THE BLACKFOOT CONFIGURATIONALITY CONSPIRACY: PARALLELS AND DIFFERENCES IN CLAUSAL AND NOMINAL STRUCTURES

by

HEATHER ANNE BLISS

B.A. Honours, University of Calgary, 2003
M.A., University of Calgary, 2005

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

DOCTOR OF PHILOSOPHY

in

THE FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES

(Linguistics)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

December 2013

ABSTRACT

This dissertation explores the argument-typing system of Blackfoot, a Plains Algonquian language spoken in Southern Alberta and Northwestern Montana. It develops a classification of the phrases, words, and morphemes in Blackfoot that are associated with arguments of the predicate (nominal expressions and argument-indexing verbal morphology) according to their internal and external syntax. The analysis sheds light on how and why Blackfoot displays properties of a non-configurational language. The main thesis is that non-configurationality in Blackfoot is a conspiracy resulting from properties of Blackfoot's argument-typing system, and in particular the PROXIMATE/OBVIATIVE contrast, a type of reference-tracking morphology that disambiguates between multiple 3rd persons in a clause.

The dissertation begins with a discussion of the theoretical assumptions, methodology, and the main proposal (Chapter 1) as well as a background on the relevant properties of Blackfoot morphosyntax (Chapter 2). Following that is a detailed discussion of the internal and external syntax of inflected nouns (Chapter 3), demonstratives (Chapter 4), person prefixes (Chapter 5) and number suffixes (6). Chapter 7 discusses the implications of Blackfoot's argument-typing system for non-configurationality. Blackfoot is shown to be a partially non-configurational language, in which proximate nominal expressions are not subject to the same distributional constraints as obviative ones (i.e., proximate nominal expressions display non-configurational properties such as free word order and extensive use of null anaphora). Finally, Chapter 8 considers the proximate/obviative contrast in a broader cross-Algonquian context.

The data and generalizations presented in this dissertation are largely from the author's own fieldwork with two native speakers over a ten year period, and these are supplemented with data from text materials glossed and annotated by the author. As such, a key contribution of this research is empirical; it contributes to the documentation and analysis of this endangered First Nations language.

PREFACE

With the exception of some independent and collaborative projects that have been presented at conferences and/or submitted for publication, this dissertation is original, unpublished, independent work by the author, Heather Bliss.

In Chapter 2, my discussion of the cline of audibility builds on the findings of Bliss and Glougie (2010) and Gick et al. (2012), both of which I am an author. The analysis of the direct/inverse as associating with an Aspect head builds on my M.A thesis (Bliss 2005), as well as Bliss et al. (2010a, b).

In Chapter 5, the analysis of the long and short form person prefixes is taken from Bliss and Gruber (2011a, b). The discussion of the prefix *na-* is influenced by Bliss and Ritter (2007, 2009), although the analysis is different.

The fieldwork undertaken for this dissertation is covered under ethics approval for the project “Interface Syntax” (H10-02768) granted to the dissertation supervisor, Dr. Martina Wiltschko.

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1,2,3	=	1st, 2nd, 3rd, 4th person
ABL	=	ability modal
ABS	=	absolutive
ACCOMP	=	accompaniment
AI	=	Animate Intransitive
ANIM	=	animate
ASSOC	=	associative
BEN	=	benefactive
CAUS	=	causative
CL	=	classifier
CN	=	conjunct nominal
CONJ	=	conjunct order
CONT	=	content
DEM	=	demonstrative
DIM	=	diminutive
DIR	=	direct
DIST	=	distributive
ERG	=	ergative
EVID	=	evidential
FUT	=	future
IC	=	initial change
II	=	Inanimate Intransitive
IMP	=	imperative
IMPF	=	imperfective
INAN	=	inanimate
INCL	=	inclusive
INSTR	=	instrument
INTERR	=	interrogative
INTNS	=	intensifier
INV	=	inverse
INVIS	=	invisible
LOC	=	locative
LOCAL	=	local person (1st or 2nd)
MOD	=	modal (epistemic)
MVG	=	moving
NEG	=	negative
NOM	=	nominalizer
NONAFF	=	non-affirmative
NONFUT	=	non-future
NONLOC	=	non-local person (3rd)
NONPART	=	non-particular
OBV	=	obviative
OT	=	other time
PERF	=	perfect
PL	=	plural
POSS	=	possessive
PRN	=	pronoun
PROX	=	proximate
PURP	=	purpose
RECPR	=	reciprocal
REFL	=	reflexive
REP	=	reportative
RESTR	=	restricted
SBJN	=	subjunctive
SG	=	singular
SPKR	=	speaker
STAT	=	stationary
TA	=	Transitive Animate
TI	=	Transitive Inanimate
UNREAL	=	unreal order
UNSPEC	=	unspecified person

ACKNOWLEDGEMENTS

With everything I read I always look at the acknowledgements. I'm fascinated by the way an author's vision can be shaped by the people around them. And how, really, a short statement of acknowledgement is just a small clue to the complex picture underneath. Here I have the chance to reflect on how my own vision has been shaped, and to try to paint a picture that expresses my gratitude. It's but a drop in the bucket.

First and indeed foremost, my thanks go to my Blackfoot teachers **Rachel Ermineskin and Beatrice Bullshields**. Rachel, the first time I ever heard Blackfoot it was spoken from your lips over ten years ago -- and over this time, you have shown so much patience and support as I stumble along. Beatrice, your commitment to your students and to your language is inspiring. Your rigour has made me a better language learner and a better linguist. To both of you, this dissertation is as much yours as mine. *Nitsikóhtasi'taki*.

I don't even know where to begin in thanking my advisor, **Martina Wiltschko**. You have been my mentor and my friend, you have taught me more than I expected to learn, and you have pushed and challenged and inspired me – not only with this dissertation, and not only in linguistics, but in so many aspects of my life.

My other committee members, **Rose-Marie Déchaine** and **Hotze Rullmann**, have been instrumental in shaping this dissertation. Rose-Marie, my work has benefited from your ability to balance the "bigger picture" with the intricate details. Hotze, the role you've played in my career stretches far beyond this dissertation. From supervising my honours thesis to encouraging me to do my Master's, to working through this final stage with me, you have always supported me and helped me to think about things in ways I otherwise wouldn't.

To the other members of my defense committee, **Marcel den Dikken**, **Henry Davis**, and **Barbara Dancygier**, thank you for the care and attention you have paid to my dissertation. Your thoughtful questions helped make made my defense fun and exciting, have improved the final version of the dissertation, and have given me avenues to pursue in my future research.

I have been so fortunate to have had **Betsy Ritter** as a mentor, a friend, and a collaborator for many years. Betsy, you gave the tools to think the way I do about language, and even after I came to UBC, you continued to work with me to help me sharpen those tools.

Bettina Gruber, our collaboration was so unexpected and intense and inspiring. I love the way we came from our different perspectives, learned how to learn together, and then converged. I can't wait for more.

This time in my life will always be tied up with fond memories of my cohort -- **Elizabeth Ferch, Raphael Girard, Murray Schellenberg, Beth Stelle, Anita Szakay, Carmela Toews** … and of course our honourary cohort member **Dennis Storoshenko**. Our first two years together at UBC established a tight bond, and that's carried me through the later years of grad school, well past the time when we were together more than we were not. I consider myself so lucky for having shared this experience with you guys, and I'll always remember that closeness, despite the distance that separates us all now.

My fellow Thesis Anonymous members – **Solveiga Armoskaite, Christiana Christodoulou, Atsushi Fujimori, Peter Jacobs, Sonja Thoma,** and **James Thompson** - our meetings were so fruitful. Whether we were brainstorming, or motivating, or critiquing, or commiserating, or just laughing and eating and drinking, having your support elevated me.

My understanding of Blackfoot has been broadened through my involvement with the UBC Blackfoot Research Group. **Solveiga Armoskaite, Mike Barrie**, **Joel Dunham, Jennifer Glougie, Meagan Louie, Amélia Reis Silva**, it has been so much fun to uncover puzzles together. Of course, we all have had a huge leg up thanks to the scholarship of **Don Frantz**. Don, I appreciate so much you taking the time to answer my questions over the years, and to give me frank and thoughtful feedback on my work.

There are other faculty in the Department of Linguistics who have taught me useful things that have impacted this dissertation. Thank you in particular to **Bryan Gick, Gunnar Hansson, Lisa Matthewson**, and **Doug Pulleyblank**.

Of course, a dissertation isn't written in a bubble, and life continued to go on all around me, even when I was wrapped up in writing. **Carmelle Lamb**, you pulled me out of my fog in all the right ways. I love all of our adventures, and I can't help but think that during this crazy time in my life, you helped me maintain not only balance but, really, sanity. **Meghan Haberl**, **Wayne Adams**, and **Tammy Oliver**, you too have provided necessary distractions and unwavering support. I would be remiss if I didn't mention **Josh Bliss**. Despite everything, you have always seen the value in me chasing after this, and you've graciously allowed yourself to be caught up in the chase too.

The right "ingredients" needed to fall into place for this dissertation to get written. I am so fortunate to have had the chance to escape on some wilderness writing retreats at exactly the times when I needed them. But when I couldn't escape, **O'Hare's Pub** proved to be a place with the right ambience – and the right beer (**Driftwood Fat Tug**, which will now forever remind me of writing my dissertation). And **Maki Performance Training** provided the right outlet for all my frustrations and gave me the strength and stamina for the final leg of this journey.

Steve, I don't think either of us expected to find each other when we did … and I don't think we always knew how best to support each other through the challenges we've faced in the past few years. But despite all my fumblings, and your occasional bewilderment about this process, you have believed in and encouraged me. And as I learn about your lens for seeing the world, you give me a fresh perspective.

Finally, to my daughters **Beth Bliss** and **Anna Bliss**, you didn't choose to be along for this journey, but you have decided to be my fans nevertheless. Words cannot express how I feel about your role in this work. I've been driven by wanting to show you how being tenacious and persistent can bring you to your goals, and that sometimes it's terribly hard – but still you can persevere and achieve. But that's not the whole story. You have grounded me – and you've never let me escape reality, no matter which deadline is lurking. My achievements are the richer for this.

CHAPTER 1

INTRODUCTION

1.1. Introduction

What does it mean for a language to be non-configurational? In a literal sense, a non-configurational language is a language lacking structure, a language without hierarchical relations between the pieces that comprise a sentence. However, the most basic assumption of the generativist enterprise is that, in all languages, there are building blocks which combine with each other to form consecutively larger building blocks, resulting in a hierarchical syntax. I refer to these building blocks as LINGUISTIC OBJECTS. Under this assumption, "non-configurationality" becomes a cover term for a clustering of properties that obscure the evidence for structural relations between linguistic objects. The task for a linguist looking at the syntax of a non-configurational language is to uncover the hierarchical structure lurking beneath the mask of non-configurationality.

In this dissertation, I take on this task for Blackfoot, a Plains Algonquian language spoken in Southern Alberta and Northwestern Montana. Blackfoot displays the hallmark properties of a non-configurational language: it has extensive null anaphora, variable word order, and discontinuous expressions (cf. Hale 1983). However, it shows evidence of hierarchical structure in the form of c-command relations between constituents both within and across clauses.

I propose that Blackfoot's mask of non-configurationality is the result of its ARGUMENT-TYPING SYSTEM, i.e., the classification of linguistic objects associated with the arguments of the predicate. Specifically, in this dissertation I analyse the internal and external syntax of Blackfoot's argument expressions (inflected nouns and demonstratives) and argument-indexing verbal morphology (person prefixes and number suffixes).

An emergent theme is the important role that PROXIMATE and OBVIATIVE morphology plays in obscuring Blackfoot's hierarchical syntax. 3rd person argument expressions in Blackfoot are marked as either singular or plural, and singular argument expressions are coded as either proximate or obviative.

Clauses are similarly coded as to whether the arguments in the clause are proximate singular, obviative singular, or plural. I argue that the proximate marking signals that a phrase is independent; it cannot be structurally dependent on another constituent. As such, clauses coded as proximate are necessarily matrix clauses[1], and argument expressions coded as proximate cannot occupy argument positions. Rather, they are adjoined outside the clause and bind a null *pro* argument inside the clause (cf. Baker 1991, 1996). As for obviative marking, I decompose it into two different types of dependency-marking. I analyse obviative marking on the clause as singular number agreement in C. Obviative marking on argument expressions, on the other hand, I analyse as a generalized case marker; it appears on all argument expressions in the clause, but does not co-vary with grammatical function (e.g., subject/object).

Under this analysis, the mask of non-configurationality in Blackfoot is a conspiracy, resulting predominantly from two independent factors: the requirement that one class of 3rd argument expressions be syntactically independent, and the fact that case-marking is indiscriminate, and does not code grammatical functions.

This chapter provides the relevant background for the dissertation and summarizes my main claims. The chapter proceeds as follows. In §1.2, I discuss my methodology, and in §1.3, I lay out my theoretical assumptions. In §1.4, I walk through the main proposal of the dissertation, and in §1.5, I outline the contributions of each subsequent chapter.

1.2. Methodology for Data Collection

In this section, I discuss the methodology I employed for collecting the Blackfoot data presented in this dissertation. The primary source of data is my own fieldwork over the past ten years (2003-present) with Rachel Ermineskin, a speaker of the Siksiká dialect, and Beatrice Bullshields, a speaker of the Kaináá dialect. My fieldwork combines a variety of methods, including elicitation, conversation practice, and story collecting.

[1] Here and throughout the dissertation I use term *matrix clause* to refer to clauses that are not subordinate. I opt for this term over the term *root clause* to avoid confusion with lexical (i.e., N or V) roots.

Regarding elicitation methods, these involve asking questions of the consultants in an interview-like setting. The questions are designed to elicit sentences and/or short monologues, as well as grammaticality judgments; they involve translation tasks (both from English to Blackfoot, and Blackfoot to English), as well as the use of pictures, stories, and other props that prompt the consultant to provide sentences, or judge the grammaticality of sentences I provide. The use of pictures was particularly important for eliciting judgments about c-command relations (see Chapter 7); here, I had the consultant match pictures depicting scenarios with sentences describing the scenarios. In all elicitation settings, I attempt to establish a clear discourse context, either verbally or via pictures and props.

Regarding conversation practice, I participated in a Blackfoot conversation group at UBC, in which linguistics graduate students and professors met regularly with a consultant (Beatrice Bullshields) and played language games designed to increase our vocabulary and conversational abilities. Word and phrase lists were compiled, as well as transcripts of our meetings, and these are included in the corpus I draw on for the data in this dissertation.

