

Nominal modification in Upper Nicola Okanagan: A working paper¹

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The goals of this paper are to examine patterns of nominal modification in Upper Nicola Okanagan, to determine what constraints there are on well-formedness, and to distinguish relative clauses and attributive modification as distinct classes of nominal modification. I suggest that these two classes may be distinguished on the basis of differences between (a) permissible head-modifier orderings; (b) restrictions on the semantic type of the modifier; and (c) the distribution of determiner *iʔ* and oblique/attributive marker *t*.

1 Introduction

This paper focuses on data I have elicited and tested on the topic of nominal modification in the Upper Nicola dialect of Okanagan, spoken in the vicinity of Quilchena and Douglas Lake, British Columbia.

Okanagan, Coeur d'Alene, Moses-Columbian, and Spokane-Kalispel-Flathead, comprise the Southern Interior sub-branch of the Salish language family. Systematic studies of relative clauses have been carried out for the Northern Interior languages of Thompson (Kroeber 1997, 1999; Koch 2004, 2006) and Lillooet (Matthewson & Davis 1995; Davis 2002, 2004). Related work on attributive modification exists for Lillooet (Davis, Lai & Matthewson 1997), Thompson (Koch 2006), and Saanich (Montler 1993), but a detailed analysis of these related areas in Okanagan has yet to be undertaken. The empirical generalizations made here will serve as the foundation for a more rigorous semantic and syntactic analysis of this area of the grammar.

The structure of the paper is as follows:

In section 2, by way of background, I will discuss basic clause structure in Okanagan, followed by an overview discussion of subordination strategies in the language, the aim of which is to show that relative clauses and attributive modification structures are distinct from other types of subordinate clauses.

In section 3, I will introduce nominal modification in Okanagan, and draw some comparisons with the Northern Interior languages. I then begin to discuss the problem of distinguishing relative clauses from cases of attributive modification.

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In section 4, I conduct a detailed investigation of the types of modification introduced in section 3, by examining major patterns displayed by the determiner *iʔ* and oblique marker *t*, in their capacity of introducing heads and modifiers within nominal modification structures. To illustrate, consider the following three similar sentences, focusing on the bracketed strings:

- (1) a. wík-ən [iʔ kʷəckʷáct t ylmíxʷum]. (JL)
 see-(DIR)-1SG.ERG DET strong t chief.
 I saw the strong chief. (volunteered gloss)
- b. wík-ən [iʔ kʷəckʷáct iʔ tkɫmílʷ]. (LL)
 see-(DIR)-1SG.ERG DET strong DET woman
 I saw the strong woman.
- c. kn wík-əm [t kʷəckʷáct t tkɫmílʷ]. (LL)
 1SG.ABS see-MID t strong t woman
 I saw a strong woman.

In (1a), the determiner *iʔ* introduces the modifier *kʷəckʷáct* 'strong', while the oblique marker *t* introduces the nominal head *ylmíxʷum* 'chief'. In (1b), the determiner introduces both the modifier and the nominal head, and in (1c), the oblique marker introduces both the modifier and the head. These 3 sentences exemplify 3 distinct patterns of nominal modification in Okanagan. The question I seek to answer is whether sentences like (1a-c) also differ structurally.

It will be seen that only certain patterns allow free ordering of the head and modifier, and that in other cases, there are apparently selectional restrictions on the semantic type of the modifier. I will argue that these facts constitute evidence for a pattern being characteristic of either a relative clause, or attributive modification.

Section 5 is a summary and discussion of the main empirical observations. I address some unanswered questions that follow from these observations. Section 6 concludes.

2 Basic Clause Structure and Clausal Subordination

Okanagan, like other Salish languages, is fundamentally predicate initial, although word order is flexible (N. Mattina 1996). (2a) shows a simple intransitive predicate/argument structure, with basic VS ordering. (2b) shows an equally acceptable SV-ordering of the same sentence.

- (2) a. xʷ-xʷís-t iʔ tkɫmílʷ. (HC)
 IRED-walk-STAT DET woman
 The woman started walking.
- b. iʔ tkɫmílʷ xʷxʷíst. (LL)

For transitive predicates with two overt nominal DP arguments, SVO is the preferred word order, as in (3a). VSO is equally acceptable (3b). While a VOS interpretation of (3b) is not possible, VOS interpretations are possible in cases where the subject is animate and the object inanimate (A. Mattina 2004). An OVS interpretation of (3a) is not possible.

(3) a. *iʔ* *sámaʔ* *wík-s* *iʔ* *xíxwtəm* (JL)
 DET white.person see-(DIR)-3SG.ERG DET little.girl
 The white person saw the girl. / *The girl saw the white person.

b. *wík-s* *iʔ* *xíxwtəm* *iʔ* *sámaʔ* (JL)
 see-(DIR)-3SG.ERG DET little.girl DET white.person
 The little girl saw the white person / *The white person saw the girl.

Topicalized, object-initial structures are permissible if the subject is pronominal (cf Gardiner 1993 for discussion of similar cases in Shuswap):

(4) *iʔ* *sámaʔ* *wík-ən*. (SM,LL)
 DET white person see-(DIR)-1SG.ERG
 I saw a white person.

Arguments of transitive and intransitive predicates require an introductory particle, usually the determiner *iʔ*, as in (2-4). Oblique arguments of intransitive predicates are introduced by the oblique marker *t*, as in (5a,b) (cf N. Mattina 1996:45).

(5) a. *kn* *kʷúf-əm* *t* *latáp*. (RS)
 1SG.ABS make-MID t table
 I'm making a table.

b. *kn* *s-c-ʔaʔ-ʔaʔ-mixaʔx* *t* *kíwlx-iʔxʷ*. (LL)
 1SG.ABS NOM-CUST-look.for-INCEPT t old-house
 I'm looking for an old house.

Patients of ditransitives (6a), adverbial adjuncts (6b), agents of passive predicates (6c), and nominals marked as instrumental (6d) are also introduced by *t*. The determiner *iʔ* sometimes co-occurs with *t* before a passive agent and before a nominal marked as instrumental.²

² *t* is not a determiner, since it may co-occur with *iʔ*. *t*-oblique nominals do, however, seem to share certain semantic commonalities with narrow-scope *k*-type DPs in the Northern Interior languages (cf Matthewson 1999), but a detailed investigation of these similarities is beyond the scope of this paper.

- (6) a. $cu\lambda k^w\text{-xt-m-}\acute{a}n$ t $\lambda a\lambda\acute{u}sa\lambda.$ (LL)
bring-DITR-2SG.ACC-1SG.ERG t egg
I brought you an egg.
- b. $n\text{-}\lambda iys\text{-}\acute{t}\text{-}\acute{a}n$ Mary $i\lambda$ automobile-s t $spi\lambda sci\acute{t}$. (LL)
n-buy-DITR-1SG.ERG Mary DET automobile-3SG.GEN t yesterday
I bought Mary's car yesterday.
- c. $k\acute{il}\text{-}nt\text{-}\acute{a}m$ $i\lambda$ t $skmx\acute{i}st$. (LL)
chase-DIR-PASS DET t bear
He was chased by the bear.
- d. $\acute{t}\acute{f}\acute{a}p\text{-}nt\text{-}\acute{i}s$ $i\lambda$ t $s\text{-}wl\text{-}wlm\text{-}ink$. (JL)
shoot-DIR-3SG.ERG DET t NOM-IRET-metal-stomach
He shot it with a gun.

Subordination in Okanagan takes a variety of forms, only some of which I discuss here. My goal is simply to show that the determiner $i\lambda$ and oblique marker t do not play the role of complementizer. This fact contrasts with neighboring Thompson, where the present e and irrealis k determiners, as well as the oblique marker t , may all occur in complementizer positions (cf Kroeber 1999:207-211).

Complementizers in Okanagan are largely optional, unlike in Northern Interior languages (cf Kroeber 1999). One sometimes finds \acute{t} or $\acute{t}a\lambda$, which A. Mattina (1973:114) describes as being 'sequential complement particles'. (7a) was volunteered without a complementizer. (7b), with complementizer \acute{t} , was judged good by my speaker.

- (7) a. $n\acute{t}\acute{i}p\text{-}t\text{-}m\text{-}\acute{a}n$ $i\text{-}ks\text{-}k^w\text{an}\text{-}\acute{i}m$ $in\text{-}q^w\acute{a}cq\acute{n}$. (LL)
forget-DIR-MID-1SG.ERG 1SG.GEN-FUT-take-MID 1SG.GEN-hat
I forgot to get my hat.
- b. $n\acute{t}\acute{i}ptm\acute{a}n \acute{t} iksk^w\text{an}\acute{i}m inq^w\acute{a}cq\acute{n}$. (JL)

Factive complements allow but do not require a \acute{t} complementizer, as in (8) below.³ (8a) does not have a complementizer, while (8b) shows the complementizer \acute{t} intervening between the 1st plural absolutive subject k^wu , and the predicate to which the pronoun would otherwise procliticize, $acpapa\lambda silx$.⁴

- (8) a. $\acute{x}ast$ $n\lambda iyp$ k^wu $k\text{-}swit\text{-}m\acute{i}\text{-}st$ ($i\lambda$) l $nq^w\lambda q^w\acute{i}ltn\text{-}t\acute{a}t$. (SM)
good always 1PL.ABS FUT-try-APPL-CAUS (DET) LOC language-1PL.GEN
It is good that we are trying to do our best at the language.

³ There may be a regular phonological reduction of \acute{t} in certain environments. This question merits further investigation.

⁴ When the complementizer intervenes between a proclitic and its host predicate, the proclitic subject apparently has a focused reading (A. Mattina 1973:114).

- b. \check{x} ast k^wu \downarrow /*i \uparrow ? ac-pa \uparrow pa \uparrow silx i \uparrow k \uparrow ks-c-x^wuy-tət. (SM)
 good 1PL.ABS COMP CUST-feel bad DET LOC FUT-CUST-go-1PL.GEN
 It's good that we are thinking about where we will be going.

We might have expected *i \uparrow* to be grammatical as a complementizer in (8b) given that Thompson allows a determiner in this position, but this is ungrammatical.

Complements to negative predicates do not have \downarrow complementizers, as shown in (9). Neither the negative complement clause, nor the complement to the embedded perception predicate *nstils*, are introduced by a complementizer.⁵

- (9) lut [kn nstils [ixi \uparrow t k^wú \uparrow -s Norman.]] (LL)
 NEG 1SG.ABS think DEM t make-3SG.GEN Norman
 I don't think that Norman made that.⁶

Complements of perception predicates disallow the complementizer \downarrow (10a,b). These sentences also illustrate how the oblique particle *t* does not function as a complementizer in Upper Nicola Okanagan, unlike in Thompson.

