Deverbal nominalizations in Ktunaxa

Abstract: This paper presents an overview on deverbal nominalizations from Ktunaxa, a language isolate spoken in eastern British Columbia, Canada. Deverbal nominalizations are formed uniformly with a left-peripheral nominalizing particle $k$ (Morgan 1991). However, they do not form a single homogenous class with respect to various syntactic properties. These properties are illustrated with novel data, showing that deverbal nominalizations fall into at least two classes, which are analyzed here as nominalization taking place at either $vP$ or $VP$, where $vP$-nominalizations include the external argument and $VP$-nominalizations do not. Evidence for this division comes from how possession is expressed, the interpretation of the passive (and passive-like constructions), and the licensing of verbal modifiers. As both classes of deverbal nominalizations are constructed uniformly with the nominalizing particle, these properties are derived syntactically from the size of the verbal constituent being nominalized.

Keywords: Ktunaxa; Deverbal nominalization; possession; argument structure; passive

1. Introduction

Ktunaxa (isolate, also Kutenai) is a language spoken in Eastern British Columbia, Canada, and in northern Idaho and Montana, in the United States. In British Columbia it is spoken by 31 fluent speakers across four communities (Dunlop, Gessner, Herbert, & Parker 2018). The language reported on here comes from fieldwork conducted with two speakers in the ?aqam First Nations near Cranbrook, BC, and with one speaker in Vancouver, BC.

There are several early descriptions of the Kuntaxa language from Canestrelli (1894), Boas (1926) and Garvin (1948a, b, c, d). More recently, there has been an effort to document and analyse various grammatical properties of Ktunaxa (Mast 1988; Dryer 1991, 1992, 1994, 2002; Laturnus 2011; Blamire 2011; Tamppere, Birdstone & Wiltschko 2012; McClay & Birdstone 2015; McClay 2017; Bertrand 2019), though there has been little attention payed to the grammar of nominalizations. In addition to the above works, the most substantial description of Ktunaxa to date is in Morgan (1991). While Morgan does include brief discussions on subordination and nominalization in what he calls $k$-forms (Morgan 1991:124, and especially chapter 4), there is no formal discussion of their syntax. This investigation provides the first steps in filling this gap by presenting novel data bearing on the internal syntax of deverbal nominalizations and accounting for their properties.
Deverbal nominalizations in Ktunaxa

K-forms include questions (1a), subordinate clauses (1b), relative clauses (1c), and nominalizations (1d). In each of the examples below, the bracketed constituent is marked on the left-edge with the morpheme $k$. Examples throughout are presented in a slight variation from practical, community used orthography. Unless otherwise noted, the examples in this paper were elicited by the author through grammaticality judgements on constructed examples and elicited speech with contexts supported through the use of storyboards (Burton & Matthewson 2015).

(1) K-forms in Ktunaxa

a. qapsin kin ?ik
   qapsin k-hin ?ik
   what k-2.SBJ eat
   ‘What did you eat?’

b. sukitmunapni ni?is k suki? ?ik f?an
   sukitmun-ap-ni ni?is k suki? ?ik f?an
   make.happy-1.OBJ-IND DEM K well eat John
   ‘It makes me happy that John eats well.’

c. sukaxni?si lik?is k ?itkin a:n
   sukaxni?-s-i k-?it-k-i-s k ?itkin a:n
   good.taste-OBV-IND K-eat-PASS-OBV K make Anne
   ‘The food that Anne made tastes good.’

d. wi?qa?ni k’it’iq’
   wi?qa-ni k-?it’iq’
   big-IND K-stretch.INTRANS
   ‘The sweater is big.’

This paper investigates the syntax of deverbal nominalizations, such as (1d). Viewed from the outside, these forms are nominal and have the same distribution as other full DPs. However, there is some variation in their internal syntax. Morgan (1991: 305) presents one example of this: (2a) shows a deverbal nominalization with a possessor expressed with the verbal subject clitic, and (2b) shows one whose possessor is expressed with the usual nominal possessor marker. While there are a handful of such examples in Morgan’s grammar, there is no discussion about why this variation arises and the examples are presented in passing.