Regarding story collecting, the consultants have occasionally told stories, either traditional folktales or personal narratives, that I have recorded and analysed, either on my own or in collaboration with other members of the Blackfoot research group at UBC (cf. Bullshields et al. 2008).

The generalizations presented in this dissertation reflect the consultants' judgments based on my fieldwork and are not always convergent with those presented in Frantz's (1991, 2009) Blackfoot Grammar. When there are discrepancies between my consultants' judgments and the generalizations presented in the grammar(s), these discrepancies are noted.

In addition to my fieldwork data, I draw on material from texts. The texts are four traditional Blackfoot stories that are part of a larger collection of narrative texts recorded and made available through the *Niitsitapiisini: Our Way of Life* exhibit at the Glenbow Museum in Calgary, Alberta. Each story is transcribed in Blackfoot, with English and French translations and an accompanying audio recording. In the dissertation, transcriptions are presented as in the original texts; the morphological analysis and glossing is my own.

Drawing on data from elicitation, conversation practice, stories I have collected, as well as texts I have analysed, this dissertation makes a contribution to the collection of Blackfoot language materials.

1.3. Theoretical Assumptions

In this section, I outline my theoretical assumptions. In §1.3.1, I outline my assumptions regarding syntactic categories, and in §1.3.2, I outline my assumptions regarding syntactic dependencies. In §1.3.3, I discuss my assumptions regarding the morphology-syntax interface. In §1.3.4, I show how these three sets of assumptions define a model for mapping linguistic objects onto syntactic structure that sets the course for this dissertation.

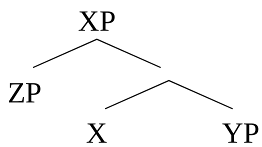
1.3.1. Syntactic Categories: The Universal Spine Hypothesis

The model of syntactic categories that I adopt is based on the UNIVERSAL SPINE HYPOTHESIS (cf. Wiltschko to appear b, Wiltschko and Déchaine 2010) The main premise of this framework is that there is a fixed and universal ordering of functional categories that dominate lexical categories, comprising what is referred to as the UNIVERSAL SPINE. The universal spine has both verbal and nominal instantiations, as given in (1a) and (1b), respectively.

(1) a. [CP [IP [AspP [*v*P [VP]]]]]
b. [KP [DP [ϕP [*n*P [NP]]]]]

(1a) is the verbal spine and (1b) is the nominal spine. All languages employ these structures; linguistic objects map onto positions in the universal spine, yielding hierarchical structures corresponding to clauses and nominal expressions. A linguistic object may map onto a head position in the spine, or it may modify a head position. Any given head (X) can combine with a phrase (YP), and the resulting complex phrase can further combine with other elements (ZP) without changing the categorial identity of that complex expression.

(2)



Crucially, the Universal Spine Hypothesis distinguishes between CATEGORIES (which correspond to the heads of the structures in (1)) and WORD CLASSES (which can be thought of as language-particular instances of how categories are instantiated). Languages vary in their inventories of word classes, and in which word classes associate with which categories, but under this hypothesis, all languages associate linguistic objects with a fixed set of categories.

To give an example, some languages have a word class known as articles, whereas others do not have articles but they have demonstratives, and still others have both.[2] In some of these languages, both articles and demonstratives associate with the category of D (cf. Abney 1987). Thus, word classes cannot be equated with categories; different word classes can associate with a single category. Moreover, it is not universally true that articles and demonstratives associate with D in all languages. For example, in many languages, demonstratives co-occur with determiners (which arguably associate with D) and function as adnominal modifiers (e.g., Hungarian, Greek, and many others, cf. Alexiadou et al. 2007). Even in English, the word class of articles is argued to partition into those that associate with D (e.g., *the*) versus those that associate with Num (or ϕ in my model), (e.g., *a*), cf. Lyons 1999; Ghomeshi 2003). These examples show that we cannot map a given linguistic object onto the syntactic spine on the basis of its word class alone. In other words, the generalization is that categories cannot be defined by word class membership.

How, then, can we define categories? According to the Universal Spine Hypothesis, each layer in the structures in (1) is associated with a dedicated syntactic function. These functions are integral to the

[2] I revisit the relationship between articles, demonstratives and the syntactic category D in Chapter 4.

layer itself; each layer of both the verbal and nominal spines shares the same core function. In (3), I give the spines with their associated functions. A brief explanation of each layer and its associated function follows.

(3)

CP	**LINKING**	KP
IP	**ANCHORING**	DP
AspP	**VIEWPOINT**	ϕP
*v*P	**CLASSIFICATION**	*n*P

The **CLASSIFICATION LAYER** of the clause is associated with thematic role assignment and event structure; *v* provides a structure for the thematic arguments of the predicate, e.g., agent and patient (e.g., Hale and Keyser 1993; Chomsky 1995). The nominal equivalent of *v* is *n*. Like *v*P, *n*P provides an architecture for the arguments of the noun; it can introduce an external argument (a possessor) and can license an internal argument. The classification layer is often associated with Aktionsart, or inner aspect, which classifies verbs according to their event structure (cf., Macdonald 2008; Travis 2010) and its nominal equivalent, SEINSART, which classifies nouns according to countability (cf. Bach 1986, Rijkhoff 1991).

According to the Universal Spine Hypothesis, classification is not universally tied to semantic notions such as, e.g., telicity or count/mass; we predict that languages will vary in how verbs and nouns are classified (cf. Lowenstamm 2007 for arguments that *n* can associate with gender). As for Blackfoot, classification is tied to grammatical animacy. This is observed in Chapter 2, in which I develop an analysis of Blackfoot's *v*P and in Chapter 3, in which I develop an analysis of Blackfoot's *n*P.

The **VIEWPOINT LAYER** of the clause provides a connection between the event and a perspective on that event. In the verbal spine, the viewpoint layer has been often associated with outer aspect or viewpoint aspect (to be distinguished from inner aspect or Aktionsart), which provides a temporal perspective on the event (e.g., perfective aspect views the event in its entirety from the outside;

imperfective views an interval of the event from within, cf. Comrie 1976; Smith 1997). In Chapter 2, I present an analysis of AspP in Blackfoot, which I argue is associated with the direct and inverse suffixes. It has been argued that Number is the nominal equivalent of Aspect (Megerdoomian 2008, and references therein). Following Déchaine and Wiltschko (2002) and others, I adopt the label ϕP instead of NumP to refer to this head, as a way of dissociating the function of this head from its semantic content.[3] In Chapter 3, I argue that the nominal plural suffixes in Blackfoot map onto ϕ.

In the verbal spine, the **ANCHORING LAYER** connects the event situation to the utterance situation, a composite of the speech act participants, the moment of speaking, and the location of the speech act (cf. Cowper 2005). Although traditionally associated with Tense, Ritter and Wiltschko (2005, 2009, to appear) have argued that the category of INFL[4] can also be associated with person and location. The nominal equivalent of INFL is D; just as INFL connects the event to the utterance, D connects the individual to the utterance. I discuss D in Blackfoot in Chapter 4, and INFL in Chapter 5.

The **LINKING LAYER** situates the phrase (i.e., the clause or nominal expression) in a superordinate structure and/or the larger discourse. In the verbal spine, linking is associated with C, which can signal subordination, or can connect the clause to the larger discourse (e.g., by signalling the type of speech act, or by encoding information structural properties of the clause, cf. Rizzi 1997). In the nominal domain, linking is associated with K (Case), which connects the nominal expression to the clause (cf. Ogawa 2001). The linking layer in Blackfoot is associated with the number suffixes that appear on nouns and verbs; this is discussed in Chapters 3 and 6.

An important point to note is the parallelism between the verbal and nominal spines. This parallelism has been long observed in generative grammar; in his (1970) *Remarks on Nominalization*, Chomsky observed that clauses and arguments can project parallel syntactic structures. This has been

[3] In the literature (and in this dissertation), "ϕ" is used in two ways: (i) to refer to a nominal functional head, and (ii) to refer to nominal features, e.g., person, number, gender.

[4] Since Chomsky (1995) (based on Pollock 1989) it has been customary to refer to the head of the clause as T(ense), rather than its earlier label INFL(ection). However, once we divorce the anchoring category from its temporal content, then the label INFL is more appropriate.

elaborated and debated in various directions (cf. Abney 1987, Grimshaw 1990, Szabolski 1983, Ogawa 2001, and many others). Abstracting away from the details, the main point to be gleaned from this is that there is a parallelism between verbal and nominal spines. Under the Universal Spine Hypothesis, this parallelism is taken as evidence that there are syntactic layers with dedicated functions, and these functions are not integrally related to semantic content.

Moreover, the Universal Spine Hypothesis allows for the possibility that a given linguistic object could associate with a particular position in the spine (e.g., head of the linking layer), but be neutral with respect to the nominal/verbal distinction. Under this view, category-neutral roots (e.g., English *run*) associate with the lexical layer of the spine but are not inherently categorized as nominal or verbal.[5] The prediction is that there should be instances of neutrality in the functional layers as well. In Chapters 3 and 6, I argue that Blackfoot possesses a linguistic object (the proximate suffix –*wa*) that maps onto the head position of the linking layer of the spine, but is not categorized as nominal or verbal. I refer to this head as LINK.

Notably, in postulating that UG makes available a fixed set of functional categories, the Universal Spine Hypothesis situates itself "in between" two other generative models of syntax: Minimalism (Chomsky 1995) and Cartography (Cinque 2002; Rizzi 2004). In its strictest form, Minimalism does away with functional categories (as primitives) and as such cannot account for the parallelisms observed between verbal and nominal structures. Cartographic approaches, on the other hand, allow for a wide range of categories, and the sheer number of proposed categories in the cartographic tradition obscures the parallelism between verbal and nominal structures.

1.3.2. Syntactic Dependencies

The ways in which linguistic objects combine with one another is constrained by their categorial identity; linguistic objects associate with positions in the spine according to their categorial identity and this

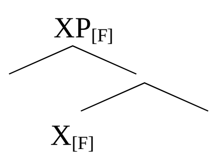
[5] Under some hypotheses, all roots are inherently category-neutral, and categorization takes place in the syntax (cf. Marantz 1997; Borer 2004; Arad 2005). However, following Armoskaite (2011), I assume that in at least some languages (including Blackfoot), roots are inherently categorized. See Chapter 3 for discussion.

dictates that they combine in a fixed order. Once linguistic objects associate with the spine, they may subsequently undergo various derivations, constrained by a dependency relation referred to as AGREE, and defined here narrowly as a dependency of a head on its Specifier (i.e., the sister of the phrase consisting of the head and its complement, represented by ZP in (2)).

Thus I am adopting a mixed model, drawing on both representational and derivational approaches to syntax. Admittedly, such a model places a heavy burden on UG; it stipulates that UG supplies both the universal spine and the Agree mechanism. However, in my approach, the spine and Agree are responsible for different things: the spine dictates the combination of functional layers with one another based on the properties of their heads, and Agree is responsible for the combination of heads with their arguments inside the functional layers. Whether and how these two approaches could be integrated into a single model (representational *or* derivational) is a matter for future research.

Agree is a feature-matching mechanism: the features (F) of a head must agree with the features of its Specifier. Following Chomksy (1995), I assume that any given head can bear a combination of interpretable and uninterpretable features. Interpretable features contribute to the semantic interpretation of the sentence and they project from the head to the whole phrase, as schematized in (4).

(4)



An uninterpretable feature must be checked by a matching interpretable feature in a local (i.e., Specifier-head) configuration. The uninterpretable features of the head are checked by the interpretable features of the Specifier, establishing a dependency relation between the head and the Specifier.

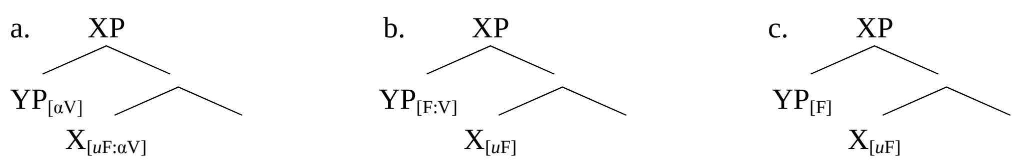
Both uninterpretable and interpretable features can be either valued (V) or unvalued.[6] This yields a four-way contrast in features, as summarized in Table 1.1 below.

Table 1.1. Grammatical Features

	Interpretable	**Uninterpretable**
Valued	[F:V]	[*u*F:V]
Unvalued	[F]	[*u*F]

Unvalued features are those that range over an inflectional class (e.g, person or number), but do not have a particular value (e.g., 1st person or plural number) associated with them. Valued features, on the other hand, are those that have a particular value associated with them.

Uninterpretable valued features must be checked by a matching interpretable feature with the same value. Uninterpretable unvalued features, on the other hand, are checked by a matching feature, and may or may not be concurrently valued by the interpretable feature. (Uninterpretable unvalued features that are not valued by the interpretable feature remain unvalued.) These three options are schematized below.

(5)


In (5a), the head X bears an uninterpretable valued feature [*u*F:αV]; it is checked by the matching interpretable feature [F:αV] on the Specifier YP. In (5b), the head X bears an uninterpretable unvalued feature [*u*F]; it is checked and valued by the feature [F:V] on the Specifier YP. Finally, in (5c), the head X bears an uninterpretable unvalued feature [*u*F] that is checked by a matching interpretable unvalued feature [F] on the Specifier YP. Thus, the four-way contrast in grammatical features observed in Table 1.1. yields three different Agree possibilities: checking a valued feature (5a), checking and valuing an

[6] This is contra Chomsky (2001) who assumes a two-way contrast between uninterpretable unvalued features, and valued interpretable features. However, it is inspired by Pesetsky and Torrego's (2004) proposal for a more nuanced approach to grammatical features; they suggest that features can vary according to un/interpretability as well as whether they have a semantic value or are purely formal.

unvalued feature (5b), or checking (but not valuing) an unvalued feature (5c). In Chapter 5, I make use of all three of these Agree relations in my analysis of the arguments in Spec, IP.

1.3.3. The Morphology-Syntax Interface

To this point, we have seen that the structural organization of linguistic objects is constrained by their categorial identities (i.e., which position in the spine they map onto), as well as subsequent Agree relations. Additionally, they may be constrained by linearization principles related to their morphological form. Linearization of morphemes, like Agree, involves derivations that take place after the initial mapping of linguistic objects onto the spine.