- (10) a. kn nstíls-əm (*i \uparrow , * \downarrow , *t) \check{x} mínk-əm t k \downarrow -cítx^w-s. (LL)
 1SG.ABS think-MID want-MID t UNR.POSS-house-3SG.GEN
 I thought he wanted a house.

- b. kn nstíls (*i \uparrow * \downarrow , *t) ks-məq^w-q^w-míxa \uparrow x. (LL)
 1SG.ABS think FUT-SNOW-FRED-INCEPT
 I think it's going to snow.

Kroeber (1999:233) states that *t* sometimes introduces perception complements in Okanagan, but Upper Nicola speakers evidently do not use this strategy.

Causal complements⁷ (11) and complements of conditionals (12) are often introduced by the locative *tl* 'from' (cf Kroeber 1999:236).⁸ Unlike locative case DPs, a determiner may not precede the locative (11a). Also, for conditional complements at least, *tl* is optional (12a).

⁵ See A. Mattina (2000) for a discussion the emphatic particle *t(a)/t(i)*, which often introduces a negative complement clause, but is absent in (9). Also, A. Mattina (1996:239) discusses "negative request verb forms" in Okanagan, which take *ks*- future: e.g. *lut aks \uparrow t \uparrow ən* "Don't eat". Subsequent discussion (p. 246) introduces similar Shuswap forms, e.g. *tá \uparrow wəs k sk \uparrow ékst* "Don't let go!", where the complement of the negative predicate *tá \uparrow wəs* is introduced by irrealis determiner *k*. A. Mattina seems to imply that there may be a historical connection between *k*-type determiners in the Northern Interior and /k/ in Okanagan future *ks*-.

⁶ –[I think [That is Norman's making.]]

⁷ Thompson introduces causal complements with oblique *t* and determiner *e* (Kroeber 1999:210).

⁸ (11) also illustrates how subordinate clause predicates may either take possessor (genitive) subject morphology (11a) or ergative morphology (11b). (cf Kroeber 1999:239)

- (11) a. *kn* *túk^w-ncút* (**iʔ*) *tl* *i-s-ʔáyǰ^wt.* (LL)
 1SG.ABS lay.down-RFLX (**DET*) LOC 1SG.GEN-NOM-tired
 I laid down because I was tired.
- b. *ǰast* *i-s-puʔús* *tl* *ʔ-x^wuy-st-s* *iʔ* *tum¹-s.* (LL)
 good 1SG.GEN-NOM-heart LOC LOC-go-CAUS-3ERG DET mother-3SG.GEN
 I'm glad because she took her mother home.
- (12) a. *cəm¹* *ǰawt* *iʔ* *scwaɪ* (tl) *lut* *k^w* *ʔaʔ* *marúsəm.* (LL)
 EPIS go.out DET fire (LOC) NEG 2SG.ABS COMP build.the.fire
 The fire will go out if you don't put on more wood.
- b. *cəm¹* *k^w* *ki'ýt* *tl* *s-mq^waq^w-s.* (LL)
 EPIS 2SG.ABS cold LOC NOM-snow-FRED-3SG.GEN
 You'll get cold if it snows.

Upper Nicola speakers also use a form *k^waʔ* as a complementizer for causal subordinate clauses (cf Kroeber 1999:354 and A. Mattina 1985:stanza421).⁹

- (13) a. *kn* *túk^w-ncút* *k^waʔ/*iʔ* *kn* *s-ʔáyǰ^w-t.* (LL)
 1SG.ABS lay.down-RFLX COMP 1SG.ABS STAT-tired-STAT
 I laid down because I was tired.
- b. *túk^w-ncút* *k^waʔ* *ʔiʔ-s* *yaʔyaʔt iʔ* *lasup.* (LL)
 lay.down-RFLX COMP eat-(TR)-3SG.ERG all DET soup
 She laid down because she ate all the soup.

One of the few environments where the complementizer might be required in Upper Nicola Okanagan is for interrogative complements (14).

- (14) a. *k^wu* *siw-nt* *ʔ* *i-ks-x^wuy.* (LL)
 1SG.ABS ask-DIR COMP 1SG.GEN-FUT-go
 He asked me if I was going to go.
- b. *siw-ən* *i-s-n-ylmíx^wm* *ʔ* *i-ks-sx^wmaʔmáyaʔm.* (LL)
 ask-1SG.ERG 1SG.GEN-NOM-LOC-chief COMP 1SG.GEN-FUT-teacher
 I asked my boss if I could be the teacher.

It remains to be seen what the semantics of the *ʔ* complementizer are in Okanagan, and whether or not it contributes any meaning when it is optional.

The determiner *iʔ* and oblique marker *t*, are notably absent from the inventory of particles introducing subordinate clauses in Okanagan. N. Mattina (1996:57) lists a potential counterexample, given below as (15) with her original morpheme glosses retained:

⁹ *k^waʔ* and *tl* seem interchangeable in some sentences, but not in others. It is unclear to me how the two differ.

- (15) $cx^wuy?ilx\ u\! \! \! n\! \! \! i\! \! \! y\! \! \! p\! \! \! c\text{-myst-is}\quad i\! \! \! ?\quad sqilx^w$
 many.come and always CUST-know-3ERG DET people
 $i\! \! \! ?$ $s\text{-}\acute{t}\acute{c}x^wuy\text{-}s\quad i\! \! \! ?\quad s\acute{a}ma\! \! \! ?$
 SB NEUT-arrive-3SG.GEN DET whiteman
 They kept coming and the Indian people knew all along that the white people were coming.

N. Mattina glosses the bolded determiner in (15) as a 'subordinator', suggesting that *i?* here has a function similar to complementizer *!*, but I think it is possible to analyze the determiner as introducing a complex possessed DP, which is the object argument of the main predicate, *cmystís*. (15) might then translate similarly as *...All along the Indian people knew the white people's coming*. Here is some evidence for my analysis:

I gave a similar English sentence to Upper Nicola Okanagan speakers. The Okanagan form (16a) was volunteered first with a bare complement clause, and then with complementizer *!a?*. *i?* is not grammatical as a complementizer (16b), as shown by the infelicity of the intended reading.

- (16) a. $i\! \! \! ?\quad sqilx^w\ ac\text{-}my\text{-}st\text{-}is\quad (!a\! \! \! ?)\quad \acute{t}\acute{c}\text{-}x^wuy\quad i\! \! \! ?\quad sm\text{-}s\acute{a}ma\! \! \! ?.$ (LL)
 DET person CUST-know-CAUS-3ERG (COMP) LOC-go DET IRED-white.person
 The Indian people knew that the white people were coming.

- b. $i\! \! \! ?\quad sqilx^w\ acmystís\quad i\! \! \! ?\quad \acute{t}\acute{c}x^wuy\quad i\! \! \! ?\quad sms\acute{a}ma\! \! \! ?.$ (JL)
 *Intended: The Indian people knew that the white people were coming.
 Actual: The Indian people knew the white men that were coming.

Note that the embedded predicate *!tcx^wuy* in (16a,b) is not inflected for the 3rd person possessor subject *-s*, as in (15). If *i?* were functioning as a complementizer in (15), we might then expect the intended reading of (16b), with a non-inflected embedded predicate, to be felicitous, just as in (16a) with complementizer *!a?*. (16b) however has a different meaning: *The Indian people knew the white men that were coming*. In other words, (16b) is a preposed relative clause.

To summarize, Okanagan differs from other Interior Salish languages such as Thompson because determiner *i?* and the oblique marker *t* do not function as complementizers. Both these particles are used in nominal modification structures. For the Upper Nicola dialect at least, we can use this complementary distribution as a diagnostic to distinguish relative clauses and attributive modification from other structures involving clausal subordination.

3 Introducing Nominal Modification in Okanagan

This section introduces prototypical attributive modification and relative clause structures, and introduces the problem of formally distinguishing these as separate classes in Okanagan.

3.1 Okanagan Attributive Modification Basics

One function of oblique *t* that is of immediate concern to the aims of this paper is its use as a DP-internal nominal attributive marker. Its function appears to be that of 'linking' the nominal head to an adjective-like, unaccusative modifier (cf Davis, Lai & Matthewson 1997). In (17a), the modifier $\acute{q}^w\acute{u}ct$ 'fat' is modifying $\acute{q}^wi\acute{f}\acute{a}lqs$ 'black-robe (priest)'. The modifier must precede the nominal, as in (17a). I refer to these structures as *complex DPs*. A head-initial ordering (17b) is not grammatical.

- (17) a. $[i\acute{?} \quad \acute{q}^w\acute{u}ct \quad t \quad \acute{q}^w\acute{f}ay-lqs]_{DP} \quad tali \quad c-\acute{?}ilx^wt.$ (LL)
 DET fat t black-robe very CUST-hungry
 The fat priest is very hungry.
- b. $*[i\acute{?} \acute{q}^w\acute{f}ay-lqs \ t \ \acute{q}^w\acute{u}ct]_{DP} \ tali \ c\acute{?}ilx^wt.$ (JL)

Predicate nominals may also be modified (18a). I call these structures *complex nominal predicates* (CNPs) (following *ibid.*)

- (18) a. $\acute{x}ast \quad t \quad tk\acute{f}milx^w \quad i\acute{?} \quad ylm\acute{x}^wm-t\acute{t}.$ (LL)
 good t woman DET chief-1_{PL.GEN}
 Our chief is a good woman.
- b. $*tk\acute{f}milx^w \ t \ \acute{x}ast \ i\acute{?} \ ylm\acute{x}^wmt\acute{t}.$ (JL)

Like complex DPs, head-final ordering is required within a CNP structure.^{10,11}

Modifiers of oblique objects of intransitive predicates may either precede (19a) or follow the nominal (19b). I refer to these as *complex obliques*.

- (19) a. $kn \quad w\acute{i}k-\acute{o}m \ t \quad k^w\acute{e}ck^w\acute{a}ct \quad t \quad tk\acute{f}milx^w.$ (LL)
 1_{SG.ABS} see-MID t strong t woman
 I see a strong woman.

¹⁰ Structures analogous to (17) and (18) are found in Shuswap and Lillooet (Davis, Lai & Matthewson 1997), as well as in Thompson, where the attributive marker *t* may co-occur with an irrealis determiner *k* (Koch 2006). Lillooet contrasts with Shuswap, Thompson, and Okanagan by having no oblique marker *t*(\acute{o}) in this environment, but only an optional, irrealis determiner *ku*. Assuming that the Thompson pattern reflects an earlier stage of Interior Salish, this implies both that oblique *t* has been lost in this environment in Lillooet (Davis, p.c.), and that the *k*-determiner has been lost from this particular environment in Shuswap. Okanagan, perhaps taking a similar, localized reduction to its logical conclusion, now has no *k*-type determiner *anywhere* in its grammar.

