter.

1) Direct extraction of Lillooet intransitive subject

   a. Łiq ta=šmúlač=a
      arrive DET=woman=EXIS
      'The woman arrived.'
b. ta=[[ƛíq]=a šmúlač]
   DET=[[arrive]=EXIS  woman]
   'the woman who arrived'

(Lillooet; Davis (2010:5))

The extraction of a transitive object is signaled overtly in the form of subject agreement, provided the subject is 1st or 2nd person – rather than the indicative clitic seen in (2a), a transitive subject suffix is used (2b).

2) Direct extraction of Lillooet transitive object

a. ʔáčx-ən=ikan ta=šmúlač=a
    see-DIR=1SG.S DET=woman=EXIS
    'I saw the woman.'

b. ta=[[ʔáčx-ən-án]=a šmúlač]
   DET=[[see-DIR-1SG.ERG]=EXIS  woman]
   'the woman I saw'

(Lillooet; Davis (2010:5))

There are a few different ways to signal extraction of a transitive subject. Unlike Halkomelem, Lillooet can retain ergative agreement under A'-extraction in certain circumstances – when the subject is 3rd person and the object is 1st or 2nd (3), or when there is an overt DP object (4).

3) Transitive subject extraction, 3>1,2

a. ʔáčx-ən-č-aš ta=šmúlač=a
    see-DIR-1SG.3ERG DET=woman=EXIS
    'The woman saw me.'

b. ta=[[ʔáčx-ən-č-aš]=a šmúlač]
   DET=[[see-DIR-1SG.3ERG]=EXIS  woman]
   'the woman who saw me'

(Lillooet; Davis (2010:5))
4) Transitive subject extraction, overt DP object

\[
\begin{align*}
\text{ta}= & \left[\text{šmúłač}=a \quad [?\acute{a}\check{c}\text{-}\text{on-aš} \quad \text{ta}=\check{\text{sqáyx}}\text{ʷ}]=a]\right] \\
\text{DET}= & \left[\text{woman}=\text{EXIS} \quad [\text{see}=\text{DIR}\text{-}3\text{ERG} \quad \text{DET}=\text{man}=\text{EXIS}]\right]
\end{align*}
\]

i. 'the woman the man saw' (preferred)
ii. 'the woman who the saw the man' (possible in context)

(Lillooet; Davis (2010:6))

There are two strategies that involve the loss of subject agreement as well – use of the passive, and use of a special non-topical subject suffix which replaces all agreement morphology (5). This latter is the preferred strategy for subject extraction.

5) Transitive subject extraction – non-topical subject

\[
\begin{align*}
\text{ta}= & \left[\text{šmúłač}=a \quad [?\acute{a}\check{c}\text{-}\text{en-táli} \quad \text{ta}=\check{\text{sqáyx}}\text{ʷ}]=a]\right] \\
\text{DET}= & \left[\text{woman}=\text{EXIS} \quad [\text{see}=\text{TR}\text{-}3\text{NTS} \quad \text{DET}=\text{man}=\text{EXIS}]\right]
\end{align*}
\]

'the woman who saw the man'

(Lillooet; Davis (2010:7))

What the examples of extraction in (1-5) share is the lack of any additional morphosyntactic operations on the predicate, aside from the special agreement morphology. This exemplifies direct extraction.

There are positions from which direct extraction is impossible, though. As with Halkomelem, the themes of unergatives and of ditransitives formed with a plain transitivizer can only be extracted with the aid of predicate nominalization. Note that unlike in Halkomelem, unregistered DPs in Lillooet do not occur with an oblique marker.

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2 The corresponding string without an overt DP object can only be interpreted as an object-centered relative.

3 There are two main dialects of Lillooet – Upper/Fountain and Lower/Mount Currie. This strategy is restricted to Upper Lillooet.
6) Predicate nominalization: extraction of unergative theme

a. xʷúž=lkaxʷ=ha əlxít-xal kʷu=šmúłač
going.to=2SG.S=YNQ invite-ACT DET=woman
'Are you going to invite any women?'

b. ?i=[šmúłač=a əlxʷú]š-xlít-xal-šu]
DET.PL=[woman=EXIS [going.to nom-invite-ACT-2SG.POSS]]
'the women you are going to invite'

(Lillooet; Davis (2010:8))

7) Predicate nominalization: extraction of ditransitive theme

a. xʷúž=lk əû̂m-ən ta=škʷûkʷmi?t=a ta=šá̱yši?tən=a
going.to=1SG.S give-DIR DET=child=EXIS DET=toy=EXIS
'I'm going to give the child a toy.'

b. ta=[šá̱yši?tən=a əlxʷú]š-əû̂m-ən-an ta=škʷûkʷmi?t=a]
DET=[toy=EXIS [going.to nom-give-DIR-1SG.ERG⁴ DET=child=EXIS]]
'the toy I'm going to give the child'

(Lillooet; Davis (2010:8))

At this point, Lillooet extraction looks to be restricted in much the same way as Halkomelem. The DPs in (1-5) are all indexed by agreement morphology and can extract directly, while the DPs in (6) and (7) are not indexed by agreement and can only be extracted if the predicate is nominalized. However, themes of ditransitive predicates formed with -xít can be extracted directly, despite the fact that they are not indexed by agreement (Davis and Matthewson (2003), Davis (2010)). The relative clause is marked as such by the use of the transitive subject suffix, as in the case of object extraction shown in (2) above.

⁴ Lillooet obligatorily encodes the subject of transitive nominalized predicates with the ergative suffixes regardless of person, reserving possessive agreement for subjects of intransitive nominalized predicates. This is also the case in Thompson (Kroeber (1999:314)).
8) Direct extraction of -\textit{xit} ditransitive theme

\begin{itemize}
\item a. \(x^w\text{úž}=l\text{kan} \quad \text{náš-xit} \quad \text{ta}=\text{šk}^w\text{úk}^*\text{mi?=t=a} \quad \text{ta}=\text{šáýśi?=tən=a}\)
\text{going.to=1SG.S} \quad \text{go-IND} \quad \text{DET=child=EXIS} \quad \text{DET=toy=EXIS}

'I'm going to bring the child a toy.'

\item b. \(\text{ta=[śáýśi?=tən=a} \quad [x^w\text{úž} \quad \text{náš-xit-an} \quad \text{ta}=\text{šk}^w\text{úk}^*\text{mi?=t=a}]]\)
\(\text{DET=[toy=EXIS} \quad [\text{going.to} \quad \text{go-IND=1SG.ERG} \quad \text{DET=child=EXIS}]\]

'the toy I'm going to bring to the child'
\end{itemize}

(Lillooet; Davis (2010:8))

Data like those in (8) clearly show that morphological agreement is not the relevant factor in constraining direct extraction. Davis and Matthewson (2003) claim that it is abstract Case that governs extraction in Lillooet, and that the difference between \textit{xit} and the other transitivizers is that only the former is able to case-mark two internal arguments.

We have then a superficial difference between predicate nominalization in Halkomelem and Lillooet when it comes to the themes of ditransitives. Does this mean that the licensing conditions for the operation are fundamentally different between the two languages? I think a better area of the grammar to situate the contrast is in the relationship between Case and agreement. One of the conclusions reached by Davis and Matthewson (2003) is that there is only a one-way relationship between Case and agreement in Lillooet – Case constrains agreement, but the reverse is not true. If that relationship is bi-directional in Halkomelem though, themes that are not registered by agreement are also lacking Case. The obligatory presence of the oblique marker with all and only unregistered DPs in Halkomelem supports a bi-directional analysis of Case and agreement in the language. Thus, it can be argued that in both languages the nominalizer can only merge in a non-case marked position, and that the difference reduces to the inventory of Case marked positions. This conclusion is consistent with analyzing the nominalizer as an NP in this construction, in that only DPs are capable of bearing Case.
5.2.2 Systems with two nominalizers

As with unregistered themes, true obliques (DPs that are not subcategorized for by the predicate) cannot be directly extracted in Halkomelem. This is true across much of the family, and there are a variety of mechanisms employed to get around this constraint. For example, in a pattern that differs from the rest of the Central Salish languages, Squamish apparently relativizes locations with a nominalized clause introduced by $l$. That it is a nominalized clause and not a nominalized predicate can be seen in the location of possessive agreement, which attaches to $l$ rather than to the main predicate. Kroeber (1999:319) cites the following example from Kuipers (1967).

9) Squamish locative-centered relative clause

\[
\begin{align*}
\text{kʷəci=ʔeqiʔás} & \quad [\text{wa=l-s=?əs-nʔiʔ}\text{w?}] & \quad \text{kwəci=młášis} \\
\text{DET=barrel} & \quad [\text{PROG=l-3POSS=STV-be.in}] & \quad \text{DET=molasses}
\end{align*}
\]

'the barrel in which the molasses was'

(Squamish; Kuipers (1967:198))

Kroeber (1999:319) refers to $l$ as a nominalizer, given the presence of possessive agreement, but it is not clear that this is correct. As he himself acknowledges, the Squamish pattern strongly resembles the Lillooet pattern, where one type of locative-centered relative is also introduced by $l$, a complementizer also used in certain adverbial clauses. In Lillooet though, the subject of the relative clause is introduced by the same subjunctive inflection found in the adverbial clauses.
The other Northern Interior languages, Shushwap and Thompson, likewise make use of a clause with subjunctive clitics, though they appear to be introduced by determiners rather than a complementizer (cf. Kroeber (1997, 1999), Davis (2004)).

A number of languages, including the rest of the Central Salish languages, Bella Coola, and perhaps Tillamook, use a form of predicate nominalization in these cases. Its use in Halkomelem was introduced in 2.2.2.2 in the discussion of the oblique marker. This kind of nominalization, which I will refer to as *oblique nominalization*, is like the predicate nominalization that was explored in Chapter 3 in a number of respects – it forms a reduced relative clause; the agent in Spec-\(v\)-P surfaces as a possessive argument; registered internal arguments are unaffected; the nominalizer is attached to the predicate, rather than to any pre-predicate auxiliaries. However, there are two notable differences between extraction of oblique arguments and of true obliques (instruments/locations). The first of these is the identity of the extractee – where plain predicate nominalization affects a subcategorized argument of the verb, with oblique nominalization it is an adjunct that is extracted. The second is the form of the nominalizer – the nominalizer employed in Halkomelem for extraction of true obliques has a different shape than the one used for extraction of unregistered themes. The pairs of sentences in (12) show extraction of an instrument and location. In both cases, the instrumental nominalizer is

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5 A more common way of doing locative-centered relatives in Lillooet involves a nominalized clause (cf. Davis (2010)).
This is the nominalizer used to create lexical participant nominalizations that denote instruments, as can be seen in the following coinage.

11) Instrumental nominalizer

\( \text{šxʷ-Ɂim ɛx} \sim \text{walker (the piece of medical equipment)} \)

(Upriver)

12) Extraction of instrument

a. niʔ=čən ɬəxən-t tʰ sɬənə-s tʰ swiwləs

AUX=1 SG S medicate-TR.3O DET leg-3POSS DET man

[ʔə ɬə pɨʔpqiʔas]

[OBL DET snowberry.PL]

'I put the snowberries on the man's leg.' (lit. 'I medicated the man's leg with the snowberries.')

b. pɨʔpqiʔas ɬə niʔ nə-ɬ-ɬəxən-t kʰθə sɬənə-s

snowberry.PL DET AUX 1 SG.POSS-NOM.INST-medicate-TR.3O DET leg-3POSS

kʰθə swiwləs

DET man

'Snowberries are what I put on the man's leg.'