In this section, I introduce my assumptions regarding the morphology-syntax interface (i.e., the interface between linguistic objects and the spine). The model I adopt is influenced by Rice (2000) and Pittman and Compton (2010), both of whom argue for a syntactic view of word formation in polysynthetic languages (Athapaskan languages and Inuit, respectively). Abstracting away from variations in the implementation, these authors share the insights that, in these languages, a phonological word may correspond to a syntactic phrase, and that the linearization of morphemes inside the word is conditioned by syntactic principles. I propose that the same is true of Blackfoot. The model I adopt in this dissertation centers around three main ideas:

(i) Morphemes are linguistic objects comprised of sound-meaning bundles, and structure-building is the process of associating these bundles with the syntactic spine.[7]

(ii) The linearization of bound morphemes reflects this association, but depending on whether the morpheme is lexicalized as a suffix, prefix, or clitic, it is subject to a different linearization algorithm.

(iii) Spell-out operations can take place post-syntactically (i.e., after linguistic objects associate with the spine, and after any Agree operations) and can affect the linearization of morphemes and morpheme combinations.

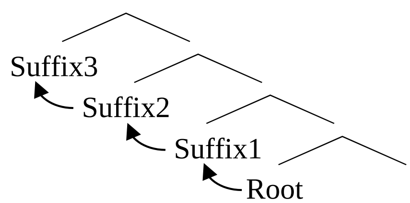
[7] In other words, I do not assume that the syntax manipulates feature bundles that are associated with a phonetic form post-syntactically, e.g., Distributed Morphology (Halle and Marantz 1993).

In what follows, I introduce my assumptions about the linearization of suffixes, prefixes, and clitics, as well as post-syntactic spell-out operations.

1.3.3.1. Linearization of Suffixes

In Blackfoot, suffixes tend to associate with head positions. As such, they exhibit Head Movement Constraint effects (cf. Travis 1984); they undergo cyclic head movement starting with the lexical root up to the highest head in the spine, as schematized below.

(6) a.



b. [Root – Suffix1 – Suffix2 – Suffix3]

In (6a), there are four morphemes, a root and 3 suffixes, and they associate with head positions in the syntactic spine. Beginning with the root, these morphemes undergo cyclic head movement resulting in the order in (6b). As such, they conform to Baker's (1985) Mirror Principle; the suffix furthest from the root is highest in the structure.

1.3.3.2. Linearization of Prefixes

In Blackfoot, prefixes tend not to be heads but modifiers. As such, they do not show Head Movement Constraint effects, and their surface order reflects a different linearization algorithm than that of the suffixes. (This type of asymmetry between suffixes and prefixes is common crosslinguistically, cf. di Sciullo 2005).

Here and throughout the dissertation, I remain largely agnostic about the precise mechanisms that determine the relative ordering of prefixes. (The one place where I discuss prefixes is Chapter 5, in which

I argue that the person prefixes[8] are in Spec, IP.) However, abstracting away from the details, we can observe that, at least in some cases, the linear order of Blackfoot's prefixes correlates with scope relations. An example illustrating the scope relations between prefixes is given below.

(7) a. *Na* *Doris* ***kák****sinsskaka'pssiwa*.
ann-wa D **ikak**-inasskaka'pssi-wa
DEM-PROX D **only**-be.tidy.AI-PROX
"Doris is only tidy." (i.e., not friendly and clever)

b. *Na* *Doris* ***máátsikak****sinsskaka'pssiwa.* *maat-* > *ikak-*
ann-wa D **maat-ikak**-insskaka'psii-wa
DEM-PROX D **NEG-even**-be.tidy.AI-PROX
"Doris is not even tidy." (i.e., or friendly or clever)

c. *Na* *Doris* ***kaksá****ínskaka'pssiwa.* *ikak-* > *sa-*
an-wa D **ikak-sa**-insskak-a'pssi-wa
DEM-PROX D **only-NEG**-tidy-be.AI-PROX
"Doris is only not tidy person.' (i.e., she's friendly and clever; she's only not tidy)

In (7a), the preverb *ikak-* is interpreted as "only," and in (7b), *ikak-* is preceded by the negative prefix *maat-* and it is interpreted as "even." This is similar to languages such as Dutch, German, Spanish, Finnish, and Swedish in which a word used to express "even" is only licensed under the scope of negation (Rullmann 1997, and references therein). By analogy we can conclude that the *maat-* prefix in (7b) takes scope over the *ikak-* prefix. In (7c), we see the opposite case: when *ikak-* is followed by a negative prefix (here *sa-*), it is not interpreted as "even" but "only." If the "even" reading only obtains when *ikak-* scopes under negation, then we can conclude that in this example *sa-* does not take scope over *ikak-*. The contrast between (7b) and (7c) tells us that the linearization of prefixes can inform us about their relative scope relations. This is particularly evident if we compare (7c) with (8) below.

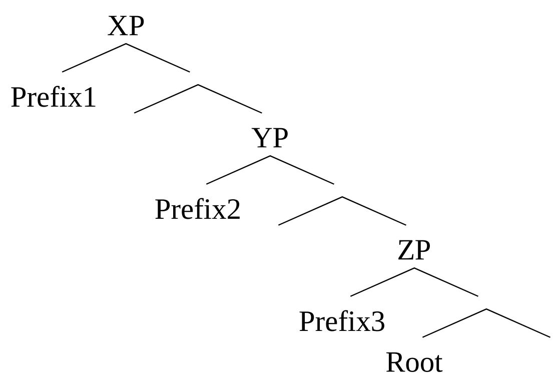
(8) *Anna* *Carmelle* *íínikksiistapoowa* *kám****saikak****saapi'si* *píítaa.*
ann-wa C ii-inikk-miistap-oo-wa kam-**sa-ikak**-yaapi-hsi piitaa
DEM-PROX C IC-angry-away-go.AI-PROX if-**NEG-even**-see.AI-CONJ eagle
"Carmelle will leave angry if she doesn't even see an eagle."

[8] In fact, it isn't clear to me whether the person prefixes are best analysed as prefixes or as clitics. In Chapter 2, I develop language-specific diagnostics for distinguishing clitics from affixes, and according to these, the person prefixes pattern as prefixes. However, see also Déchaine (1999) and Stacy (2004), who argue that they are clitics.

In (8), the same negative prefix as in (7c), *sa*-, appears on the subordinate verb, and here it precedes *ikak*-. In this case, the "even" reading" of *ikak*- obtains, suggesting that here *sa*- scopes over *ikak*-. The generalization is as follows: When *sa*- precedes *ikak*-, it scopes over it; when *sa*- follows *ikak*-, it does not. (See Bliss 2010b for an analysis of *ikak*-). In short, the linear order of prefixes correlates with scope relations.

If we assume that scope relations are structurally determined (e.g., Aoun and Li 1993), then this suggests that (at least some of) the prefixes are linearized according to their relative height in the structure, as schematized below.

(9) a.



b. [Prefix1 – Prefix2 – Prefix3 – Root]

In (9a), the three prefixes are in specifier/adjunct positions, and their relative syntactic positions directly determine their linear position in (9b).

1.3.3.3. Linearization of Clitics

Clitics are an "in-between" class: they are neither affixes nor words (cf. Zwicky 1977) and are not subject to the same linearization algorithms as affixes. In particular, the linearization of clitics is determined by phonological factors, and not syntactic ones such as c-command. In Chapter 2, I discuss some Blackfoot-specific diagnostics for distinguishing between clitics and affixes, and I demonstrate that Blackfoot's clitics attach outside the prosodic domain of affixes, as schematized below.

(10) [[Prefix(es) – Root - Suffix(es)] – Clitic(s)]

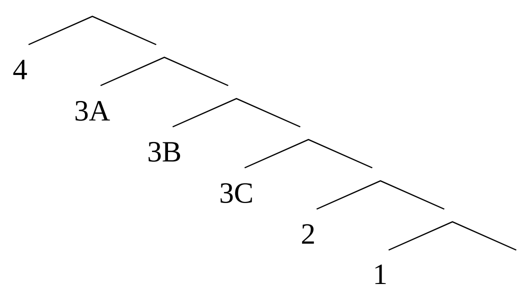
The position(s) of Blackfoot's clitics is dictated by the phonology, and does not inform us about the clitic's syntactic position. This becomes relevant in Chapters 6 and 7, in which I argue that (some) enclitic pronouns occupy argument positions in the clause. Thus, depending on the grammatical function the enclitic fills, it has a different syntactic position. Nevertheless, it always attaches in the same place in the surface string.

1.3.3.4. Post-Syntactic Spell-out Rules

Following the mapping of linguistic objects to the syntactic spine, and any subsequent derivations, there may be mismatches between the surface string and the syntactic structure. Specifically, morphemes that map onto the spine may not appear in the surface string, and conversely, morphemes that are not mapped on to the spine may appear in the string. I assume that these mismatches reflect post-syntactic spell-out restrictions. These spell-out restrictions may (i) constrain the co-occurrence of morphemes in the syntax, or (ii) require the spell-out of an extra-syntactic morpheme.

Regarding the first possibility, consider the structure in (11a), in which three morphemes – 3A, 3B, and 3C - are each associated with different syntactic positions. However, as shown in (11b), only one of these can be spelled out in the surface form. A spell-out restriction blocks the three from co-occurring.

(11) a.



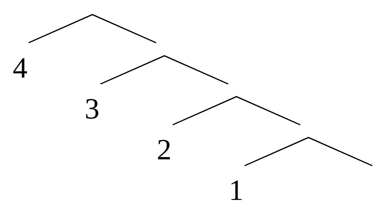
b. [1 – 2 – 3 – 4]

A B C

One-to-many mappings of this sort have been proposed for Blackfoot, as well as other Algonquian languages. For example, Bliss et al. (2010a,b) proposed that the direct and inverse suffixes that all appear in the same morphological position on verbs in both Blackfoot and Nishnaabemwin are split across three different syntactic positions. The details of the analysis are not relevant here, but what is relevant is that the mapping between morphology and syntax is not isomorphic; one morphological position maps on to many syntactic positions. Bliss et al. propose a series of spell-out restrictions to account for this mapping. Furthermore, the direct/inverse morphology has been proposed to be split across multiple syntactic positions in Western Naskapi (Brittain 1999) and Plains Cree (Déchaine and Reinholtz 1997, 2008), as well as in Proto-Algonquian (Oxford 2012). Additionally, Slavin (2012) observes that verb class finals can map onto different syntactic positions in Oji-Cree. This suggests that spell-out restrictions that block the co-occurrence of multiple syntactic heads in the surface morphology are pervasive in Algonquian languages. In Chapter 3, I appeal to this mechanism in my account of plural nominal expressions.

Regarding the second possibility (i.e., that an extra-syntactic morpheme be spelled-out), there are (at least) two types of spell-out rules to consider, illustrated in (12) and (15) below.

(12) a.



b. [1 – 2 – 3 – 4 – **5**]

In (12), there are four morphemes associated with the syntactic spine (a), but five morphemes in the surface string (b). In this case, morpheme 5 is spelled out post-syntactically. An example that may qualify as an extra-syntactic element like morpheme 5 is the so-called "connective I" in Blackfoot (Frantz 2009, p. 77). This is a morpheme that appears between certain prefix-verb concatenations without any apparent phonological or syntactic motivation. An example is given below.

(13) a. *Passkáát*!
passkaa-t
dance-imp
"Dance!"

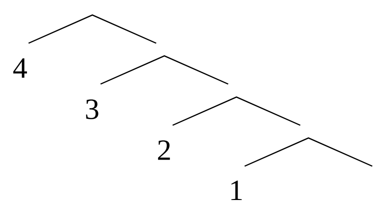
b. *Á**í**passkaayaawa*.
a-***i***-passkaa-yi-aawa
IMPF-***i***-dance-PL-3PL.PRN
"They are dancing." (Frantz 2009: 77)

(14) ***Aap**oyíínaattsiwa*.
aapoyiinaattsi-wa
be.brown.II-PROX
"It is/was brown." (Frantz and Russell 1995: 11)

In (13a), the verb stem is consonant-initial, and in (13b), it is prefixed with the imperfective marker *a-*. In this context, a morpheme *–i-* intervenes between the prefix and the stem. Note that this morpheme is not the result of epenthesis; (14) shows that /*a+p*/ sequences are not prohibited by the phonology. However, it has no identifiable semantic or syntactic function.

The second type of many-to-one relation between morphemes and syntactic positions is schematized in (15).

(15) a.



b. [1 – 2A – 3 – 4 – 2B]

In (15), morpheme 2 is associated with a single syntactic position but is spelled out twice in the surface string (represented as 2A and 2B). I refer to this as COPYING. The notion of copying can account for concordial agreement systems, the insight being that if an identical morpheme appears on multiple elements, then one instantiation reflects its "true" syntactic position, and the others are copies, spelling out an agreement relation (cf. Déchaine et al. 2013; Wiltschko 2009).[9] In Chapter 4 I return to the issue of copying, as it pertains to the nominal inflection that appears on demonstratives.

[9] These analyses draw on Wiltschko and Déchaine's (2010) model of Interface Syntax, which allows the phonetic form of a morpheme to associate with the spine either early or late in the derivation. An early association results in agreement with copying, whereas a late association results in agreement without copying. My analysis differs, insofar as I assume that morphemes always associate early, and thus copying reflects a post-syntactic operation.

In summary, morphemes can map onto syntactic positions in various ways, depending on whether they are suffixes, prefixes, or clitics. Moreover, post-syntactic spell-out restrictions can result in one-to-many or many-to-one relations between the morphemes and syntactic positions.

1.3.4. Mapping Morphemes onto the Syntactic Spine

The Universal Spine Hypothesis defines a methodological paradigm for a researcher looking at the syntax of a given language (cf. Wiltschko 2011). For any given language, we can ask the question: Which linguistic objects associate with which functional categories? The framework I am adopting gives us two families of diagnostics for determining this association: diagnostics based on syntactic position and diagnostics based on syntactic function. Regarding tests for syntactic position, tests for structural asymmetries can establish dependency relations within a clause, and the linear order of words and morphemes can inform syntactic structure. Notably, these tests allow us to establish relative but not absolute structural positions. Under the framework adopted here, tests for syntactic function allow us to establish absolute positions. A linguistic object can be located in a particular layer in the spine if it fulfills the core function associated with the syntactic category that instantiates that layer. Throughout this dissertation, I combine tests for syntactic position and syntactic function in order to map Blackfoot's linguistic objects onto the syntactic spine.

