

# Is Tense (T)ense in Nêhiyawêwin? An exploration of Nêhiyawêwin anchoring

Rebekah Stevens

Department of Linguistics and Indigenous Studies, Simon Fraser University,  
8888 University Dr., Burnaby, BC V5A 1S6  
[rosteven@sfu.ca](mailto:rosteven@sfu.ca)

## Abstract:

This paper proposes an account of the optionality of tensed clauses in Nêhiyawêwin (Plains Cree, y-dialect). The Minimalist framework is largely based on the research of Indo-European languages (Chomsky 2015). Because of this, many of the hypotheses have failed to adequately account for the cross-linguistic variation found amongst many non-Indo-European languages, specifically Indigenous languages in Canada. In Nêhiyawêwin, tense markers are not mandatory to infer when an event happens in relation to when an utterance is being said (i.e. past tense may be interpreted when lacking the past tense morpheme). Examples (1) and (2) demonstrate this, though they both are interpreted to have taken place in the past: example (1) lacks the past tense morpheme *-kî-*, whereas example (2) has the past tense morpheme. As the data demonstrates, Nêhiyawêwin does not require an utterance to be marked for tense in the same sense as is mandatory in English. Referencing Ritter and Wiltschko's analysis of tenseless languages (2014), where it is argued that Blackfoot (a related Algonquian language) is not required to use tense, this paper will further explore the methods Nêhiyawêwin uses to anchor its sentences under the category INFL (i.e. IP), instead of a TP. In the present paper, I apply Ritter and Wiltschko's diagnostics to a new language in an effort to account for an Indigenous language. The syntactic categories of tense, locatives, order, and obviation will be analyzed using Wiltschko's Universal Spine Hypothesis (2014). Also using the Universal Spine Hypothesis, I will consider possible options of the content which substantiates the anchoring category in Nêhiyawêwin. I will argue that order and obviation interact within the IP domain in order to anchor Nêhiyawêwin utterances via C:PERSPECTIVE.

- (1)  
*Namôya nânitâw wih-îte-wak*  
not anything intend-say.to-3.OBV  
'They did not care to say anything to him'
- (2)  
*kî-sipwêthêw*  
PAST-leave  
'He left (some time ago)'

**Keywords:** Anchoring – Plains Cree – Tense – Universal Spine Hypothesis – INFL

# 1. Introduction

## 1.1 Background

Nêhiyawêwin (Plains Cree, y-dialect) is a member of the Algonquian linguistic family. Nêhiyawêwin is spoken across large regions of Canada and some areas of the United States, with the majority of speakers in Alberta and Saskatchewan (Dahlstrom, 1991). Nêhiyawêwin has a declining number of native speakers and is currently endangered (Langlois & Turner 2014). This is a significant source of my motivation to carry out this research.<sup>1</sup>

Mainstream Minimalist syntax (e.g., Chomsky, 2015) has attempted to account for cross-linguistic variation while attempting to also maintain Universal Grammar that can be applied to all of the world's languages. This has created a constrained way of accounting for the structures of languages, but it has failed to adequately account for linguistic variations found amongst non-Indo-European languages (Wiltschko 2014). As a result, Indigenous languages in Canada have not been sufficiently situated within the Minimalist framework, largely leaving them out of the narrative.

The Minimalist framework has asserted that the languages of the world are made up of the same building blocks, differing only by the morphological content which supplies them (Wiltschko, 2014). Ritter and Wiltschko (2009, 2014), however, have argued that the universal building blocks (assumed by the Minimalist Framework) are not applicable to Indigenous languages, specifically Halkomelem and Blackfoot. During their research, Ritter and Wiltschko account for the contents hosted within the IP domains (anchoring domain) of Blackfoot and Halkomelem while using the Universal Spine Hypothesis. This is a significant motivating factor for my research and will guide my analysis of a potential anchoring category in Nêhiyawêwin.

## 1.2 The Universal Spine Hypothesis

Rejecting the Minimalist framework, Wiltschko (2014) proposes the Universal Spine Hypothesis (referred to as USH from this point on), which argues for a universal syntactic spine, employing a small set of core Universal Categories (K). The Universal Categories are filled with different substantive content across languages. The universal categories (K) are filled by language-specific categories (c), which may vary cross-linguistically, and are constructed out of language-specific Units of Language (UoL) (Wiltschko 2014).

The USH presents a framework which can account for similarities as well as differences across the world's language. The similarities being: the four core Universal Categories (K), which serve similar functions across languages. The differences being: the language-specific categories (c) which fill the Universal Categories (K). In other words, languages may achieve the same functions associated with (K), but may employ a different set of categories (morphemes and words) to substantiate said functions.

The syntactic spine of the USH is composed of four core domains (K), which build up the syntactic spine. The domains and categories from highest down are: *linking*, which refers to the CP and KP domains, *anchoring*, referring to the IP and DP domains, *point-of-view*, referring to both the AspP and PhiP domains, and finally, *classification* in the vP and nP domains. In this paper, I am concerned only with the IP domain (i.e. TP, according to the Minimalism), being the

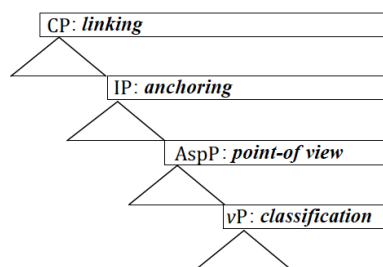
---

<sup>1</sup> As an act of positioning myself within my research, I am of Cree and Métis descent, a significant motivator for my research as well.

domain, which *anchors* and situates an utterance to the real-life situation which is being referred to (Wiltschko 2014).

I argue that the USH is necessary to account for the optionality of Nêhiyawêwin tensed clauses, and I explore other possible candidates that Nêhiyawêwin may use to fill its IP domain (i.e. the anchoring domain). A diagram of the areas of the spine, as proposed by Wiltschko (2014), is given in figure (1)

**Figure (1): The Proposed Syntactic Spine**



Wiltschko (2014)

According to Wiltschko (2014), the domain which is referred to as the anchoring domain in the USH, is that which is traditionally assumed to be substantiated by tense and aspect across all languages. There are languages which do not require tense for a clause to be grammatical, which has been researched by Matthewson (2006) and Cable (2017). Matthewson (2006) and Cable (2017) attempt to account for tenseless languages while still applying the Minimalism Framework, which will be discussed at a further section in this paper. There are many questions which are raised as a result of their research, creating a gap in the narrative and leaving these “tenseless” languages (or languages which do not use tense to serve the same function as Indo-European languages) out of the discussions.