(Island)

13) Extraction of location

a. niʔ=čən si:l-t ɬə qʰaʔəp [ʔə kʰθə ciłəs]

AUX=1 SG S roll-TR.3O DET apple [OBL DET hill]

'I rolled an apple down the hill

b. niʔ nə-ɬ-si:l-t ɬə qʰaʔəp [kʰθə ciłəs]

AUX 1 SG.POSS-NOM.INST-roll-TR.3O DET apple [DET hill]

'I rolled an apple down the hill.' (lit. 'The hill is the location of my rolling the apple.')

(Island)

Following Kroebber (1999:317-318), I am assuming that the instrumental nominalizer is a

---

6 Kroebber (1999) uses the more neutral term nominalizer, at least in part so that he can include the Squamish ɬ in the list of nominalizers.

7 Comox also makes use of an instrumental nominalizer in these circumstances (Kroebber 1999:317). For language-internal reasons, the plain nominalizer is null, while the instrumental nominalizer surfaces as xw-.
single morpheme. However, this is not a universally held position. The Halkomelem instrumental nominalizer has been decomposed by some scholars into the plain nominalizer /s-/ and another prefix /xʷ-, identified tentatively by Suttles (2004:266) and by Gerdts (2010c:fn.12) as an oblique relater, and by Galloway (2010:918) as a prepositional prefix meaning 'towards' or 'for'. The surface form of the nominalizer as /š-/ is a result of a phonological process stated in (14).

14) /s/ → [š] / _ xʷ

The following Island example shows a /xʷ-/ prefix on a non-nominalized predicate. As with the examples discussed by Suttles, this predicate has a lexical suffix which has some oblique interpretation. Here it specifies the location of the slap.

15) Oblique relater

xʷ-łaqʷ-əs-t
OBL.REL-slap-face- TR.3O
'slap him/her on the face'

(Island; Gerdts (f.n.))

Galloway provides an example of /xʷ-/ that he treats as a prepositional prefix. In this example, a locative predicate (that has been pluralized and reduplicated) has been prefixed with /xʷ-, resulting in an idiomatic interpretation.

---

8 Island Halkomelem possesses /š/ as a separate phoneme, which has replaced /x/ in the phoneme inventory. Upriver lacks /š/ as a separate phoneme (Gerdt (1977), Galloway, (p.c.)). The process depicted in (13) is often masked by the fact that /xʷ-/ deletes unless followed by a glottal stop in the Island dialect.
Without seeing these predicates in sentences it is difficult to put a complete story together about the role the proposed /xʷ-/ might play in predicate nominalization. Neither source provides minimal pairs showing these words without the /xʷ-/ prefix either. Some speculation is possible nonetheless.

Assuming that the instrumental nominalizer is synchronically decomposable into the two prefixes identified above, the task of extracting true obliques would then be split into two components, one performed by each morpheme. If the syntax of the nominalizer is kept constant across both kinds of extraction (i.e. it merges as an oblique object and remerges at the edge of the thematic domain), the /xʷ-/ prefix would have to derive a predicate with an oblique object position filled by an instrument or location. The virtue of this approach is that it allows for a uniform analysis of the role of the nominalizer across both types of extraction. There is also a clear semantic relationship between the instrumental nominalizer and the morphemes identified by Galloway and Suttles – both make reference to instruments and locations.

While recognizing the plausibility of this decomposition, I adopt an atomic analysis of the instrumental nominalizer, in which /s-/ and /šxʷ-/ are stored as separate morphemes that merge in different locations in the clause. The plain nominalizer merges as an oblique object clitic, as proposed in Chapter 3, while the instrumental nominalizer merges as an oblique adjunct clitic.
On this analysis the difference between the two kinds of predicate nominalization is stipulated as in the merging instructions of the nominalizers – the plain nominalizer merges as the complement of V, while the instrumental nominalizer merges as an instrument or locative adjunct.\(^9\)\(^{10}\) The upshot is that no argument structure-changing mechanism needs to be ascribed to \(/xʷ^-/\). Once the instrumental nominalizer has merged as an adjunct, it undergoes relativization just like the plain nominalizer.

Kroeber's (1999) argument for treating the instrumental nominalizer as a single morpheme in several Central Salish languages comes from a reconstruction of a Proto-Central Salish form. Consider the instrumental nominalizer in Lushootseed, \(/daxʷ^-/\). It is used in (19) in a locative-centered relative clause.

---

\(^9\) This could be tailored to a cartographic approach by saying that the plain nominalizer merges as an argument of V, while the instrumental nominalizer merges as the specifier of whichever functional projection hosts the relevant 'adjunct'.

\(^{10}\) Recall from 2.2.2.2 that temporal adjuncts do not extract via predicate nominalization.
Rather than decomposing the instrumental nominalizer /dǝxʷ-/, Kroeber (1999:318) suggests that the nominalizer employed by Lushootseed here, along with the instrumental nominalizers in the other Central Salish languages, can be reconstructed to a single morpheme /*sǝxʷ-/. If this reconstruction is adopted, then it comes at the expense of the reconstruction proposed by Galloway and Suttles. I assume, regardless of the diachronic source, that the correct synchronic analysis of the instrumental nominalizer treats it as a single morpheme.

Given the existence of two different nominalizers in both Halkomelem and Lushootseed, it can be asked whether there are differences in how they are used for predicate nominalization, and what any differences might tell us about the nominalizers. In answer to the first question, there are some differences between the two languages’ deployment of the nominalizers. Halkomelem maintains a rigid partition between cases where the plain and oblique nominalizer can be used. Hess (1995) reports that it sometimes is used in contexts where the instrumental nominalizer would be expected. If the extracted instrument or location is marked as such somehow, the plain nominalizer can be used. In (21) the suffix /-ab/\(^{11}\) indicates that the bow is the means of accomplishing the event in the following relative clause, and in (22), the locative predicate establishes the relationship between the fire and the falling event in the relative clause.

\(^{11}\) H. Davis (p.c.) points out that this suffix has a likely source in the middle suffix. See Gerds and Hukari (1998, 2006c) for a description of cases of suffixing a noun with the middle marker in Halkomelem.
20) Use of plain nominalizer in instrument-centered relative

\[ \text{qčic-\text{-ab}} \ [t \ s-u-\text{-lu-uc-ud-s} \ ti?o? \ sqig^*ac] \]

bow-\text{inst} \ [\text{DET NOM-PFV-shoot-TR-3POSS} \ \text{DEM deer}] 'With a bow he shot this deer.'

(Lushootseed; Hess (1995:103))

21) Use of plain nominalizer in locative-centered relative

\[ \text{dx}^*?-\text{al}=t=\text{hўd} \ [t \ s-x^*i\text{t}ιl \ ?o=t=\text{biac}]^{12} \]

\[ \text{to-\text{at}=DET-fire} \ [\text{DET=NOM-fall} \ \text{OBL=DET=meat}] \]

'Into the fire fell the meat.'

(Lushootseed; Hess (1976:564))

These examples are unexpected if the plain nominalizer in Lushootseed is restricted to theme positions as in Halkomelem. However, Hess (1995:104) notes that the plain nominalizer can sometimes be used for true oblique extraction in normal speech, even without the additional material seen in (20) and (21). The converse cannot be said of the instrumental nominalizer though – it is only ever used in the context of true oblique extraction. The resulting picture is one in which the plain nominalizer in Lushootseed can be used in any unlicensed VP-internal position, while the instrumental nominalizer is the more restricted form.

Bella Coola also makes use of two separate nominalizers for extracting unlicensed DPs, but the division of labor differs from that seen in the Central Salish languages. While the choice of nominalizer in Halkomelem and Lushootseed is determined by a fairly straightforward syntactic diagnostic – argument vs. adjunct – the choice in Bella Coola appears to cross-cut this distinction, and is tied instead to the preposition used to introduce the DP. Instruments and oblique objects introduced by the the preposition \(x\) (oblique) are extracted by means of the plain

\[^{12}\text{In Lushootseed, the possessive argument of a nominalized predicate can optionally appear as an oblique, in the absence of possessive agreement. In this respect they partially resemble overt DP possessors, which are always treated as obliques, and are never indexed by possessive agreement.} \]
nominalizer /s-/ as seen in the following examples cited by Kroeber (1999).\textsuperscript{13}

22) Extraction of oblique object of intransitive

a. ḷyuk-c x=tx
talk-\textsc{1sg.s} \textsc{obl}=\textsc{dem}
'I am talking about him.'

b. ti=[s- ḷyuk-c]=tx
det=[\textsc{nom-talk-1sg.s}]=\textsc{dem}
'the one I am talking about' (Bella Coola; Nater (1984:102))

23) Extraction of oblique object of ditransitive

a. nap-i-s ci=xnas=cx x=tx
give-\textsc{3sg.o-3sg.s} det=\textsc{woman}=\textsc{dem} \textsc{obl}=\textsc{dem}
'She/he gave it to the woman.'

b. ti=[s-nap-i-s] ci=xnas=cx
DET=[\textsc{nom-give-3sg.o-3sg.s} det=\textsc{woman}=\textsc{dem}]
'what he gave to the woman' (Bella Coola; Nater (1984:102))

24) Extraction of instrument

ti=tqła ti=[s-tx-i-s] ti=ƛmsta=tx ti= qlsxs=x=tx
DET=\textsc{knife} det=[\textsc{nom-cut-3sg.o-3sg.s} det=\textsc{person}=\textsc{dem} det=\textsc{rope}=\textsc{dem}]
'the knife that the person cut the rope with' (Bella Coola; Davis and Saunders (1984:218))

In contrast, DPs introduced by the preposition ṣat (at) are extracted by means of the second nominalizer /s-/ . This set includes locations (25) but, as Kroeber (1999:324) points out, it also includes benefactives (26) and some oblique objects (27).

\textsuperscript{13} Kroeber (1999:327) notes that Thompson Salish and perhaps Shushwap, both from the Northern Interior branch of the family, also use the same nominalizer to extract unregistered themes and instruments. Locations are not extracted via PN in either of these languages.
25) Extraction of location

a. \( \text{kx-i-s} \) \( ?a-ti=?a\text{lu}\text{lu:s} \)
\( \text{see-3SG.o-3SG.s AT=DET=picture} \)
'He saw it in a picture.'

b. \( ?a\text{lu}\text{lu:s} \) \( t-i=[s\text{i-kx-i-s}] \)
\( \text{picture DET=[NOM-see-3SG.o-3SG.s]} \)
'It was a picture that he saw it in'

(Bella Coola; Nater (1984:106))

26) Extraction of benefactive

a. \( \text{ksnmak-c} \) \( ?a-t=x \)
\( \text{work-1SG.s AT=DEM} \)
'I work for him.'

b. \( t=x \) \( t-i=[s\text{i-ksnmak-c}] \)
\( \text{it's DET=[NOM-work-1SG.s]} \)
'It's him that I work for.'

(Bella Coola; Nater (1984:106))

27) Extraction of oblique object

a. \( ?a\text{lps-c} \) \( ?a-ti=k\text{kl}\text{l} \)
\( \text{eat-1SG.s AT=DET=herring} \)
'I am eating a herring.'

b. \( k\text{kl}\text{l} \) \( t-i=[s\text{i-}\text{a}\text{lps-c}] \)
\( \text{herring DET=[NOM-eat-1SG.s]} \)
'It is a herring I am eating.'