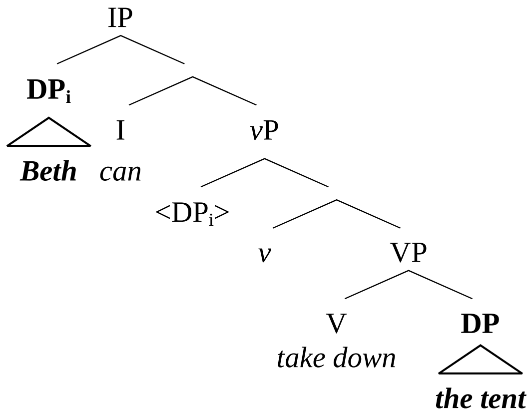
1.4. Proposal

I began my dissertation research wanting to know how to represent the structure of a sentence like that in (16).

(16)	*Na*	*Beth*	*áákohkottsikooni'pa*	*anni*	*ksikkokóówayi.*
	ann-wa	Beth	yaak-ohkott-ikooni-'p -wa	ann-yi	ksikkokóówa-yi
	DEM-PROX	Beth	FUT-ABL-take.down.TI-1:INAN-PROX	DEM-INAN	tent-INAN
	"Beth can take down the tent."				

The standard assumption is that in the English translation of (16), the ARGUMENT EXPRESSIONS – "Beth" and "the tent" – map onto ARGUMENT POSITIONS, as in (17).

(17)



In Blackfoot, as in numerous other languages, the mapping from argument expressions to argument positions is less transparent. Unlike in English, argument expressions in Blackfoot can be moved around (18a) split apart (18b) or omitted (18c), obscuring the mapping between the argument expressions and the positions they are associated with.[10]

(18) a.

Áákohkottsikooni'pa	*anni*	*ksikkokóówayi*	***na***	***Beth*.**
yaak-ohkott-ikooni-'p-wa	ann-yi	ksikkokóówa-yi	**ann-wa**	**Beth**
FUT-ABL-take.down.TI-1:INAN-PROX	DEM-INAN	tent-INAN	**DEM-PROX**	**Beth**

"Beth can take down the tent."

b.

Na	*áákohkottsikooni'pa*	***Beth***	*anni*	*ksikkokóówayi.*
ann-wa	yaak-ohkott-ikooni-'p-wa	**Beth**	ann-yi	ksikkokóówa-yi
DEM-PROX	FUT-ABL-take.down.TI-1:INAN-PROX	**Beth**	DEM-INAN	tent-INAN

"Beth can take down the tent."

c.

Áákohkottsikooni'pa	*anni*	*ksikkokóówayi.*
yaak-ohkott-ikooni-'p-wa	ann-yi	ksikkokóówa-yi
FUT-ABL-take.down.TI-1:INAN-PROX	DEM-INAN	tent-INAN

"She can take down the tent."

Languages with this clustering of properties (i.e., languages that exhibit patterns exemplified by (18)) are labelled as non-configurational (cf. Hale 1983), but non-configurationality has long been understood to be a cover term for languages with a surface appearance that obscures hierarchical relations between constituents, rather than a literal label meant to suggest that any language in fact lacks hierarchical structure.

[10] The examples in (18) are a subset of the possible ways in which argument expressions can be moved or split apart. See Chapter 7 for a more detailed discussion.

The goal of this dissertation is to uncover the hierarchical relations in Blackfoot that are obscured by the non-configurational properties of the language, and to determine the reason(s) why Blackfoot appears to be non-configurational. My main thesis is that non-configurationality in Blackfoot is a conspiracy resulting from properties of Blackfoot's argument-typing system, and in particular the proximate/obviative contrast, referred to as OBVIATION.

In Algonquian languages, obviation is a type of reference-tracking morphology, disambiguating between multiple 3rd persons in a clause. At most one 3rd person referent can be marked proximate in a clause; all others are marked obviative. Often obviation is correlated with notions of discourse saliency; proximate 3rd persons are typically more salient than obviative ones.[11] In Blackfoot, the morphological reflexes of obviation surface on argument expressions and on clauses. Examples are given below.

(19)	a.	*Áyissksimmaa**wa***	*om**a***	*imitáá**wa**.*
		a-yissksimaa-**wa**	om-**wa**	imitaa-**wa**
		IMPF-carry.load.AI-**PROX**	DEM-**PROX**	dog-**PROX**
		"That dog (PROX) is a pack dog." (lit: it carries loads)		

	b.	*Áyissksimmaa**yini***	*om**i***	*imitáá**yi**.*
		a-yissksimaa-**yini**	om-**yi**	imitaa-**yi**
		IMPF-carry.load.AI-**OBV**	DEM-**OBV**	dog-**OBV**
		"That dog (OBV) is a pack dog." (lit: it carries loads)		

In (19a), both the verb and the argument expression (the noun and the demonstrative) are marked proximate by virtue of the suffix –*wa*. In (19b), the argument expression (the noun and the demonstrative) is marked obviative by virtue of the suffix –*yi*, and the verb is marked obviative by virtue of the suffix –*yini*. In this dissertation, I argue that obviation is a grammatical construct rather than a primitive. In particular, it is constructed from three ingredients, corresponding with the three obviation suffixes in (19): -*wa*, -*yi*, and –*yini*.

First, regarding the proximate suffix –*wa*, I argue that, regardless of whether it appears on clauses or argument expressions, it associates with the highest functional head in the spine. I refer to its syntactic

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[11] For example, proximate marking has been said to code the perspective-holder (cf. Dahlstrom 1991; Russell 1991; Mühlbauer 2008) and/or the discourse topic (cf. Russell 1996; Junker 2004; Genee 2009; Goddard 1984, 1990). The discourse functions associated with obviation vary across Algonquian languages. I discuss this in Chapter 8.

category as LINK to reflect the fact that it is in the linking layer of the spine, but is neutral with respect to which spine it appears in (nominal or verbal). I demonstrate that any expression that is marked with *–wa* can be construed as either a predicate or an argument, as shown below.

(20) a.

(*Anna)*	*áísttokimaa**wa**.*
(ann-wa)	a-isttokimaa-**wa**
(DEM-PROX)	IMPF-drum.AI-**PROX**

"S/he is drumming."

b.

Anna	*áísttokimaa**wa***	*ákaomatapóówa.*
ann-wa	a-isttokimaa-**wa**	akaa-omatap-oo-wa
DEM-PROX	IMPF-drum.AI-**PROX**	PERF-begin-go.AI-PROX

"The drummer has just left." OR "S/he is drumming (and) she has just left."

(21) a.

(*Oma)*	*póós**a**.*
(om-wa)	poos-**wa**
(DEM-PROX)	cat-**PROX**

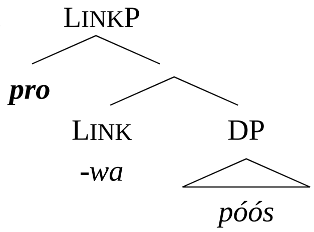
"That is a cat."

b.

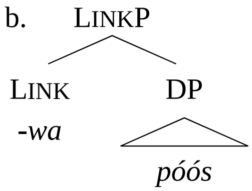
Oma	*póós**a***	*áyo'kaa**wa**.*
om-wa	poos-**wa**	a-yo'kaa-**wa**
DEM-PROX	cat-**PROX**	IMPF-sleep.AI-**PROX**

"That cat is sleeping." OR "That is a cat (and) it is sleeping."

In (20a), the verb is suffixed with *–wa* and it is interpreted as a predicate; in (20b), the same verb can be interpreted either as an argument or as a predicate. Similarly in (21a), the noun is suffixed with *–wa* and interpreted as a predicate; in (21b), the same noun can be interpreted either as an argument or as a predicate. I propose that the predicate/argument flexibility observed in examples like (20) and (21) reflects a structural ambiguity observed with LINKPS: LINK may or may not license null *pro* in its Specifier. In the former case, the resulting structure is interpreted as a saturated predicate, i.e., a complete proposition. In the latter case, the resulting structure is interpreted as an argument.

(22) a. 

“S/he is a cat.”

b. 

“cat”

Although they can be interpreted semantically as arguments of the predicate, LINKPs are not arguments in the syntactic sense, i.e., they do not occupy argument positions but are instead adjoined to the clause.

Turning now to the obviative suffix –*yi*, I propose that it associates with the functional head K in the nominal spine and its function is to link the argument expression to the clause. In other words, -*yi* encodes the dependency relation between the argument expression and the clause. Being categorized as K, -*yi* is conceived of in terms of a case marker. Just as nominative and accusative case in an Indo-European language code KPs as appearing in subject and object positions, -*yi* also codes the nominal expressions as appearing in argument positions. However, whereas K in a nominative/accusative system co-varies with grammatical functions, K in Blackfoot is generalized and does not co-vary. As such, the same instantiation of K appears on every argument expression in the clause. This is schematized below.

(23)

Indo- European	**Blackfoot**
K_{NOM} = subject	K (-*yi*) = subject
K_{ACC} = object	K (-*yi*) = object

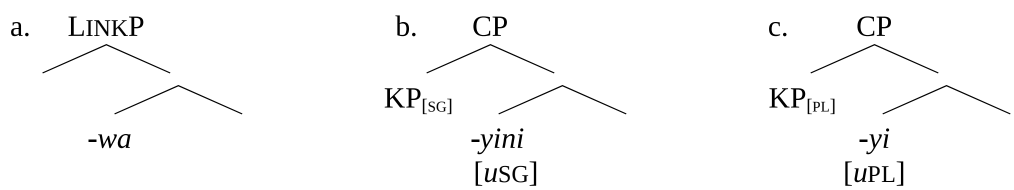
The other type of morphology subsumed under the umbrella of obviation is the number morphology that appears on the right edge of the verbal complex. Examples are given below.

(24) a. *Áyissksimmaa**wa*** *om**a*** *imitáá**wa***.
a-yissksimaa-**wa** om-**wa** imitaa-**wa**
IMPF-carry.load.AI-**PROX** DEM-**PROX** dog-**PROX**
“That dog (PROX) is a pack dog.” (lit: it carries loads)

b. *Áyissksimmaa**yini*** *om**i*** *imitáá**yi***.
a-yissksimaa-**yini** om-**yi** imitaa-**yi**
IMPF-carry.load.AI-**OBV** DEM-**OBV** dog-**OBV**
“That dog (OBV) is a pack dog.” (lit: it carries loads)

c. *Áyissksimmaa**yi*** *om**iksi*** *imitá**íks***.
a-yissksimaa-**yi** om-**iksi** imitaa-**iksi**
IMPF-carry.load.AI-**PL** DEM-**PL** dog-**PL**
"Those dogs are pack dogs." (lit: they carry loads)

(24a) and (24b) are repeated from (19) above, and in (24c), we see that the plural suffix *–yi* contrasts with proximate *–wa* and obviative *–yini*. As discussed above, the proximate suffix *–wa* maps onto the functional head LINK, and just as proximate argument expressions are syntactically independent, so are proximate clauses. They are necessarily matrix clauses, and they do not require an argument expression to saturate the predicate. As for obviative *–yini* and plural *–yi*, I demonstrate that these map onto C, the highest functional head in the verbal spine. Further, I argue that they are number agreement markers; *-yini* is singular agreement in C and *–yi* is plural agreement in C. Whereas proximate *–wa* does not require an argument in its Specifier, obviative *–yini* (and plural *–yi*) do.

(25)


To summarize, in this dissertation I decompose Blackfoot's obviation system into three different pieces: (i) proximate marking, the morphological encoding of a requirement that a phrase be syntactically independent, (ii) obviative marking on nouns, a generalized case marker, signalling that a nominal expression associates with an argument position, and (iii) number agreement in C. Each of these contributes independently to Blackfoot's appearance of non-configurationality; proximate argument expressions are not mapped onto argument positions, obviative argument expressions are not coded according to their different argument positions, and number agreement in C creates an "extra" argument position not cued to grammatical function. Thus, my dissertation contributes to the growing body of literature showing ways in which different languages can conspire to be non-configurational (e.g., Legate

2002; Pensalfini 2004), and provides further evidence against the view of non-configurationality as a macro-parameter (contra Chomsky 1981, Hale 1983; Baker 1996).

Moreover, I show that, once obviation is taken out of the picture, Blackfoot bears robust similarities to other (configurational) languages. In particular, I look at nominal expressions that are neither proximate nor obviative, and I show that they pattern like other bare nouns in a variety of unrelated languages. For example, similar to NPs in Hungarian (Farkas and de Swart (2003), Niuean (Massam 2001), Chamorro (Chung and Ladusaw 2004) and many other languages, bare nouns in Blackfoot have a close syntactic relation with V, and are necessarily narrow-scoping and non-specific. The fact that, without obviation, Blackfoot nominal expressions bear strong similarities to nominal expressions in other languages provides support for the claim that obviation is the main contributor to Blackfoot's non-configurational profile.

1.5. Outline of Dissertation

Following this chapter, the dissertation has seven additional chapters. This section gives a brief synopsis of each chapter.

In **Chapter 2**, I provide background information on the Blackfoot language, focusing on the morphosyntactic properties of nominal expressions and the verbal complex. I also discuss variability in the phonetic realization of the proximate and obviative suffixes, and I argue that, despite the fact that, for some speakers, proximate and obviative suffixes are completely inaudible, they are nevertheless active in the grammar. Additionally, I develop an analysis of the syntactic correlates of the grammatical functions in the language. I argue that the grammatical functions of subject and object in Blackfoot are both associated with external argument positions of *v* heads, and I introduce a grammatical function that is associated with the Spec, AspP position and that I refer to as the Point-of-View (PoV) holder. The PoV holder is determined by the direct/inverse system: if the verb is coded as direct the subject is the PoV holder, and if the verb is inverse the object is the PoV holder.

In **Chapter 3**, I explore the syntax of nominal expressions. I argue that, depending on whether a nominal expression is inflected as proximate singular, obviative singular, plural, or is uninflected (i.e., bare), it has different internal and external syntax. First, regarding proximate singular nominal expressions, I argue that the proximate suffix –*wa* maps onto the highest functional head in the spine, but is neutral with respect to whether it associates with a nominal or verbal spine. I adopt the label LINK to refer to this head, and I propose that LINKPS are adjoined to the clause; they do not occupy argument positions. As for obviative singular nominal expressions, I argue that obviative –*yi* also maps onto the highest head in the spine, but it is restricted to nominal phrases. Hence, it is K. I propose that K is a generalized case marker; it is required on all argument expressions in case positions, but does not co-vary with grammatical function. As such, every argument expression inside the clause is a KP. Regarding bare nouns, I argue that these are pseudo-incorporated: they as phrasal complements to V and they are not assigned case. I discuss the syntactic and semantic properties of pseudo-incorporated nominal expressions and I show that they pattern like pseudo-incorporated nominal expressions in a variety of languages: they are restricted to an immediately post-verbal position, their internal syntax is restricted (they are *n*Ps), and they are narrow-scoping and non-specific. Finally, I argue that plural nouns are structurally ambiguous; they can be pseudo-incorporated in Comp, VP, in which case they are ϕPs. Alternatively, they can occupy argument positions, in which case they are KPs. In the latter case, I propose a spell-out restriction that blocks the realization of the case suffix –*yi* on plural nouns.