Wiltschko (2014) instead proposes the previously mentioned categories of anchoring, as a method by which to account for this cross-linguistic variation. Anchoring, specifically, can be substantiated by anything which serves to situate an event (In the Minimalist Framework, this is thought to be through temporal): the content hosted in the anchoring domain is *anchoring* the utterance to the real-life event. Ritter and Wiltschko (2009, 2014) argue that anchoring need not be manifested in the form of temporal content (i.e. tense), and instead may be filled by a language-specific category which fulfils the anchoring of the utterance via person, spatially, or realis. Other areas of the syntactic spine will not be discussed, as it is outside of the scope of this paper.

### ***1.3 This Investigation***

In the present analysis, I use the USH, as proposed by Wiltschko (2014). I also use evidence and diagnostics provided and used by Ritter and Wiltschko (2009, 2014), which they use to analyse Halkomelem and Blackfoot, to situate my research of Nêhiyawêwin. I argue that the Minimalist framework (Chomsky 2015) cannot solely account for anchoring in Nêhiyawêwin.<sup>2</sup>

<sup>2</sup> I also consider the following sources throughout my research: Wolfart (1973), Dahlstrom (1991), Bakker (2006), Déchaine & Wiltschko (2011), Muehlbauer (2012, 2015), Oxford (2014)

This paper proceeds as follows: in Section 2, I outline my methods used during this paper. In Section 3, I will provide an outline of relevant Nêhiyawêwin categories. I will only discuss the categories that I consider to be possible candidates serving to anchor clauses in Nêhiyawêwin. The grammatical categories in Section 3 are not an exhaustive list of possibilities, or pieces of Nêhiyawêwin grammar. In Section 4, I discuss previous approaches proposed to account for tenseless languages and the problems they present, followed by a discussion of the methods the USH utilizes to resolve the problems which arise from the existing approaches. In Section 5, I will introduce and apply the diagnostics proposed by Ritter and Wiltschko (2009, 2014), and use the diagnostics to explore the possible content that is hosted in the IP (anchoring) domain in Nêhiyawêwin. I will also discuss the importance that a cultural context holds for the syntax of Indigenous languages, specifically Nêhiyawêwin. Section 6 will highlight possible avenues for future research, and I will conclude in Section 7.

## 2. Methods

Throughout this paper, I examine data from multiple sources. I use a Plains Cree grammar from Dahlstrom (1991) for grammatical information and glossed data (adapted from Bloomfield 1934).<sup>3</sup> I will also use data and evidence from an analysis of Plains Cree verb structure from Bakker (2006), and a comparison of micro-variation agreement of Blackfoot and Plains Cree from Déchaine & Wiltschko (2011), among others previously mentioned.<sup>4</sup>

To guide my research, I use the framework and diagnostics provided by Ritter and Wiltschko (2009, 2014) in order to diagnose the content found in the IP domain of Nêhiyawêwin. I also use the Universal Spine Hypothesis by Wiltschko (2014) to guide my analysis. Additionally, I will compare Nêhiyawêwin to English examples to illustrate my claims further, when needed.<sup>5</sup>

## 3. Background on relevant Nêhiyawêwin grammatical categories

In this section, I will discuss the relevant grammatical information needed for the diagnosing of contents that are hosted in the IP and anchoring domain in Nêhiyawêwin. This is not an exhaustive list of the possible candidates that Nêhiyawêwin may employ as the substantive content in the anchoring domain. It is instead a preliminary account of Nêhiyawêwin anchoring, in order to account for the variation amongst the world's languages, while at the same time, accounting for the similarities found cross-linguistically.

Nêhiyawêwin is a non-configurational and highly polysynthetic language, having no fixed word order. A significant amount of grammatical information is expressed on the verbal

---

<sup>3</sup> Dahlstrom's (1991) glosses do not include the distinction between long vowels and short vowels. This creates some inconsistency, though the morphemes identified are still accurate (to my knowledge) and should not affect the results.

<sup>4</sup> I have not collected any of the Nêhiyawêwin data myself. Data used in this text are cited under the glosses which they correspond to. The following abbreviations are used in this paper: 1/2/3 – 1st/2nd/3rd person; OBV – obviate; PROX – proximate; PAST – past; FUT – future; PRES – present; LOC – locative; CONJ – conjunct order; INDEP – independent order; INAN – inanimate; ANIM – animate; VTA – transitive animate verb; VIA – intransitive animate verb; VTI – transitive inanimate verb; VII – intransitive inanimate verb; PL – plural; REDUP – reduplication; DIR – direct object; AUX – auxiliary.

<sup>5</sup> Judgements made on the grammaticality of any English examples are my own.

complexes rather than the nominal constituents (Bakker 2006).<sup>6</sup> Distinctions between subject and object are not necessarily distinguished by person or number affixes and are instead marked via other inflectional suffixes on transitive verbs (Dahlstrom, 1991). The complexity of Nêhiyawêwin inflection can be observed in examples (3) and (4). Example (3) demonstrates a fairly simple sentence in Nêhiyawêwin, whereas example (4) illustrates the complexity of verbal inflections which are often found in Nêhiyawêwin words and sentences.

(3)

*ni-wapam-a-w-ak*

1-see-DIR.3-3

‘I see them’

Dahlstrom 1991<sup>7</sup>

(4)

*Awa oskini.kiskwew ki-wehtahe-w anihih awasis-ah*

this young.woman bring.home-3.OBV that.OBV child-OBV

‘this young woman brought the lad home’

Dahlstrom 1991

### 3.1 TENSE

I consider investigating tense as an anchoring category simply because tense (i.e. what would be temporal anchoring) is the category traditionally assumed to anchor a clause cross-linguistically (Wiltschko 2014). Dahlstrom (1991) does not discuss Nêhiyawêwin tense in detail, so I will turn to the observations made by Wolfart (1973) and Bakker (1995).

An interesting aspect of tense in Nêhiyawêwin is that it is not mandatory to have a tense morpheme on the verb for a clause to be grammatical. There are, however, optional tense morphemes, as identified by Bakker (1995) and Wolfart (1973). Tense morphemes, when present, occur as a prefix on the verbal complex (Bakker 2015). Tense morphemes occur follow the person prefix, after an aspectual morpheme, then preceding the verbal stem. The tense morphemes have been identified as the following:

**Table 1: Nêhiyawêwin PAST and FUTURE tenses**

<i>-kî-</i>	<i>-ka-</i> (shortened from <i>-kita-</i> )
PAST	FUTURE

Nêhiyawêwin clauses containing tense morphemes are exemplified in examples (5) and (6). It is worth mentioning that the following examples are not full sentences, which does not affect the interpretations of these clauses. The tense morphemes are in bold.<sup>8</sup>

<sup>6</sup> See Wolfart (1973), Oxford (2014), and Bakker (2015), for in-depth discussions of the verbal complexes and inflection of Nêhiyawêwin

<sup>8</sup> There are also a significant number of aspect morphemes. I will not be discussing these in this paper. For a discussion of Nêhiyawêwin Aspect, see Wolfart (1973) and Oxford (2014).