(Bella Coola; Nater (1984:106))

It is difficult to see how a syntactic or semantic account of nominalizer choice in Bella Coola could be constructed, especially when examples like (22) and (23) are compared to (27). It seems instead that the choice corresponds to a lexical property tied to the choice of preposition.

The generalization that emerges from these two sections is that even among languages for which predicate nominalization is a precursor to extracting otherwise unextractable DPs, there
are differences in the types of DPs that can be extracted this way. Looking to the Northern Interior Languages, for some it is only unregistered arguments (Lillooet), while others also permit instruments to be extracted via predicate nominalization as well (Thompson and Shushwap) (Kroeber (1999:328-329)). Among the Central Salish languages, it is common to have two nominalizers, the distribution of which corresponds straightforwardly to the argument–adjunct distinction. Bella Coola also has a predicate nominalization system with two nominalizers, but the distribution of its nominalizers is a lexical, rather than syntactic or semantic issue. The conclusion to be drawn from this variation is that nominalizers can only merge in unregistered positions, but that there is nothing inherent to the operation of predicate nominalization that determines which of these unregistered positions a given language will permit the nominalizer to merge into.

5.2.3 Voice and agreement

The core claim I advanced in Chapter 3 was that the nominalizer remerges after all argument-introducing heads and their arguments are merged in order to form a (reduced) relative clause. This means that the nominalized structure contains a VoiceP, at least when the predicate is ditransitive. Allowing this much structure proved necessary to accommodate passive morphology and ergative agreement inside the nominalized predicate. I have also treated predicate nominalization as a type of A'-movement, though not to the CP domain. Evidence for A-movement in Halkomelem is hard to come by – recall the discussion of the passive from 2.2.2.1 – but the prediction is that a promotional passive would not interfere with the relativization of the nominalizer, as they are different types of movement.

Montler (1996, 2010) provides some interesting data for Klallam (Central Salish), which
has both a promotional passive and predicate nominalization. I assume this passive to have the structure in (28a), where the object of the plain transitive predicate becomes the grammatical subject. This can be contrasted with the impersonal passive of Halkomelem in (28b).

(28)

a. VoiceP
   DP_obj Voice'
   Voice vP
   PASS ... DP_obj ...

b. VoiceP
   pro Voice'
   Voice vP
   PASS ... DP_obj ...

As with Halkomelem, when a Klallam predicate is ditransitive, the applied object, rather than the theme, triggers object agreement (29a). The promotional passivization promotes the applied object to grammatical subject, while leaving the unregistered theme inside VP (29b). The theme in the following two sentences is pro.

(29) Klallam passive ditransitive

a. ?əə-(t)-c
   cn
give-(TR)-2SG.O 1SG.S
'I give (it) to you.'

b. ?əə-č-t-əŋ əŋ cxʷ ?a? cə ń-cat
   give-TR-PASS 2SG.S OBL DET 2SG.POSS-father
'You were given it by your father.'

(Klallam; Montler (1996:259))

Ditransitive predicates can be nominalized, which, as in Halkomelem, results in a new predicate whose subject is interpreted as the theme of the nominalized predicate. If that argument is 1st or 2nd person and the nominalized predicate is in an indicative clause, it will by indexed by an indicative subject clitic. As expected with nominalized ditransitive predicates, the agent is
indexed by possessive agreement and the applied object is unaffected. In the example in (30), the 1\textsuperscript{st} person agent surfaces as a possessive argument, the 2\textsuperscript{nd} person theme surfaces as grammatical subject, and the DP goal is still a direct object.

30) Klallam nominalized ditransitive

\begin{verbatim}
1SG.POSS-NOM-give-TR FUT 2SG.S DET 2SG.POSS-mother
\end{verbatim}

'I'll give you to your mother.' (lit. 'You will be my giving to your mother.')

(Klallam; Montler (1996:259))

Montler (1996) shows that the passive example in (29b) above can feed predicate nominalization in the following way. The subject of the nominalized predicate is interpreted as the theme of the underlying predicate, while the argument promoted by the passive is indexed by possessive agreement.

31) Klallam nominalized passive ditransitive

\begin{verbatim}
1SG.POSS-NOM-give-TR PASS 2SG.S OBL DET 2SG.POSS-father
\end{verbatim}

'Your father gave you to me.'\footnote{A literal translation of this sentence would be extremely cumbersome, if not outright ungrammatical.}

(Klallam; Montler (1996:259))

Montler (1996, 2010) actually presents predicate nominalization as a kind of passive, essentially adopting a Voice analysis. His analysis of predicate nominalization in (31) calls for first performing the standard promotional passive, which would demote the agent to oblique, and promote the applied object to subject. This is followed by a second A-movement, promoting the theme to subject, and a second demotion, this time of the promoted applied object to possessor. This is shown in (32).
While I do not have the data that would present the strongest arguments for extending my relativization analysis to Klallam – use of an embedded passive inside the nominalized predicate – I would nonetheless suggest that the facts in this language are expected on my analysis.

Consider again the Halkomelem nominalized passive. There is no possessive agreement when the embedded form of the passive is used, because, as I have assumed, the Halkomelem passive is non-promotional. Thus, the passive in this language *bleeds* that portion of predicate nominalization responsible for the possessive argument, establishing a relationship between the two operations in Halkomelem.

Returning to Klallam, which does have a promotional passive, the presence of possessive agreement is expected. Passivization, an A-movement, would apply first, moving the applied object up to Spec-Voicelp. Assuming the licensing head F tentatively proposed in 3.3.3, predicate nominalization would produce the following structure.

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15 Though Gerdts and Hukari (1998) show that for some speakers, in certain embedded clauses, the passive object is 'doubled' by the appropriate subject agreement, suggesting a possible move towards a promotional passive (cf. Ch. 4, fn.6). H. Davis (p.c.) also suggests that Halkomelem is in a state of flux, between the impersonal passive of Proto-Salish and an innovative promotional passive.
The existence of this kind of structure is predicted when a relativization account of predicate nominalization is extended to a language with a fully promotional passive, and the order of operations – first passivization, then nominalization – reflects the difference between A and A'-movement.

5.3 **Clausal nominalization**

In Chapter 4, I argued that Halkomelem clausal nominalization involves merging the nominalizer in the C domain as a defective complementizer, taking a full IP for its complement. Halkomelem complementizers are responsible for clause-typing, and the nominalizer was shown to interact with this system, functioning as an underspecified Force head. I assume that this particular use of the nominalizer does not reflect some deep property of the morpheme or of clausal nominalization, but rather that it represents a language-specific development. Kroeber (1999:100) notes that, with the exception of Tillamook, every Salish language possesses clausal nominalization “… at least vestigially.” Despite being clearly related constructions, there is some variation in nominalized clauses across languages, both in terms of formal properties and distribution. Assuming clausal nominalization in the other Salish languages also involves a full
IP, this suggests the following general template for clausal nominalization.

34) \[ \text{XP} \]
    \[ \text{Nom} \quad \text{IP} \]

The identity of the resulting constituent is left undetermined in (35), to accommodate the variation within the family – the nominalizer can be expected to play some role in the C domain, though the specific role will depend upon language-particular factors.

In this section, I offer a brief discussion of these clauses in three languages which provide illustrations of just the sort of variation predicted on my analysis. I look first to Lillooet, where I argue for a split CP analysis similar to the one I have proposed for Halkomelem. Based on observations from Davis and Matthewson (1996) and Arregui and Matthewson (2001), I argue that the nominalizer is best analyzed as a \( C_{\text{fin}} \) head while retaining certain, primarily morphological, nominal features. As with Halkomelem, the D-complementizer is treated as a higher C head, though here I identify it with \( C_{\text{force}} \). This is followed by a review of Bella Coola, where the nominalizer is only recognizable as such in virtue of its cognates across the family. It has essentially lost all selectional properties, and has become little more than a sign of embedding. Lastly, I look at nominalized clauses in Lushootseed, which, unlike elsewhere in the family, appear to be recategorized as a nominal constituent, again at the clausal level.

### 5.3.1 Nominalizer as \( C_{\text{fin}} \) – Lillooet

Davis and Matthewson (1996) discuss Lillooet nominalized clauses in the context of subordinate clauses in the language, while Arregui and Matthewson (2001) do so in the context of adverbial modification. While the analyses offered in these papers differ in certain respects,
there is a common thread between them – the nominalizer is tied to finiteness. Recall from Chapter 4 that Lillooet possesses what is arguably an infinitival construction (Davis and Matthewson 1996, Kroeber 1999:223). The embedded clause in this construction obligatorily lacks both the nominalizer and subject agreement.

35) Lillooet infinitive

Lillooet infinitive

\[
\text{zwát-ən} \quad [k^*u=wá? \quad məč-xál]
\]

'\text{'I don't know how to write.'} 

(Lillooet, Davis and Matthewson (1996))

This generalization can be accommodated in the model I have proposed here by treating the Lillooet nominalizer as the head of FinP, capable of selecting a finite Infl.\(^{16}\)

36) The syntax of the Lillooet clausal nominalizer

\[
\text{FinP} \\
\text{Fin}^0 \quad \text{IP} \\
\text{s-} \\
\text{ [+fin]} \quad \text{I}^0 \\n\text{ [+fin]}
\]

This analysis captures the fact that the nominalizer is consistent with tensed interpretations, but is not associated with any particular temporal interpretation, much like English \textit{that}. It is thus related to the structure in (34), in that the nominalizer has grammaticalized as a low C head that selects as finite IP complement.

Like Halkomelem, Lillooet nominalized clauses are typically, though not universally, introduced by one of two lexical items which are, by hypothesis, D-complementizers – \textit{k(u)}- and

\(^{16}\text{The authors cited in this section use the label TP, rather than IP. I continue to use IP though, for consistency.}\)
$t(i)$- … -a. They are clearly related to two determiners, the non-assertion of existence determiner $ku$ and one of the assertion of existence determiners $ti -$ -a, though the nature of this relationship is not obvious. The determiners of Lillooet are provided in the following table, as organized by Matthewson (1996). The determiners that the complementizers are related to are in bold.

<table>
<thead>
<tr>
<th></th>
<th>Assertion of existence</th>
<th>Non-assertion of existence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(X … a)</td>
<td></td>
</tr>
<tr>
<td>Present</td>
<td>ti … a</td>
<td>ni … a</td>
</tr>
<tr>
<td>Absent</td>
<td></td>
<td>kʷu … a</td>
</tr>
<tr>
<td>Remote</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singular</td>
<td>ti … a</td>
<td>ni … a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kʷu … a</td>
</tr>
<tr>
<td>Plural</td>
<td>i … a</td>
<td>nel … a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kʷel … a</td>
</tr>
<tr>
<td>Collective</td>
<td>ki … a</td>
<td></td>
</tr>
</tbody>
</table>

Table 11. Lillooet determiners (from Matthewson 1996)

Davis and Matthewson (1996) and Arregui and Matthewson (2001) argue explicitly that these forms are determiners. Davis and Matthewson furnish phonological, syntactic, and semantic arguments for this unified analysis. They argue that the apparent differences in form between the complementizers and the corresponding determiners can be accounted for by regular phonological processes in the language, involving obligatory reduction of vowels when followed by a clitic. Syntactically, they show that, as is the case with DPs, the focus predicate $nil$ must be used to focus a nominalized clause. This differentiates nominalized clauses from the other embedded clause type, the subjunctive clause, which does not require the focus predicate.