In **Chapter 4**, I consider the syntax of demonstratives. They are required with the subject and object argument expressions, and as such have a distribution expected of D, which in many languages is required to turn a nominal predicate into an argument. I argue that Blackfoot demonstratives are not D heads but phrases that map onto the Spec, DP position. I discuss the various morphemes that comprise the demonstratives, and although I do not present an analysis of their internal structure, I suggest that their morphological composition is amenable to a syntactic treatment. As for the syntactic function of the demonstratives, I propose that they serve the anchoring function associated with the D layer of the spine, connecting the nominal expression to the utterance situation.

In **Chapter 5**, I look at the person prefixes that appear at the left edge of the verbal complex. I claim that these appear in Spec, IP and, like the demonstratives in Spec, DP, they serve an anchoring function, connecting the clause to the utterance situation. Adapting Ritter and Wiltschko's (to appear) analysis of Blackfoot INFL as person-based, I propose that INFL bears an uninterpretable person feature and I claim that this restricts the inventory of items that can appear in Spec, IP. Specifically, I argue that Spec, IP arguments only appear in realis (i.e., real-world) contexts, and I show that the person prefixes are restricted to realis clauses in Blackfoot (see also Déchaine and Wiltschko 2010). Moreover, I argue that arguments in Spec, IP necessarily have a temporal component, even though INFL itself does not have temporal (i.e., tense) features. Finally, I show that, in addition to the person prefixes, Spec, IP can be occupied by an evidential prefix *na*-. Like an expletive subject (e.g., English *it*), the evidential prefix does not refer to an event participant, but unlike expletive subjects, *na*- is not contentless; it has deictic content. I argue that this follow from the fact that the uninterpretable person features on INFL require that arguments in Spec, IP have deictic content.

In **Chapter 6**, I look at the number suffixes that appear at the right edge of the verbal complex. I argue that these map onto the highest functional head in the verbal spine. I develop and apply language-specific diagnostics for each head in the verbal spine, and I show that the number/obviation suffixes do not meet the diagnostics for *v*, Asp, or INFL. However, they do meet the diagnostics for C: they are sensitive to clause-typing and illocutionary force. As argued in Chapter 3, proximate *–wa* associates with LINK, a head that is neutral with respect to whether it heads a nominal or verbal spine, and allows for predicate/argument flexibility. The other two number suffixes, obviative *–yini* and plural *–yi* associate with C and have number agreement features that are checked by an argument in Spec, CP.

In **Chapter 7**, I consider from various angles the question of whether Blackfoot can be considered a non-configurational language. First, I take Hale's (1983) diagnostics for non-configurationality – extensive null anaphora, free word order, and discontinuous expressions – and I apply them to Blackfoot. I show that Blackfoot exhibits an asymmetry; whereas proximate expressions can be freely omitted and moved around, obviative and plural ones cannot. Second, I consider whether Blackfoot meets the criteria for a Pronominal Argument (PA) language (cf. Jelinek 1984, Baker 1991, 1996). Here again, I observe an asymmetry: proximate argument expressions meet the criteria, but obviative and plural ones do not. Finally, I look at the hierarchical organization of the arguments in the clause, and using various c-command tests I demonstrate proximate arguments asymmetrically c-command obviative ones. This is consistent with the claim that proximate argument expressions are clause-external adjuncts.

Finally, in **Chapter 8**, I situate Blackfoot within a broader cross-Algonquian context. I point out that, whereas in Blackfoot, proximate and obviative morphology maps onto the highest functional layer in the spine, this is not uniformly the case across Algonquian. I look at the highest functional layer of the clause, CP, in various other Algonquian languages, and. I demonstrate that the functional material associated with the CP layer in the other Algonquian languages is located lower in the clause in Blackfoot. Nevertheless, the core function of this layer – linking – is maintained across languages. Additionally, I compare the obviation system of Blackfoot with that of other Algonquian languages. I discuss the various discourse functions that have been associated with obviation, and I propose that they share a common thread: they encode discourse in/dependence. I suggest that discourse in/dependence in Blackfoot's obviation system is not lexically encoded, but arises by virtue of the syntactic properties associated with the proximate and obviative markers. I conclude by speculating that this may also be true in other Algonquian languages.

CHAPTER 2

BACKGROUND ON BLACKFOOT

2.1. Introduction

The goal of this chapter is to provide an overview of the properties of the Blackfoot grammar that are relevant to this dissertation. The description draws heavily on Frantz's (1991, 2009) reference grammar. Not intended to be a complete description (or analysis) of Blackfoot grammar, the grammatical sketch presented includes references to research on the same phenomena, in Blackfoot and/or related Algonquian languages. This section proceeds as follows: in §2.2 is a profile of the language, and in §2.3 is an introduction to the morphosyntactic properties of nominal expressions. In §2.4 is an overview of the morphosyntactic properties of the verbal complex, and in §2.5, I discuss the phonetic realization of the proximate and obviative suffixes, which appear on both nouns and verbs and are discussed in detail in Chapters 3 and 6. In §2.6, I present a structural analysis of Blackfoot's grammatical functions. Finally, in §2.7 I conclude.

2.2. Language Profile

Blackfoot consists of four mutually intelligible dialects, spoken on three reserves in Southern Alberta and one reservation in Northwestern Montana. In Alberta, the three dialects are Siksiká (aka Blackfoot), Kaináá (aka Blood), and Piikani (aka Peigan), and in Montana, the dialect is Blackfeet.

The population of Blackfoot speakers is less than 10,000; it includes very few (if any) first language learners, and few monolingual speakers (Russell and Genee 2006). Frantz (2009) reports that the past twenty years have seen the language being used with less frequency, resulting in an increase of sub-dialects and idiolects. Moreover, speakers often report a distinction between "old Blackfoot" (spoken by people in their seventies and upwards) and "new Blackfoot" (spoken by people in their forties to sixties). To date, documentation on these two varieties has focused on phonetic differences (cf. Bortolin and

McLennan 1995; Kaneko 1999), and it has been observed that the old/new characterization reflects a continuum of language change, as opposed to two distinct language varieties (cf. Van Der Mark 2003).

Blackfoot is a member of the Algonquian language family, of which there are three geographically-defined sub-groupings: Central Algonquian (including the Cree and Ojibwe dialects), Eastern Algonquian (including Micmac and Passamaquoddy), and Plains Algonquian. Blackfoot, along with Arapaho and Cheyenne, is part of the Plains Algonquian sub-group (Lewis 2009). Blackfoot is thought to be the most divergent of the Algonquian languages (cf. Goddard 1974), having separated from Proto-Algonquian earlier than other Algonquian languages (cf. Proulx 1989). Its genetic affiliation within the Algonquian language family is yet unclear.

Like other Algonquian languages, Blackfoot can be defined typologically as a polysynthetic head-marking language. A clause consists minimally of a VERBAL COMPLEX, i.e., an inflected verb stem and may or may not contain nominal expressions representing arguments and/or adjuncts to the clause. As will be discussed in detail in Chapter 7, overt nominal expressions are in most cases optional, are relatively unrestricted in their linear order, and may be discontinuous. In what follows, I briefly discuss the form and distribution of nominal expressions, and then I give an overview of the morphology that comprises the verbal complex.

2.3. Nominal Expressions

This section gives an introduction to Blackfoot's nominal expressions. The syntax of nominal expressions is discussed in Chapter 3, and a detailed survey of the types of nominal expressions that can fulfill the various grammatical functions is presented in Appendix A.

Nominal expressions consist minimally of an independent pronoun or noun, and the latter may be modified by a demonstrative or numeral or both. Other types of modifiers, such as adjectives or quantifiers, are expressed as nominal prefixes or as verbal predicates. Nouns can also be marked for possession; the person prefixes that function as possessors are the same as the prefixes that appear on verbs and they are discussed in §2.4.1 below.

Nouns are lexically specified as either animate or inanimate, a grammatical distinction that does not necessarily reflect ontological distinctions of animacy.[12] Nouns can be inflected for number (singular versus plural), and animate singular nouns can also be inflected as either proximate or obviative. Inanimate singular nouns are inflected as obviative; they cannot be inflected as proximate. The proximate/obviative distinction is neutralized in the plural. The inflectional suffixes that appear on nouns are presented in Table 2.1.

Table 2.1. Nominal Inflection

		Animate	**Inanimate**
Singular	**Proximate**	*-wa*	--
	Obviative	*-yi*	
Plural		*-iksi*	*-istsi*

As shown in Table 2.1., only grammatically animate nouns may be marked with the proximate singular suffix *–wa*, but both grammatically animate and inanimate nouns may be marked with the obviative singular suffix *–yi*. Animate and inanimate nouns are morphologically distinguished in the plural. Examples illustrating these different inflectional suffixes are given in (1) and (2) below. As shown in (1) and (2), the nominal inflectional suffixes also appear on demonstratives. (The syntax of demonstratives is discussed in Chapter 4.)

(1) a. *Om**a*** *sááhkomaapi**wa*** *ííksspitaawa*.
om-wa saahkomaapi-wa iik-sspitaa-wa
DEM-PROX boy-PROX INTNS-be.tall.AI-PROX
"That boy (PROX) is tall."

b. *Om**i*** *sááhkomaapi**yi*** *ííksspitaayináyi*.
om-yi saahkomaapi-yi iik-sspitaa-yini-ayi
DEM-OBV boy-OBV INTNS-be.tall.AI-OBV-3SG.PRN
"That boy (OBV) is tall."

[12] Whereas grammatically inanimate nouns in Blackfoot are always ontologically inanimate, grammatically animate nouns may be ontologically animate ("sentient") or inanimate ("non-sentient"), cf. Bliss (2005a). Examples of non-sentient animate nouns include *isttóan* "knife" and *po'taatsis* "stove." Only sentient animate nouns may function as the subject in a transitive clause. While animacy is a common feature of Algonquian, the deployment of animacy contrasts across the Algonquian languages is not uniform (cf. Mühlbauer 2008).

	c.	*Om**iksi***	*sááhkomaap**iks***	*ííksspitaayaawa*.
		om-iksi	saahkomaapi-iksi	iik-sspitaa-yi-aawa
		DEM-PL	boy-PL	INTNS-be.tall.AI-PL-3PL.PRN
		"Those boys are tall."		

(2)	a.	*Om**i***	*náápioyis**i***	*ííksspiiwa*.
		om-yi	naapioyis-yi	iik-sspii-wa
		DEM-INAN	house-INAN	INTNS-be.tall.AI-PROX
		"That house is tall."		

	b.	*Om**istsi***	*náápioy**ists***	*ííksspiiyaawa*.
		om-istsi	naapioyis-istsi	iik-sspii-yi-aawa
		DEM-PL	house-PL	INTNS-be.tall.AI-PL-3PL.PRN
		"Those houses are tall."		

In (1), the grammatically animate noun *sááhkomaapi* "boy" is inflected with the proximate singular suffix *–wa* (a), the obviative singular suffix *–yi* (b), and the plural suffix *–iksi* (c). In (2), the grammatically inanimate noun *náápioyis* "house" is inflected with the suffix *–yi* (glossed as INAN, but formally identical to the obviative suffix that appears on animate singular nouns) and the plural suffix *–istsi*.

Regarding proximate and obviative marking, this serves a reference-tracking function, disambiguating between multiple 3rd persons in a clause. At most one 3rd person referent can be marked proximate in a clause; all other singular nouns are marked obviative, as illustrated below.

(3)	a.	*Matónni*	*na*	*Leo*	*ííhpokinihkimiiwa*	*n**i***	*nitán**i***.
		matonni	ann-wa	Leo	ii-ohpok-inihki-m-yii	ann-**yi**	n-itan-**yi**
		yesterday	DEM-PROX	Leo	IC-ACCOMP-sing.AI-TA-3-4-PROX	DEM-**OBV**	1-daughter-**OBV**
		"Yesterday Leo sang with my daughter."					

	b.	**Matónni*	*na*	*Leo*	*ííhpokinihkimiiwa*	*n**a***	*nitán**a***.
		matonni	ann-wa	Leo	ii-ohpok-inihki-m-yii	ann-**wa**	n-itan-**wa**
		yesterday	DEM-PROX	Leo	IC-ACCOMP-sing.AI-TA-3-4-PROX	DEM-**PROX**	1-daughter-**PROX**
		intended: "Yesterday Leo sang with my daughter."					

(4)	a.	*Anna*	*Beatrice*	*áístaawa*	*ann**i**sk*	*Irvine* …
		ann-wa	B	a-isstaa-wa	ann-**yi**-hk	I
		DEM-PROX	B	IMPF-want.AI-PROX	DEM-**OBV**-INVIS	I

… *omááhkitsspiyissi*	*omi*	*páísskaan*.
om-aahk-it-ihpiyi-hs-yi	om-yi	paisskaa-n-yi
3-MOD-LOC-dance.AI-CONJ-OBV	DEM-INAN	dance-NOM-INAN

"Beatrice wants Irvine to dance at the dance."

b.	**Anna*	*Beatrice*	*áístaawa*	*ann**a**hk*	*Irvine …*
	ann-wa	B	a-isstaa-wa	ann-**wa**-hk	I
	DEM-PROX	B	IMPF-want.AI-PROX	DEM-**PROX**-INVIS	I

… *omááhkitsspiyissi*	*omi*	*páísskaan.*
om-aahk-it-ihpiyi-hs-yi	om-yi	paisskaa-n-yi
3-MOD-LOC-dance.AI-CONJ-OBV	DEM-INAN	dance-NOM-INAN

intended: "Beatrice wants Irvine to dance at the dance."

In (3a), the subject, *na Leo*, is proximate (as evidenced by the proximate marking on the demonstrative), and the object *ni nitáni* "my daughter" is obviative. (3b) shows that it is ungrammatical for both the subject and object to be marked proximate. In (4), the subject of the matrix clause, *anna Beatrice*, is proximate and the subject of the subordinate clause, *annisk Irvine*, is obviative. (4b) shows that it is ungrammatical for both to be marked proximate.