1 Specifically, IPA symbols are used rather than orthographic Ɂ and ɬ to represent the alveolar affricate /tʃ/ and the lateral fricative /ɬ/. In orthography, $k$ is written as variably as a stand-alone particle or as part of the following word, generally when it precedes the subject proclitic or a pre-verb. Morgan invariably analyzes $k$ as a proclitic (Morgan 2011:34–38).
The above contrast will be used to argue for the presence of verbal material embedded within the nominalization. The central claim I will make in this paper is that the $k$ morpheme in nominalizations heads a category-changing $n\text{P}$ (Marantz 1997; Wiltschko 2014) taking some level of verbal structure as its complement. Specifically, I propose that there are (at least) two sizes of $k$-form deverbal nominalizations in Ktunaxa, corresponding to $VP$-nominalizations and $vP$-nominalizations. As we will see, the picture that emerges is one where the varying properties of the nominalizations are derived entirely from differences in the embedded verbal structure. Under this view, the nominalizing $n^0$ is strictly a category-changing head.

2. Verbal structure overview

Ktunaxa has a generally free word order across major constituents, with the unmarked word order being VOS (Morgan 1991: 367). McClay (2017) presents evidence that word order is sensitive to focus, with SOV order also being common. Within constituents, however, there is a strict order of morphemes. This section overviews the basic syntactic properties of the verbal complex which are relevant for the discussion to follow. For a more complete discussion, see Bertrand (2019). The basic verb template is given in (3).

(3) Basic Verbal Template

\[
\text{subj.pers-} (\text{pre-verbs})\text{-verb.root}- (\text{pass/obj})- (\text{sbj.num})- \text{obv-ind}
\]

The leftmost element in the verb phrase is the subject pro-clitic, which appears with the exponents in Table 1. These pro-clitics express the person of the subject, while plural number of the subject, as well as the person and number of the direct object, is indicated as a separate suffix on the verb (see Morgan 1991: 242–244, Bertrand 2019 for discussion).

Tab. 1: Subject pro-clitics and suffixes

<table>
<thead>
<tr>
<th>Person</th>
<th>SUBJ.PERS</th>
<th>SUBJ.NUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>hu=</td>
<td>-nał</td>
</tr>
<tr>
<td>2</td>
<td>hin=</td>
<td>-kil</td>
</tr>
<tr>
<td>3</td>
<td>∅</td>
<td></td>
</tr>
</tbody>
</table>
Prototypically, the subject proclitics realize the external argument, which I assume is introduced in the specifier of \(v^0\), which take a VP complement (Bertrand 2019). In using the label \(vP\), I would like to focus on its capacity to introduce external arguments (Chomsky 1995; also see VoiceP of Kratzer 1996). There is a vast literature on the various functions and articulations of \(v\) and extended verbal projections, and I do not wish to make specific claims about the verbalising or Case-checking functions of \(v^0\), which require further investigation into the argument structure of Ktunaxa. Additionally, whether roots are rather category-neutral \(\psiPs\) and \(v^0\) is a verbalizer (Marantz 1997) is a choice that is orthogonal to our concerns in this paper. As such, I will assume that verb roots are verbal VPs, use \(vP\) as a cover term for a verbal functional projection which introduces the external argument.

Immediately following the subject proclitic are a series of optional pre-verbal modifiers called *pre-verbs* (Dryer 2002; Morgan 1991 refers to them as (derived) adverbs). Pre-verbs are the only elements that may intervene between the subject pro-clitic and the verb root. They generally end in -(i)ɬ and convey a variety of meanings from temporal information to focus related information (McClay 2017: 76–86, Blamire 2011). Multiple pre-verbs are permitted (Dryer 2002).

Following the verb stem is *pass*, which hosts the passive marker, -(iɬ), but also includes other voice-related morphemes such as the indefinite subject morpheme -(ə)nam which will be discussed below in greater detail in Section 3.2. I assume that these morphemes are realizations of \(v^0\) (Bertrand 2019) in the sense discussed above, and will serve as important tools for developing the diagnostics for nominalizations.

The verbal obviative morpheme, -(ʔi)s, often functions as a switch-reference marker, and I assume following Bertrand (2019) that it is
introduced as I⁰. As a verbal category, it appears to be sensitive to relational properties between events in a discourse. Specifically, Bertrand, Birdstone, & Wiltschko (2017) proposes that it marks disjointedness between events in terms of event participants, event time, and event location.