17 Strictly speaking, Davis and Matthewson (1996) do not distinguish between D-elements that take nominal and verbal complements, arguing that D and I are non-contrastive in Lillooet. Nominalized clauses are distinguished from subjunctive and indicative clauses on this account, in that only the latter constitute full CPs. Note that this account differs from the one I proposed in 2.3 concerning the relationship between lexical and functional categories. I assume that determiners must select a nominal complement, while Infl can select complements of any category. On the analysis presented in Davis and Matthewson (1996), D/I heads are unable to distinguish between verbal and nominal complements, essentially allowing determiners to directly select VP complements.
Finally, Davis and Matthewson propose that the distribution of \( k^u \) and \( ti \ldots -a \) in nominalized clauses is conditioned by the same semantic considerations as that of their counterparts in DPs. When nominalized clauses are complements to negation and intensional verbs, they are introduced by \( k^u \), while nominalized clauses in factive environments are typically introduced by \( ti \ldots -a \).

37) Nominalized clause under negation – \( ku \)

\[
\begin{align*}
\text{xʷʔaż} & \quad [k^*-n=\dot{s}=ƛiq] \\
\text{NEG} & \quad [\text{COMP}=1\text{SG.POSS}=\text{NOM}=\text{arrive}] \\
'I \text{ did not arrive.}'
\end{align*}
\]

(Lillooet; van Eijk (1981:39))

38) Nominalized clause under intensional predicate – \( ku \)

\[
\begin{align*}
\text{waʔ} \quad \text{xáƛ-min-om} & \quad [k^*=\dot{s}=núk^*-\text{an-či-m}] \\
\text{IMPF} \quad \text{hard-APPL-1PL.S} & \quad [\text{COMP}=\text{NOM}=\text{help-TR-2SG.O-1PL.S}] \\
'We \text{ want to help you.}'
\end{align*}
\]

(Lillooet; van Eijk (1981:45))

39) Nominalized clause under factive predicate – \( ti \ldots -a \)

\[
\begin{align*}
\text{ʔáma} & \quad [t=\dot{s}=ƛiq=\dot{s}w=a] \\
\text{good} & \quad [\text{COMP}=\text{NOM}=\text{arrive}=2\text{SG.POSS}=\text{EXIS}] \\
'It \text{ is good that you came.' (lit. 'Your coming is good.')}
\end{align*}
\]

(Lillooet; van Eijk (1985:271))

As far as it goes, this is consistent with treating the complementizers and determiners as non-distinct – the event denoted by a clausal complement of negation or an intensional verb are not asserted to exist, while the events denoted by factive nominalized clauses are asserted to exist.\(^{18}\)

Arregui and Matthewson motivate the determiner analysis by proposing that the nominalizer turns a proposition into the right sort of semantic object to be selected by a

\(^{18}\) Kroeger (1999:206) recasts this argument in terms of presupposition of the truth of the embedded proposition.
determiner. The role of the nominalizer in their account is to turn a proposition, which denotes a
set of situations, into a set of minimal situations. These minimal situations are extensionally
equivalent to events, which are a kind of individual in the semantic system they adopt. Because
the nominalized IP now denotes a kind of individual, it is now semantically appropriate for
selection by a determiner.

Kroeber (1999), on the other hand, treats these as complementizers for a few reasons.
First, the semantic contrast between $k^w$ and $ti$-$a$ is not the same in nominalized clauses as that in
DPs. Kroeber specifically points to the use of $k(u)$- in '… complements of [verbs of] cognition
and [predicates] of manner and frequency.' (ibid, 206)

40) Cognition predicate – $ku$

\[
\begin{array}{l}
  wáʔ=łkan \quad zəwát-ən \quad [k^w=š=ƛiq=š] \\
  \text{IMPF}=1\text{SG.S} \quad \text{know-TR} \quad [\text{COMP}=\text{NOM}=\text{arrive}=3\text{POSS}] \\
  \text{'I know that he came.'} \\
  \text{(Lillooet; Van Eijk (1997:233))}
\end{array}
\]

41) Manner predicate – $ku$

\[
\begin{array}{l}
  ũxʷəm \quad [k^w=š=čixʷ=š \quad ?úxʷal] \\
  \text{fast} \quad [\text{COMP}=\text{NOM}=\text{arrive}=3\text{POSS} \quad \text{reach.home}] \\
  \text{'She arrived home fast.'} \\
  \text{(Lillooet; Van Eijk (1997:234))}
\end{array}
\]

42) Frequency predicate – $ku$

\[
\begin{array}{l}
  kałáš \quad [k^w=š=ƛáyləx=š] \\
  \text{three} \quad [\text{COMP}=\text{NOM}=\text{jump}=3\text{POSS}] \\
  \text{'He jumped three times.'} \\
  \text{(Lillooet; Van Eijk (1997:133))}
\end{array}
\]

Particularly with the latter two examples, the nominalized clause refers to an event that took
place, or, put differently, an event whose existence is asserted. If Lillooet nominalized clauses
were truly introduced by determiners, the expectation should be that these would be introduced by \textit{ti} \ldots \textit{-a}, but this is not borne out.

Second, despite their potentially appropriate semantics, no other determiners are used to introduce nominalized clauses. For instance, it is not clear why a nominalized clause denoting an event that is not directly perceived but is nonetheless asserted to have taken place could not be introduced by the remote or absent determiners. Nor is it obvious, as Kroeber points out, why nominalized clauses denoting multiple events can't be introduced by a plural determiner. Lastly, and most significantly, as with Halkomelem nominalized clauses, the licensing restrictions for DPs and nominalized clauses differ. Nominalized clauses introduced by \textit{t(\textit{i})- \ldots -a} are used as rationale clauses, in which case they are clearly not licensed by any case or agreement assigning head, and yet they do not require an oblique marker.\textsuperscript{19} On the assumption that this restriction is encoded on the lexical items that head these constituents, say, in the form of a case feature, this necessarily means that the heads are different – i.e. Lillooet nominalized clauses are headed by complementizers, not determiners.

If the nominalizer is, as I claim, a \textit{C_{fin}} head, and the D elements are a higher complementizer,\textsuperscript{20} clausal nominalization results in the following structure for the left periphery in Lillooet.

\textsuperscript{19} H. Davis (p.c.) points out that there could be a null form of \textit{nił}, a particle that is optional in these constructions, and is used in clefting and focus constructions. Assuming an argument could be made for its presence, it could then also be argued that the null and overt forms of \textit{nił} serve to license the nominalized clause. To my knowledge though, these arguments have not yet been made.

\textsuperscript{20} It is not obvious to me what sort of more specific label would be appropriate for this projection. Certainly not SubP, which I argued for in Halkomelem. The distribution of the two D-complementizers in Lillooet suggests that they have more content than a pure subordinator would. Keeping with Rizzi's system, it might make sense to propose ForceP, but it is not clear that the contrast between the two forms has anything to do with illocutionary force. In the absence of any real arguments, I leave this part of the analysis unspecified.
This structure is consistent with the Lillooet facts as I understand them, and makes sense within the system I have proposed for Halkomelem.

5.3.2 Nominalizer as a subordinating C – Bella Coola

In both Lillooet and Halkomelem, the nominalizer functions as a complementizer while retaining some of its nominal character, in the form of possessive subject agreement and higher complementizers. The situation is different in Bella Coola, where the nominalizer has become the default marker of subordination, with nothing particularly nominal about it. Again, the relationship to the structure in (34) is a natural one, reflecting a possible reanalysis of a head selecting an IP in subordinating contexts. I propose in this section that Bella Coola's nominalizer is best analyzed as a plain subordinator.

Bella Coola does not distinguish matrix from embedded clauses in terms of inflection, but instead uses the same paradigms in both contexts. A subset of embedded clauses appears not to require any overt marker of subordination. Kroeber (1999:128) reports that among the embedded clauses of Bella Coola, 'conditional clauses, negative constructions, and some perception clauses are the only notionally-distinguishable clause types that lack the nominalizer prefix s-.' The first two often (but not always) contain a proclitic *ka-*, which Kroeber shows not to be a marker of subordination, based on its presence in an non-embedded clause. Conditional clauses are
sometimes introduced by *kamal-* ('if'), which Kroeber (1999:128) treats as a subordinating conjunction. Negative constructions appear to be at the beginning of a transition from a bi-clausal structure to a mono-clausal one (Davis (2005)). If it is bi-clausal, the subordinate clause is bare, lacking an overt complementizer. Clausal complements of immediate perception predicates are often treated as relative clauses (Kroeber (1999:129)).

For everything else though, there is the nominalizer. This includes adjuncts, such as purpose/rationale clauses and temporal adjuncts, and arguments, such as desiderative complements and complements of predicates of cognition and evaluation. The only indication that these clauses are embedded is the nominalizer. Kroeber (1999:133-134) cites the following examples.

44) **Purpose/rationale clause**

\[
\text{\`{}ap-s=k^w=ma=k^w u} \quad \text{ta=sniniq} \quad \text{s-ka-nuklm-s=tu=\text{'}}
\]

\[
\text{go-3SG.S=QUOT=DUB=USIT \quad \text{DET=sniniq'} \quad \text{NOM-IRR-cross-3SG.S=CONF=PERF}}
\]

\[
\left[s-ka-a\text{-}l=aw\text{-}l-i-s=tu=\text{'}} \quad \text{\`{}a\text{=}t\text{'}w}
\]

\[
\left[\text{NOM-IRR-follow-3SG.O-3SG.S=CONF=PERF} \quad \text{AT=then}
\right]
\]

'The *sniniq* [type of monster] would go across to follow him again then.'

(Bella Coola; Davis and Saunders (1980:1.123))

45) **Temporal adjunct**

\[
\text{\`{}ustx^w-aw} \quad \text{?ul=a=sl=aw} \quad \left[s-kl-s \quad \text{ti=sn\text{'}}=\text{tayx}\right]
\]

\[
\text{enter-3PL.S \quad TO=DET=house-3PL.POSS} \quad \left[\text{NOM-set-3SG.S} \quad \text{DET=sun=DEM}\right]
\]

'They go into their house when the sun sets.'

(Bella Coola; Nater (1984:104))

46) **Desiderative predicate**

\[
\text{?anayk-aw} \quad \left[s-ka-lip-ayx-s\right]
\]

\[
\text{want-3PL.S} \quad \left[\text{NOM-IRR-turn-NC.RESUL-3SG.S}\right]
\]

'They wanted to get her back.'

(Bella Coola; Davis and Saunders (1980:10.217))
47) Cognition predicate

\[ \text{q̯axʷ=k} \quad \text{ʷ=} \quad \text{ʔaλnap-i-s} \quad \text{ʔilʔayl} \]
\[ \text{not=QUOT=PERF} \quad \text{know-3SG,O-3SG.S} \quad \text{THAT,ONE} \]
\[ \text{[s-kaʔaciw-lt-nix-i-m} \quad \text{x=ta=snx=t̥x]} \]
\[ \text{[NOM-IRR-belly-child-NC-3SG.O-PASS} \quad \text{OBL=DET=sun=DEM]} \]

'She didn't know that she would be made pregnant by the sun.'

(Bella Coola; Davis and Saunders (1980:9.115))

48) Evaluation predicate

\[ \text{way-lit-s=c} \quad \text{ta-stalmxtn-aw=t̥x} \quad \text{s-ƛap-aw=én]} \]
\[ \text{okay-say-3SG.S=PERF} \quad \text{DET-chief-3PL.POSS=DEM} \quad \text{[NOM-go-3PL.S=IMPF]} \]
\[ \text{ʔał=t̥xʷ} \quad \text{s-nax-liwa-naw=c} \quad \text{AT=then} \quad \text{NOM-ready-SIM-3PL.S=PERF} \]

'The chief approved their going then when they were ready.'