¹¹ Modifiers in CNPs must be individual-level predicates (cf *ibid.*). In Okanagan, stage-level predicates inflected with stative *ac-* are also allowed in this position. I analyze these as having been coerced to an individual level status. Both stage- and individual-level modifiers are permissible within complex DP structures, however. I will return to this point in section 4.2.

b. kn wíkəm t tkłmílx^w t k^wäck^wáct. (LL)

Variable head-modifier ordering is likewise possible for arguments of transitive predicates (20), if a determiner introduces both the head and the modifier. I refer to examples like (20) as *Det-Det* structures, since determiners introduce both the head and the modifier.

(20) a. wík-ən iʔ sílx^waʔ iʔ ylmíx^wum. (LL)
 see-(TR)-1SG.ERG DET big DET chief
 I see the big chief.

b. wíkən iʔ ylmíx^wum iʔ sílx^waʔ. (LL)

(20) is clearly different than a complex DP (cf 17a), and it seems that the choice of *iʔ* versus *t* has structural implications.

Reviewing examples (17-20), we see an asymmetry between complex DPs and CNPs on the one hand, and complex oblique objects and *Det-Det* structures on the other with regards to permissible head-modifier ordering. These differences are summarized in Table 1:

	<i>Complex DPs</i>	<i>CNPs</i>	<i>Complex Obliques</i>	<i>Det-Det structures</i>
head-final	√	√	√	√
head-initial	*	*	√	√

Table 1. Permissible Head-modifier orderings for a subset of Okanagan Modification Structures

All of the modifiers in the examples in this section are unaccusative. Next, I will introduce some examples of clausal modification. I assume these cases to be relative clauses, following Kroeber (1999).

3.2 Okanagan Relative Clause Basics

I adopt the syntactic definition of a relative clause given in Kroeber (1999:252): "Relative clauses are clauses that contain gaps that are co-referent with an NP in a higher clause, and the relative clause serves to restrict the type of entity denoted by the matrix NP." In (21), the bracketed relative clause *isck^wúʔ* 'the thing that I made' restricts the type of shirt under discussion. (21) also shows that Okanagan allows variable ordering of the head and the relative clause, which is characteristic of Interior Salish relativization patterns.

(21) a. iʔ lasmíst (iʔ) [i-s-c-k^wúʔ] síʔ-mí-n. (LL)
 DET shirt (DET) 1SG.GEN-NOM-CUST-make lose-APPL-(CAUS)-1SG.ERG
 I lost the shirt which I made.

b. (iʔ) [isck^wúʔ] iʔ lasmíst síʔmín. (LL)

I will refer to (21a) and (21b) respectively as *post-nominal*, and *pre-posed* relatives following Davis (2002, 2004).

The clausal determiners in (21) are phonologically null as part of a regular process that deletes them before 1st and 2nd person possessive morphemes (*in-* and *an-*) (N. Mattina 2006:113). The determiner *iʔ* will also regularly change to *a* before customary/stative prefix (*a*)*c-* (A. Mattina 2000:151), as in unaccusatively modified (22a). I assume that the second determiner in (22a) has coalesced with the following prefix, since it may emerge before (*a*)*c-* in slow speech contexts (22b).

- (22) a. q^wəlq^wil-st-n iʔ sqəłtmíx^w ac-ʔayǰ^wt. (LL)
 talk to-CAUS-1SG.ERG DET man STAT-tired
 I talked to the man who is tired. / I talked to the tired man.
- b. q^wəlq^wilstn iʔ sqəłtmíx^w iʔ acʔayǰ^wt. (JL)

Further evidence for a phonologically null determiner in this environment is the fact that post-nominal unaccusative modifiers without *ac-* are always ungrammatical without an introductory determiner:

- (23) a. *wikən iʔ ylmíx^wum silx^waʔ. (JL)
 see-(DIR)-1SG.ERG DET chief big
 I saw a big chief. / I saw a chief who is big.
- b. wikən iʔ ylmíx^wum **iʔ** silx^waʔ. (LL)

Returning to relative clauses, *pre-nominal* (24a) and *post-posed* (25a) relatives are ungrammatical in Okanagan, similarly to Thompson, but unlike Lillooet. The generalization is that either *iʔ* or *t must* introduce both the head and clausal portion of a relative. (24b) also shows that the determiner may surface before clausal modifiers prefixed with customary *ac-*.

- (24) a. *John k^wn-nú-s iʔ ac-wík-s qáqx^wəlx. (JL)
 John take-manage.to-(TR)-3ERG DET CUST-see-(DIR)-3ERG fish
 John caught the fish that he saw.
- b. John k^wnnús iʔ acwíks **iʔ** qáqx^wəlx. (LL)
- (25) a. *waý ʔíɬ-ən iʔ qáqx^wəlx ʔýq-nt-ís. (JL)
 AFFIRM eat-(TR)-1SG.ERG DET fish cook-DIR-3ERG
 I ate the fish that he cooked.
- b. waý ʔíɬən iʔ qáqx^wəlx **iʔ** ʔýqəntís. (LL)

Headless relatives are also possible in Okanagan, as in other Salish languages:

- (26) a. kaʔkíc-ən (iʔ) ac-sʰ-mí-st-ən (iʔ) in-kəwáp. (LL)
 find-1SG.ERG (DET) CUST-lose-APPL-CAUS-1SG.ERG (DET)1SG.GEN-horse
 I found my horse that I lost.
- b. kaʔkíc-ən (iʔ) ac-sʰ-mí-st-ən Ø. (LL)
 find-1SG.ERG (DET) CUST-lose-APPL-CAUS-1SG.ERG
 I found (what) I lost.

I compare permissible head-modifier orderings for Okanagan relatives with those of Northern Interior languages Lillooet and Thompson in Table 2.

clause type	configuration	Lillooet	Thompson	Okanagan
pre-nominal	[D1 [clause NP]]	√	*	*
post-posed	[D1 [NP clause]]	√	*	*
post-nominal	[D1[NP [D2 clause]]]	√	√	√
pre-posed	[D1 clause D2 NP]	*	√	√

Table 2. Possible Relative Clause Configurations in Lillooet, Thompson, and Okanagan¹²

Finally, in contrast to Northern Interior languages, there is *no distinct* inflectional paradigm which is characteristic of relative clauses in Okanagan (cf Kroeber 1999:304). Either ergative subject morphology (e.g. 24-26) or nominalization with possessor (genitive) subject morphology (e.g. 21) may be used, but both of these paradigms are found in main clauses as well.^{13,14}

Okanagan relative clauses, and unaccusatively modified Det-Det structures, both exhibit free head-modifier orderings. So far, the only apparent difference between the two is the semantic type of the modifier. Is it possible that Det-Det structures like (20) *are* relative clauses, structurally speaking?

I follow Heim & Kratzer (1998:96) for English (and Koch (2006) for Thompson) in assuming the following semantic distinction between relative clauses and attributive modification: A relative clause by definition utilizes a rule of predicate abstraction, whereas attributive modification simply involves a rule of predicate modification (Heim & Kratzer 1998:65). After surveying a wide range of data in the next section, I will identify some morpho-syntactic evidence for motivating this semantic distinction in Okanagan, which in turn suggests that Det-Det structures may be structurally distinct from relatives.

¹² Davis (p.c.) suggests that Okanagan's pattern represents "the canonical Interior system". Lillooet is 'transitional', in the sense that particles may or may not introduce the clause and/or head. Central Salish languages disallow post-nominal and pre-posed relatives.

¹³ Sometimes minimal-pair sentences are possible, which differ only by subject inflection on the relativized predicate. Consultants comments suggest that there are differences in meaning, the nature of which seem to be primarily temporal/aspectual. I do not address these problems in this paper.

¹⁴ For discussion of the different inflectional paradigms in Okanagan, see for example A. Mattina (1993) or N. Mattina (1996).

4 Examining the Distribution of *iʔ* and *t* in Nominal Modification

In Okanagan, there are six logically possible surface patterns involving determiner *iʔ* and oblique marker *t* in their capacity of introducing heads and modifiers in nominal modification structures. For two of these patterns, *iʔ* and *t* co-occur. Each pattern also varies by whether the nominal head precedes or follows the modifier: These six patterns are summarized in Table 3.

Pattern	HEAD-INITIAL		HEAD-FINAL	
	before nominal	before modifier	before modifier	before nominal
1	<i>iʔ</i>	<i>iʔ</i>	<i>iʔ</i>	<i>iʔ</i>
2	<i>iʔ</i>	<i>t</i>	<i>iʔ</i>	<i>t</i>
3	<i>iʔ</i>	<i>iʔ t</i>	<i>iʔ t</i> ¹⁵	<i>iʔ</i>
4	<i>t</i>	<i>t</i>	<i>t</i>	<i>t</i>
5	<i>t</i>	<i>iʔ</i>	<i>t</i>	<i>iʔ</i>
6	<i>t</i>	<i>iʔ t</i>	<i>iʔ t</i> ¹⁴	<i>t</i>

Table 3. Surface Patterns Displayed by Head/Modifier Introductory Particles in Okanagan Nominal Modification Structures

The identity of the first particle depends on the transitivity of the main predicate, and so is predictable. Patterns 1-3 will surface for core arguments of formally transitive main predicates, while patterns 4-6 will surface for oblique arguments of formally intransitive main predicates. The identity of the second particle(s) is not so easily predictable, but I will show in this section that it depends in part on whether the particle is introducing a modifier or a head, but also depends on the semantic type of the modifier.

Next, I will survey data involving the patterns in Table 3 across a range of modifiers of differing semantic types. For each sub-section, I will start with simple unaccusative modifiers, and move through increasingly complex types.

4.1 Determiner - Determiner (Pattern 1)

Despite data like (20), for non-eventive unaccusative predicates modifying a nominal head, the head normally follows the modifying predicate if a determiner introduces both components. This makes them similar to complex DPs, and constitutes evidence that not all pattern 1 structures are relative clauses:

¹⁵ The head-final versions of pattern 3 and 6 are *not* written as *iʔ* modifier - *iʔ t* nominal and *t* modifier - *iʔ t* nominal, which would otherwise follow from the general pattern in Table 1. This is because *iʔ t* nominal sequences indicate that the DP has specific argument status, which is a separate use of the sequence (see 6c and 6d for examples). For cases relevant to modification, *t* will associate with the modifier.