The constraint against multiple proximate 3rd persons extends to possessed nouns as well. Singular nouns possessed by a 3rd person possessor are obligatorily obviative, regardless of whether the possessor is proximate or obviative, as shown below.

(5)	a.	*Am**a***	*nitómitaam**a***	*iyíístapokská'siwa.*
		am-**wa**	nit-omitaa-m-**wa**	i-yiistap-okska'si-wa
		DEM-**PROX**	1-dog-POSS-**PROX**	IC-run.away.AI-PROX
		"My dog ran away."		
	b.	*Ann**a***	*kitómitaam**a***	*iyíístapokská'siwa.*
		ann-**wa**	kit-omitaa-m-**wa**	i-yiistap-okska'si-wa
		DEM-**PROX**	2-dog-POSS-**PROX**	IC-run.away.AI-PROX
		"Your dog ran away."		
	c.	**Ann**a***	*otómitaam**a***	*iyíístapokská'siwa.*
		ann-**wa**	ot-omitaa-m-**wa**	i-yiistap-okska'si-wa
		DEM-**PROX**	3-dog-POSS-**PROX**	IC-run.away.AI-PROX
		intended: "Her dog ran away."		
	d.	*Ann**i***	*otómitaam**i***	*iyíístapokská'siyináyi.*
		ann-**yi**	ot-omitaa-m-**yi**	i-yiistap-okska'si-yini-ayi
		DEM-**OBV**	3-dog-POSS-**OBV**	IC-run.away.AI-OBV-3PRN
		"Her dog ran away."		

In (5a) and (5b), the possessor is a local person (1st and 2nd, respectively), and the possessed noun is marked as proximate. In (5c), the possessor is 3rd person, and it is ungrammatical for the possessed noun to be marked as proximate. (5d) is the grammatical alternative to (5c), in which the possessed noun is marked as obviative.

As for the interpretational difference between proximate and obviative nominal expressions, in the Algonquianist literature this is often discussed in the context of discourse functions. Although there is considerable variation across Algonquian, in all the languages proximate nominal expressions are thought to be more discourse-salient than obviative ones in some sense (e.g., the proximate nominal expression is the perspective-holder and/or discourse topic, cf. Dahlstrom 1991; Genee 2009; Goddard 1984, 1990; Junker 2004; Mühlbauer 2008; Russell 1991, 1996). Specifically regarding the discourse functions of the proximate/obviative contrast in Blackfoot, Genee (2009) claims that proximate marking appears on discourse topics, i.e., those nominal expressions that refer to what the sentence or larger discourse is about. Throughout this dissertation I focus largely on the syntactic properties of proximate and obviative morphology, but I also discuss their discourse functions in Chapter 8.

Nominal expressions can fulfill a variety of different grammatical functions in the clause. In this dissertation, I make reference to the SUBJECT and OBJECT, which in §2.6 I correlate with *v*P-internal positions.[13] I distinguish between INDEXED and UNINDEXED objects; the former show agreement on the verb whereas the latter do not.[14] Additionally, I make reference to OBLIQUES, which I define as nominal expressions that are introduced by an adpositional prefix (discussed in §2.4.2.3 below).

2.4. Verbal Complex

In morphological terms, the verbal complex can be described in terms of a template, with designated slots for each type of affix. The template is given in Figure 2.1, and is followed by a brief discussion of each slot.

[13] In the Algonquianist literature, the subject and object are often referred to as the ACTOR and GOAL, respectively (cf. Bloomfield 1962; Hockett 1966; Wolfart 1973).

[14] In the Algonquianist literature, indexed and unindexed objects are often referred to as the PRIMARY OBJECT and SECONDARY OBJECT, respectively (cf. Rhodes 1990).

Figure 2.1. Morphological Template for Verbal Complex

$$\text{Person–(Prefixe(s))–}\underbrace{\text{Root–(Noun)–Final}}_{\text{Stem}}\text{–}\underbrace{\text{Direct/Inverse–Clause Type-Person/Number–Number}}_{\text{Suffixes}}\text{–Clitic(s)}$$

2.4.1. Person Prefixes

The leftmost position in the verbal complex is where the person prefixes appear. Examples are given in (6).

(6) a. ***Nit**sáámaahkiaaki*.
nit-yaamaahki-aaki
1-sweep-AI
"I swept."

b. ***Kit**sáámaahkiaaki*.
kit-yaamaahki-aaki
2-sweep-AI
"You swept."

c. *…**ot**sáámaahkiaakissi*.
ot-yaamaahki-aaki-hs-yi
3-sweep-AI-CONJ-OBV
…(when) s/he swept."

Regarding 3rd person *ot-*, it is restricted in distribution in ways that 1st person *nit-* and 2nd person *kit-* are not. Whereas *nit-* and *kit-* appear whenever required in both matrix clauses and subordinate conjunct clauses (see §2.4.5), *ot-* is restricted to conjunct clauses, as well as matrix transitive clauses in which an obviative 3rd person acts on a proximate one. In environments in which the 3rd person prefix does not appear, the prefix slot is empty, or may be occupied by a prefix *na-* (discussed below.)

As in other Algonquian languages, there is only one morphological slot for the person prefixes. The 2nd person prefix *kit-* is used whenever there is a 2nd person argument in the clause (7), and the 1st person prefix *nit-* is used whenever there is a 1st person argument, but no 2nd person (8). The 3rd person *ot-* is used only if neither of the arguments is 1st or 2nd person (and if the distributional criteria outlined in the preceding paragraph are met), (9).

(7) a. ***Kit**sóóhtooki.*
kit-yooht-o-oki
2-hear-TA-2:1
"You heard me."

b. ***Kit**sóóhtoo*.
kit-yooht-o-o
2-hear-TA-1:2
"I heard you."

c. ***Kit**sóóhtowawa*.
kit-yooht-o-a-wa
2-hear-TA-DIR-PROX
"You heard him/her."

d. ***Kit**sóóhtooka*
kit-yooht-o-ok-wa
2-hear-TA-INV-PROX
"S/he heard you."

(8) a. ***Nit**sóóhtowawa.*
nit-yooht-o-a-wa
1-hear-TA-DIR-PROX
"I heard him/her."

b. ***Nit**sóóhtooka*
nit-yooht-o-ok-wa
1-hear-TA-INV-PROX
"S/he heard me."

(9) a. *Íyoohtoyiiwa*
ii-yooht-o-yii-wa
IC-hear-TA-3:4-PROX
"He$_{\text{PROX}}$ heard her$_{\text{OBV}}$."

b. ***Ot**sóóhtooka*.
ot-yooht-o-ok-wa
3-hear-TA-INV-PROX
"She$_{\text{OBV}}$ heard him$_{\text{PROX}}$."

The person prefixes also appear on nouns to mark the possessor. The primary difference between the verbal and nominal prefixes lies in the encoding of the inclusive. On verbs, the inclusive is marked by the absence of a prefix (along with a suffix *–o'p*, see §2.4.6); on nouns, the inclusive is marked with a second person prefix (along with a suffix *–(i)nnoon*).[15] This is shown below.

(10) a. *Áámaahkiaaki**o'p**.*
yaamaahki-aaki-**o'p**
sweep-AI-**INCL**
"We (INCL) swept."

b. ***kit**saamááhkimaa'ts**innoon***
kit-yaamaahkimaa'tsis-**innoon**
2-broom-**INCL**
"our (INCL) broom"

The forms of the prefixes in (6)-(10) are the long form prefixes; there are also short forms, as shown in Table 2.2.

Table 2.2. Person Prefixes

	Long forms	Short forms
1st	*nit-*	*n-*
2nd	*kit-*	*k-*
3rd	*ot-*	*w-*

In Chapter 5, I discuss the distribution and interpretation of the long and short form prefixes (see also Bliss and Gruber 2011a, b). Here I present some examples of the short form prefixes; in particular, they are required in the context of the perfect (11), certain modals (12), and inalienable possession (13).

(11) a. ***N**ikááyo'kaa*.
n-ikaa-yo'kaa
1-PERF-sleep.AI
"I have slept."

b. ****Nit**sikááyo'kaa*.
nit-ikaa-yo'kaa
1-PERF-sleep.AI
intended: "I have slept."

[15] The *–o'p* form on verbs is also used in impersonal constructions, whereas the *kit-…-(i)nnoon* form on nouns is used only with inclusive reference.

(12) a. ***K****ááhksikkamihpiyi.*
k-aahk-ikkam-ihpiyi
2-MOD-if-dance
"You might dance."

b.

Kit*ááhksikkamihpiyi*	*(…kikatáí'ssiksinaasstopi).*
kit-aahk-ikkam-ihpiyi	(…kit-kata'-ssiksinaasi-htopi)
2-MOD-if-dance	(2-NEG-break.leg.AI-UNREAL)

"You would dance (…if you hadn't broken your leg)."

(13) a. ***o****ksíssts*
w-iksisst-yi
3-mother-OBV
"his/her mother"

b. *****ot****síksissts*
ot-iksisst-yi
3-mother-OBV
intended: "his/her mother"

In the Siksiká dialect only (cf. Frantz 1991, 2009), the leftmost slot in the verbal complex can also be occupied by the prefix *na-*. In Chapter 5, I develop an analysis of *na-* as an evidential marker (see also Bliss and Ritter 2007, 2009). Illustrative examples of *na-* are given below.

(14)

Nítssksíni'p	*anna*	*imitááwa*	***ná****ísiksipiiwáyi*	*ni*	*John.*
nit-ssksini-'p	ann-wa	imitaa-wa	**na**-siksip-yii-wa-ayi	ann-yi	J
1-know.TI-1:INAN	DEM-PROX	dog-PROX	**EVID**-bite.TA-3:4-PROX-3PRN	DEM-OBV	J

"I know the dog bit John."

(15) ***Ná****ísootaawa.*
na-i-sootaa-wa
EVID-rain.II-PROX
'It rained.'

(16)

Kiistówa	*ki*	*niistówa*	***ná****óówato'p*	*anni*	*napáyini.*
kiistowa	ki	niistowa	**na**-oowato-'p	ann-yi	napayin-yi
2SG.PRN	and	1SG.PRN	**EVID**-eat.TI-1:INAN	DEM-INAN	bread-OBV

'You and I ate the bread.'

2.4.2. Verbal Prefixes

Following the person prefixes, there may appear a range of different verbal prefixes that encode temporal, aspectual, modal, quantificational, adpositional, and adverbial meanings or functions. (These are referred to as PREVERBS in the Algonquianist literature, cf. Bloomfield 1927). Multiple prefixes can occur in a single verbal complex, and there are various restrictions on the co-occurrence and ordering of verbal prefixes. A discussion of these restrictions is beyond the scope of this thesis. However, to facilitate readability of the data, in what follows, I give an overview of the types of verbal prefixes in Blackfoot. I do not discuss prefixes in combination with each other, and the list of prefixes discussed here is not exhaustive.

2.4.2.1. Tense/Aspect/Modality

Verbs that do not have a prefix that signals a temporal/aspectual/modal meaning are typically interpreted with past time reference[16] and perfective aspect (Armoskaite 2008). An example is given below.

(17) *Nitokská'si*.
nit-okska'si
1-run.AI
"I ran."

The addition of a verbal prefix can disambiguate temporal and/or aspectual reference. For example, the prefix *á*- signals imperfective aspect (cf. Dunham 2007, 2008), the prefix *yáák*- signals future time reference, and the prefix *ikaa*- signals the perfect. Examples are given below.

(18) *Nit**á**okska'si*.
nit-**a**-okska'si
1-**IMPF**-run.AI
"I am running."

(19) *Nit**áák**okska'si*.
nit-**yaak**-okska'si
1-**FUT**-run.AI
"I will run."

[16] Frantz (2009: 16) claims that unmarked verbs always receive a past time interpretation; Ritter and Wiltschko (2004) report that unmarked verbs are ambiguous between past and present time readings. In my own fieldwork, unmarked verbs are typically interpreted as having past time reference; however, a present time reading can be elicited as well.

(20) *N**iká**okska'si*.
n-**ikaa**-okska'si
1-**PERF**-run
"I have run."

Regarding the perfect marker *ikaa-* (and its word-initial allomorph *akaa-*), Frantz (2009: 34) identifies this morpheme as a perfective marker, but I analyse it as a perfect marker, the difference being that perfective aspect involves event completion and/or the perspective on the event as a whole, whereas the perfect involves temporal anteriority and current relevance (cf. Portner 2003 and references therein). I refer to the following generalizations to diagnose *ikaa-* as a perfect marker: (i) *ikaa-* can co-occur with imperfective *á-* (if it were a perfective marker, it would be incompatible with the imperfective); (ii) *ikaa-* is used to express the meaning of "already," which has a similar semantic function to the perfect (cf. Mittwoch 1993), and (iii) like the English perfect, *ikaa-* is incompatible with the adverb meaning "yesterday" (Iatridou et al. 2002). These three points are illustrated in (21)-(23) below.

(21)	*Amo*	*nínaawa*	***ákaa**'p**a**istotakiwa*	*náápioyii.*
	amo	ninaa-wa	**akaa-**a'p-**a-**istotaki-wa	naapioyis-i
	DEM	man-PROX	**PERF**-around-**IMPF**-work.AI-PROX	house-NONPART

'This man has built a house." (Frantz 2009: 35 (m))

(22)	*Na*	*Myaani*	***aká**íkamotaa.*
	ann-wa	M	**akaa**-ikamotaa-wa
	DEM-PROX	M	**PERF**-give.birth.AI-PROX

"Mary has already had her baby."

(23)	(**Matonni)*	*na*	*Myaani*	***áka**ihkitaawa*	*sitokihkiitaan.*
	matonni	ann-wa	myaani	**akaa**-ihkitaa-wa	sitokihkiitaan
	yesterday	DEM-PROX	Mary	**PERF**-bake.AI-PROX	pie

"(*Yesterday) Mary has baked a pie."

In addition to the imperfective, future, and perfect prefixes, a prefix *íí-*[17] can also signal past time reference. An example is given below.

[17] The *íí-* prefix is different from other prefixes in that it substitutes for the leftmost vowel of the verb complex (not including the person prefix). As such, it is related to INITIAL CHANGE, a morphophonological phenomenon found in many Algonquian languages that affects vowel quality at the left edge of the verb complex (cf. Taylor 1967; Proulx 2005). I discuss initial change in more detail in Chapter 8.