(Bella Coola; Davis and Saunders (1980:16.104))

Embedded wh-questions and jussive complements are also introduced by the nominalizer. This is a point of contrast with Halkomelem, where subjunctive clauses typically fill this role.

49) Embedded wh-question

\[ \text{q̯axʷ} \quad \text{ʔaλnap-i-s} \quad \text{[s-ka-stam-s} \quad \text{[s-ka-čkta-s]]} \]
\[ \text{not} \quad \text{know-3SG,O-3SG.S} \quad \text{[NOM-IRR-what-3SG.S} \quad \text{[NOM-IRR-do-3SG.S]]} \]

'He did not know what to do.'

(Bella Coola; Davis and Saunders (1980:10.164))

50) Jussive predicate

\[ \text{cut-m-ti-m} \quad \text{[s-ka-nu-mac-ik-i-m} \quad \text{ta=łalas=t̥x]} \]
\[ \text{tell-INDIR-3PL.O-PASS} \quad \text{[NOM-IRR-in-line.up-inside-3SG.O-PASS} \quad \text{DET=boat=DEM]} \]

'They were told to put floorboards in the boat.'

(Bella Coola; Davis and Saunders (1980:10.217))

The use of nominalized clauses across all these contexts can only be the result of the loss of contrastive syntactic and semantic features on the nominalizer.
Kroeber does point out the existence of a few types of ‘… semantically restricted and apparently textually infrequent …’ (ibid. 130) nominalized clauses that are additionally marked as subordinate by an article. The overall picture though, is of a language that has simplified the morphosyntax of its system of clause-linkage. With the exception of the conditional kamal-, there are no dedicated clause-typing morphemes. Nor are there complementizers that are sensitive to finiteness or polarity. And with the exception of the obligatoriness of 3rd person subject agreement in embedded contexts, there are no inflectional grounds for distinguishing clause types. In this context, it is not surprising that Bella Coola's nominalizer has less formal content and wider distribution than the nominalizers of Halkomelem or Lillooet.

5.3.3 Nominalizer as a nominalizer? – Lushootseed

Finally, there is the possibility that some language will take the configuration in (34) as a basis for 'Abneyan' nominalization. Lushootseed appears to be the best candidate among the Salish languages for such an analysis. The principle arguments against treating Halkomelem nominalized clauses as DPs come from their distribution and licensing restrictions, and from their semantics. Specifically, unlike DPs, Halkomelem nominalized clauses are able to appear in unlicensed positions (as oblique themes and adjuncts) without an oblique marker, cannot be the subject of a transitive predicate, and do not use the full range of articles available to ordinary DPs as complementizers, even where they may be semantically appropriate. In contrast, the nominalized clauses of Lushootseed are introduced by a wider range of D-elements, essentially subject to semantic compatibility. Kroeber presents the contrast as having to do with presupposition – the truth of those nominalized clauses introduced by the non-referential

---

21 This is of course only obvious in the Island dialect, where the oblique marker is fully retained. It is only optionally present in Downriver and completely lost Upriver, so the argument rests on the Island data.
determiner *kwi'* is not presupposed, while nominalized clauses introduced by a referential
determiner are ‘… presupposed as true at or before the speech event time.' (Kroeber 1999:182)

51) Lushootseed nominalized clause with *kʷi*

\[
d-s-xāł \quad [k^{*}i=d-(s)-šu-du-bicid] \\
1SG.POSS-NOM-desire \quad [DET=1SG.POSS-NOM-see-TR-2SG.O] \\
'I want to see you.' \\
\]

(Lushootseed; Hess (1976:581))

52) Lushootseed nominalized clause with *te*

\[
dxʷ-yəq-qíd-əxʷ \quad [tə=s-u-gʷádgʷəd-s] \\
PREF-loud-head-NEW \quad [DET=NOM-PFV-talk-3POSS] \\
'She's talking loudly now.' \\
\]

(Lushootseed; Hess (1976:157))

53) Lushootseed nominalized clause with *tiʔtł*

\[
h̓áʔl \quad [tiʔtł=gʷ-əd-s-əs-hikʷ-tu-b] \quad \?ə=t(i)=ad-ʔišəd] \\
good \quad [DET=IRR-2SG.POSS-NOM-STV-big-TR-PASS] \quad OBL=DET=2SG.POSS-people \\
'Your people will have great respect for you.' \\
\]

(Lushootseed; Hess (1976:192))

That this is so means that the D-elements introducing nominalized clauses in Lushootseed might
not have been bleached of their semantic content. Along with the retention of semantic properties
of determiners, the D-elements in question retain the formal licensing properties of determiners
as well – nominalized clauses that are not licensed by agreement must occur with the oblique
marker or another preposition.

54) Oblique nominalized clause with oblique marker

\[
sq̓əyíq̓əɬ=čəd \quad [ʔə=k^{*}i=d-s-xāł-alikʷ] \\
ignorant=1SG.S \quad [OBL=DET=1SG.POSS-NOM-write-INTR] \\
'I don't know how to write.' \\
\]

(Lushootseed; Hess (1976:384))
Recall from 4.3.2 that one of the arguments for treating the D-elements that introduce Halkomelem nominalized clauses as complementizers rather than determiners came from the lack of oblique marking in contexts where such would be required by a DP. Here, the argument is simply reversed – the fact that Lushootseed nominalized clauses do require oblique marking in contexts where a normal DP would can be taken as evidence for treating the nominalized clause as a DP.

The inflectional behavior of Lushootseed nominalized clauses also mirrors that of DPs – the grammatical subject of the clause is treated essentially as a possessor, with no regard to the transitivity of the predicate. That they are obligatory, and obligatorily interpreted as agents, sets them apart from true possessors. However, the obligatory nature can be seen as a consequence of the presence of an IP, and the agentive interpretation to the fact that it is an argument of \( v \). Once these explanations are taken into account, the formal properties of the subject of a Lushootseed nominalized clause are the same as those of true possessors. Unlike Lilooet, where transitive subjects are indexed by transitive subject suffixes, or even Halkomelem, where only 3rd person transitive subjects are optionally indexed by ergative agreement, the subjects of Lushootseed nominalized clauses can only be indexed by possessive agreement.\(^\text{22}\) Given the independent

\(^{22}\) H. Davis (p.c.) points out that this is a consequence of the general loss of transitive subject suffix inflection across all paradigms, and so should not necessarily be attributed to the nominalizer itself. It is not clear to me though why it can't be the case that the diachronic loss of an inflectional paradigm can't result in separate synchronic analyses of the resulting paradigms. In this case, where the transitive suffixes are all lost and the remaining paradigm is entirely nominal, it seems reasonable to assume that subject licensing is now accomplished by the nominal FP shown in (56).
development by which all subjects in Lushootseed indicative clauses are indexed by clitics, including 3rd person transitive subjects, a plausible explanation of nominalized clause subject agreement might be to nominalize the agreeing head, which by hypothesis is Infl. If something like Abney's (1987) or Schueler's (2005) analysis of category-changing nominalization is correct, this would entail merging the nominalizer with IP and yielding a nominal functional projection associated with licensing. I have adopted the use of FP as a label for the projection that licenses possessors (cf. 2.2.5.3). Thus, something like the following structure can be posited for Lushootseed nominalized clauses.

56) Lushootseed nominalized clause

```
   DP
   |
   D  FP
   |
   F  IP
   |
   s-
```

Kroeber (1999:116) points out a further similarity between the subjects of nominalized clauses and DP possessors inside NPs, which already appeared in the discussion of Lushootseed predicate nominalization above (fn.12). True possessors are only able to appear as obliques, and are not indexed by possessive agreement. DP subjects of nominalized clauses, like DP agents in nominalized predicates, are able to surface as direct arguments indexed by agreement, but they are also able to take the form of an oblique possessor.
57) Oblique nominalized clause subject

\[
\begin{align*}
\text{ʔəs-ʔəx} \text{id} & \quad [\text{k}^{*}\text{i}=\text{s-h\acute{a}ac}] \\
\text{STV-how} & \quad [\text{DET}=\text{NOM-long}] \\
'\text{How long is that hunting canoe?}'
\end{align*}
\]

(Lushootseed; Hess (1976:176))

Depending on the analysis of DP possessors, relative to the licensing head F, this may necessitate some flexibility in the analysis proposed in (56).

There are some respects in which Lushootseed nominalized clauses do not display DP syntax. For example, like their counterparts across the language family, they cannot be used as the subjects of transitive predicates. This can certainly be used as an argument against treating these clauses as DPs. It should be pointed out though, that Lushootseed generally imposes restrictions on the subjects of transitive predicates. Kroeber (1999:40) notes that overt 3rd person subjects of transitives are only possible when the object is 1st or 2nd person. While it is still possible that this distributional gap reflects a non-DP restriction, it is clear that there are pressures that DPs are susceptible to as well, and that these could be relevant.

There are also apparently rare cases where there appears to be a mismatch between the semantics of the determiner and the role of the nominalized clause in the matrix clause, or where either or both the determiner and oblique marker do not surface. The general picture though, suggests that Lushootseed nominalized clauses are best analyzed as DPs. Their inability to function as transitive subjects still needs explanation, but there are more reasons than category label for such prohibitions. Other tests, such as coordination with ordinary DPs, or selection by demonstratives, have not been conducted, to the best of my knowledge. The clear prediction on this account though is that nominalized clauses should pattern with DPs in these cases as well.

Kroeber (1999:187) suggests that the Lushootseed pattern of allowing multiple
determiners to function as complementizers, subject to semantic plausibility, is reconstructible to Proto-Central Salish, along with the need for the oblique marker or some preposition when the nominalized clause is used as an oblique. If this is true, it may reflect a time where nominalized clauses in (at least) Central Salish languages were analyzed as DPs across the board, only to gradually lose their nominal character in most languages. The structure in (34) provides a natural template for the attested kinds of reanalysis, where the nominalizer that merges with IP is eventually treated as a kind of complementizer. The exact consequences of this reanalysis within a given language would presumably be constrained by other language-specific factors, concerning the organization of the clausal periphery and of the inflectional features of subject agreement.

5.4 Conclusion

In this chapter I have looked to some of the languages of the Salish family to explore the kinds of variation that my analyses of predicate nominalization and clausal nominalization should admit in related languages. For Halkomelem predicate nominalization, the core components of my analysis are that the plain nominalizer is lexically specified as an oblique object clitic NP, that it remerges above VoiceP to create a reduced relative clause, and that it then projects to create an NP. An apparent distinction between Lillooet and Halkomelem predicate nominalization was shown to reduce to a difference in the relationship between case and agreement in the two languages. Some real variation exists though, when Halkomelem and Lillooet are compared to languages like Thompson and Bella Coola. For the former two, the plain nominalizer is only permitted in theme positions, while the latter two use the same form for
extraction of oblique themes and instruments. Here it seems that the nominalizer cannot be lexically specified as a theme, and that formal licensing is the real constraint. This is perhaps even true of Lushootseed, which, like Halkomelem, possesses a special form for extraction of true obliques. However, unlike Halkomelem, Lushootseed allows the plain nominalizer to be used even when a true oblique is being extracted. The kind of variation on display here is consistent with the notion that the initial merge of the nominalizer is at least partially arbitrary. Every instance involves merging the nominalizer in place of a non-case-marked constituent, something that can be attributed to the status of the nominalizer as an NP. But languages are free to specify just which non-case-marked constituents the nominalizer can merge in place of. This is a welcome finding, given that there is nothing in my account of predicate nominalization from which restriction to a given position would necessarily follow.