(5)<sup>9</sup>

*ni-kîh-pê-maskamikawin*

2-PAST-VERB

‘he was taken away from me’

(6)

*ni-ka-miywêyihên niya mîna wâhyaw kit-êtohtêmakahk pîkiskwêwin...*

2-FUT-VERB

‘I myself shall be glad that far away my speech will go...’

Wolfart (1973)<sup>10</sup>

### 3.2 LOCATIVE CASE

Nêhiyawêwin also uses locative case in some clauses. Ritter and Wiltschko (2009, 2014) argue that Halkomelem is a language that uses locative markers to anchor its clauses, by anchoring clauses spatially. This leads me to consider the investigation of Nêhiyawêwin anchoring via locatives.

Nêhiyawêwin makes use of a locative case ending *-ihk*, which can be added to objects of directional postpositions or on nouns lacking any adposition to signal location (Dahlstrom 1991). The locative suffix *-ihk* blocks nouns from being marked with plural or obviative inflections. The uses of the locative suffix are demonstrated in examples (7) and (8).

(7)

*mi.tos-ihk*

tree-LOC

‘in the tree’

(8)

*wa.skahikan-ihk ohci*

house-LOC from

‘from the house’

Dahlstrom (1991)

### 3.3 ORDER

Ritter and Wiltschko (2009, 2014) do not argue that order plays a significant role in anchoring in any language, though there are some characteristics of order in Nêhiyawêwin that I have observed to be potentially be relevant to anchoring in Nêhiyawêwin.

Nêhiyawêwin makes use of three inflectional paradigms referred to as *order* (sometimes also referred to as ‘mood’): the *independent order*, *conjunct order*, and *imperative order* (Dahlstrom 1991). I will not be discussing the imperative order in this analysis. I do not include a discussion of the imperative order, as the majority of my evidence and resources do not discuss the imperative order, either. I did not have enough evidence to fully consider the imperative order satisfactorily. For a discussion of the imperative order, see (Wolfart 1973).

<sup>9</sup> The *-h-* which is attached to the past tense morpheme in (5) is allomorphy. It does not affect the interpretation of the sentence.

<sup>10</sup> These data in Wolfart (1973) did not include a full morpheme-by-morpheme gloss and highlighted only the relevant aspects of the discussion (tense in this section). I have still included this data, in order to show the position of tense morphemes in Nêhiyawêwin.

Order is often used to describe a feature prevalent in Algonquian languages (e.g., Wolfart 1973). In Nêhiyawêwin, order is used to describe the distinction between different clause types (Déchaine & Wiltschko 2011). These clause types can also be referred to as *indexical* (independent) and *non-indexical* clauses (conjunct) in (Déchaine & Wiltschko 2011). The conjunct order has four morpho-phonological forms: the *ê-conjunct* form, the *simple conjunct* (with a null prefix), the *kâ-conjunct* prefix form, and the *initial-change conjunct* (where there is a change in the prefix's vowel quality) (Déchaine & Wiltschko 2011).

Orders also affect the agreement of person morphology in Nêhiyawêwin. While 1P and 2P arguments are expressed on the verb in both the independent and conjunct orders, person morphemes are expressed only via suffixes in the conjunct order. In the independent order, however, both prefixes and suffixes are used to express person (Bakker 2006).

3P arguments are located in two positions in both independent and conjunct orders in Nêhiyawêwin. Person suffixes and plurality suffixes of 3P arguments are expressed separately on the verbal complex, with the independent and conjunct order following the same pattern (Dahlstrom, 1991).

Clauses which are distinguished between the independent order and the conjunct order are exemplified in examples (9) and (10).

**(9) Independent order:**

*(null)-itwê-w*  
 say-2.INDEP  
 'he or she says'

Muehlbauer (2015)

**(10) Conjunct orders:<sup>11</sup>**

a. *ê-conjunct*:  
*ê-itwê-t*  
 C-say-2.CONJ  
 '[as] he or she says'

c. *Initial-change conjunct*:  
*ka-itwê-t*  
 C-say-2.CONJ  
 'for him or her to say'

b. *kâ-conjunct*:  
*kâ-itwê-t*  
 C-say-2.CONJ  
 'that she or he says'

d. *Simple conjunct*:  
*(null)-itwê-ci*  
 C-say-2.CONJ  
 'if he or she says'

Muehlbauer (2015)

The independent order in Nêhiyawewin is used in contexts where it is the speaker's beliefs that are being represented by the speech event, whereas the conjunct order distinguishes between several people whose beliefs are being represented in the discourse (Muehlbauer 2015).

---

<sup>11</sup> I have included a 'C' to indicate the different conjunct prefixes in the glosses.

There is much written about the order paradigms in Nêhiyawêwin, but that is not the sole focus of this paper. For more detailed discussions of Nêhiyawêwin order, see Cook (2008).

### 3.4 OBVIATION

Obviation plays a significant role in Nêhiyawêwin, both syntactically and for discourse purposes (Muehlbauer 2015). Obviation is used to distinguish between two or more 3P arguments, and whose perspective is being reported by the speaker of the utterance.

Obviation distinguishes between a proximate argument and an obviative argument (1 or more), where the proximate is usually considered to be the most salient perspective of the discourse. Animate nouns are marked with the suffix *-a(h)*, and verbal affixes (relating to the proximate argument) with *-yi(t)-*, and *-im-*.<sup>12</sup> The proximate argument itself does not receive overt morphology (i.e. there is no suffix or prefix on the proximate noun), and its interpretation instead relies on the context of the utterance. The proximate argument receives its interpretation via the contrast of obviative arguments (Bakker 2006, Muehlbauer 2015, Dahlstrom 1991).