(24) *Nits**íí**kska'si*.
nit-**ii**-okska'si
1-**IC**-run.AI
"I ran."

The two prefixes *aahk*-[18] and *ohkott*- signal epistemic and deontic modality, respectively. The epistemic modal is ambiguous between necessity and possibility readings. A detailed discussion of Blackfoot's modal system can be found in Louie (in prep), and Reis Silva (in prep).

(25) ***Nááhk**okska'si*.
n-**aahk**-okska'si
1-**MOD**-run.AI
"I might/must run."

(26) *Nit**ohkótt**okska'si*.
nit-**ohkott**-okska'si
1-**ABL**-run.AI
"I can run."

2.4.2.2. Quantifiers and Other Scope-Taking Prefixes

The universal quantifier *ohkana*- is a verbal prefix that can associate with either the subject or the object. If both arguments are plural, then the quantifier is ambiguous between subject- and object-associated interpretations.

(27) *Nit**ohkaná**óhpommatoo'pinnaaniaawa.*
nit-**ohkana**-ohpommatoo-'p-innaan-yi-aawa
1-**all**-buy.TI-1:INAN-1PL-3PL-3PL.PRN
"We bought all of them." OR "We all bought them." (Frantz 1991: 88)

Other scope-taking prefixes include the negation prefix *máát*-[19] as well as various focus-sensitive operators such as *ikak*- "only"[20] and *matt*- "also." Examples are given below. Detailed descriptions of these (and other) scope-taking prefixes can be found in Bliss (2010b), and Louie (2008, 2011a, b).

[18] In addition to *aahk*-, Frantz and Russell (1995) list the forms *aahkama'p* and *aahksikkama'p*. These are phonological variants of a morphologically complex form, *aahk* + *ikkam*- "if" + *a'p*-.

[19] The verbal prefix *máát*- marks clausal negation. A second negation prefix *sa*- appears closer to the verb stem and marks predicate negation (cf. Louie 2008).

(28) *Ni**máát**okska'si*.
ni-**maat**-okska'si
1-**NEG**-run.AI
"I didn't run."

(29) *N**ikák**okska'si*.
n-**ikak**-okska'si
1-**only**-run.AI
"I only ran."

(30) *Ni**matt**okská'si*.
nit-**matt**-okska'si
1-**also**-dance.AI
"I also danced."

2.4.2.3. Adpositions

Adpositions are verbal prefixes that introduce oblique nominal expressions in the clause. Examples are given below.

(31)

*Nits**ít**sooyi*	*anni*	*itáísooyo'pi*.
nit-**it**-ioyi	ann-yi	itaisooyo'p-yi
1-**LOC**-eat	DEM-INAN	table-INAN

"I ate at the table."

(32)

*I**iht**sipákihkiniiw*	*anni*	*Leo*	*otohtáípiksspi.*
ii-**oht**-ipakihkin-yii-wa	ann-yi	L	ot-iihtáípiksspi-yi
IC-**INSTR**-strike.on.head.TA-3:4-PROX	DEM-OBV	L	3-hammer-OBV

"She hit Leo over the head with her hammer."

(33)

Napayíni	*n**omohp**iówatoo'pa*	*ómihka*	*i'ksisakoyihka.*
napayin-i	n-**omohp**-iowatoo-'p-wa	om-yi-hka	i'ksisako-yi-hka
bread-NONPART	1-**ASSOC**-eat.TI-1:INAN-PROX	DEM-INAN-INVS	meat-INAN-INVS

"I ate the meat with bread." (Frantz 2009: 92)

In (31), the spatiotemporal adposition *it-* introduces a location, in (32) *oht-* introduces an instrument, and in (33), *omohp-* introduces an associate. In each of the examples, the nominal expression introduced by the adposition does not control agreement on the verb. Throughout this dissertation I use the term OBLIQUE to refer to nominal expressions that are introduced by an adposition and do not control agreement on the verb. (These differ from nominal expressions that are introduced by an applicative verb

[20] In the context of negation, *ikak-* is interpreted as "even," not "only," (cf. Bliss 2010b).

final such as benefactive *–omo*, which function as direct objects and do control agreement on the verb, cf. Bliss 2007, 2010a). Adpositions are referred to as LINKERS by Frantz (1991, 2009) and are cognate with what are referred to as RELATIVE ROOTS in other Algonquian languages (e.g., Rhodes 2010). Detailed discussions of Blackfoot adpositions can be found in Bliss (2011, 2012a), Bliss et al. (2013), Hanson et al. (2010), and Louie (2009).

2.4.2.4. Other Verbal Prefixes

Various other meanings are expressed via prefixes. Included in this list are adverbial prefixes as well as prefixes that encode meanings typically associated with RESTRUCTURING PREDICATES (infinitival verbs such as "try" or "start" that lack certain clausal properties, cf. Wurmbrand 2001). Illustrative examples are given below.

(34) *Nits**ikkam**okská'si.*
nit-**ikkam**-okska'si
1-**fast**-run.AI
"I ran quickly."

(35) *Nit**ssáak**okska'si.*
nit-**ssaak**-okska'si
1-**try**-run.AI
"I tried to run."

(36) *Nit**sstsim**okská'si.*
nit-**sstsim**-okska'si
1-**reluctant**-run.AI
"I reluctantly ran."

2.4.3. Verb Stems

Verb stems are composed of a root and a stem-forming suffix referred to as a FINAL, plus an optional incorporated noun.[21] Each is discussed in turn below.

[21] In the Algonquianist literature, the verb stem is described as consisting of an INITIAL, MEDIAL, and FINAL (cf. Bloomfield 1946), corresponding to what I am here calling the root, incorporated noun, and final, respectively. In Blackfoot, incorporated nouns are not necessarily in medial position in the verb stem; some precede the root, as shown in (38) and (40).

2.4.3.1. Roots

The root contributes the main lexical content of the verb complex. Some examples are given below.

(37) a. *Nít**sstsistt**aki*.
nit-**ihtsistt**-aki
1-**swallow**-AI
"I swallowed (something)."

b. *Nit**á'psst**aki*.
nit-**a'psst**-aki
1-**wave**-AI
"I waved."

c. *Nít**sskss**aki*.
nit-**ihkss**-aki
1-**dry**-AI
"I dried something."

For a detailed discussion of Blackfoot roots, see Armoskaite (2011).

2.4.3.2. Incorporated Nouns

Incorporated nouns are optional in the verb stem. A detailed investigation of Blackfoot noun incorporation is pending, but as a starting point it can be observed that some incorporated nouns precede and some follow the verb root, and they encode body parts as well as other entities (cf. Barrie and Dunham 2008; Dunham 2009). Examples are given below.

(38) *Nitsíssap**aapin**o'toka*.
nit-sap-**aapin**-o't-o-ok-wa
1-in-**eye**-grasp-TA-INV-PROX
"He poked me in the eye." (Dunham 2009: 4)

(39) *Nitsíípaks**ik**íniooka*.
nit-ii-ipak-**ika**-ini-ok-wa
1-IC-hit-**foot**-TA-INV-PROX
"She struck me on the legs." (Frantz and Russell 1995: 55)

(40)

Anna	*Leo*	*á**ínnoka**ikskimaa*	*annohk*.
ann-wa	L	a-**innoka**-ikskim-aa-wa	annohk
DEM-PROX	L	IMPF-**elk**-hunt-AI-PROX	now

"Leo is elk-hunting today."

2.4.3.3. Finals

Verb stems obligatorily include a final, which encodes transitivity and animacy. In the Algonquianist tradition, finals are classified as in Table 2.3.

Table 2.3. Verb Finals

II	Inanimate Intransitive	Subject = Inanimate
AI	Animate Intransitive	Subject = Animate
TI	Transitive Inanimate	Object = Inanimate
TA	Transitive Animate	Object = Animate

Throughout the dissertation, I refer to the first two types of finals (II and AI) as forming MORPHOLOGICALLY INTRANSITIVE verbs, and the latter two (TI and TA) as forming MORPHOLOGICALLY TRANSITIVE verbs. In the examples, verb finals are glossed according to the labels in Table 2.3 (e.g., II, AI, TI, TA).

In Blackfoot, there are restrictions on which roots can combine with which finals. Few (if any) roots can be used with all four classes of finals, but some can be used with three of the four. An example is given below. (See Armoskaite 2011 for a more detailed discussion of Blackfoot stem formation.)

(41) a. *Náíhkiit**aa**wa.*
na-ihkiit-**aa**-wa
EVID-bake-**AI**-PROX
"S/he baked (something)."

b. *Náíhkiit**at**siiwa* *omi* *pi'kssíí.*
na-ihkiit-**at**-yii-wa om-yi pi'kssii-yi
EVID-bake-**TA**-3:4-PROX DEM-OBV chicken-OBV
"S/he baked that chicken."

c. *Náíhkiit**atoo**ma* *omi* *napayíni.*
na-ihkiit-**atoo**-m-wa om-yi napayin-yi
EVID-bake-**TI**-3:INAN-PROX DEM-INAN bread-INAN
"S/he baked that bread."

The forms of the finals are dependent on the root to which they attach. For example, whereas the root *iihkiit* "bake" selects the finals -*aa* (AI), *at* (TA), and -*atoo* (TI), the root *ikooki't* "regret the loss" selects a different set of finals: -*aki* (AI), -*mm* (TA), and –*i* (TI).

(42) a. *Náíkooki'**taki**wa.*
na-ikooki't-**aki**-wa
EVID-regret.loss-**AI**-PROX
"She regretted the loss (of something)"

b. *Náíkooki**mm**iiwa* *anni* *oksíssts.*
na-ikooki't-**mm**-yii-wa ann-yi w-iksisst-yi
EVID-regret.loss-**TA**-3:4-PROX DEM-OBV 3-mother-OBV
"She regretted the loss of her mother."

c. *Náíkooki'ts**i**ma* *anni* *ookóówayi.*
na-ikooki't-**i**-m-wa ann-yi w-ookoowa-yi
EVID-regret.loss-**TI**-3:INAN-PROX DEM-INAN 3-home-INAN
"She regretted the loss of her home."

2.4.4. Direct/Inverse Marking

Direct/inverse marking is sometimes referred to as THEME MARKING in the Algonquianist tradition (Frantz 2009). It is obligatory for morphologically transitive verbs, and signals the grammatical relations of the participants in the clause. Descriptively, direct/inverse marking is determined on the basis of the person hierarchy in (43).

(43) $1^{st} > 2^{nd} > 3^{rd}$ proximate > 3^{rd} obviative

When a higher-ranking participant is the subject, direct morphology appears on the verb, and when a higher-ranking participant is the object, inverse morphology appears on the verb. For example, the (a) and (b) examples in (44) differ formally only in the direct/inverse marking; the direct suffix *-a* in (44a) signals that a higher-ranking 1^{st} person is the subject and the lower-ranking 3^{rd} person is the object, and the inverse suffix *–ok* in (44b) signals that the 1^{st} person is the object and 3^{rd} person is the subject.

(44) a. *Nitsikámotsiipi**a**wa.*
nit-ikamotsiip-i-**a**-wa
1-rescue-TA-**DIR**-PROX
"I rescued him/her."

b. *Nitsikámotsiipi**ok**a.*
nit-ikamotsiip-i-**ok**-wa
1-rescue-TA-**INV**-PROX
"S/he rescued me."

The form of the direct/inverse markers varies depending on the person features of the participants. Table 2.4 gives the direct/inverse markers for matrix clauses.[22]

Table 2.4. Direct/Inverse Marking in Matrix Clauses

		Direct	**Inverse**
TA	Local	*-o*	*-oki*
	Mixed	*-a*	*-ok*
	Non-Local	*-yii*	*-ok*
TI	Local	*-'p*	--
	Non-Local	*-m*	--

As is customary in the Algonquianist tradition, I have referred to the Transitive Animate markers as LOCAL, MIXED, and NON-LOCAL. Local direct/inverse markers are used for 1^{st} and 2^{nd} person only, mixed direct/inverse markers are used for local and non-local persons, and non-local direct/inverse markers are used for 3^{rd} persons only.[23] Examples of each are given in (45).

(45) $1^{st} > 2^{nd}$

a. *Kitsííhkssamm**o**.*
kit-ii-ohksssa-mm-**o**
2-IC-pity-TA-**1:2**
"I pitied you."

b. *Kitsííhkssamm**oki**.*
kit-ii-ohksssa-mm-**oki**
2-IC-pity-TA-**2:1**
"You pitied me."

$1^{st} > 3^{rd}$

c. *Nitsííhkssamm**a**wa.*
nit-ii-ohksssa-mm-**a**-wa
1-IC-pity-TA-**DIR**-PROX
"I pitied him/her."

d. *Nitsííhkssamm**ok**a.*
nit-ii-ohksssa-mm-**ok**-wa
1-IC-pity-TA-**INV**-PROX
"S/he pitied me."

$2^{nd} > 3^{rd}$

e. *Kitsííhkssamm**a**wa.*
kit-ii-ohksssa-mm-**a**-wa
2-IC-pity-TA-**DIR**-PROX
"You pitied him/her."

f. *Kitsííhkssamm**ok**a.*
kit-ii-ohksssa-mm-**ok**-wa
2-IC-pity-TA-**INV**-PROX
"S/he pitied you."

---

[22] Direct/inverse markers also vary according to clause type cf. Bliss et al. (2010a, b). A discussion of the different clause types is in §2.4.5.

[23] Following Bliss et al. (2010a, b), I assume that the mixed series instantiates the "core" direct/inverse system and the local and non-local series are in some sense peripheral. My glossing conventions reflect this assumption: the *–a* and *–ok* morphemes are glossed as "DIR(ect)" and "INV(erse)" respectively; others are glossed according to the persons involved in the clause (e.g., *-o* is glossed as "1:2" to indicate that it is used in clauses with a 1^{st} person acting on a 2^{nd} person).

3rd PROX > 3rd OBV

g. *Ííhkssamm**ii**wa*.
ii-ohksssa-mm-**yii**-wa
IC-pity-TA-**3:4**-PROX
"She$_{\text{PROX}}$ pitied him$_{\text{OBV}}$."

h. *Otsííhkssamm**ok**a*.
ot-ii-ohksssa-mm-**ok**-wa
3-IC-pity-TA-**INV**-PROX
"He$_{\text{OBV}}$ pitied her$_{\text{PROX}}$."