As for clausal nominalization, I analyzed the Halkomelem nominalizer as a defective complementizer, incapable of expressing its own force distinctions and hence dependent on another clause. This can be seen as a consequence of a process of grammaticalization taking the structure in (34), reproduced below, as a starting point.

\[
58) \quad \begin{array}{c}
\text{XP} \\
\text{Nom} \quad \text{IP}
\end{array}
\]

Taking three separate languages as case-studies, I showed first how this configuration gave rise to a split-CP structure in Lillooet, similar in many respects to that in Halkomelem. The languages differ though, in that the nominalizer is sensitive to finiteness distinctions only in Lillooet. I proposed to capture this fact by treating the nominalizer as a \(C_{\text{fin}}\) head in Lillooet, as opposed to a \(C_{\text{force}}\) head in Halkomelem. I showed next that the configuration in (58) can lead to a reanalysis of
the nominalizer as a plain C in Bella Coola, insensitive to both finiteness and force contrasts. This reanalysis is consistent with the general reduction of inflectional contrasts in embedded clause types in the language. Finally, I showed that there is reason to believe (58) has led to a true category-changing operation in Lushootseed. In that language, nominalized clauses are subject to the same licensing constraints as normal DPs, as can be seen in the need for the oblique marker or a preposition in the relevant environments. All three of these possibilities, as well as the fourth structure proposed for Halkomelem, represent logical ways of integrating a nominalizer into the left periphery of the clause.
Chapter 6

Concluding Remarks

6.1 Introduction

By way of conclusion, I revisit and again discard a possibility which I have argued against, namely that of a unified analysis of nominalization in Halkomelem. There is some *prima facie* plausibility to a unified analysis, on both language-internal and typological grounds. Language-internally, there is the formal similarity between the different nominalizations – the shape of the nominalizer, the use of possessive agreement, etc. – as well as a certain functional similarity – nominalized clauses and nominalized predicates share some clausal properties, predicate nominalization and lexical nominalization both require reference to particular thematic roles, etc. From a typological perspective, the use of a nominalizer in embedded clauses and relativization is not uncommon. Noonan (2008) refers to this as the nominalization–relativization syncretism, and points out that it is a common feature of the languages in the Indo-Altaic speech area which extends from Siberia to South Asia (cf. Masica (1976)). In the face of all this, it is reasonable to adopt a unified analysis of the nominalizer as the null hypothesis, and to attempt to reduce the distinctions between the different constructions to properties of the constituent the nominalizer merges with. Ultimately though, while I argue that there are indeed significant differences between these constituents, they are not sufficient to account for the differences between predicate and clausal nominalization. Rather, some differences must be attributed to the
nominalizers themselves.

As a first step, it would be useful to review the reasons for positing two formally distinct kinds of syntactic nominalization. This point is worth making, as it has not always been recognized for Halkomelem (e.g. Leslie (1979), who consistently conflates the two), or for other Salish languages (e.g. Lushootseed, Bates (1997)). Similarly, as mentioned in 1.1 and in Chapter 5, other partitions of nominalizations have been proposed for Salish languages that cannot be reconciled with the kinds of morphosyntactic and distributional criteria that serve as the basis for the categorization adopted here (Beck (2000), for Lushootseed and Bella Coola). The following table summarizes the properties of nominalized predicates and clauses that were established over the course of Chapters 3 and 4, respectively, and which serve to show that they are formally distinct syntactic objects.

<table>
<thead>
<tr>
<th>Property</th>
<th>Nominalized predicate</th>
<th>Nominalized clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position of nominalizer</td>
<td>Prefixed to main predicate</td>
<td>Outside predicate complex</td>
</tr>
<tr>
<td>Position of agreement</td>
<td>Affixed to the main predicate</td>
<td>Adjacent to nominalizer¹</td>
</tr>
<tr>
<td>Selectional restrictions</td>
<td>Dictated by formal properties of the predicate</td>
<td>Imposed from outside the clause</td>
</tr>
<tr>
<td>Distribution</td>
<td>NP (predicate)</td>
<td>Clausal</td>
</tr>
<tr>
<td>D-element</td>
<td>Any semantically appropriate determiner</td>
<td>Restricted to kw</td>
</tr>
<tr>
<td>Argument structure</td>
<td>Unsaturated</td>
<td>Complete</td>
</tr>
</tbody>
</table>

Table 12. Formal distinctions between nominalized predicates and clauses

Many of these criteria are laid out in Kroeber (1999) as well, who says explicitly that

¹ The distribution is more complicated than this. The 1st and 2nd person plural markers are partial exceptions to this, with the second part typically surfacing as an enclitic on the first element in the predicate complex. The 3rd person marker also encliticizes to the highest element in the verbal complex, rather than appearing adjacent to the nominalizer. That said, the distribution of these two series can be distinguished along clitic–affix lines, in the sense of Davis (2000).
“even when the affixes are the same, the nominalization processes used to form oblique-centered relative clauses are different from what I have called propositional nominalization.” (ibid. 310-311).

This sets very clear limits on how much of a reduction is possible between these constructions, and the particular analyses I proposed for each go further. I argued in Chapter 3 that predicate nominalization produces a reduced free relative clause, and that the nominalizer functions as a relative pronoun in this construction. I argued in Chapter 4 that the clausal nominalization forms a CP, and the nominalizer is the lower complementizer in a split CP. These are, on the face of it, distinct analyses, so it seems that a unified analysis is already ruled out. Nevertheless, I address it directly in this chapter. To do so, it will be necessary to introduce the third nominalization – lexical nominalization – in more detail. I do so in 6.3, though I refrain from offering an explicit analysis. In 6.4, I consider first the possibility of reducing all nominalizations to relativization (6.4.1), and second, of reducing all nominalizers to complementizers (6.4.2). I reject both of these possibilities, and maintain instead that all three nominalizations are syntactically distinct constructions with homophonous and diachronically related nominalizers. Before addressing any of these issues, I set the stage in 6.2 with a summary of the analyses I propose for predicate and clausal nominalizations in this dissertation.

6.2 Summary of the analyses

In this section I briefly reprise the analyses of predicate nominalization and clausal nominalization put forward in Chapters 3 and 4, respectively.

I argue in Chapter 3 that predicate nominalization is a kind of relativization, where the
nominalizer is an NP that functions as a relative pronoun. It merges as an unregistered theme and remerges above VoiceP, possibly in the specifier of a licensing head F, forming a reduced relative clause. I further proposed that nominalized predicates be analyzed as free relatives, under a Merge-and-Project model of such constructions. In such a model, the merged element projects its label, rather than the target of the merge. The structure I propose for predicate nominalization then is as follows.

1) Syntax of Halkomelem predicate nominalization

\[
\begin{align*}
\text{NP} & \quad \text{NP} \quad \text{F} \quad \text{VoiceP} \\
\text{FP} & \quad \text{F} \quad \text{VoiceP} \\
\text{s-} & \quad \text{…} \quad \text{VP} \\
\text{V} & \quad \text{NP}
\end{align*}
\]

The relativization analysis accounts for the fact that nominalized predicates are internally clause-like in several respects, including facts about agreement, anaphora resolution, and the form of the passive. Base generating the nominalizer as an NP complement to V captures the strict relationship between predicate nominalization and unregistered themes as well.

The Merge-and-Project analysis also captures the external distribution of nominalized predicates, specifically in its ability to address Kroeker's conundrum – why these are the only relative clauses capable of functioning as predicates. By adopting the this analysis, I am able to assign the label 'NP' to the nominalized predicate, at which point its ability to function as a predicate is expected.

In Chapter 4, I propose an analysis of the nominalizer as the lower complementizer in a
split-CP. The structure I propose is reproduced in (2).

2) Syntax of Halkomelem clausal nominalization

\[
\begin{array}{c}
\text{CP}_{\text{N}} \\
\text{C} \\
\text{s} \\
\text{IP} \\
\text{[N]}
\end{array}
\]

I show that the nominalizer is free from restrictions based on the kinds of features encoded in Infl (compare to English *that* and *for*). Rather, it seems that the nominalizer is used as a default syntactic mechanism for indicating that a clause is dependent on another clause. I characterize this dependence in terms of illocutionary force – the nominalizer is a defective complementizer in that it does not encode any force distinction. Rather, it depends on syntactic context to acquire one, accounting for the inability of nominalized clauses to stand on their own. It must instead either be c-commanded by a suitable C or selected by a predicate that can assign it a force specification.

I also argue that nominalized clauses are not DPs, and that the D-particle that introduces embedded nominalized clauses is a complementizer, rather than a determiner. This conclusion is based on the application of diagnostics initially proposed by Kroeber (1999), as well as observations concerning the omission of the D-complementizer in certain contexts. Collectively, these facts show that nominalized clauses (and the D-complementizer) do not have the same morphosyntactic licensing conditions as DPs (and determiners), supporting the conclusion that they are indeed distinct syntactic objects.

These then are my analyses of predicate and clausal nominalization. With them in place, I turn to lexical nominalization.
6.3 Lexical nominalization

Chomsky (1970) argued that a distinction must be made between lexical and syntactic nominalization, arguing that the former are formed in a separate lexical component, while the latter a formed in the syntactic component. However, in a number of current frameworks, the lexicon is no longer considered a distinct module of grammar. Instead, the same kinds of structure building operations that are employed in building phrases are assumed to be responsible for building words. These sorts of analyses have been proposed specifically for nominalizations as well. Thus, for example, Van Hout and Roeper (1998) propose that at least some /-er/ nominalizations involve a fully composed VP, with which the nominalizer merges according to general syntactic principles. Baker and Vinokurova (2009) likewise propose that agentive nominalizations are constructed by merging a nominalizer above a verbal projection.

There are two distinct and productive lexical nominalizations in Halkomelem – the plain nominalizer /s-/ combines with verbal bases to form theme nominals, and the instrumental nominalizer /šxʷ-/ combines with verbal bases to form instrument or location nominals. In this respect, they seem to parallel those cases of predicate nominalization seen in Chapter 3 and in 5.2.2. However, unlike those cases, which I have argued to be relative clauses, the lexical nominalizations formed with these morphemes are truly nouns. This can be seen in the lack of an

In the absence of a thorough investigation into the properties of this construction, I will not venture an analysis.

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2 Galloway (2010:230) identifies another participant nominalization, formed with what appears to be a combination of the /s-/ nominalizer and another prefix /laxʷ-/ (always), and interpreted as 'a person who always Vs'. While I do not have any systematic data, it does not seem to be characterizable in terms of thematic role. The examples provided by Galloway include both agents (i, ii) and experiencers (iii).

i. laxʷ-s-hé:we
   ALWAYS=NOM-hunt
   'a person that always hunts'

ii. laxʷ-s-šl-om
   ALWAYS=NOM-sing-MID
   a person that always sings'

iii. laxʷ-(s)-ši:si
   ALWAYS=NOM-scared
   'coward, a person who is always scared'

In the absence of a thorough investigation into the properties of this construction, I will not venture an analysis.
obligatory possessor, and is reflected in the fact that they are generally smaller morphologically than nominalized predicates (e.g. limits on voice and valency morphemes). In this section I first present some of the relevant facts about the productive instances of lexical nominalization and some brief discussion about current models of syntactic word formation in relation to these facts (5.3.1). I follow this with a discussion of an unexpected situation – the use of the plain nominalizer to derive place names.