Obviation is not mandatory in every clause, being required only when it is necessary to select a specific, more salient, 3P argument out of multiple 3P arguments in a single clause (Dahlstrom 1991). The contrast of obviative and proximate arguments are exemplified in (11):

(11)

*awa peyak napesis o-hta-wiya eh-okima-wiyit, misatim-wah ite.h e-yaya-yit ekoteh aya-w;*  
this one boy 2-father-OBV be.chief-OBV.CONJ horse-OBV LOC be-OBV.CONJ here be-3  
'a certain boy PROX whose father OBV was chief, where the horses OBV were, there he PROX was;'

Dahlstrom (1991)

Briefly summarizing Section 3, we are able to see that Nêhiyawêwin verbal complexes warrant a very in-depth discussion. To fully analyse the entire composition of the Nêhiyawêwin verbal structure is beyond the scope of this paper. Nevertheless, we do see that Nêhiyawêwin does indeed make use of (optional) tense, locative case, order, and obviation, which is significant when diagnosing the content hosted in the anchoring domain. Despite Nêhiyawêwin having tense morphology, it is likely not interpreted in the same way that, for example, English uses each of these categories (if at all). The aforementioned categories will be discussed further in section 5.<sup>13</sup>

## 4. Alternative approaches to “tenseless” languages and a resolution by the USH

So called “tenseless” languages have been addressed frequently in the existing literature but are often approached from a Eurocentric perspective (Wiltschko 2014). The previous approaches have overlooked non-Indo-European language variation. The perspective by which the analyses of tenseless languages are approached have resulted in a lack of narrative to account for non-Indo-European languages, in order to attempt to maintain a cohesive narrative.

---

<sup>12</sup> I will not be discussing the distinctions between animacy and inanimacy in this paper. For discussion of the animacy paradigms in Nêhiyawêwin, see Bakker (2006) and Muehlbauer (2012).

<sup>13</sup> To see more complete discussions of Nêhiyawêwin verbal complexes and grammar, see (Wolfart 1973, Dahlstrom 1991, Bakker 2006, Muehlbauer 2012, 2015, Oxford 2014)

#### **4.1 Cable (2017) on Tlingit Tense:**

Cable (2017) argues, on the basis of Tlingit, that all instances of a ‘discontinuous past’ should instead be simply ‘plain’ tense (i.e., how tense is believed to contribute to English syntax).<sup>14</sup> The question addressed by Cable (2017), is what are the features of tense that Universal Grammar will account for? This is similar to the question addressed in this discussion, though, following Wiltschko (2014), I am instead asking “what features does UG allow for in the anchoring domain of Nêhiyawêwin?” In addition to exploring the features which are hosted in the anchoring domain, I also explore *why* such content is hosted within the anchoring domain of Nêhiyawêwin. As tense is traditionally assumed to be the sole category in what is referred to as the anchoring domain, according to USH, the analysis made by Cable (2017) is useful to situate my research in relation to previous accounts of a “tenseless” language.

In sum, Cable (2017) argues that it is not necessary to refer to a category of ‘discontinuous past’ in a language which employs optional tense and should instead still make use of the Indo-European tense paradigm. Cable (2017) argues that, across languages, tense may only bare the features of PAST, PRESENT, FUTURE, and NON-FUTURE. Cable (2017) is arguing, that despite the differences in distribution which Tlingit uses tense in its clauses, that tense functions the same as that of Indo-European languages.

While Cable’s analysis addresses the feature of Tlingit ‘optional tense,’ it fails to adequately consider *why* languages may have optional tense, or if tense is really acting as tense (as is found in Indo-European languages). This is crucial in truly understanding how a language’s syntax, as languages are used to communicate in real-life situations. The possibility of optional tense, and therefore, no mandatory T-head, further motivates my argument that the anchoring domain may be substantiated by content other than tense (Wiltschko 2014).

#### **4.2 Matthewson (2006):**

Matthewson (2006) observes the ‘superficial tenselessness’ found in St’átimcets, an Indigenous language of British Columbia.<sup>15</sup> Matthewson (2006) argues that St’átimcets and English differ in only two ways regarding the expression of temporal references. These differences are: St’átimcets does not have tense morphemes that are pronounced, and that St’átimcets tense morphemes do not carry the same semantics as English tense morphemes do, where it is observed that St’átimcets has only one tense morpheme, restricting the reference time to being non-future.

In brief, Matthewson (2006) argues that as previously thought, St’átimcets is not tenseless, but instead has a null tense morpheme encoding non-future semantics. Matthewson (2006) concludes that superficially tenseless languages should not be assumed to lack tense, and hints at a hypothesis that all languages do in fact use tense, probing into the deeper semantics and features of the language’s syntax.

Matthewson’s (2006) argument fails to take into account the cultural aspects which a language holds with it. This is approached by Muehlbauer (2015), who discusses the significance of considering the cultural aspects of a language and argues that it should be considered when investigating a language’s syntax. In brief, this means that the cultural context of a language is needed in order to account fully for the categories which a language makes use of. This is a

---

<sup>14</sup> Tlingit is a member of the Na-Dene language family, spoken in Northwest British Columbia and Alaska.

<sup>15</sup> St’átimcets is a member of the Salishan language family.

significant area of research within the field of ethnobotany of Indigenous peoples. For example, the ways in which cultures use language to classify and categorize their languages is a reflection of and interaction with the cultural environment which they are a part of (Turner et al., 2013). If Matthewson had instead considered the cultural environment in which St'átimcets is spoken, it would not be necessary to approach the analysis from a minimalist perspective, adding another exception to be added to the list of languages which do not substantiate tense in the way which is traditionally assumed by Minimalist syntax.

The failure to account for the cultural background of St'átimcets has resulted in an analysis which attempts to force a language into a framework which it does not necessarily belong. The USH (Wiltschko 2014) resolves this, allowing for the similarities and differences of languages such as St'átimcets to be captured within a single framework, as discussed in Section 4.3.

#### ***4.3 USH in accounting for optional or tenseless languages:***

Reflecting on the preceding discussion of several existing analyses of superficially tenseless languages, it can be noted that Wiltschko's (2014) hypothesis of an anchoring domain may provide possible solutions in accounting for so-called 'tenseless' languages.

Proposing a universal syntactic spine allows for the variation among languages to be accounted for. In this particular case, around the discussion of tense and tenseness, allows 'tenseless' languages to be accounted for in a way which satisfies UG hypotheses.

The USH also allows for languages which do not make use of tense as languages such as English do but allowing languages to associate other properties with tense (Wiltschko 2014). The arguments made by both Matthewson (2006) and Cable (2016) argue for a tense that displays the same formal properties which holds for Indo-European languages, which, I argue is not the case for Nêhiyawêwin. Thus, the anchoring domain allows for the different formal properties associated with a language's categories to be accounted for, while not assuming an Indo-European perspective on all the world's languages.

### **5. Diagnosing the Nêhiyawêwin anchoring category**

Ritter and Wiltschko (2009, 2014) suggest a series of tests to diagnose a language's content hosted in the IP (anchoring) domain. The tests are meant to classify each category as either a head or modifier (Ritter & Wiltschko 2009, 2014), which is used to determine which category may serve as an anchor in a particular language. In addition to Ritter and Wiltschko's (2009, 2014) diagnostics, I will also be considering other existing analyses of the relevant categories of Nêhiyawêwin (Bakker 2006, Muehlbauer 2015, Dahlstrom 1991) to motivate my claims.