(27) a. nʔiys-ən iʔ ćwćiw̄t iʔ lasmíst. (LL)
 BUY-(DIR)-1SG.ERG DET clean DET shirt
 I bought a shirt that is clean. / I bought a clean shirt.

b. *nʔiysən iʔ lasmíst iʔ ćwćiw̄t. (JL)

(28) a. wík-ən iʔ cəcám̄aʔt iʔ skəkʔákaʔ. (JL)
 see-(DIR)-1SG.ERG DET small DET birds
 I saw the small birds. / I saw the birds that are small.

b. *wíkən iʔ skəkʔákaʔ iʔ cəcám̄aʔt. (JL)

(29) a. wík-ən iʔ sílxʷaʔ iʔ skəmXíst. (SM)
 see-(DIR)-1SG.ERG DET big DET bear
 I saw a big bear. / I saw a bear that is big.

b. *wíkən iʔ skəmXíst iʔ sílxʷaʔ. (JL)

There may be an animacy effect here, however. If the nominal being modified denotes a human, the modifier may follow the noun (e.g. 20). Such effects are otherwise unattested in Salish, as far as I know, and I currently have no explanation for the nature of this constraint, which is fairly consistent.¹⁶

For unergative modifiers, both head-modifier orderings are apparently grammatical, regardless of animacy:

(30) a. wík-ən iʔ skəkʔákaʔ iʔ ʔəxʷt-ílx. (LL)
 see-(TR)-1SG.ERG DET birds DET fly-body
 I saw the flying birds. / I saw the birds that are flying.

b. wíkən iʔ ʔəxʷtílx iʔ skəkʔákaʔ. (LL)

(31) a. wík-ən iʔ tətʷít (iʔ) ac-ʔatʔpm-ncút. (LL)
 see-(TR)-1SG.ERG DET boy (DET) CUST-jump-RFLX
 I saw the boy who jumped. / I saw the jumping boy.

b. wíkən (iʔ) ac-ʔatʔpmncút iʔ xíxwtəm. (JL)

Eventive unaccusative modifiers also display variable head-modifier orderings:

(32) a. kn-xít-ən iʔ tətʷít iʔ tkʷakʷ. (LL)
 help-DITR-1SG.ERG DET boy DET fall.down
 I helped the boy who fell down. / I helped the fallen boy.

b. knxítən iʔ tkʷakʷ iʔ tətʷít. (JL)

¹⁶ Animacy effects surface in other areas of the grammar as well: Humans often cannot be referred to as obliques in indefinite contexts, although there are exceptions.

(33) a. kn-xít-n iʔ ʃnínúmt iʔ xíxwtəm. (LL)
 help-DITR-1SG.ERG DET get.hurt DET little.girl
 I helped the girl who got hurt. / I helped the hurt girl.

b. knxítn iʔ xíxwtəm iʔ ʃnínúmt. (LL)
 Consultant's Comment: Sounds better than the first.

For nominalized intransitives inflected with possessor subject marking (i.e. the genitive paradigm), head-modifier ordering is variable. The modifiers in examples (34-35) are inflected as perfectives by the nominalizer and customary prefixes *s-c-*.

(34) a. cmay ixíʔ iʔ swárákxn (iʔ) i-s-c-wik. (LL)
 EPIS DEM DET frog (DET) 1SG.GEN-NOM-CUST-see
 That might be the frog that I saw.

b. cmay ixíʔ (iʔ) iscwik iʔ swárákxn. (LL)

(35) a. wik-s iʔ lasmíst iʔ s-c-ʔkim's. (LL)
 see-(DIR)-3ERG DET shirt DET NOM-CUST-sew-3SG.GEN
 He saw the shirt she sewed.

b. wiks iʔ scʔkims iʔ lasmíst. (JL)

For transitive predicate modifiers inflected for ergative subjects, head-modifier ordering is also variable:

(36) a. ixíʔ wík-ən iʔ s-c-ʃáw-səlx iʔ qáqx^wəlx.(RS)
 DEM see-(TR)-1SG.ERG DET NOM-CUST-dry-(CAUS)-3PL.ERG DET fish
 I saw the fish that they were drying.

b. ixíʔ wíkən iʔ qáqx^wəlx iʔ scʃáw'səlx. (JL)

(37) a. wík-ən iʔ ʔʃap-nt-ís iʔ skəkʃákaʔ. (LL)
 see-(DIR)-1SG.ERG DET shoot-DIR-3ERG DET birds
 I saw the birds that he shot.

b. wík-ən iʔ skəkʃákaʔ iʔ ʔʃap-nt-ísəlx. (JL)
 see-(DIR)-1SG.ERG DET birds DET shoot-DIR-3PL.ERG
 I saw the birds that they shot.

(38) a. i-s-c-k^wuʔ-əm iʔ lpot iʔ maʔ-ən. (LL)
 1SG.GEN-NOM-CUST-make-MID DET cup DET break-(TR)-1SG.ERG
 I'm fixing the cup I broke.

b. isck^wuʔəm iʔ maʔən iʔ lpot. (JL)

- (39) a. *ixiʔ iʔ ylmix^wum iʔ wík-ən.* (LL)
 DEM DET chief DET see-(TR)-1SG.ERG
 That's the chief I saw.
- b. *ixiʔ iʔ wík-ən iʔ swárákxn.* (LL)
 DEM DET see-(TR)-1SG.ERG DET frog
 That's the frog I saw.¹⁷

To summarize this section, both clausal, as well as non-clausal, predicate modifiers of nominal heads allow variable head-modifier ordering. The one exception is with non-eventive unaccusative modifiers and non-human heads, where the modifier must be pre-posed (27-29).

I suggest that this exception may be straightforwardly explained if examples like (27-29) have been re-analyzed as complex DPs. There is some supporting evidence for this analysis in the next section.

4.2 Determiner - t (Pattern 2)

Recall that for complex DPs, an unaccusative modifier will obligatorily precede the nominal head. Recall also that *iʔ* predictably introduces a core argument of a transitive main predicate. As such, complex *iʔ* DPs cannot serve as theme arguments of absolutive-subject main predicates (40a), or ditransitives (41a). In (40b) and (41b), the speaker volunteers complex oblique forms.

- (40) a. **kn wík-əm iʔ q^wʔay t swárákxn.* (IL)
 1SG.ABS see-MID DET blue t frog
 I saw a blue frog.
- b. *kn wíkəm t q^wʔay t swárákxn.* (LL)
- (41) a. **x^wíc'-xt-m-ən iʔ lasmíst t c'w'ciwt.* (IL)
 give-DITR-2SG.ACC-1SG.ERG DET shirt t clean
 I gave you a clean shirt.
- b. *x^wíc'xtmən t c'w'ciwt t lasmíst.* (LL)

In stark contrast to the pattern 1 unaccusatives, unergatives are disallowed as modifiers in complex DP structures (42a,b).

¹⁷ The near-minimal pair given as (39) shows that relatives with demonstrative main predicates also allow for either ordering. The demonstrative must be the main predicate in (39b), since if the demonstrative were simply the head of the relative clause, we would have to posit a null copula, since the DP *iʔ swárákxn* "the frog", by hypothesis cannot also function as a predicate.

- (42) a. *wík-ən iʔ t̚x^wt-ílx t skəkʔákaʔ. (JL)
 see-(DIR)-1SG.ERG DET flying t birds.
 I see the flying birds. (cf 30a,b)
- b. *wík-ən (iʔ) ac-łat̚pm-ncút t xíxwtəm.¹⁸ (JL)
 see-(DIR)-1SG.ERG (DET) CUST-jump-RFLX t girl
 I see the jumping girl. (cf 31,a,b)

Koch (2006:149) discusses a similar finding for Thompson.

The examples in (43) indicate that eventive unaccusatives are also disallowed as modifiers within a complex DP structure. (43c) illustrates how for these cases, the speaker will usually correct to pattern 1.¹⁹

- (43) a. *kn-xít-ən iʔ t̚k^wák^w t t̚t̚wít. (JL)
 help-DITR-1SG.ERG DET fallen t boy
 I helped the fallen boy. (cf 31a,b)
- b. *kn-xít-ən iʔ ʃnnúmt t xíxwtəm. (JL)
 help-DITR-1SG.ERG DET hurt t girl
 I helped the hurt girl. (cf 32a,b)
- c. *wík-ən iʔ yax^wt t skəkʔákaʔ. (JL)
 see-(DIR)-1SG.ERG DET fallen t bird
 I see the fallen bird.
 Consultant: wíkən iʔ yax^wt iʔ skəkʔákaʔ. (LL)

For CNPs, only individual-level unaccusatives are acceptable as modifiers (44a,45a).²⁰ Complex DPs are less stringent, since they do allow stage-level unaccusatives as modifiers (44b,45b):

- (44) a. t̚łt̚łt̚t t ylmíx^wum. (JL) (individual level)
 true/straight t chief
 He is a straight-forward chief.

¹⁸ We will see that (a)c- permits non-eventive stage-level unaccusatives to occur within CNPs. The same is not true for (a)c- prefixed to an unergative. This is because the function of (a)c- is different with unergatives than with unaccusatives. "The prefix c- adds to Okanagan state words a notion 'get/become'. With action words it signals progressive or habitual action." (A. Mattina 1993:241).

¹⁹ If it is an event variable that prevents unergatives and eventive unaccusatives from occurring as modifiers in complex DP structures, then we may have a straightforward explanation for why only simple, adjectival unaccusatives are acceptable as modifiers in complex DPs. Based on similar data in Thompson, Koch (2006) argues that pre-nominal modifications (i.e. complex DPs) contain less structure than post-nominal modifications (relative clauses), since the former lack vP, TP, and AuxP.

²⁰ See Davis, Lai & Matthewson (1997) for similar data in Lillooet and Shuswap.

b. iʔ tətətət t ylmix^wm kmɣltəm-s iʔ pəptwɪnax^w (JL)
 DET true/straight t chief visit-(DIR)-3ERG DET old.woman
 The straight-forward chief visited the old woman.

(45) a. *q^wiməm t sqəltmɪx^w. (JL) (stage level)
 frightened t man
 He is a frightened man.

b. iʔ q^wiməm t sqəltmɪx^w kmɣltəm-s iʔ pəptwɪnax^w (JL)
 DET frightened t man visit-(DIR)-3ERG DET old.woman
 The frightened man visited the old woman.

Comparing ungrammatical (45a) with (46a) below, we see that by prefixing stative *ac-* to the modifier, the sentence becomes grammatical.²¹

(46) a. ac-q^wiməm t sqəltmɪx^w. (LL) (stage level + ac-)
 STAT-frightened t man
 He is (in the state of being) a frightened man.

b. wik-ən iʔ ac-q^wiməm t sqəltmɪx^w. (LL)
 see-(TR)-1SG.ERG DET STAT-frighten t man
 I see the frightened man.

Adding stative *ac-* to a stage level unaccusative essentially allows that predicate to function as an individual level predicate,²² which in turn allows it to modify a nominal predicate within a CNP structure.