The rightmost element glossed as ind is the indicative marker, -(n)i. It occurs on all matrix contexts and is banned from all embedded contexts including all k-forms discussed here. I follow Bertrand (2019) in assuming that this morpheme instantiates C⁰.

![Fig. 1: Simplified clause structure of Ktunaxa.](image)

The structure above is linearized via headmovement of the verb root through the functional projections dominating it (Bertrand 2019; cf. Dékány 2018 on an assessment of headmovement approaches to linearization). Note that each head corresponds to a suffix, and that the linear order of each suffix corresponds to the hierarchical position of its head, in accordance with the Mirror Principle (Baker 1985). The subject argument is raised to the specifier of the head occupied by the verb, generally Spec,CP in indicative clauses.

### 3. Syntax of k-forms

Externally, k-forms have the distribution of nominal arguments as can be seen in (1) above. This section demonstrates that the internal properties of nominalizations are heterogeneous, even when restricted to deverbal nominalizations. The variation in these properties will be analyzed as the result of the point in the derivation at which nominalization occurs.

---

5 I do not have an account for whether this is for Case reasons or for phonological reasons. A syntactic account ultimately requires movement of subjects to Spec,CP in matrix indicative clauses, but permits them to remain low when the CP projection is absent (as I show is the case for nominalizations). A more fully articulated view of clausal syntax is necessary to resolve this question.
Deverbal nominalizations in Ktunaxa

3.1. Possession of nominalizations

The first major distinction within the deverbal nominalizations arises from the realization of possessors. In one class of nominalizations, the possessor is realized with the normal nominal possessive morpheme, which is illustrated in the partial paradigm below. (4) shows the possessive on an inherent nominal, (5) shows the possessive on a nominalization. The full table of exponents is given in Table 2.

(4) Possession on inherent nominals

<table>
<thead>
<tr>
<th></th>
<th>a. ka xaʔšin</th>
<th>b. xaʔšinis</th>
<th>c. xaʔšinisʔis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.poss</td>
<td>dog</td>
<td>dog-2.poss</td>
<td>dog-3.poss</td>
</tr>
<tr>
<td>'my dog'</td>
<td>'your dog'</td>
<td>'his/her/its/their dog'</td>
<td></td>
</tr>
</tbody>
</table>

(5) Possessions on nominalizations

<table>
<thead>
<tr>
<th></th>
<th>a. ka k’it’iq’ hanuhusni</th>
<th>b. k’it’iq’nis hanuhusni</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.poss</td>
<td>NMLZ-stretch</td>
<td>NMLZ-stretch-2.poss</td>
</tr>
<tr>
<td>‘My sweater is red.’</td>
<td>be.red-IND</td>
<td>be.red-IND</td>
</tr>
<tr>
<td>2. prox</td>
<td>N-ʔis</td>
<td>N-ʔis-ʔis</td>
</tr>
<tr>
<td>‘John’s sweater is red.’</td>
<td>John</td>
<td>be.red-IND</td>
</tr>
</tbody>
</table>

In the other class of nominalizations, the possessor is instead realized with the subject proclitic. In such examples, the subject proclitic appears to the right of the k-morpheme with no additional possessive morphology, as in (6).
The examples in (7) show that expressing possession with nominal possession morphology as in (5) above is not possible with these forms.

(7) Nominal possessive morphology not possible

a. *ka q’umnimu hanuhsni
   ka     q’umni-mu  hanuhs-ni
   NMLZ-1.SBJ  sleep-INS  be.red-IND
   Intended: ‘My pyjamas are red.’

b. *kq’umnimu(ʔ)nis hanuhsni
   k-q’umni-mu-nis hanuhs-ni
   NMLZ-sleep-INS-2.Poss  be.red-IND
   Intended: ‘Your pyjamas are red.’

c. kq’umnimunis hanuhsni
   k-q’umni-mu-ʔis hanuhs-ni
   NMLZ-sleep-INS-3.POSS  be.red-IND
   Intended: ‘His/her pyjamas are red.’

Similarly, example (8) shows that this strategy of exponence with the subject proclitic is not available for the forms in which the possessor is expressed with the nominal possessive morpheme (compare with (5)).