6.3.1 Productive uses of lexical nominalization

As pointed out by Hukari (2010:fns.10-11), it can in practice be difficult to distinguish between certain cases of lexical nominalization and predicate nominalization, presumably with respect to a given expression. Indeed, in Chapter 1, a pair of strings were provided that could be analyzed as the result of lexical, predicate, or clausal nominalization.

3) \( k^w \) s-\( \text{t} \)-\( \text{l} \)-\( \text{m} \)-\( s \) \\
\hspace{1cm} \text{det/comp} \hspace{1cm} \text{nom-sing-mid-3poss} \\
\hspace{2cm} \text{a. 'his song' } \\
\hspace{2cm} \text{b. 'what he sang/will sing' } \\
\hspace{2cm} \text{c. 'that/when/because he sings/will sing'} \\
\hspace{1cm} \text{(Upriver)}

4) \( k^w \) s-\( \text{i} \)-\( \text{t} \)-\( \text{t} \)-\( \text{t} \)-\( s \) \\
\hspace{1cm} \text{det/comp} \hspace{1cm} \text{nom-eat-3poss} \\
\hspace{2cm} \text{a. 'his food' } \\
\hspace{2cm} \text{b. 'what he ate/will eat' } \\
\hspace{2cm} \text{c. 'that/when/because he eats/will eat' } \\
\hspace{1cm} \text{(Upriver)}

The distinction between the interpretation derived by lexical nominalization and by predicate nominalization (a and b) is not very robust. Where lexical nominalization in the (a) analyses results in a participant nominal whose referent corresponds to the theme of the base predicate,
predicate nominalization in the (b) analyses creates a relative clause whose referent corresponds to the theme of the base predicate. Given the practical and formal similarity – both appear in argument positions with the same denotation, and both involve an s- prefix on a verbal root, with concomitant nominal morphology – it is reasonable to suspect that lexical and predicate nominalization might be amenable to a unified analysis. Indeed, Hukari (1994, 2010) points out that both plain and instrumental nominalizers are used productively to derive participant nominals, which can be used to refer to the theme of the nominalized predicate, in the case of the former, or to an instrument or location, in the case of the latter. The following examples demonstrate this pattern.

5) Plain lexical nominalization

| a. hǝwałǝm | ↔ | s-ǝwałǝm |
| 'play' |
| b. me?kʷǝl | ↔ | s-me?kʷǝl |
| 'get injured' |
| c. qa?qa? | ↔ | s-qa?qa? |
| 'drink' (v) |
| d. ǝθakʷǝla? | ↔ | s-θakʷǝla? |
| 'bet' (v) |

6) Instrumental nominalization

| a. čǝkʷǝls | ↔ | š-čǝkʷǝls |
| 'fry', IMPF |
| b. hiwałǝm | ↔ | šxʷ-ıwałǝm |
| 'play', IMPF |
| c. Ɂəš-enep | ↔ | š-Ɂəšənəp |
| 'plow-ground' |
| d. ?iʔtən | ↔ | šxʷ-ʔiʔtən |
| 'dishes' |

While there are many nouns that begin with an /s-/ that do not appear to follow the pattern in (5),

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3 Hukari (2010) notes that instrumental nominalizations are typically formed on verbs in what he refers to as the imperfect aspect. Galloway (1993:371, fn.1) makes a similar observation, stating that the instrumental nominalizer occurs with resultative or continuative verbs, while the plain nominalizer occurs with non-continuative verbs.
there are enough to make clear that this is a productive word-formation strategy. The question then, is what sort of mechanism should be proposed to constrain lexical nominalization to just those roots that it occurs with and just those interpretations it yields. The answer though, is not obvious.

The forms in (5) and (6) are participant nominalizations – their denotation is a participant of the event denoted by the base verb. There are a number of syntactic accounts of derivational word formation that have been proposed recently to handle participant nominalization. Some attempt to insert the nominalizer in the clausal structure as a head. For example, Baker and Vinokurova (2009) propose an analysis of agentive nominalization in which nominalizers like English -er are treated as a nominal counterpart to Voice/v.\(^4\) The basic structure they propose then has the nominalizer selecting a VP complement, as the verbal Voice heads do.

7) Syntax of -er (Baker and Vinokurova (2009))

![Diagram of syntax of -er]

Appealing to Kratzer's (1996) analysis, in which agents are arguments of the light verb Voice rather than the verb itself, Baker and Vinokurova propose a semantics for -er that parallels that of an active voice head. The N projected by -er is a kind of semi-lexical category on this

\(^4\) Kaufman (2009) makes the strong claim that Tagalog has only nominal Voice heads, and further, that the lexical category V is not available in the language. This represents an interesting challenge to standard assumptions, and one that is taken up in Koch and Matthewson (2009).
analysis, triggering an agentive interpretation in virtue of its status as a nominal *Voice* head.

It is not clear though how such an analysis could be extended to the cases of lexical nominalization in Halkomelem. If Cinque (1999) is right about adjuncts being introduced as specifiers of various heads in an exploded Infl, there might be a way to assimilate instrumental nominalization to this kind of analysis. The nominalizer could merge as a nominal counterpart of a semantically appropriate verbal head, yielding a noun with a denotation suitable to that position. However, by far the most common interpretation of nouns formed with the plain nominalizer is as the theme of the underlying predicate. Assuming the Deep Unaccusativity Hypothesis is correct, the theme is introduced by the predicate itself. This would leave Baker and Vinokurova in the awkward position of having to say that the nominalizer in those cases is a nominal analog of the predicate itself, rather than a separate morpheme that merges with it. This would not necessarily be a problem for analyses that assume a radical decomposition of predicates and arguments, where even internal arguments are not truly arguments of the predicate, but are instead introduced by a separate head (cf. Adger and Ramchand (2005), Baker (2003)). However, since I do not assume such a decomposition, this option is not available to me.

Another possibility comes from Fabregas' (to appear) analysis of the Spanish agentive nominalizer /-dor/. On this analysis, the nominalizer does not merge as a head, but rather as an argument – specifically, it merges in the position of the argument that the resulting noun is interpreted as. This account is compatible with the Deep Unaccusativity Hypothesis, in that there is no need for a separate theme-introducing head to replace with the nominalizer. Rather, it could be merged as the complement of V before remerging above VP.

However, this is very much like the account I proposed for predicate nominalization, and as noted in the introduction to this section, there are some real distinctions between that
operation and lexical nominalization, not least of which is that only the latter changes the
category of the affected constituent. Where lexical nominalization creates nouns, and apparently
operates on a fairly small structure, predicate nominalization creates a reduced relative clause
that is not itself a noun. It is not obvious then, what more can be said to distinguish these two
operations in the relevant ways. Thus, while there is hope for a generative analysis of these
productive types of Halkomelem lexical nominalization, I leave the details to future research,
and turn to an unexpected use of the nominalizer.

6.3.2 Unexpected use of lexical nominalization – place names

So far, the targets of lexical nominalization have all been verbs, or roots that would
otherwise surface as verbs, and the results have all been participants of the event denoted by that
verb. However, a perusal of Galloway's (2010) dictionary of Upriver Halkomelem reveals a fair
number of place names that are formed with the plain nominalizer. The following three examples
show this at work.

8) Scháchewxel ~ Cháchewxel⁵ – 'a village of the Pilalt people'
   (Galloway (2010:561))

9) Sqweʔop (?) – 'Cheam Creek on north side below Ford Creek', cf. qweʔop – apple
   (Galloway (2010:621))

10) St'ámiya – 'Hope Mountain', cf. t'ámiya – hermaphrodite
   (Galloway (2010:627))

In example (8), we have a name that optionally takes the nominalizer. The unmarked
form is not listed separately, so the nominalizer doesn't seem to have any affect. Not so with the
second two examples. In (9), the addition of the nominalizer to the word for apple results in the

⁵ These place names are provided in the official orthography, of the Stólō Nation, developed by Brent Galloway.
Notable difference include the following: ch – č; sh – š; lh – l; xw – xʷ; a – æ; o – a; ò – o.

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name of a specific place. The basis for the example in (10) however, is laid out quite clearly by Galloway – from a particular vantage point, Hope Mountain takes on the appearance of a reclining figure with breasts and male genitalia, a hermaphrodite. Judging by the number of place-names that involve a nominalizer – at least 70 are reported in Galloway (2010) – this seems to be a common strategy.

These are surprising for two reasons. First, a number of these, including all three examples above, are formed on nominal bases. There are a few other cases of the nominalizer attaching to a nominal base as well, often with idiosyncratic meanings, but the bulk of nominalized nouns are place names. Second, despite the presence of a nominalizer in the language that is productively associated with locations (the instrumental nominalizer), the plain nominalizer can be used to derive place names. To be sure, as can be seen in the following examples, the instrumental nominalizer is also used to create place names, though only nine such cases are reported in Galloway (2010).

11) Shxwhá:y – ‘village at outlet of old Chilliwack River on Fraser River, now known as Skway reserve (Chilliwack Indian Reserve #5); cf. hà:y – make a canoe
   (Galloway (2010:656))
12) Shxwqó:m – 'Lake of the Woods'; cf. qó: [also common noun meaning 'water basket']
   (Galloway (2010:658))
13) Shxwʔilamōwelh – 'rocky place across from and just above Emory Creek, on east/CN side of Fraser River; cf. ʔilám
   (Galloway (2010:661))

This fact only serves to make the use of the plain nominalizer in the (51-53) more striking – they do not conform to the productive use of the plain nominalizer outlined in 5.3.1. This use of the plain nominalizer also provides further evidence for distinguishing it from predicate and clausal nominalization.
6.4 Against a unified analysis

I have argued in this dissertation that despite their superficial similarity, the three different nominalizations in Halkomelem are synchronically distinct constructions in a number of ways. The following table summarizes the relevant distinctions.

<table>
<thead>
<tr>
<th>Property</th>
<th>LN</th>
<th>PN</th>
<th>CN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominalized constituent</td>
<td>Root</td>
<td>VoiceP</td>
<td>IP</td>
</tr>
<tr>
<td>Category of nominalizer</td>
<td>N</td>
<td>NP</td>
<td>C</td>
</tr>
<tr>
<td>Resulting constituent</td>
<td>Noun</td>
<td>Free relative/NP</td>
<td>Defective CP</td>
</tr>
</tbody>
</table>

Table 13. Distinct nominalizations

It is clear from this table that I do not think a unified analysis is possible. I have not yet explicitly addressed the possibility though. Given that others have proposed unified analyses of similarly diverse uses of nominalizers in other languages, it is a worthwhile exercise to consider specific proposals concerning such a unification in Halkomelem. I first examine the possibility that all three nominalizations in Halkomelem are instances of relativization (6.4.1). Following this I consider the possibility that the nominalizer functions as a complementizer in all three cases (6.4.2).

6.4.1 All nominalizations as relativization

I have already argued that predicate nominalization is a form of relativization, and that the nominalizer behaves as a relative pronoun in this construction. I also showed in 6.3 that there are some similarities between predicate nominalization and at least the productive use of lexical
nominalization – both the subject of a nominalized predicate and the denotation of a derived noun correspond to the theme of the base in plain nominalization, and an instrument or location in instrumental nominalization. While there are obstacles to implementing a relativization analysis for lexical nominalization, it is at least a plausible line of inquiry, and one that has been pursued for other languages (cf. Ntelitheos (2006) for Malagasy). If something along those lines turned out to be the correct analysis of lexical nominalization, that would leave clausal nominalization as the only case of nominalization that doesn't form a relative clause. Therefore, I focus the following discussion on nominalized clauses.