Morphologically speaking, *q^wiməm* 'frightened' (45,46) and *ik^wək^w* 'fall down' (43a) both involve C2 resultative reduplication, and so by hypothesis both denote resulting states. The following question now arises: Why is it the case that *q^wiməm* is allowed to modify a nominal within a complex DP structure and *ik^wək^w* is not? I suggest that while stage-level predicates like *q^wiməm* may be coerced into corresponding individual level states by prefixing stative *ac-*, stage-level predicates like *ik^wək^w* may not be, since they are irreducibly eventive. This predicts that resultatives like *ik^wək^w* cannot be prefixed by *ac-*, and so cannot be a modifier in a CNP structure. This prediction seems to be borne out:

(47) a. *kn-xit-ən iʔ ac-tk^wək^w t xixwtəm. (JL)
 help-DITR-1SG.ERG DET STAT-fallen t little.girl
 I helped the fallen little girl. (cf 43a)

²¹ See A. Mattina 1993 and N. Mattina 1996 for discussion of the functions of (*a*)*c-* as a "customary/habitual" marker, and as a "stative" marker.

²² I expect *acq^wiməm* in (46a) to have a meaning similar to *timid*. In any case, I have example data from a range of stage-level predicates (in the sense of Carlson 1977) suggesting that *ac-* makes a class of stage-level predicates grammatical as CNP-internal modifiers.

b. knxítən iʔ xíxwtəm iʔ tkʷákʷ. (LL)

(48) a. *kn-xít-ən iʔ ac-ǰnnúmt t xíxwtəm. (JL)
 help-DITR-1SG.ERG DET STAT-hurt t little.girl
 I helped the hurt little girl. (cf 43b)

b. knxítən iʔ xíxwtəm iʔ ǰnnúmt. (LL)

Based on the differences between predicates such as *qʷiməm* and *tkʷákʷ*, I suggest that there are two classes of stage-level predicates in Okanagan. The distinctions are represented by Table 4.

	Unergative	Unaccusative			
		Stage Level 1: <i>non-coercible</i>	Stage Level 2: <i>coercible</i>		Individual Level
			<i>w/o ac-</i>	<i>with ac-</i>	
CNP	*	*	*	√	√
Complex DP	*	*	√		√

Table 4. Restrictions on Unergative/Unaccusative Modifiers in CNPs and Complex DPs

To summarize, complex DPs do not require that a stage-level modifier be prefixed by *ac-*, but do require that if the modifier is stage-level, that it is also in principle coercible to an individual level status by *ac-*. CNPs require *ac-* stage-level modifiers.²³

Example (49a,50a) show that a head-initial ordering for pattern 2 is ungrammatical. These cases are often corrected to pattern 1 (49b,50b).

(49) a. *John sqʷlqʷil-t-s iʔ sqəltmíxʷ t tʃap-nt-ís iʔ sʃaʔcínəm. (JL)
 John talk.to-DIR-3ERG DET man t shoot-DIR-3ERG DET deer
 John talked to the man who shot the deer.

b. John sqʷlqʷilts iʔ sqəltmíxʷ iʔ tʃapntís iʔ ʃaʔcínəm. (LL)

(50) a. *kʷúl-ən iʔ yámǰwəʔ t ks-yaʔyáʔǰaʔ-səlx (JL)
 make-(TR)-1SG.ERG DET basket t FUT-show-(CAUS)-3PL.ERG
 I made the basket that they will show.

b. kʷúlən iʔ ksyaʔyáʔǰaʔsəlx iʔ yámǰwəʔ. (LL)

Finally, thematically transitive modifiers cannot occur within a complex DP structure (51-53):

²³ Note that individual level predicates *simpliciter* cannot take *ac-* either, so the *ac-* test applies only to stage-level predicates which may be coerced into individual-level states.

- (51) a. *ʔiʔ-ən iʔ s-c-ǰáw'-səlx t qáqx^wəlx. (JL)
eat-(TR)-1SG.ERG DET NOM-CUST-dry-(CAUS)-3PL.ERG t fish
I ate the fish that they are drying.
- b. ʔiʔən iʔ scǰáw'səlx iʔ qáqx^wəlx. (LL)
- (52) a. *wik-ən (iʔ) ac-k'w'úl-st-s t sqəlqəltmíx^w. (JL)
see-(TR)-1SG.ERG (DET) CUST-build-CAUS-3SG.ERG t men
I saw what the men were building.
- b. wikən (iʔ) ack'w'úlsts iʔ sqəlqəltmíx^w. (LL)
- (53) a. *kn s-c-ǰáaʔǰáaʔ-míxaʔx iʔ tʃap-nt-ísəlx t skəkʃákaʔ. (JL)
1SG.ABS NOM-CUST-look.for-INCEPT DET shoot-DIR-3PL.ERG t birds
I'm looking for some birds that they shot.
- b. *wik-ən iʔ tʃap-nt-ísəlx t skəkʃákaʔ. (JL)
see-(DIR)-1SG.ERG DET shoot-DIR-3PL.ERG t birds
I saw some birds that they shot
- c. i-s-c-ǰáaʔǰáaʔ-ám iʔ tʃap-nt-ísəlx iʔ skəkʃákaʔ. (LL)
1SG.GEN-NOM-CUST-look.for-MID DET shoot-DIR-3PL.ERG DET birds
I'm looking for some birds that they shot.

The crux of this section is that pattern 2 places definite constraints on the semantic type of the modifier: Only predicates that either *already are* non-eventive individual-level unaccusative predicates (e.g. *təʔtəʔt* 'straight/true'), or *may in principle* be coerced into such predicates by adding stative *ac-* (e.g. *q'w'iməm* 'frightened') may occur in this position. I cautiously suggest that the category of adjectives in Okanagan comprise just that class of basic and derived lexical items that may occur as modifiers in complex DP structures.

The ungrammaticality of eventive unaccusatives and unergatives as modifiers in complex DP structures supports an argument that says pattern 1 (Det-Det) structures, which allow these modifiers (e.g. 30-33), are structurally distinct from pattern 2 complex DPs.

There is also apparently a preference for head-initial ordering for pattern 1 unergatives and eventive unaccusative modifiers (cf 33b). Compare this to the preference for head-final ordering (excepting +human nominals) for pattern 1 non-eventive unaccusatives, which I have suggested may be reanalyzed as complex DPs. The overall generalization seems to be that intransitive modifiers more complex than non-eventive unaccusatives prefer to occur post-nominally.

4.3 Determiner - Determiner *t* (Pattern 3)

(54a) is a typical example of a pattern 3 modification. These are similar to pattern 1, except that an optional *t* intervenes between the determiner and the modifier.²⁴ They are nevertheless distinct, since pre-posed transitive modifiers (54b) are at best marginal for pattern 3 structures, but fine for pattern 1.

- (54) a. $k^w\acute{u}l\text{-}\acute{o}n$ $i\acute{?}$ $y\acute{a}m\check{x}^w\acute{a}l$ $i\acute{?}$ (t) $ks\text{-}y\acute{a}l\acute{y}\acute{a}l\check{x}\acute{a}l\text{-}s\acute{o}lx$. (LL)
 make-(DIR)-1SG.ERG DET basket DET (t) FUT-show-CAUS-3PL.ERG
 I made a basket that they will show.

- b. $\#k^w\acute{u}l\acute{o}n$ ($i\acute{?}$) $t\text{ }ks\acute{y}\acute{a}l\acute{y}\acute{a}l\check{x}\acute{a}l\text{-}s\acute{o}lx$ $i\acute{?}$ $y\acute{a}m\check{x}^w\acute{a}l$.²⁵ (JL)

My speaker suggests there is a slight difference in meaning for (54a), depending on whether *t* is present or not, but I have not so far been able to discover the nature of this difference.²⁶

Preceding a nominal, *i\acute{?}* *t* optionally marks the agent DP of a passive sentence, as shown by (6c) in section 2. *i\acute{?}* *t* preceding a modifier does not indicate agent extraction, however, since both agent- (55,56) and patient- (57,58) centered relatives are acceptable within this pattern.

- (55) $w\acute{i}k\text{-}\acute{o}n$ $ixi\acute{?}$ $i\acute{?}$ $s\text{-}\acute{q}uwilx\text{-}\acute{t}\text{-}c\acute{a}sy\acute{a}l\acute{q}n$
 see-(TR)-1SG.ERG DEM DET NOM-old-CONN-skull
 $i\acute{?}$ (t) $ks\text{-}kn\text{-}x\acute{i}t\text{-}\acute{o}m\text{-}s$. (LL)
 DET (t) FUT-help-DITR-2SG.ACC-1SG.ERG
 I saw a skull that is going to help you (*captik^{w\acute{t}} context*).

- (56) a. $w\acute{i}k\text{-}\acute{o}n$ $i\acute{?}$ $s\acute{q}oltm\acute{i}x^w$ $i\acute{?}$ $ac\text{-}kn\text{-}x\acute{i}t\text{-}\acute{o}m\text{-}s$. (SM)
 see-(TR)-1SG.ERG DET man DET CUST-help-DITR-2SG.ACC-1SG.ERG
 I saw the man that helps you/that is helping you.

- b. $w\acute{i}k\acute{o}n$ $i\acute{?}$ $s\acute{q}oltm\acute{i}x^w$ $i\acute{?}$ $t\text{ }acknx\acute{i}t\acute{o}ms$. (JL)

- (57) $w\acute{a}y\acute{?}$ $i\text{-}ks\text{-}k^w\acute{u}l\text{-}\acute{o}m$ $i\acute{?}$ $pewminn$
 AFF 1SG.GEN-FUT-make-MID DET drum
 $i\acute{?}$ (t) $ks\text{-}y\acute{a}l\acute{y}\acute{a}l\check{x}\acute{a}l\text{-}s\acute{o}lx$. (LL)
 DET (t) FUT-show-(CAUS)-3PL.ERG
 Yes, I'm making a drum that they will show.

²⁴ *t* is optional in the sense that without it, the resulting pattern 1 is equally grammatical.

²⁵ Marginal sentences indicated by #, ungrammatical sentences by *.

²⁶ In Thompson, oblique *t* introduces all relative clauses, but is phonologically deleted before certain determiners. (Koch 2006:7). It is possible that the 'optional' *t*, which distinguishes pattern 3 from 1, is historically related to the Thompson pattern.

- (58) nʔiys-ən iʔ lasmíst iʔ t ac-ʔkimʹ-st-xʷ. (JL)
 buy-(TR)-1SG.ERG DET shirt DET t CUST-sew-CAUS-2SG.ERG
 I bought the shirt that you are sewing.

There seem to be differences in the acceptability of this pattern, depending on the aspectual class of the relative clause predicate. (59) illustrates my general observation that pattern 3 is unacceptable if the relative clause predicate is inflected for past perfective *sc-*. By contrast, if a relative clause predicate is inflected for the future perfective *ksc-*, then pattern 3 is acceptable (60).

- (59) a. wik-s iʔ lasmíst iʔ s-c-ʔkimʹ-s. (LL)
 see-(DIR)-3SG.ERG DET shirt DET NOM-CUST-sew-3SG.GEN
 He saw the shirt that she made.