(8) Subject proclitic not possible

a. *ku ?it’iq’ hanuhsni
   k-hu     ?it’iq’  hanuhs-ni
   NMLZ-1.SBJ  stretch  be.red-IND
   Intended: ‘My sweater is red.’
Deverbal nominalizations in Ktunaxa

b. *kin ?it’iq’ hanuhusni
   kin ?it’iq’ hanuhus-ni
   NMLZ-2.SBJ stretch be.red-IND
   Intended: ‘Your sweater is red.’

c. *k’it’iq’ fəa:n hanuhusni
   k-∅ ?it’iq’ fəa:n hanuhus-ni
   NMLZ-3. SBJ stretch John be.red-IND
   Intended: ‘John’s sweater is red.’

The generalization that emerges is that deverbal nominalizations fall into two classes, based on how the possessor is expressed. What drives this division? Consider some of the verbs whose nominalization expresses possession with the verbal subject proclitic.

**Tab. 3: Possession Strategies for various verbs**

<table>
<thead>
<tr>
<th>NOMINAL POSSESSION</th>
<th>SUBJECT PRO-CLITIC POSSESSION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>K-NOMINALIZATION</strong></td>
<td><strong>CORRESPONDING VERB</strong></td>
</tr>
<tr>
<td>k’it’iq’ ‘sweater’</td>
<td>?it’iq’ ‘stretch.intrans’</td>
</tr>
<tr>
<td>kamak’ši ‘orange (fruit)’</td>
<td>hamak’ši ‘be orange’</td>
</tr>
<tr>
<td>kanuhusnana ‘apple’</td>
<td>hanuhus ‘be red’</td>
</tr>
<tr>
<td>kawisxu ‘banana’</td>
<td>hawisxu ‘hang’</td>
</tr>
</tbody>
</table>

In Table 3, there are two key take-aways. First, the referent of these nominalizations corresponds generally to the theme or other internal argument of the verb from which the nominalization is derived (on the instrumental suffix -mu, see section 3.3.). The possessor, when expressed as a subject pro-clitic, can be construed as the agent of the embedded event, or syntactically, the external argument of the embedded verb introduced by v (Chomsky 1995, cf. VoiceP of Kratzer 1996). That is, for a form like kiʔik ‘food’, a more faithful paraphrase would be “thing that he/she/it eats”, with the agent of eating being interpreted as the nominal’s possessor. This suggests an analysis such as Figure 2, where such a possessor is introduced in Spec,vP as in a clausal context. The internal argument e serves as the referential argument, or R-argument (Williams 1981), for the whole nominalization.
This analysis also predicts that the nominalizations of intransitive (unaccusative) verbs in which the possessor cannot be understood as the agent of the embedded event will not allow the possessor to be expressed with the subject proclitic. This prediction is borne out, as can be seen in (5, 8) above, as well as below in (9).

(9) Possessor cannot be the agent of the embedded eventuality

a. ka kamak’fii
   ka k-hamak’fii
   1.poss NMLZ-be.orange 1.poss NMLZ-be.red-dim
   ‘orange (fruit)’ ‘apple’

These cases of nominalization are straightforwardly analyzed as a VP-nominalization, with the possessor introduced in a nominal projection parallel to the possession of an inherent nominal, external to the nominalizer. Crucially, these nominalizations exclude the external argument introducing vP. This is modelled here as a PossP projection, with the possessor in Spec,PossP. Again, the referential argument of the whole nominalization is the internal argument e of the verb.

The above discussion draws a picture of two mutually exclusive classes of nominalizations, distinguished by the level at which the nominalizer is introduced. This recalls Abney’s (1987) analysis of English gerunds, where the
Deverbal nominalizations in Ktunaxa

Deverbal nominalizations in Ktunaxa

Die Online-Ausgabe dieser Publikation ist Open Access verfügbar und im Rahmen der Creative Commons Lizenz CC-BY 4.0 wiederverwendbar. http://creativecommons.org/licenses/by/4.0/

Differences in where the eventive agent is expressed in of-ing, POSS-ing, and ACC-ing gerunds. In Ktunaxa, however, the crucial variation lies not in where the semantic agent of the embedded verb is expressed, but rather how the grammatical subject of the embedded verb is interpreted: in nominalizations the external argument can be interpreted as the possessor.

There are, however, a small number of forms which permit both possessive strategies, given in (10).