#### ***5.1 Diagnostic 1: Contrastive M-Marking***

Featural opposition is a diagnostic which is used to determine whether or not a syntactic category displays properties of a head or a modifier (Ritter and Wiltschko 2009, 2014). If a certain syntactic category is obligatory, and therefore a head, the category will have semantic content regardless of whether there are overt phonological markings. If the category is not interpreted when there is an absence of a particular morpheme, then it may be a modifier and likely not the anchoring category in Nêhiyawêwin.

### 5.1.1 TENSE

As has already been established in preceding sections, tense is not a mandatory component of Nêhiyawêwin syntax. When looking at the Nêhiyawêwin data, it can be deduced that in the absence of past or future marking, doesn't not imply a present interpretation, as would be in English. A lack of an overt tense morpheme results in a clause which can be interpreted as any temporal interpretation (Bakker, 2006). This test would suggest, that so far, tense is not obligatory for the anchoring domain of Nêhiyawêwin. The lack of featural opposition of Nêhiyawêwin tense can be seen from examples (12-13). Example (12) demonstrates the utterance being interpreted as past tense, even though it lacks the past tense prefix *-kî-*, whereas example (13) does have the past prefix. I do not examine the features which give (12) its past interpretation. What is significant in (12), is that lacking a past-tense morpheme does not necessarily result in a present-tense interpretation. The PAST morpheme has been bolded to highlight the relevant features of the examples.

(12)

*Namôya nâ-nitâw wih-îte-wak*  
not anything intend-say.to-3.OBV  
'They did not care to say anything to him'

Dahlstrom (1991)

(13)

*kî-sipwêthêw*  
PAST-leave  
'He left (some time ago)'

Dahlstrom (1991)

Contrast examples (12-13) to English clauses which contain the past tense morpheme *-ed* versus clauses which do not receive past tense morphology. English clauses which lack past-tense morphology are interpreted as being in the present tense, unlike Nêhiyawêwin. This is exemplified in example (14).

(14)

a. Past

I play-**ed** outside  
I play-PAST outside

b. Present

I play outside  
I play.PRES outside

Comparing the Nêhiyawêwin examples (12-13) to the English in (14), we can see that Nêhiyawêwin tense does not display featural opposition, the same as English tensed clauses.



(17) The Simple Conjunct:

(**null**)-nawac kakwê-wâpam-a-*cik*  
be.better try.see.VTA-DIR-2:3PL.CONJ  
'you ought to try to see them'

Déchaine & Wiltschko (2011)

(18) The Independent:

(**null**)-papâmitâcimô-w, initonaw-â-t  
crawl.about.VAI-3.INDEP look.for.VTA-DIR-3  
'he crawled about, looking for him'

Wolfart (1973)

### 5.1.4 OBVIATION

Considering featural opposition has led me to consider the possibility the role obviation has in anchoring Nêhiyawewin clauses. Proximate arguments are never indicated with an overt morpheme and is instead indicated via a null prefix and contrasts with the obviative affixes. The obviative morpheme on any other 3P arguments in the clause, is the feature that gives the proximate argument the proximate interpretation. This featural opposition held between the proximate and obviative is similar to the contrasts displayed by other syntactic categories argued to be hosted in the anchoring domain cross-linguistically (Ritter and Wiltschko 2009, 2014). This is demonstrated in examples (19-20):

(19)

*nâpêw-(null) wâpamêw iskwêw-a*  
man.PROX sees woman-OBV  
'the man<sub>PROX</sub> sees the woman<sub>OBV</sub>'

(20)

*nâpêw-a wâpamik iskwêw-(null)*  
man-OBV see woman-PROX  
'the man<sub>OBV</sub> sees the woman<sub>PROX</sub>'

Muehlbauer (2015)

The lack of the proximate 3P argument receiving an overt proximate morpheme is also reminiscent of English tense (specifically, present interpretations), leading to the speculation of the possibility of the proximate and obviative contrast being the content hosted as a head in the IP domain, and thus anchoring Nêhiyawewin clauses.

## 5.2 Diagnostic 2: Matrix and Embedded Clauses

The second diagnostic used by Ritter and Wiltschko (2009, 2014) to classify a certain category as a head or a modifier (leading to diagnosing the content of the anchoring domain), is to observe which morphemes may occur only in matrix clauses, only in embedded clauses, and those which can occur in both matrix and embedded clauses. If a particular morpheme may occur in a matrix clause, it is possible that such a morpheme may serve to anchor the utterance situation. Morphemes which are able to occur in embedded clauses may be associated as behaving as a modifier and as a result, may not be the grammatical category which anchors the utterances of a particular language.

### 5.2.1 TENSE

There does not appear to be any restrictions on tense morphemes regarding the occurrence of the tense prefixes in matrix or embedded clauses. This suggests that tense in Nêhiyawewin is not

behaving like tense, in English. Examples of tense markers occurring in both matrix and embedded clauses are given in (21-22):

(21) Matrix:

*ni-ka-sihkiyah-wa-wak misatim-wak*  
1-FUT-drive.ahead-1-3 horse-PL  
'I shall drive on the horses'

Dahlstrom (1991)

(22) Embedded:

*mina ka-kiske-yih-te-nta-n. e-yikohk ka-pimipayi-yin*  
also FUT-know.to-2-INAN what.extent FUT-ride-2.CONJ  
'besides, you will know how far to ride'

Dahlstrom (1991)

Compare the preceding Nêhiyawêwin examples to the following ungrammatical English example (23), which does not allow the overt past tense morpheme in embedded clauses (behaving similarly for future morphemes). Instead, in English, auxiliaries and aspect is used in embedded clauses to indicate a temporal reference point.

(23) English: <sup>16 17</sup>

\*[I walk-**ed** to the store [to grabb-**ed** some coffee]]  
1 walk-PAST grab-PAST  
Intended meaning: 'I walked to the store to grab some coffee'

### 5.2.2. LOCATIVE CASE

The locative case *-ihk* morpheme is not restricted to occurring only in matrix or embedded clauses, as is demonstrated in examples (24-25). The Nêhiyawêwin locative morpheme may occur in either a matrix or an embedded clause. The appearance of the locative morpheme in both matrix and embedded clauses, would indicate that locatives are behaving as a modifier, in Nêhiyawêwin. This would suggest that locatives in Nêhiyawêwin do not serve to anchor utterances, similar to the account of Halkomelem anchoring (Ritter and Wiltschko 2014).