- b. *wik-s iʔ lasmíst iʔ t s-c-ʔkimʹ-s. (JL)

- (60) a. wik-s iʔ lasmíst (iʔ) i-k-s-c-kʷúʔ (SM)
 see-(DIR)-3SG.ERG DET shirt (DET) 1SG.GEN-FUT-NOM-CUST-make
 She saw the shirt that I'm going to make.
 (Context: Looking through a clothes-patterning catalogue).

- b. wiks iʔ lasmíst iʔ t iksckʷúʔ. (JL)

It remains to be seen exactly which aspectual classes may be introduced by *iʔ t*.

One thing is clear, however: pattern 3 is only felicitous if the modifier is thematically transitive. Unaccusative and unergative modifiers are not possible here (61a,62a), and will be corrected to a pattern 1 structure (61b,62b).

- (61) a. *qʷəlqʷíl-st-ən iʔ sqilxʷ iʔ t ac-xʷylwís. (JL)
 talk-CAUS-1SG.ERG DET people DET t STAT-travel
 I talked to the traveling people.

- b. qʷəlqʷílstən iʔ sqilxʷ (iʔ) acxʷylwís. (LL)

- (62) a. *qʷəlqʷíl-st-ən iʔ sqilxʷ iʔ t kstkʷtkʷʔút-aʔx. (JL)
 talk-CAUS-1SG.ERG DET people DET t FUT-travel-INCEPT
 I talked to the people who are going to travel.

- b. qʷəlqʷílstən iʔ sqilxʷ iʔ t kstkʷtkʷʔútaʔx. (LL)

Examples (63-65) below show a range of unaccusative modifiers, all of whom are ungrammatical as post-nominal modifiers within pattern 3, but fine within pattern 1.

- (63) a. *wik-ən iʔ ylmíxʷum iʔ t silxʷaʔ. (JL)
 see-(DIR)-1SG.ERG DET chief DET t big
 I saw a chief that was big. / I saw a big chief.

b. *wikən iʔ ylmix^wum iʔ silx^waʔ.* (LL)

(64) a. **q^wəlq^wil-st-ən iʔ sqəltmíx^w iʔ t ac-ʔayx^wt.* (JL)
 talk-CAUS-1SG.ERG DET man DET t STAT-tired
 I talked to the man who is tired. / I talked to the tired man.

b. *q^wəlq^wilstən iʔ sqəltmíx^w (iʔ) acʔayx^wt.* (LL)

(65) a. **k^wúl-ən iʔ citx^w iʔ t cikək.* (JL)
 make-(DIR)-1SG.ERG DET house DET t burn.down
 I built the house that burned down. / I built the burned-down house.

b. *k^wúlən iʔ citx^w iʔ cikək.* (LL)

Finally, head-final ordering is not a possibility if the sequence *iʔ t* introduces the head, since this marks an agent or instrumental argument of a main predicate:

(66) a. **wik-ən iʔ ʔaʔt iʔ t stáʔəm.* (JL)
 see-(DIR)-1SG.ERG DET fast DET t boat
 I saw a fast boat. / I saw a boat that is fast.

b. *wíkən iʔ ʔaʔt iʔ stáʔəm.* (LL)

(67) a. **ʔiʔən iʔ s-c-ǰaw-səlx iʔ t qáqx^wəlx.* (JL)
 eat-(TR)-1SG.ERG DET NOM-CUST-dry-(CAUS)-3PL.ERG DET t fish
 I ate the fish that they were drying.

b. *ʔiʔən iʔ scǰawsəlx iʔ qáqx^wəlx.* (LL)

In summary, it seems clear that the sequence *iʔ t* cannot precede any modifier that is felicitous within a complex DP structure, or indeed, any intransitive modifier, but may precede certain types of transitive predicates.

Before closing this section, I should clarify that one does sometimes find *iʔ t* preceding an unaccusative modifier, but this is restricted to cases where the main predicate is passive, and the modified nominal is also introduced by *iʔ t*, as in (68).

(68) *ʔiʔ-nt-əm iʔ t sílx^waʔ iʔ t kiʔlawnáʔ i-s-c-wik.* (LL)
 eat-DIR-PASS DET t big DET t grizzly 1SG.GEN-NOM-CUST-see
 He was eaten by the big grizzly bear that I saw.

The results of sections 3.1 through 3.3 are displayed in Table 5.

		<i>non-eventive unaccusative modifiers</i>	<i>unergative modifiers</i>	<i>genitive/transitive modifiers</i>
Pattern 1	<i>iɪ</i> modifier - <i>iɪ</i> head	√	√	√
	<i>iɪ</i> head - <i>iɪ</i> modifier	√ (+human only)	√	√
Pattern 2	<i>iɪ</i> modifier - <i>t</i> head	√	*	*
	<i>iɪ</i> head - <i>t</i> modifier	*	*	*
Pattern 3	<i>iɪ</i> modifier - <i>iɪ</i> <i>t</i> head	*	*	*
	<i>iɪ</i> head - <i>iɪ</i> <i>t</i> modifier	*	*	√

Table 5. Interim Summary: Modifier/Head introductory Particles, Head-modifier orderings, and Semantic Types of Modifiers.

4.4 t - t (Pattern 4)

Middle intransitives (69-71) are often volunteered in indefinite contexts, instead of the analogous transitive sentence. I referred to these types of structures as complex obliques in section 3, where it was shown that head-modifier ordering is variable for unaccusatively modified oblique nominals:

(69) a. kn wík-əm t swárákxn t q^wƴay. (JL)
 1SG.ABS see-MID t frog t blue
 I saw a frog that is blue. / I saw a blue frog.

b. kn wíkəm t q^wƴay t swárákxn. (LL)

(70) a. kn ƶiys-əm t lasmíst t cŵcíwt. (LL)
 1SG.ABS buy-MID t shirt t clean
 I bought a clean shirt. / I bought a shirt that is clean.

b. kn ƶiysəm t cŵcíwt t lasmíst. (JL)

(71) a. kn wík-əm t cəcámaʔt t skəkƴákaʔ. (LL)
 1SG.ABS see-MID t small t birds
 I saw some small birds. / I saw some birds that are small.

b. kn wíkəm t skəkƴákaʔ t cəcámaʔt. (JL)

Unergatives (72-73) are also available as modifiers of oblique nominals, but with a preference for head initial ordering.²⁷ While head-final (72b) was judged

²⁷ Note that substituting *xíxwtəm* 'little girl' for 'rabbit' in (72) leads to a decidedly less felicitous sentence, showing the dispreference for marking human nominals as obliques.
 #kn wíkəm t xíxwtəm t acááʔpməcut. #kn wíkəm t acááʔpməcut t xíxwtəm. (JL)
 I saw a jumping little girl / I saw a little girl who jumped.

grammatical, head-final (73b) was not, and the speaker instead volunteered a pattern 1 structure.

(72) a. kn wík-əm t spəplínaʔ t ac-ʔáʔpm-ncut. (LL)
 1SG.ABS see-MID t rabbit t CUST-jump-RFLX.
 I saw a jumping rabbit. / I saw a rabbit that jumped.

b. kn wíkəm t acʔáʔpmncut t spəplínaʔ. (JL)

(73) a. kn wík-əm t skəkʔákaʔ t ac-ʔúx^wt. (JL)
 1SG.ABS see-MID t birds t CUST-fly
 I saw some birds that were flying. / I saw some flying birds.

b. *kn wíkəm t acʔúx^wt t skəkʔákaʔ. (JL)
 Consultant's Comment: wiken (iʔ) acʔúx^wt iʔ skəkʔákaʔ. (LL)

Thematically transitive relative clauses with genitive subjects are also possible with pattern 4 (74-75), and variable head-modifier ordering is possible (75):

(74) a. kn wík-əm t sʕáʔcínəm t i-ks-c-piʕ. (LL)
 1SG.ABS see-MID t deer t 1SG.GEN-FUT-CUST-hunt
 I saw the deer that I'm going to hunt.

b. kn p̣ʔq-ám t spəplínaʔ (iʔ) t i-s-c-piʕ. (LL)
 1SG.ABS cook-MID t rabbit (DET) t 1SG.GEN-NOM-CUST-hunt
 I cooked the rabbit that I hunted.

(75) a. John k^wúʔ-əm t yámǰ^waʔ t k-s-nq^wiʔ-tn-s. (LL)
 John make-MID t basket t UNR.POSS-NOM-pack-INSTR-3.GEN
 John made the basket he was going to carry.

b. John k^wuʔəm t ksnq^wiʔtns t yámǰ^waʔ. (LL)

Clear cases of transitive, ergative subject relatives are less common for pattern 4, but are possible. Head-final ordering is possible (76b), but like pattern 4 unergatives (72-73), head-initial ordering is preferred (77b).

(76) a. kn s-c-k^wuʔ-x t yámǰ^waʔ t ks-yaʔyáʔǰaʔ-slx.²⁸ (LL)
 1SG.ABS NOM-CUST-make-INTR t basket t FUT-show-(TR)-3PL.ERG
 I am making a basket that they will show.

b. kn sc^wuʔx t ksaʔyáʔǰaʔslx t yámǰ^waʔ. (JL)

²⁸ There is a reduced *-nt-* transitivizer in this form, elided before 3erg *-s* in the plural form *-selx*. (cf A.Mattina 2000:156). Strong stems do not have an overt transitivizer in the 1st singular, and 3rd singular and plural forms.

(77) a. kn wík-əm t sqəltmíx^w t ks-kn-xít-m-s. (LL)
 1_{SG.ABS} see-MID t man t FUT-help-DITR-2_{SG.ABS}-3_{SG.ERG}
 I saw the man that will help you.

b. *kn wíkəm t kskənxítəms t sqəltmíx^w. (JL)
 Consultant's Comment: wíkən i? sqəltmíx^w i? kskənxítəms. (LL)

It is important to note that I have only been able to elicit pattern 4 structures with thematically transitive modifiers when the modifier is inflected for future *k(s)*- or unrealized possessive *k(ʔ)*-. Aspectually uninflected transitive predicates are not possible here. The speaker will normally correct to the pattern 1 in these cases, and use a transitive main predicate (78-80).

(78) a. *kn wík-əm t skəkíákaʔ t ʔfap-nt-ís. (JL)
 1_{SG.ABS} see-MID t birds t shoot-DIR-3_{ERG}
 I saw some birds that he shot.

b. *kn wíkəm t ʔfapntís t skəkíákaʔ. (JL)

c. wík-ən i? ʔfap-nt-ís i? skəkíákaʔ. (LL)
 see-(DIR)-1_{SG.ERG} det shoot-DIR-3_{ERG} DET birds
 I saw the birds that he shot. (cf 28a)

(79) a. *kn wík-əm t kəkəwáp t sux^w-nt-x^w (LL)
 1_{SG.ABS} see-MID t dogs t recognize-DIR-2_{SG.ERG}
 I saw some dogs that you recognize.

b. wíkən i? kəkəwáp i? sux^wntx^w (LL)

(80) a. *kn wík-əm t sqəltmíx^w t kn-xít-əms. (JL)
 1_{SG.ABS} see-MID t man t help-DITR-2_{SG.ACC}-3_{SG.ERG}
 I saw the man that helped you.

b. wíkən i? sqəltmíx^w i? knxítəms. (LL)

The *t* which introduces the modifying clause within pattern 4 shares a certain commonality with *t* in pattern 3: it occurs before only certain aspectual classes of transitive predicates. It seems reasonable to assume that clause-introducing *t* in patterns 3 and 4 is sensitive to aspect.