(10) (i) Possessive Morpheme and Proclitic permitted
   a. ka k’almaɬumə haqmaxunisni
      1.poss nmlz-have.deep.voice scare-2.obj-ind
      ‘My deep voice scares you.’
   b. ku k’almaɬumə haqmaxunisni
      nmlz-1.sbj have.deep.voice scare-2.obj-ind
      ‘My deep voice scares you.’

Following the analysis above, the possessor is introduced after the nominalization in Spec,PossP (10a) or before the nominalization in Spec,vP (10b). While I have no account for why these verbs specifically permit nominalization at both vP and VP, my consultant noted a slight interpretive difference in the forms in (10) – (10a) is somewhat more direct and could potentially be seen as insulting or derogatory in the third-person, an interpretation which is absent in cases such as (10b).

The second key take-away from Table 3 is that the k-nominalizations which take subject pro-clitic possessors are all interpreted as possessed by a contextually salient third-person. Recall that the third-person subject proclitic is phonologically null. While these forms appear morphologically similar to the k-nominalizations which take nominal possessive morphology, they are distinguishable semantically in that the third-person possessor interpretation is obligatory. To derive an interpretation where the subject proclitic possessor k-nominalization is unpossessed, additional morphology is required. We turn to this immediately in the next section.

3.2. Passives, Indefinite Subjects, and Unpossessed k-forms

As noted, nominalizations which include the subject proclitic are obligatorily interpreted as possessed. This is unsurprising, given that the third-person subject proclitic is phonologically null, and that these nominalizations were proposed to include vP and the external argument.
An “unpossessed” interpretation requires additional morphology. This takes the form of the passive morpheme, -(i)ɬ. Presence of the passive morpheme precludes the appearance of overt subject proclitics (12b).

(12) “Unpossessed” interpretation requires the passive
   a.  k’ikiɬ
   b.  *ku ʔikiɬ
       k-ʔik-iɬ k-hu ʔik-iɬ
       NMLZ-eat-PASS NMLZ-1.SBJ eat-PASS
       ‘food/someone’s food’ Intended: ‘my food’

The scare quotes on “unpossessed” are due to (13), which shows that the passive does not straightforwardly refer to a referent with no possessor. If this were the case, there would be no reason why nominal possession couldn’t apply regularly to these derived nominals. In other words, the passive is doing more than “removing” the external argument from the derivation.6

(13) No nominal possessive on passive nominalizations
   a.  *ka k’ikiɬ
       ka k-ʔik-iɬ
       1.POSS NMLZ eat-PASS
       Intended: ‘my food’

6 There are, however, some forms which occur with the passive and the nominal possessive morpheme. These are potentially problematic under the analysis developed here. One possibility is that these are lexicalized ρP pass nominalizations. Morgan (1991) discusses a contrast between lexicalized nominalizations and ad-hoc nominalizations, though he does not present any diagnostics or examples in reference to this contrast. I leave accounting for these forms and their relationship to those discussed in the body of this paper to further research.

(i) Passive nominalizations, but allows nominal possessive morpheme
   a.  ka kaqktɬimu hanuhusni
       ka k-haqktɬimu-ɬ hanuhus-ni
       1.POSS NMLZ-swim-INSTR-PASS be.red-IND
       ‘My swimsuit is red’
   b.  *ku haqktɬimu hanuhusni
       ku haqktɬimu hanuhus-ni
       K-1.SBJ swim-INSTR be.red-IND
       Intended: ‘My swimsuit is red’
Bertrand (2019) analyses the passive morpheme -(i)ɬ as a $v^0$ head which, as we have seen above, introduces the external argument in its specifier. The presence of the passive is in these nominalizations is predicted, then, from their inclusion of $vP$. I assume that passive $v^0$ is distinct from active $v^0$ in that, rather than introducing an external argument, it existentially closes it (see Breuning 2013). The ungrammaticality of (13) follows from this: the passive does not exclude the external argument but rather existentially quantifies over it and makes its position unavailable for the introduction of other referents. Possession with nominal possessive morphology is not available because these forms are already possessed, but with an existentially-bound indefinite, introduced by passive $v^0$.

Fig. 4: The passive in $vP$-nominalizations.

The passive in Ktunaxa is restricted to transitives. In the case of nominalization of intransitive verbs, there is an indefinite morpheme which functions similarly to the passive. I assume that these are also instances of $v^0$ and existentially close the external argument in the same way as the passive.