(24) Matrix:

*asay oteh wi-kiwa-hk*<sup>18</sup>  
already here 3-house-LOC  
'meanwhile, back in their home...'

Dahlstrom (1991)

---

<sup>16</sup> I have not fully glossed this English example, as I wanted only to highlight the morphemes relevant to this discussion. This grammaticality judgement and data is my own.

<sup>17</sup> Square brackets are indicating matrix and embedded clauses.

<sup>18</sup> The full *-ihk* suffix is not used in full, the *-i* is deleted as a result of morphophonological rules.



#### 5.2.4 OBVIATION

While obviation may occur in both matrix and embedded clauses, it should not be assumed that obviation has free distribution within Nêhiyawêwin clauses. While the obviative and proximate distinction may occur in both matrix and embedded clauses, they are restricted to a strict set of syntactic conditions (Dahlstrom 1991). As has been discussed previously, clauses containing two or more 3P arguments must distinguish between the proximate argument and the obviative argument, regardless of the clause being matrix or embedded (Dahlstrom 1991). The syntactic restrictions on obviation are exemplified in examples (28-29):

(28)

*cân*            *wâpam-ê-w*    *o-stês-a*            *o-îk-ihk*  
John            see-DIR-3    3-older.sib-OBV    3-house-LOC.PROX  
'John<sub>PROX</sub> saw his<sub>PROX</sub> older brother<sub>OBV</sub> at his<sub>PROX</sub> (John's) house'

Muehlbauer (2012)

(29)

*cân*            *wâpam-ê-w*    *o-stês-a*            *o-îk-yi-ihk*  
John            see-DIR-3    3-older.sib-OBV    3-house-OBV-LOC  
'John<sub>PROX</sub> saw his<sub>PROX</sub> older brother<sub>OBV</sub> at his<sub>OBV</sub> (the brother's) house'

Muehlbauer (2012)

While obviation does appear in both matrix and embedded clauses, the syntactic conditions in which obviation may occur can be observed in examples (28-29). The obviative morpheme is used only when there are multiple 3P arguments within a clause (Dahlstrom 1991). The syntactic distribution which the obviative-proximate distinction of Nêhiyawêwin must follow, is reminiscent of those which tense must follow in languages, such as English. This suggests that obviation in Nêhiyawêwin is a head and may be the (or, *one of*) language-specific contents hosted within the IP domain and anchoring clauses.

### 5.3 Diagnostic 3: Agreement

The final test that I will address in this analysis to diagnose the content hosted in the Nêhiyawêwin anchoring domain, is to explore the agreement (or lack of) that is triggered by the presence of the particular morphemes in question. For a syntactic category to trigger agreement on the verb, would suggest it is displaying head-like properties. Conversely, if no agreement is triggered by the presence of a particular morpheme, then that syntactic category is associated with behaving as a modifier (Ritter and Wiltschko, 2009, 2014).

#### 5.3.1 TENSE

The previously identified tense morphemes in Nêhiyawêwin do not trigger agreement on the verbal complexes. This is demonstrated in example (30), where it can be seen that no agreement on the verbal complexes arise from the presence of a tense morpheme. In addition to the lack of agreement on the verb morphemes, it can also be observed that the noun argument also need not agree with the tense morpheme. Example (30) highlights this, and the relevant morphemes are bolded.

(30) Nêhiyawêwin

a. Future

*ka-sipwe-hta-na-naw*

FUT-**leave-1**-INCL

‘we shall set out’

b. Past

*ohi kî-sipwe-hte.yit*

this.OBV PAST-**leave-OBV**.CONJ

‘...who were setting off’

c. Null tense morpheme

*eh-wa-pahk sipwe.hte.wak*

be.dawn-INAN.CONJ **leave-3**

‘the next morning, they went on’

Dahlstrom (1991)

The changes to the noun arguments (*-hta-* and *-hte-*) in examples (30), are not a result of the presence of tense morphology but are instead a result of the obviative and order of each clause. This suggests that tense in Nêhiyawêwin is not a head but is instead a modifier in clause. This would further motivate the claim that tense in Nêhiyawêwin is not the substantive content within the anchoring domain.

### 5.3.2 LOCATIVE CASE

Taking previous examples of locatives into account, it can be deduced that no agreement arises from the presence of the locative morpheme, *-ihk*. Instead, we see that locatives are displaying properties of those usually associated with modifiers. This can also be seen, as demonstrated by separate locative morphemes, appearing separated from the verbal complex (Dahlstrom 1991).<sup>19</sup> Examine example (31):

(31)

a. Suffix *-ihk* locative morpheme:

*ekwah minah nipy eh-otinahk winastakayepicikan-ihk*

and also water take-3.INAN.CONJ bag-LOC

‘... and drew water in the paunch (bag),’

b. Independent locative morpheme:

*it e-tipiska-yik kapesi-wak*

LOC be.night-INAN.OBV.CONJ camp-3

‘where they were by dark, they camped for the night.’

Dahlstrom (1991)

Observing the sentences in (31), it can be seen that no agreement is resulted from the presence of the locative suffix *-ihk*, or when a separate locative morpheme is present in a clause.

---

<sup>19</sup> Other locative morphemes (which stand on their as separate words), have not been discussed in this paper, as they display adverbial properties, similar to English locative adverbs.

The lack of verbal agreement that is had with locative markers in Nêhiyawêwin, further suggests that locatives are not the language-specific content (c) hosted within the IP domain, and is therefore not the anchoring Nêhiyawêwin clauses.

### 5.3.3 ORDER

Déchaine and Wiltschko (2011) argue that in Nêhiyawêwin, the independent order triggers proclitic agreement, with the proclitic agreement occurring in the CP (linking) domain. The agreement that is had between the independent order and proclitic morphemes further motivates my examination of order behaving as an anchoring category in Nêhiyawêwin clauses. If proclitic morphemes are situated in the CP domain, it would suggest that the independent order (i.e. clause typing) occurs lower in the syntactic spine, potentially in the IP (anchoring) domain, as order morphemes occur after person prefixes in the Nêhiyawêwin verbal complex. This is evidence that order in Nêhiyawêwin does in fact trigger agreement, and therefore suggests that order is a head in Nêhiyawêwin syntax. This can best be demonstrated in the following Table (2), adapted from Déchaine and Wiltschko (2011), where the agreement in the independent order is demonstrated, compared to the conjunct order which does not trigger proclitic agreement:

**Table 2: Nêhiyawêwin Order**

	<i>Independent</i>	<i>ê-conjunct</i>	<i>kâ-conjunct</i>	<i>IC-conjunct</i>	<i>simple conjunct</i>
1	<b>ni...n</b>	<b>ê...yân</b>	<b>kâ...yân</b>	<b>IC...yân</b>	<b>(null)...yân</b>
1PL	<b>ni...nân</b>	<b>ê...yâhk</b>	<b>kâ...yâhk</b>	<b>IC...yâhk</b>	<b>(null)...yâhk</b>
2	<b>ki...n</b>	<b>ê...yan</b>	<b>kâ...yan</b>	<b>IC...yan</b>	<b>(null)...yan</b>
2PL	<b>ki...nâwâw</b>	<b>ê...yêk</b>	<b>kâ...yêk</b>	<b>IC...yêk</b>	<b>(null)...yêk</b>
3	<b>...w</b>	<b>ê...t</b>	<b>kâ...t</b>	<b>IC...t</b>	<b>(null)...t</b>
3PL	<b>...wak</b>	<b>ê...cik</b>	<b>kâ...cik</b>	<b>IC...cik</b>	<b>(null)...cik</b>
3OBV	<b>...yiwa</b>	<b>ê...yit</b>	<b>kâ...yit</b>	<b>IC...yit</b>	<b>(null)...yit</b>

Adapted from Déchaine and Wiltschko (2011)

Table 2 would suggest that at least the independent order does in fact trigger agreement. The evidence of agreement indicating that the two categories are accomplishing some function in relation with each other. The implications that result from the lack of proclitic agreement in the conjunct orders will not be discussed in this paper, though I do not dismiss the possibility that the conjunct order remains as an anchoring category when interacting with obviation in Nêhiyawêwin clauses.

### 5.3.4 OBVIATION

Obviation can be argued to be triggering agreement in Nêhiyawêwin, as well. Revisiting examples previously mentioned, obviative versus proximate interpretations are inflected via agreement on the verbal and nominal complexes. Examples (32-33) demonstrate the obviative-proximate verb agreement:

(32)

*nâpêw wâpam-êw. iskwêw-a*  
man see-OBV woman-OBV  
'the man<sub>PROX</sub> sees the woman<sub>OBV</sub>

(33)

*nâpêw wâpam-ik iskwêw*  
man seep-PROX woman.PROX  
'the man<sub>OBV</sub> sees the woman<sub>PROX</sub>

Adapted from Muehlbauer (2015)

#### 5.4 An Addition to Wiltschko (2014): Bi-Category Anchoring

In this subsection, I consider the possibility of expanding Wiltschko's (2014) theory, by proposing that two categories simultaneously working together in order to anchor Nêhiyawêwin clauses.<sup>20</sup> While Wiltschko (2014) does not explicitly state that two categories may interact as a pair in order to achieve the function associate with anchoring in a language, to my knowledge, it has not been addressed. As my own contribution to the Universal Spine Hypothesis (2014), I propose that the interactions of order and obviation in Nêhiyawêwin serve as the anchoring contents within the IP domain, and are anchoring via C:PERSPECTIVE.

In order to argue for a *bi-category* anchoring domain in Nêhiyawêwin, I will take into consideration the effects that a cultural context of a language has on the syntax of that specific language. Cross-linguistically, cultural values have been argued to be reflected in the language and the categories which a particular language makes use of (Muehlbauer, 2015). I argue that this is an important factor in diagnosing the anchoring domain in Nêhiyawêwin<sup>21</sup>. I will refer to a paradigm of Plain's Cree by Muehlbauer (2015). Muehlbauer argues that order,<sup>22</sup> obviation, and evidentiality express cultural values through the complex interactions of these syntactic categories. While evidentiality is not discussed in this paper, it is possible that it may be important for Nêhiyawêwin anchoring, as well. This is a possible area for future research.

As has been discussed in Section 3 and in Section 5, when applying the diagnostics to obviation and order, it can be seen that the two syntactic categories are interacting in the clause in order to convey information that is unique to situating Nêhiyawêwin utterances. I suggest the possibility that the information being expressed via the interactions between both obviation and order (and possibly other categories), is what is substantiated within the IP domain, and thus anchoring Nêhiyawêwin clauses.

Muehlbauer (2015) observes that speakers of Nêhiyawêwin interpret the triadic interaction of obviation, order, and the utterance speaker, as conveying information about the speaker's relation with the event. Muehlbauer (2015) introduces the distinction between being "present," "copresent," and "noncopresent," as a form of anchoring an utterance in relation to those who are present for the speech event. Obviation is the grammatical category which serves to anchor the

---

<sup>20</sup> To my knowledge, this has not been proposed by other researchers.

<sup>21</sup> A reviewer has suggested exploring the implications this has for cognitive processing, as well. This is something that I would love to explore, but for the current analyses, I will not discuss this, as it outside of the scope of this paper.

<sup>22</sup> Order can also be called "mode," as is referred to by Muehlbauer (2015).

speaker as being copresent to the subject of the speech event or the speech event itself, while order conveys information about the speaker's perception of the truth of the event. This, in essence, is expressing the speaker's perspective of the speech event, thus motivating my claim for C:PERSPECTIVE as the substantive content in the Nêhiyawêwin anchoring domain.

Muehlbauer (2015) does also discuss animacy and evidentials as contributors of encoding information about a speech event, but a discussion of these two categories is outside the scope of the present paper. It should be noted, however, that I do not dismiss the possibility of the four categories interacting with each other, all serving to anchor Nêhiyawêwin clauses together (a *four-category* anchoring, perhaps).

Accounting for the "unique" aspects of the Nêhiyawêwin language and syntax, while using both the USH (Wiltschko 2014) and Muehlbauer's (2015) perspective on the interactions of cultural values and Nêhiyawêwin syntax, allows researchers to look at Nêhiyawêwin syntax with a novel non-Indo-European perspective. A *bi-category* anchoring domain (and possibly *tri* or *four-category*), allows for an elegant account of what is serving to anchor clauses in Nêhiyawêwin, while also considering the important cultural values to expressed in a syntactic analysis.<sup>23</sup>

## 6. Discussion

While exploring the possible candidates for the Nêhiyawêwin anchoring category, it seems that perhaps more questions have been raised than have been solved. To fully explore *all* the possible candidates of the substantive content in the anchoring domain, would require more than is the scope of this paper.

Wiltschko (2014) argues for temporal, spatial, person, and realis as potential anchoring categories. Since Algonquian languages do not behave like languages typically accounted for with the Minimalist perspective (Chomsky 2015), is it then possible that Nêhiyawêwin (and perhaps other Algonquian languages) do not anchor exactly as originally argued by Wiltschko (2014)? How many categories serve to anchor in a particular language, and is there a limit? To the extent of my knowledge, this has yet to be explored. As far as the implications this will hold for universal grammar is also another area for possible future research, though I do not believe this view is incompatible with universal grammar.