In many respects pattern 4 and pattern 1 are similar, but there is a stronger-preference for a head-initial ordering in the case of pattern 4 unergative and transitive modifiers, than for corresponding cases within pattern 1.²⁹

²⁹ This complements the preference for head-final unaccusatives within pattern 1.

4.5 t - Determiner (Pattern 5)

The modifier of a *t* oblique object of a middle or ditransitive main predicate must also be introduced by *t*, regardless of the head-modifier ordering. This means that pattern 5 is ungrammatical. (81-82) illustrate this point with unaccusative modifiers. Pattern 5 (81a,82a) will always be corrected to pattern 4 (81b,82b):

(81) a. *kn wík-əm t swárákxn iʔ qʷfay. (JL)
 1SG.ABS see-MID t frog DET blue
 I see a frog that is blue. / I see a blue frog.

b. kn wíkəm t swárákxn t qʷfay. (JL)

(82) a. *xʷíc'-xt-xʷ t qʷacqn iʔ sic(t). (JL)
 give-DITR-2SG.ERG t new DET hat
 You gave him a new hat. / You gave him a hat that is new.

b. xʷíc'xtxʷ t sic t qʷacqn. (NS)

For transitive modifiers of oblique heads, if the transitive predicate is introduced by only the determiner *iʔ*, so must the nominal head, and the main predicate is also changed to a transitive. Recall that correction to the *iʔ* - *iʔ* pattern is the only possibility if the modifier is a non-future transitive (83b,84c,85b,86b).

(83) a. *kn ʔiʔn t qáqxʷəlx iʔ kʷu xʷíc'-xt-xʷ. (JL)
 1SG.ABS eat(intr) t fish DET 1SG.GEN give-DITR-2SG.ERG
 I ate some of the fish that was given to me.

b. ʔiʔ-ən iʔ qáqxʷəlx iʔ kʷu xʷíc'-xt-xʷ. (LL)
 eat-(DIR)-1SG.ERG DET fish DET 1SG.GEN give-DITR-2SG.ERG
 I ate some of the fish that was given to me.

(84) a. *kn wík-əm t kəkəwap iʔ suxʷ-nt-xʷ (JL)
 1SG.ABS see-MID t dogs DET recognize-DIR-2SG.ERG
 I saw some dogs that you recognize.

b. *kn wíkəm t kəkəwap t suxʷəntxʷ. (JL)

c. wíkən iʔ kəkəwap iʔ suxʷəntxʷ. (LL)

(85) a. *kn wík-əm t skəkʔákaʔ iʔ tʔap-nt-ísəlʔ. (JL)
 1SG.ABS see-MID t birds DET shoot-DIR-3PL.ERG
 I saw some birds that they shot.

b. wíkən iʔ skəkʔákaʔ iʔ tʔapntísəlʔ. (LL)

- (86) a. *kn p̣yq-əm t spəplínaʔ (iʔ) i-s-c-kaʔkíc. (JL)
 1SG.ABS cook-MID t rabbit (DET) 1SG.GEN-NOM-CUST-find
 I cooked some rabbit that I found.
- b. p̣yq-nt-ín iʔ spəplínaʔ (iʔ) i-s-c-kaʔkíc. (LL)
 cook-DIR-1SG.ERG DET rabbit (DET) 1SG.GEN-NOM-CUST-find
 I cooked the rabbit that I found.

4.6 t - Determiner t (Pattern 6)

Similar to pattern 3, *iʔ t* also may introduce relative clause predicates headed by oblique objects of intransitive main predicates, as in (87a) and (88a). (87b) and (88b) show equally acceptable pattern 4 forms.

- (87) a. kn s-c-kʷuʔ-x t yámǰwʰaʔ iʔ t ks-yaʔyáʔǰaʔ-s-əʔx. (LL)
 1SG.ABS NOM-CUST-make-INTR t basket DET t FUT-show-CAUS-3PL.ERG
 I'm making a basket that they will show.
- b. kn sckʷuʔx t yámǰwʰaʔ t ksyaʔyáʔǰaʔsəʔx. (LL)
- (88) a. kn wík-əm t cásyʰaʔqn iʔ t ks-kn-xít-m-s. (JL)
 1SG.ABS see-INTR t skull DET t FUT-help-DITR-2SG.ACC-3SG.ERG
 I saw a skull that is going to help you.
- b. kn wíkəm t casyaʔqn t kskənxítəms. (JL)

It was shown in 3.4 that pattern 4 relatives with transitive modifiers uninflected for future were systematically corrected to pattern 1. In these cases, however, there is also an alternate solution: the oblique head characteristic of pattern 4 may be retained in these cases by including a clause-introducing determiner *iʔ*, thus yielding pattern 6 (89-90). Note that for (89-90), *iʔ* must precede *t* since the relative clause predicate is not inflected for future.

- (89) a. kn s-c-ǰaʔǰaʔ-míxaʔx t skəkʔákaʔ iʔ t ʔʔap-nt-ísəʔx. (LL)
 1SG.ABS NOM-CUST-look.for-INCEPT t birds DET t shoot-DIR-3PL.ERG
 I'm looking for some birds that they shot.
- b. *kn scǰaʔǰaʔmíxaʔx t skəkʔákaʔ t ʔʔapntísəʔx. (JL)
- c. *kn scǰaʔǰaʔmíxaʔx iʔ t ʔʔapntísəʔx t skəkʔákaʔ. (JL)
- (90) a. kn s-c-kʷuʔ-x t péwminn iʔ t ǰmínk-s. (LL)
 1SG.ABS NOM-CUST-make-INTR t drum DET t want-(CAUS)-3SG.ERG
 I'm making a drum that he wants.
- b. *kn sckʷuʔx iʔ t ǰmínks t péwminn. (JL)

Unlike the marginally acceptable pre-posed cases of pattern 3, it is not possible to pre-pose the clause, as in (89c,90b), because these intransitive main predicates must always select for oblique *t* objects.

This pattern is also apparently grammatical if the relative clause is inflected for a genitive subject (91-92).

(91) a. kn p̣ỵq-ám t spəplínaʔ iʔ t i-s-c-piĥ. (JL)
 1SG.ABS cook-MID t rabbit DET t 1SG.GEN-NOM-CUST-hunt
 I cooked the rabbit that I hunted.

b. kn p̣ỵqám t spəplínaʔ t iscipiĥ. (LL)

(92) a. kn ʔiʔən t qáqx^wəlx iʔ t s-ʔəʔpín-s John. (LL)
 1SG.ABS eat(intr) t fish DET t NOM-net.fish-3GEN John
 I ate some fish that John caught.

b. ʔiʔ-ən iʔ qáqx^wəlx iʔ s-ʔəʔpín-s John. (LL)
 eat-(TR)-1SG.ERG DET fish DET NOM-net.fish-3GEN John
 I ate the fish that John caught.

Just as with pattern 3, unaccusative and unergative modifiers may not be introduced by *iʔ t* within pattern 6.

(93) *kn wík-əm t speplínaʔ iʔ t ac-ʔáʔp-m-ncut. (JL)
 1SG.ABS see-MID t rabbit DET t CUST-jump-RFLX
 I saw a rabbit that jumped. / I saw a jumping rabbit. (cf 30, 41, 69).

An intransitive modifier introduced by *iʔ t* may also not be pre-posed, regardless of the presence of a transitive main predicate. Note that these differ from complex DP structures only by virtue of the fact that *t* precedes the modifier.

(94) a. *x̣mínk-s iʔ t sic t q^wacqn. (JL)
 want-(CAUS)-3.ERG DET t new t hat
 He wants a new hat. / He wants a hat that is new.

b. *nʔíys-ən iʔ t c̣ẉc̣íẉt t lasmíst. (JL)
 buy-(DIR)-1SG.ERG DET t clean t shirt
 I bought a clean shirt. / I bought a shirt that is clean.

c. *wík-ən iʔ t sílx^waʔ t skemxíst. (JL)
 see-(DIR)-1SG.ERG DET t big t bear.
 I saw a big bear. / I saw a bear that is big.

The data in (93-94) imply that pattern 6 and pattern 3 share the property of allowing only thematically transitive modifiers.

The results of this survey are shown in Table 6.

		<i>non-eventive unaccusative modifiers</i>	<i>unergative modifiers</i>	<i>genitive/transitive modifiers</i>
Pattern 1	<i>iɫ</i> modifier - <i>iɫ</i> head	√	√	√
	<i>iɫ</i> head - <i>iɫ</i> modifier	√ (+human only)	√	√
Pattern 2	<i>iɫ</i> modifier - <i>t</i> head	√	*	*
	<i>iɫ</i> head - <i>t</i> modifier	*	*	*
Pattern 3	<i>iɫ t</i> modifier - <i>t</i> head	*	*	*
	<i>iɫ</i> head - <i>iɫ t</i> modifier	*	*	√
Pattern 4	<i>t</i> modifier - <i>t</i> head	√	√	√ (future only)
	<i>t</i> head - <i>t</i> modifier	√	√	√ (future only)
Pattern 5	<i>t</i> modifier - <i>iɫ</i> head	*	*	*
	<i>t</i> head - <i>iɫ</i> modifier	*	*	*
Pattern 6	<i>iɫ t</i> modifier - <i>t</i> head	*	*	*
	<i>t</i> head - <i>iɫ t</i> modifier	*	*	√

Table 6. Summary: Modifier/Head introductory Particles, Head-modifier orderings, and Semantic Types of Modifiers.

5 Summary and Discussion

From this survey of nominal modification strategies in Okanagan, several interesting generalizations emerge:

- (1) Pattern 2 is exclusively characteristic of attributive modification. This is evident from the fact that head-initial structures are disallowed, as are all unergative and transitive modifiers.
- (2) Restrictions on modificational types within pattern 2 complex DPs and CNPs provide evidence that:
 - a. there is an individual- / stage-level distinction in Okanagan.
 - b. semantically, stative *ac-* ranges over stages of an individual, while customary *ac-* ranges over events. Pattern 2 structures disallow modifiers inflected for customary *ac-*. This is expected if one extends Koch's (2006) semantic analysis of pre-nominal modification in Thompson to Okanagan.
- (3) Patterns 3 and 6 are exclusively characteristic of relative clauses, since only transitive modifiers are permitted.
- (4) Patterns 1 and 4 show characteristics of both attributive modification and relative clauses.