There is some precedent for treating embedded clauses as relative clauses – Kayne (2008) does so for English that-clauses, for example. He argues first that that can be analyzed as a relative pronoun in relative clauses like 'the man [that I saw]', and then extends the analysis to that-clauses. Rather than relativizing an argument, he proposes that embedded finite clauses are relatives that target an adjunct. For example, Kayne argues that the complement clause of fact in (15) is a relative clause derived from the sentence in (16). On his analysis of relativization, the head noun fact originated in the bracketed constituent in (16).

6 The bolding and bracketing in these examples is mine.

15) the fact [that you're here]

16) You're here, [in fact]/You're, [in fact], here/[In fact], you're here.

Kayne (2008) is not alone in proposing that at least some embedded clauses in some languages are properly analyzed as relative clauses. Similar claims have been made by Salanova (2007) for Mebengokre, and by Caponegro and Polinsky (2011) for Adyghe, for example, though with different theoretical assumptions and implementations. What would such an analysis look

---

6 The bolding and bracketing in these examples is mine.
Embedded nominalized clauses can be interpreted as facts (17) and events (18), as reasons (19), and temporal restrictions (20). If the nominalized clauses in (17-20) are relative clauses, then presumably they are headed by covert nouns with the appropriate denotations, represented in caps below.

17) Nominalized clause – fact
   a. ?i=cǝn tǝtǝl-namǝt [kʷ=ǝn=s nem hǝyeʔ]  
      AUX=1SG.S discover.IMPF-LC.REFL [COMP=2SG.POSS=NOM go leave]  
      ?ǝw kʷeyǝl=ǝs ]  
      COMP tomorrow=3CS  
      'I heard that you're leaving tomorrow.'  
         (Island)  
   b. … [kʷ [NP [NP FACT], [CP Op, s- [IP … e_i]]]]

18) Nominalized clause – event
   a. cǝl kʷǝc-lǝxʷ [kʷ=s=ǝ=s 1SG.S see-LCT.3o [COMP=NOM=AUX=3POSS go DET John]  
      'I saw John leave.'  
         (Upriver)  
   b. … [kʷ [NP [NP EVENT], [CP Op, s- [IP … e_i]]]]

19) Nominalized clause – reason
   a. cǝl xʷǝmǝc-x tǝ xǝl [kʷ=s=ǝ=s 1SG.S open-TR.3o DET door [COMP=NOM=AUX=3POSS get.hot]  
      'I opened the door because it got hot.'  
         (Upriver)  
   b. … [kʷ [NP [NP REASON], [CP Op, s- [IP … e_i]]]]
20) Nominalized clause – temporal restriction

a. cǝl ʔitǝt [kʷ=s=ǝ=s qʷaqʷǝl to swiyǝqǝ]
   1SG.S sleep [COMP=NOM=AUX=3POSS talk.IMPF DET man]
   'I slept when the man was talking.'

b. … [kʷ [NP [NP TIME], [CP Op; s- [IP … e_i]]]]

(Upriver)

There are a number of reasons why this analysis cannot work, though. First, the relative clause analysis predicts that nominalized clauses are adjoined to NPs, which are then selected by a D. However, as I show in Chapter 4, the kʷ introducing nominalized clauses does not have the formal properties or interpretation of a determiner. Second, the relative clause analysis cannot account for the clause-chaining use of nominalized clauses shown in 4.4.2. If the nominalized clause has adjoined to the head NP, then coordination will be blocked because of a category mismatch (CP and NP). If it hasn't been adjoined to a head NP, then the operator will not have an antecedent. Third, for at least the temporal restriction use of nominalized clauses, there is an overt lexical item corresponding to the supposed denotation of the nominalized clause – tǝyəm (time). If such nominalized clauses were truly relative clauses, it should be possible for that noun to appear as an overt head. Presumably, this head would intervene between the nominalizer and the D-complementizer, but the only thing that ever occurs in this position is the possessive clitic, if the subject of the nominalized clause happens to be 1st or 2nd person singular.

For these reasons, I reject a relativization analysis of clausal nominalization. This does not exhaust the possible unified analyses though. In the next subsection I examine the possibility of treating the nominalizer as a complementizer in each case.
6.4.2 All nominalizers as complementizers

In the previous section I argued that reducing nominalization to relativization cannot work in Halkomelem. In this section I address what I consider to be the other plausible unified analysis, which would be to treat the nominalizer as a complementizer across all three constructions. I have already argued that the nominalizer is a complementizer in clausal nominalization, so making this claim requires extension to lexical nominalization and predicate nominalization. I argued in Chapter 3 that at least the latter of these is a reduced relative clause, and mentioned that Ntelitheos (2006) offers a similar analysis for Malagasy participant, manner, and result nominalizations. Adopting Kayne's (1994) approach to relative clauses, Ntelitheos analyzes the Malagasy nominalizers as complementizers that provide a landing site for the relativized expression.7

In 3.5.1, I discussed the possibility of treating the nominalizer in predicate nominalization as a relative complementizer. One of the virtues of such an account is that it is a goes some way in reducing the inventory of nominalizers. However, in that same section, I argued against making this move, largely because doing so comes at the cost of a clear means of capturing the relationship between the predicate nominalization nominalizer and unregistered themes, and because it makes the ability of nominalized predicates to function as predicates harder to account for. On my account, it is stipulated as part of the lexical entry of this nominalizer that it is generated as the complement of V. While having such a stipulation is awkward, I argued in 5.2.2 that it is warranted, given the differences in how languages with two nominalizers utilized them in this construction. If the nominalizer is treated as a complementizer, it is not clear to me how one could prevent any other argument from relativizing instead. The predicative function is

7 Ntelitheos (2006) assumes abstract nouns with meanings like MANNER and RESULT, which are generated as modifiers of Voice heads, can be relativized to create manner and result nominals.
accounted for by assuming that the nominalizer, an NP, is able to project in place of the landing site. The presence of an [N] feature alone is not enough to ensure this, as it would then predict that nominalized clauses should also be able to function as predicates.

As for treating the lexical nominalization nominalizer as a complementizer, I will simply point out that doing so faces the added difficulty of accounting for one of the most important properties of lexical nominalization, namely that it creates nouns.

In short, given the differences between the different nominalizations laid out in (14) above, attempts to unify the different uses of the nominalizer are faced with considerable theoretical and empirical challenges.

6.5 Conclusion

The primary goal of this dissertation has been to propose formal syntactic analyses of two kinds of nominalization in Halkomelem – predicate and clausal nominalizations. In so doing, I have touched on the similarities between relativization and nominalization in Chapter 3, and explored the role of lexical categories in functional projections in Chapter 4.

As noted in the conclusion to Chapter 3, the connection between nominalization and relativization has been widely noted in studies of genetically and typologically diverse languages, conducted within an equally diverse range of theoretical frameworks. As pointed out in Genetti (2010:24), the structural and functional parallels between relative clauses and participant nominalizations are particular clear in languages that, like Halkomelem, allow headless relative clauses. Both pick out an individual in terms of its role in the eventuality denoted by the predicate, and both will contain a gap corresponding to the referent/head NP. The
transition is thus a natural one, between lexical and predicate nominalization.

It was also pointed out in Chapter 3 that Halkomelem predicate nominalization would run afoul of Phrasal Coherence (Bresnan (1997), Malouf (1998a,b)), which prohibits re-verbalizing a nominalized constituent, if clausal projections like MoodP, IP, and CP were truly verbal in the language. However, I argued in 2.3 that the clausal projections in Halkomelem are not inherently associated with a category feature, and hence should not be considered 'verbal' extended projections. Accepting this conclusion opens the door to reconceptualizing the relationship between lexical categories and functional projections. In systems like that of Grimshaw (2000), a [V] feature is a necessary ingredient for a functional projection to be a complementizer, while an a projection with an [N] feature would necessarily occur in an extended projection stretching from NP to DP. However, in the system employed by Kornfilt (2003) and Kornfilt and Whitman (2011a,b), there is no inconsistency in including an [N] feature in the makeup of a clausal functional projection. This inclusion typically comes at a cost, as the nominal counterparts of clausal projections are often unable to convey the same degree of information – this dissertation has produced the example of the nominal complementizer in Halkomelem, which cannot convey its own illocutionary force, and must instead acquire it from a selecting head or anaphorically from a c-commanding complementizer.

As a final note, despite having argued for separate synchronic analyses of the three nominalizations in Halkomelem, and by extension, for the nominalizers themselves, there is surely a diachronic connection between them. The formal similarities between these distinct constructions are not accidental, but rather imply a common source. An intuitively plausible connection between lexical and predicate nominalization was raised earlier in this section, and exploring this further may yield more insight into these constructions, and perhaps into the
extension of predicate nominalization to cases of long-distance extraction. As for clausal
nominalization, it is not obvious how the grammaticalization process would have proceeded. It is
interesting to note though, that the nominalizer is at its least 'nominal' here, and is even less so in
nominalized clauses elsewhere in the family (cf. Bella Coola, 5.3.2). This falls in line nicely with
the model of grammaticalization proposed in Roberts and Roussou (2003), whereby elements
that undergo grammaticalization simultaneously become bleached of content and reanalyzed as a
higher projection.

Identifying that source, and the different paths that led to the current array of
nominalizations, was not the purpose of this dissertation. Discerning the routes that could lead to
the diverse nominalizations in Halkomelem and in the rest of the Salish family will be the subject
of future research, for which this dissertation may hopefully serve as groundwork.
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## Appendix: The Salish language family

<table>
<thead>
<tr>
<th>A. Bella Coola</th>
<th>E. Interior Salish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
<td>Southern</td>
</tr>
<tr>
<td>Lillooet</td>
<td>Lillooet</td>
</tr>
<tr>
<td>Thompson</td>
<td>Thompson</td>
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<tr>
<td>Shushwap</td>
<td>Shushwap</td>
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</table>

<table>
<thead>
<tr>
<th>B. Central Salish</th>
<th>Northern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comox</td>
<td>Lillooet</td>
</tr>
<tr>
<td>Pentlatch</td>
<td>Thompson</td>
</tr>
<tr>
<td>Sechelt</td>
<td>Shushwap</td>
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<tr>
<td>Squamish</td>
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<tr>
<td>Halkomelem</td>
<td></td>
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<tr>
<td><em>Upriver</em></td>
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<tr>
<td><em>Downriver</em></td>
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<tr>
<td><em>Island</em></td>
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<tr>
<td>Nooksack</td>
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<tr>
<td>Straits</td>
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<tr>
<td>Northern Straits</td>
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<tr>
<td>Clallam/Klallam</td>
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<tr>
<td>Twana</td>
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<td>Lushootseed/Puget</td>
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<thead>
<tr>
<th>C. Tillamook</th>
<th>D. Tsamosan (Olympic)</th>
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<tbody>
<tr>
<td>Inland</td>
<td></td>
</tr>
<tr>
<td>Upper Chehalis</td>
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<tr>
<td>Cowlitz</td>
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<tr>
<td>Maritime</td>
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<tr>
<td>Quinault</td>
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</tr>
<tr>
<td>Lower Chehalis</td>
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</tr>
</tbody>
</table>

This classification of the Salish languages is taken from Kroeber (1999:4), which in turn draws on Czaykowska-Higgins and Kinkade (1998:1-5). I have included the main dialects of Halkomelem in italics.