This research has also further allowed the exploration of the importance that culture (or, the context that a language would have been traditionally spoken) has on a language's syntax. Muehlbauer (2015) adopts this perspective, and considering the evidence and data, this seems to be a plausible argument, that is necessary to fully explain anchoring in Nêhiyawêwin (and potentially other Indigenous languages).

In this analysis, I have not fully explored how obviation and order would work as a *bi-category* anchor in Nêhiyawêwin, but this remains a potential avenue to further explore how perhaps multiple categories simultaneously interacting may potentially serve as an anchor *together* cross-linguistically. It does not seem that any one particular category is absolutely satisfactory as an anchor in Nêhiyawêwin, and instead, it is the interaction and dependencies between several categories that serve to anchor an utterance.

As Muehlbauer (2015) discusses, evidentiality and animacy also interact with order and obviation in Nêhiyawêwin. While neither evidentiality nor animacy are not specifically discussed

---

<sup>23</sup> I have yet to explore how a multiple-category anchoring domain would look in the syntactic spine. I hope to explore this further at a later date.

in this paper, I do not dismiss the possibility that they both may also be hosted within the anchoring domain in Nêhiyawêwin. This would imply a *tri-category* or *four-category* anchoring domain in Nêhiyawêwin. This is something to be explored in future research, as well.

The specific role of tense in Nêhiyawêwin has still not been fully resolved. However, it has been established that tense likely does not display properties of those typically associated with the anchoring domain (according to Wiltschko 2014), as compared to English. It remains unclear which universal category (K) is tense associated with. In addition to this the question of when Nêhiyawêwin specifically does or does not use tense in its clauses is also something that must be addressed in order to determine the exact function of tense in Nêhiyawêwin.

## 7. Conclusion

In this analysis of the Nêhiyawêwin tense and its anchoring domain, I have presented an argument which proposes that Nêhiyawêwin is a language which benefits from the perspective of the Universal Spine Hypothesis, following Wiltschko (2014). I have also argued that in order to fully account for the features that the Nêhiyawêwin anchoring domain hosts, it is essential to also consider the cultural values and perspectives that the language carries with it, as language is a reflection of the culture of those who speak it. This claim is supported by Muehlbauer (2015).

After considering both the Universal Spine Hypothesis and the implications of considering cultural perspectives and syntax, I argue that order and obviation are the language-specific contents which are hosted within in the anchoring domain, though it may be possible there are other categories interacting with order and obviation as (evidentials and animacy). When order and obviation are considered to anchor clauses together, the results are reminiscent of those associated with temporal anchoring in English.

Following Wiltschko (2014), who argues that unique language-specific substantive content may be hosted within the anchoring domain, it is possible that Nêhiyawêwin-specific category in K:*anchoring* may be C:PERSPECTIVE (order and obviation, together).

From this, we can conclude that tense is not the sole content, if at all, that is hosted in the anchoring domain in Nêhiyawêwin. It is still possible that tense does serve an important role in the syntax of Nêhiyawêwin, substantiated in another domain of the syntactic spine, but that is to be addressed in later research. After applying Ritter and Wiltschko's (2009, 2014) diagnostics to tense, locatives, order, and obviation, it has been demonstrated that tense and locatives do not behave as heads and therefore are not likely associated with the anchoring domain in Nêhiyawêwin, as has been argued to be the anchor in other languages. From this discussion, it can be observed that obviation and order are both contributing to the anchoring of Nêhiyawêwin clauses, and potentially other categories as well, which is to be explored in later research. As a result, the interaction between multiple categories function as a single syntactic anchor via C:PERSPECTIVE, as well as they represent cultural values held within the Nêhiyawêwin language.

## REFERENCES

- Bakker, P. (2006). Algonquian verb structure: Plains Cree. *What's in a Verb? Studies in the Verbal Morphology of the Languages of the Americas*, 5, 3–27.
- Cable, S. (2017). The implicatures of optional past tense in Tlingit and the implications for 'discontinuous past.' *Natural Language and Linguistic Theory*, 35(3), 635–681. <https://doi.org/10.1007/s11049-016-9355-7>
- Chomsky, N. (2015). The Minimalist Program [Book]. In *The Minimalist Program* (20th ed.). The MIT Press. <https://doi.org/10.7551/mitpress/9780262527347.001.0001>
- Cook, C. E. (2008). The Syntax and Semantics of Clause-Typing In Plains Cree. *Thesis, June*.
- Déchaine, R.-M., & Wiltschko, M. (2010). Micro-variation in Agreement, Clause-typing and Finiteness: Comparative Evidence from Blackfoot and Plains Cree. *Proceedings of the 42nd Algonquian Conference*, 2.
- Langlois, S., & Turner, S., (2014). Aboriginal Languages and Selected Vitality Indicators in 2011. In *Aboriginal Languages and Selected Vitality Indicators in 2011*. Statistics Canada.
- Matthewson, L. (2006). Temporal semantics in a superficially tenseless language. *Linguistics and Philosophy*, 29(6), 673–713. <https://doi.org/10.1007/s10988-006-9010-6>
- Muehlbauer, J. (2012). The Relation of Switch-Reference, Animacy, and Obviation in Plains Cree. *International Journal of American Linguistics*, 78(2), 203–238.
- Muehlbauer, J. (2015). A “presence” paradigm in plains cree: Context, form, and content. *Anthropological Linguistics*, 57(3), 275–313. <https://doi.org/10.1353/anl.2016.0005>
- Oxford, W. (2014). Microparameters of agreement: A diachronic perspective on Algonquian verb inflection. *Thesis*.
- Ritter, E., and Wiltschko, M., 2009. Varieties of INFL: TENSE, LOCATION and PERSON. In *Alternatives to cartography*, ed. Jeroen van Craenenbroeck, 152-201. Berlin: de Gruyter.
- Alternatives to cartography, ed. Jeroen van Craenenbroeck, 153–201. Berlin: de Gruyter.
- Ritter, E., & Wiltschko, M. (2014). The composition of INFL: An exploration of tense, tenseless languages, and tenseless constructions. *Natural Language and Linguistic Theory*, 32(4) 1331–1386. <https://doi.org/10.1007/s11049-014-9248-6>
- Turner, N., J., Burton, C., van Eijk, J., (2013). Plants in language and classification among BC First Nations. *BC Studies*, (179), 135-142.
- Wiltschko, M. (2014). *The Universal Structure of Categories: Towards a Formal Typology* (illustrate). Cambridge University Press.
- Wolfart, H. C. (1973). Plains Cree: A Grammatical Study. *Transactions of the American Philosophical Society*, 63(5), 397–407.