5.1 Discussion of Generalization 1

The exclusive use of unaccusative modifiers within pattern 2, along with the ungrammaticality of more complex types of modifiers in this position, indicates that this configuration is reserved for attributive modification. The results here match nicely with data on complex DPs from Shuswap and Lillooet (Davis, Lai & Matthewson 1997), as well as Thompson (Koch 2006), and is reflective of the common ancestry of the Northern and Southern Interior sub-branches of the Salish language family.

5.2 Discussion of Generalization 2

Okanagan is different from Lillooet and Shuswap since modifiers within CNPs are not limited to individual level predicates. In Okanagan, certain stage level unaccusatives can also occur in this position if they are prefixed by stative *ac-*. Complex DPs allow both individual-level and stage-level modifiers that are not prefixed by *ac-*, but only stage-level modifiers that can independently host *ac-* in other positions (e.g. CNP modifiers³⁰) can occur as complex DP modifiers.

I propose that there are two classes of stage-level predicates in Okanagan. While a CNP structure will distinguish a basic (non-derived) unaccusative modifier as being either an individual- or a stage-level predicate, a complex DP structure will distinguish both basic and *ac-* prefixed unaccusative modifiers as being eventive predicates or not. Only non-eventive stage-level predicates may occur prefixed by stative *ac-* in these positions. Together, these two structures separate unergative and eventive (non-coercible) stage-level unaccusative modifiers on the one hand, from non-eventive stage-level unaccusatives (coercible) and individual level predicates on the other, by disallowing the former class (see Table 4 above). Customary/habitual *ac-* can attach to unergatives, e.g. *acʔáɫpməncút* 'jumping', but the effect is quite different (cf A. Mattina 1993), and as we have seen, these are disallowed as modifiers within complex DP and CNP structures.

It follows that some C2-reduplicated, stage-level resultative forms like *ɪkʷákʷ* 'fall down' have event variables (similarly to unergatives), other resultative forms like *qʷiməm* 'frightened' do not (similarly to individual-level predicates). If we accept that complex DPs and CNPs structures place definite restrictions, as described above, on the semantic type of the modifier, then the fact that *ɪkʷákʷ* patterns with unergatives is evidence for including an event variable in the semantic representation of the predicate.

Semantically speaking, stative *ac-* ranges over stages of an individual. It unifies those stages into something approximating an unbounded interval, and applies the argument property to the entire interval. Customary/habitual *ac-* ranges over events, and applies the event to successive stages of an individual. A semantics which seeks to unify the stative and customary/habitual uses of *ac-* must then be sensitive to the presence or absence of an event variable in the denotation of the predicate to which it attaches.

³⁰ Or as a post-nominal modifier within a Det-Det structure.

If stative *ac-* has the effect of turning a stage-level state into an individual-level state, then we can retain the cross-linguistic (Interior Salish) generalization that only individual level predicates may occur as modifiers within a CNP structure.

5.3 Discussion of Generalization 3

The sequence *iʔ t* is only grammatical before transitive predicate modifiers, which is a hallmark of relative clauses. I argue that the *iʔ t* sequence in patterns 3 and 6 constitutes overt, morpho-syntactic evidence of extraction.

Patterns 3 (*iʔ - iʔ t*) and 6 (*t - iʔ t*) usually reduce to patterns 1 (*iʔ - iʔ*) and 4 (*t - t*) respectively. The only case in which the *iʔ t* sequence seems required is within pattern 6, where the nominal head is an oblique argument of the main predicate, and the relative clause predicate is not inflected with future *ks-*. The sequence *iʔ t* is required in this case because a reduced pattern 4 structure requires that the predicate be inflected for future *ks-*. If we consider the exclusive availability of future transitives as relative clause modifiers within pattern 4 along with the requirement that *iʔ* be retained in before non-future pattern 6 relatives, then we have intriguing evidence that the clausal determiner may be sensitive to the selectional properties of the relativized predicate.

This implies that relative clauses in Okanagan may be formed by movement of a clause-internal determiner to the front of the clause. Kroeber (1997) and Koch (2006) argue that this is the case for Thompson relative clauses, and Davis (2004) makes similar claims for Lillooet.

Locative relative clauses in Okanagan offer tantalizing evidence for such an analysis, since they pattern similarly to Thompson and Lillooet:

(95)	talki	in-ǰast	iʔ	[səntumisten] ₂	[iʔ	tl	t ₂] ₁
	very	1SG.GEN-good	DET	store	DET	LOC	
		sən-ʔiys-ən		t ₁	axàʔ.		
		buy-(TR)-1SG.ERG		DEM			

I like the store where I bought these from.

Kroeber suggests that for Thompson, "the preposition codes the relation of gap to relative clause predicate, not the relation of the whole relative clause to the matrix predicate... Thus, at least locative relative clauses in Thompson are formed by means of some sort of movement (1997:396-7)." Okanagan locatives, such as *tl* 'from' in (95), occur DP-internally and so are not technically prepositions. A locative DP such as *iʔ tl səntumistən* 'from the store' may nevertheless be said to be an underlying locative adjunct of the relative clause predicate *sənʔiysən* 'I bought', since it does match the selectional restrictions of the relative clause predicate, and not the main clause predicate.

It is difficult, however, to motivate extending this movement account to non-locative relatives in Okanagan. In Thompson and Lillooet, which have elaborate determiner systems, the determiner which introduces the head nominal can be different from the determiner which introduces the clause, therefore the

determiner introducing the clause can show the selectional properties of the relative clause predicate, without necessarily showing the selectional properties of the main predicate. Because Okanagan has only one determiner, the result is ambiguous. In principle, we might have been able to make use of the oblique marker *t* to obtain the necessary contrast. Two patterns show clear mismatches: patterns 2 and 5. But unfortunately, pattern 2 does not allow for clausal modifiers, and pattern 5 is categorically ungrammatical.

Another issue is the fact that *iʔ t* cannot be said to have moved as a unit, unlike the determiner + locative in (95). This is because *iʔ t* nominal sequences in Okanagan are used to mark agents of passives or instrumental nominals, and are therefore ungrammatical if used to mark core arguments of main predicates in non-passive or instrumental contexts. Also, whereas *t* in pattern 3 is optional, the locative particle in a locative relative clause structure is never optional.³¹ One piece of evidence in favor of extending the movement account to non-locatives is that both Okanagan locatives and pattern 3 and 6 relatives share the property of not allowing a pre-posed structure.^{32,33}

Restrictions on the uses of patterns 3 and 6 offer a promising avenue of research for eventually motivating a movement account of non-locative relatives in Okanagan. I expect that the motivating factors are semantic, rather than syntactic, however. Syntactically speaking, the fact that *iʔ* is required for non-future transitive relatives within pattern 6, but not for future transitives, might lead us to expect different selectional properties for future transitive versus non-future transitive predicates in main clauses, but this is not the case. All transitive main predicates will normally select for *iʔ* DP arguments, regardless of whether the predicate is inflected for future or not, but the choice of *iʔ* versus *t* arguments (and correspondingly, a speaker's choice of a transitive versus intransitive main predicate) does depend partially on the discourse context. Intransitive predicates with oblique objects are more likely to be used in indefinite contexts, whereas transitive predicates with *iʔ* DP objects are more likely to be used in definite contexts. The requirement that *iʔ* precede certain pattern 6 relatives is plausibly related to the definiteness of the referent of the extracted nominal within the larger discourse context, but this hypothesis needs to be tested.

5.4 Discussion of Generalization 4

Patterns 1 and 4 share characteristics of both attributive modification and relative clauses. In contrast to pattern 2, pattern 1 permits head-initial structures. For unergative, eventive unaccusative, and transitive modifiers within pattern 1, speakers will usually volunteer a head-initial structure. The ungrammaticality of post-nominal unaccusative modification of a non-human head within pattern 1 may be straight-forwardly explained if these instances

³¹ Both locatives and the oblique *t* might possibly be analyzed as DP-internal case markers, but this requires further research.

³² Recall that for pattern 3, a pre-posed clause is only marginally acceptable.

³³ This could be evidence for a raising analysis of these structures (Kayne 1994).

have been reanalyzed as pattern 2 complex DPs. Note that these are the only types of modifiers which show a ordering restriction within pattern 1. Not incidentally I think, they are also the only types of modifiers *allowed* within pattern 2. The question of why unaccusative modification of human heads does not show this same restriction has no clear answer at this time.

Out of all the patterns, 1 and 4 allow for the widest range of semantic modifiers, and are relatively free with regards to their head-modifier orderings. But as we have seen, there are restrictions and speaker preferences. Especially for pattern 1 and 4 unergative and clausal modifications, it seems clear that head-initial structures are preferred. Also, for clausal modifications within patterns 1 and 4, patterns 3 and 6 (with the *i?* *t* sequence) are usually options. If we assume that there is a covert, clausal *t* for unergative and clausally modified pattern 1 structures, and a covert clausal *i?* for unergative and clausally modified pattern 4 structures, then we might also say that extraction has occurred in these cases. This account seems plausible, but does not explain why pre-prosed clauses and post-nominal intransitives are acceptable for patterns 1 and 4, but not for 3 and 6. I therefore assume, for the time being, that patterns 1 and 4 are characteristic of both attributive modification and relative clauses.

6 Conclusion

The results from this survey clearly indicate that pre- and post-nominal *spheres* (to use terminology from Koch 2006) differ structurally in Okanagan. Non-eventive unaccusative modification of a nominal is canonically pre-nominal, whereas semantically more complex, eventive modification is canonically post-nominal.³⁴ The post-nominal sphere is structurally more complex than the pre-nominal sphere, since it allows clausal and eventive intransitive modification. This analysis accords with findings made by Koch (2006) for Thompson. A formal semantics which compositionally accounts for the distinction should now be possible.

³⁴ This does not preclude canonically post-nominal clausal modifiers from pre-posing.

Abbreviations

ABS	absolute	GEN	genitive
ACC	accusative	INCEPT	inceptive
ADV	adverb	INCH	inchoative
AFF	affirmative	INDEP	independent pronoun
APPL	applicative	IREP	initial-reduplication
CAUS	causative transitivizer	LOC	locative
COMP	complementizer	MID	middle intransitive
CONJ	conjunction	NEG	negative
CONN	connective	NOM	nominalizer
CUST	customary	PASS	passive
DEM	demonstrative	PL	plural
DET	determiner	PT	particle
DIR	directive transitivizer	RFLX	reflexive
DITR	ditransitivizer	RCPR	reciprocal
EPIS	epistemic modal	SG	singular
ERG	ergative	STAT	stative
EVID	evidential	TR	transitivizer
FRED	final reduplication	UNR.POSS	unrealized possessor
FUT	future	YNQ	yes-no question

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