(14) Indefinite subject marker for intransitive $vP$-nominalizations

a. kyawkɬifɬnam
   k-yawkɬifɬnam
   NMLZ-lie.on-INDEF
   'bed'

b. *ku yawkɬifɬnam
   k-hu
   NMLZ-1.SBJ
   Intended: ‘my bed’

c. *ka kyawkɬifɬnam
   ka
   1.Poss
   Intended: ‘my bed’

   kyawkɬifɬnam
   lie.on- INDEF

In a derived sense, then, $vP$-nominalizations are inalienable. Due to the inclusion of the external argument introducing $vP$, there is necessarily some argument which is interpreted as the possessor, whether that argument be expressed by the subject proclitic or existentially closed by the passive.
For VP nominalizations, an indefinite possessor marker is possible which is identical to the indefinite subject marker of intransitives. Note, however, that in these examples the indefinite marker is not obligatory for the unpossessed reading – rather, the indefinite marker here is introduced after the nominalization in Poss⁰.

(15) VP nominalizations with the indefinite morpheme marking possession

a. k’it’iq’
   k-ʔit’iq’
   NMLZ-stretch
   ‘sweater’

b. k’it’iq’nam
   k-ʔit’iq’-nam
   NMLZ-stretch-INDEF.POSS
   ‘someone’s sweater’

Fig. 5: -nam introduced above nP interpreted as indefinite possessor.

3.3. Instrumental readings

Returning briefly to some forms which express their possessor with the subject proclitic, there are several forms which include an additional instrumental morpheme, -mu, as in (16a). These are used quite productively in mechanical parts, such as car parts, or tools. Note that all these nominalizations naturally induce an instrumental reading, given the presence of the instrumental morpheme. Crucially, this morpheme is verbal, as can be seen in (16b).

(16) Instrumental morpheme in nominalizations

a. kq’umnimuɬ
   k-q’umni-mu-ɬ
   NMLZ-sleep-INST-PASS
   ‘pyjamas’

b. q’umnimu
   q’umni-mu
   Sleep-INST
   ‘to sleep with (something)’

Thanks to an anonymous reviewer for suggesting the following line of analysis.
This shows that the referent of \textit{k}-form deverbal nominalizations is not restricted to theme arguments but can be modulated by the presence of other verbal arguments. In other words, the assignment of the R-argument is not mediated by the nominalizing head but rather by the embedded verbal structure.

This resembles reference assignment in Blackfoot clausal nominalization, which does not have a consistent reference and whose referent is necessarily internal to the nominalized constituent (Bliss 2014). The argument that acts as the referent depends on the cluster of properties exhibited by the embedded clause. Blackfoot, however, has multiple types of nominalization and in fact has two dedicated nominalizers with consistent referent assignment: “abstract” or process nominalization with -\textit{hsin}, and instrumental nominalization with -\textit{a’tsis} (Bliss 2014; Wiltchko 2014; Ritter 2014). In Ktunaxa, nominalizations are all accomplished through \textit{k}, which nominalizes its complement (nominalization-via-complementation in Wiltchko 2014).

I will leave a formal account of nominalization referent-assignment in Ktunaxa along the lines of Bliss (2014) for Blackfoot to future work. Informally, the presence of verbal argument-introducing morphemes (see Morgan 1991: 309–314 for more on these “involvement suffixes”) modulates which argument functions as the referent for the nominalization. Given the position of the instrumental morpheme specifically, one possible line of analysis is that the highest verbal argument is the referent. This raises certain difficulties, however. Despite being present in \textit{vP} nominalizations, external arguments are not candidates for the referent for cases discussed here, as in \textit{kiʔik ‘food’}. Further, Ktunaxa does have agent nominalizations, such as \textit{k’anam ‘hunter’ (< \textit{aʔnam ‘to hunt’}), which appear to contradict any analysis where the external argument is categorically excluded from referent assignment. I leave this for future research.

### 3.4. Preverbal Modifiers

The final piece of evidence for the contrast between \textit{vP} and \textit{VP} nominalizations is the presence of verbal modifiers, known as pre-verbs verbs (Dryer 2002; Blamire 2011; Morgan 1991: 33 refers to them as derived adverbs). These pre-verbs, as expected from their name, occur linearly before the main verb stem but following the subject proclitic. They serve various semantic functions, including subject focus (McClay 2017: 76–86) and contributing temporal or aspectual information. For a more elaborate description, see Dryer (2002).

Syntactically, they are a verbal category. A precise characterization of their syntactic position, and whether they are best analyzed as adjuncts or
instances of high verbal functional projections, is uncertain. However, what is crucial for the purposes of this paper is that they are restricted to verbal environments, and thus serve as a useful diagnostic for verbal material. Consider the forms below, which are the nominalizations discussed in (10) that allow either the subject proclitic or the nominal possessive strategy for expression possession.

(17) Covariation of possession strategy and preverb compatibility

a. Tanwa hułpañí k isit ałmaɬumats̍əns
   Tanwaɬ hułpaɬ-ní k isit ałmaɬuma-s əsəns
   Daniel hear-IND NMLZ very deep.voice-OBV John
   ‘Daniel heard John’s very deep voice’

b. * Tanwa hułpañí k isit ałmaɬumats̍ənsi əsəns
   Tanwaɬ hułpaɬ-ní k isit ałmaɬuma-ʔis əsən
   Daniel hear-IND NMLZ very deep.voice-3.poss John
   Intended: ‘Daniel heard John’s very deep voice’

When the possessor is expressed as the subject proclitic, which is null in (17a) but co-occurring with the overt DP əsən ‘John’, the result is grammatical. When the possessor is expressed through the nominal possessive morpheme (17b), the result is ungrammatical. This is predicted by the analysis above. If preverbs are high clausal adjuncts, at least higher than vP, then the lack of this projection in (17b) precludes preverbs by cutting off the clausal spine before they are licenced.8

4. Conclusion

I have shown that Ktunaxa deverbal k-nominalizations fall into two classes based on syntactic evidence from the realization of possessors, the presence of passives and other verbal morphology on the embedded verb, and the presence of verbal modifiers. These classes of deverbal nominalizations appear with a cluster of properties that suggest the presence of an external argument introducing a vP projection. Possessors introduced within this projection surface with the same morphology as verbal subjects. The passive is another instance of v0 and forms “unpossessed” vP nominalizations – these

8 In the above examples (16), the obviative morpheme appears. While this suggests that the nominalization takes place much higher, at IP (see Bertrand 2019 for the obviative morpheme as I0), I will leave this issue for further research as I lack the necessary data beyond the obviative morpheme, as well as lacking an account of the obviation system itself. An alternative analysis is that the form in (16a) is a subordinate clause. What is crucial for our purposes is the presence or absence of vP, which the preverbs allow us to determine.
Deverbal nominalizations in Ktunaxa

are analyzed as being possessed by an indefinite third-person. Finally, additional argument-introducing verbal morphemes and verbal modifiers in nominalizations co-occur with the vP-level property of expressing possession with the verbal subject proclitic.

These properties have not been discussed in the description on Ktunaxa’s nominalization system in Morgan (1991). The data and discussion presented here forms the first steps toward a more detailed picture of the Ktunaxa’s ubiquitous k-forms. This emerging picture from deverbal nominalizations is that the k morpheme serves only to nominalize its complement. Under Wiltschko’s (2014) typology of recategorization strategies, Ktunaxa’s k is the realization of the nominalization via complementation head n0, which takes various functional projections (here, VP and vP) as complements. The syntactic properties of these nominalizations are derived entirely, then, from the internal structure of n’s complement.

An important remaining question is how other k-forms (presented in (1)) are to be analyzed under such a proposal. If k-forms are all nPs, then how are we to treat questions, subordinate clauses, and relative clauses? In her work on the verbal functional projections of Ktunaxa, Bertrand (2019) analyzes k as a realization of C0 due to its role in subordination and its complementary distribution with respect to the indicative marker. However, an analysis of these constructions as fundamentally nominalizations, taking seriously the fact that k is present in all these constructions, could provide a unified analysis of these various constructions, as well as contribute to the large body of literature on the relationship between nominalizations and clausal constructions (see Introduction and papers in Zariquiey, Shibatani, & Fleck 2019, Comrie & Estrada-Fernández 2012). The view from deverbal nominalizations provides the first look at the possible complements of the Ktunaxa nominalizer and the properties these constructions yield and will form a foundation for investigating the structure of k-forms more broadly.

References


Terrance Gatchalian
University of British Columbia
tgatchalian@alumni.ubc.ca