The local suffixes are shown in (45a/b); when there is a 1st person subject and 2nd person object, the direct suffix *–o* is used, and when there is a 2nd person subject and 1st person object, the inverse suffix *–oki* is used. The sentences in (45c-f) provide additional examples of the mixed direct/inverse markers, direct *–a* for a 1st or 2nd person subject and 3rd person object, and inverse *–ok* for a 3rd person subject and a 1st or 2nd person object. The non-local direct/inverse markers are exemplified in (45g/h). When a proximate 3rd person is the subject, and an obviative 3rd person is the object, a direct suffix *–yii* is used, and when an obviative 3rd person is the subject and a proximate 3rd person is the object, the inverse suffix *–ok* is used. Plural 3rd persons are not coded as proximate or obviative, and a transitive clause containing two plural 3rd persons can be marked as either direct or inverse (depending on discourse conditions), as shown in (46) below.

(46) a. *Omiksi imitáíks iihkanáóksisaissko**yii**yaaw omiksi póósiks*.
om-iksi imitaa-iksi ii-ohkana-oksisaissk-o-**yii**-yi-aawa om-iksi poos-iksi
DEM-PL dog-PL IC-all-chase-TA-**3:4**-PL-3PL.PRN DEM-PL cat-PL
"The dogs chased all the cats."

b. *Omiksi imitáíks otohkanáóksisaissko**ok**iyaaw omiksi póósiks*.
om-iksi imitaa-iksi ot-ohkana-oksisaissk-o-**ok**-yi-aawa om-iksi poos-iksi
DEM-PL dog-PL 3-all-chase-TA-**INV**-PL-3PL.PRN DEM-PL cat-PL
"The dogs chased all the cats."

Regarding the Transitive Inanimate series, there are dedicated morphemes for indicating a local person subject acting on an inanimate object, and a non-local person subject acting on an inanimate object. Examples are given in (47).

(47) a. *Nítssimatoo**'p**a*.
nit-ssim-atoo-**'p**-wa
1-smell-TI-**1:INAN**-PROX
"I smelled it."

b. *Kítssimatoo**’pa**.*
kit-ssim-atoo-**’p**-wa
2-smell-TI-**2:INAN**-PROX
“You smelled it.”

c. *Íissimatoo**m**a.*
ii-ssim-atoo-**m**-wa
IC-smell-TI-**3:INAN**-PROX
“S/he smelled it.”

There are no inverse suffixes in the TI series because Blackfoot does not permit non-sentient (and hence inanimate) subjects in transitive clauses. In order to express an event in which a non-sentient referent acts upon a sentient one, a construction is used in which an unspecified (formally local) person functions as the subject, and the non-sentient referent is introduced by the means/instrument adposition *oht-*.

(48) a.

**Anna*	*pokóna*	*íísitoyiiwa*	*anni*	*pookááyi*.
ann-wa	pokon-wa	yiisit-o-yii-wa	ann-yi	pookaa-yi
DEM-PROX	ball-PROX	hit-TA-3:4-PROX	DEM-OBV	child-OBV

intended: “The ball hit the child.”

b.

Anna	*pookááwa*	*iihtsíísitowawa*	*anni*	*pokóni.*
ann-wa	pookaa-wa	ii-oht-yiisit-o-a-wa	ann-yi	pokon-yi
DEM-PROX	child-PROX	IC-INSTR-hit-TA-DIR-PROX	DEM-OBV	ball-OBV

“(Someone) hit the child with the ball.”

A syntactic analysis of the direct/inverse is presented in §2.6.2.

2.4.5. Clause-Typing Suffixes

Following the direct/inverse suffixes are clause-typing suffixes. A summary of Blackfoot’s clause types is given in Table 2.5 below.

Table 2.5. Clause Types

	Clause type	**Suffix**	**Distribution**
Matrix	Imperative	*-t*	commands
	Independent	--	elsewhere
Subordinate	Subjunctive	*-iniki*	conditional/hypothetical
	Unreal	*-htopi*	past counterfactual
	Conjunct	*-hs-yi*	elsewhere

As shown in Table 2.5, there are two clause types that are used with matrix clauses: imperative and independent. Imperative clauses are marked with a suffix *–t*, and independent clauses are not overtly marked. Examples are given below.

(49) *Soksínihkit!*
sok-inihki-t
good-sing.AI-IMP
"Sing well!"

(50) *Kitsoksínihki.*
kit-sok-inihki
2-good-sing.AI
"You sang well."

Regarding subordinate clauses, there are three types. Subjunctive clauses are used for expressing conditional and/or hypothetical situations and are marked with the suffix *–iniki* (or a variant, depending on the person specification of the arguments). Unreal clauses are used in counterfactual contexts with a past time orientation, and are marked with the suffix *–htopi*. Finally, the conjunct is the elsewhere clause type, used for subordinate clauses that are neither subjunctive nor unreal. Conjunct clauses are marked with two suffixes *–hs* and *–yi*; (in Chapter 3 I develop an analysis of *–yi* as the obviative suffix; accordingly, it is glossed as OBV.) Examples of the subordinate clause types are given below.

(51)	*Ikkamáyo'kainoa**iniki**,*	*nitáakahkayi.*
	ikkam-a-yo'kaa-inoa-**iniki**	nit-yaak-waahkayi
	if-IMPF-sleep.AI-2PL-**SBJN**	1-FUT-go.home.AI
	"If you (PL) are sleeping, I'll go home."	(Frantz 2009: 110, (l))

(52)	*Nitsítssáyoyi**htopi**,*	*nitáaksoyi*	*ánnohka.*
	nit-it-say-ioyi-**htopi**	nit-yaak-ioyi	annohka
	1-LOC-NEG-eat.AI-**UNREAL**	1-FUT-eat.AI	now
	"If I hadn't eaten then, I'd eat now."		(Frantz 2009: 113 (x))

(53)	*Nitsíkstaataa*	*anna*	*John*	*ninááhkohkook**ssi***	*omi*	*isttoani.*
	nit-ik-staa-t-a-wa	ann-wa	J	nit-aahk-ohkot-ok-**hs-yi**	omi	isttoan-yi
	1-INTNS-want-TA-DIR-PROX	DEM-PROX	J	1-MOD-give.TA-INV-**CONJ-OBV**	DEM	knife-OBV
	'I want John to give me that knife'					

2.4.6. Person/Number Suffixes

In the verbal complex, there are two suffix positions for number marking. The first marks plural number for local persons (1^{st} and 2^{nd}) and the second marks number (and the proximate/obviative contrast) for non-local (3^{rd}) persons. This subsection focuses on the former, which I henceforth refer to as the *person/number suffixes*. A summary of the inventory of person/number suffixes is given in Table 2.6 and examples are given below.

Table 2.6. Person/Number Suffixes

Form	**Meaning**	**Gloss**
-(hp)innaan[24]	1^{st} person plural	1PL
-(hp)oaa	2^{nd} person plural	2PL
-o'p	Inclusive (/impersonal)	INCL

(54) a. *Nitááksóóyi**hpinnaan*** *pisátsskitaan.*
nit-yaak-ioyi-**hpinnaan** pisátsskitaan
1-FUT-eat.AI-**1PL** cake
"We (EXCL) will eat cake."

b. *Kitááksóóyi**hpoaa*** *pisátsskitaan.*
kit-yaak-ioyi-**hpoaa** pisátsskitaan
2-FUT-eat.AI-**2PL** cake
"You (PL) will eat cake."

c. *Ááksóóyo**'p*** *pisátsskitaan.*
yaak-ioyi-**o'p** pisátsskitaan
FUT-eat.AI-**INCL** cake
"We (INCL) will eat cake." OR "Someone will eat cake."

As there is only one morphological slot for person/number suffixes, in local transitive clauses with two plural participants, only the 1^{st} person suffix appears, as shown below.

(55) *Kitsinóóhpinnaan.*
kit-inoo-o-hpinnaan
2-see.TA-1:2-1PL
"We (EXCL) saw you (SG/PL)."

[24] *-hp* only appears when all participants in the clause are local (1^{st} and 2^{nd}) persons. The syntax of *–hp* is discussed in Chapter 5 (see also Ritter and Wiltschko, to appear).

2.4.7. Number Suffixes

Following the person/number suffixes (which mark plural 1^{st} and 2^{nd} persons) are the number suffixes, which are used exclusively with 3^{rd} persons. There are three such suffixes, as summarized in Table 2.7 and exemplified below.

Table 2.7. Number Suffixes

Form	**Meaning**	**Gloss**
-wa	3^{rd} person (proximate singular)	PROX
-yi	3^{rd} person plural	PL
-yini	3^{rd} person obviative singular	OBV

(56) a.

Anna	*Rosie*	*ááksóóyi**wa***	*pisátsskitaan.*
ann-wa	R	yaak-ioyi-**wa**	pisátsskitaan
DEM-PROX	R	FUT-eat.AI-**PROX**	cake

"Rosie (PROX) will eat cake."

b.

Omiksi	*aakííkoaiks*	*ááksóóyi**y**aawa*	*pisátsskitaan.*
om-iksi	aakiikoan-iksi	yaak-ioyi-**yi**-aawa	pisátsskitaan
DEM-PL	girl-PL	FUT-eat.AI-**3PL**-3PL.PRN	cake

"Those girls will eat cake."

c.

Anna	*Rosie*	*oksíssts*	*ááksóóyi**yin**áyi*	*pisátsskitaan.*
ann-wa	R	w-iksisst-yi	yaak-ioyi-**yini**-ayi	pisátsskitaan
DEM-PROX	R	3-mother-OBV	FUT-eat.AI-**OBV**-3PRN	cake

"Rosie's mother (OBV) will eat cake."

There is only one morphological slot for the number suffixes. The obviative suffix *–yini* has the most limited distribution; it appears only in matrix declarative clauses in which all of the arguments are obviative and animate, as shown in (57) below. The plural suffix *–yi* appears in matrix declarative clauses in which there is at least one plural argument but no proximate argument, as shown in (58). Finally, the proximate suffix *–wa* is the default suffix, appearing elsewhere (including, for example, matrix declarative clauses with a single 3^{rd} person argument). This is shown in (59).

(57)

*Otsski'tsok**ini***	*anni*	*oksíssts*	*anni*	*otómitaami.*
ot-sski't-i-ok-**yini**	ann-yi	w-iksisst-yi	ann-yi	ot-imitaa-m-yi
3-frighten-TA-INV-**OBV**	DEM-OBV	3-mother-OBV	DEM-OBV	3-dog-POSS-OBV

"Her$_i$ dog frightened her$_i$ mother."

(58)	*Náínoyiii**yi***	*omiksi*	*sááhkomapiks*	*anni*	*otómitaami*.
	na-iin-o-yii-**yi**	om-iksi	saahkomapi-iksi	ann-yi	ot-imitaa-m-yi
	EVID -see-TA-3:4-**PL**	DEM-PL	boy-PL	DEM-OBV	3-dog-POSS-OBV
	"The boys saw her dog."				

(59)	*Nitsíínoa**wa***	*oma*	*imitáá.*
	nit-iin-o-a-**wa**	om-wa	imitaa-wa
	1-see-TA-DIR-**PROX**	DEM-PROX	dog-PROX
	"I saw that dog."		

Notably, the inflectional contrasts expressed by the number suffixes on verbs differs from those expressed by the number suffixes on nouns. As discussed in §2.3 above, in the nominal paradigm the proximate suffix –*wa* is restricted to animate singular nouns, but in the verbal paradigm -*wa* has a wider distribution, functioning as the elsewhere suffix and appearing in contexts where number and obviation contrasts are neutralized. Moreover, whereas the nominal obviative suffix –*yi* appears on both animate and inanimate nouns, the verbal obviative suffix –*yini* is restricted to animate singular reference only. Finally, whereas the nominal plural suffixes encode animacy distinctions, animacy is neutralized with the verbal plural suffixes. These differences in the inflectional contrasts of the nominal and verbal paradigms are summarized in Table 2.8.

Table 2.8. Nominal and Verbal Number Suffixes Compared

	Nominal paradigm	**Verbal paradigm**
Proximate	animate singular (-*wa*)	elsewhere (-*wa*)
Obviative	singular (-*yi*)	animate singular (-*yini*)
Plural	animate plural (-*iksi*) or inanimate plural (-*istsi*)	plural (-*yi*)

The syntax of the nominal number suffixes is discussed in Chapter 3, and the syntax of the verbal number suffixes is discussed in Chapter 6.

2.4.8. Enclitic Pronouns

Enclitic pronouns can appear at the right edge of the verbal complex to reference plural and/or singular obviative/inanimate arguments. There are four enclitic pronouns, given in Table 2.9 below.[25]

Table 2.9. Enclitic Pronouns

Form	**Meaning**
-áyi	Singular
-aiksi	plural animate
-aistsi	plural inanimate
-aawa	plural

Enclitics can be distinguished from affixes according to Blackfoot-specific diagnostics. These are summarized in Table 2.10 (see also Fox and Frantz 1979; Frantz 2009, chapter 9).

Table 2.10. Affixation versus Encliticization

	Affixes	**Enclitics**
Sensitive to distribution of nominal expression	×	✓
Stackable	×	✓
Pitch accent is additive	×	✓

Regarding the first diagnostic in Table 2.10, agreement affixes appear on the verb regardless of whether a nominal expression is present or not, and regardless of its position with respect to the verb. For example, in the preceding section, we saw that the number suffixes *–wa*, *-yi*, and *–yini* index proximate, plural, and obviative arguments, respectively. Regardless of whether the argument expression is preverbal, postverbal, or null, the number suffix appears on the verb. This is illustrated with *–wa* in (60).

(60)	a.	*Oma*	*saahkómaapiiwa*	*kita'páísstooka.*
		om-wa	saahkomaapii-wa	kit-a'p-a-issto-ok-wa
		DEM-PROX	boy-PROX	2-around-IMPF-wave.AI-INV-PROX
		"That boy is waving at you."		

[25] Frantz (2009: 49) refers to the first three clitics in Table 2.9 as DTP ("Distinct Third Person") pronouns. He notes that they are used when then there is another 3rd person in the clause, and that they don't refer to "major" (i.e., proximate singular) 3rd persons. The fourth clitic, *-aawa*, similarly cannot refer to proximate singular 3rd persons, but may be used if there are no other 3rd persons in the clause.

b.	*Kita'páísstooka*	*oma*	*saahkómaapiiwa.*
	kit-a'p-a-issto-ok-wa	om-wa	saahkomaapii-wa
	2-around-IMPF-wave.AI-INV-PROX	DEM-PROX	boy-PROX
	"That boy is waving at you."		

c. *Kita'páísstooka.*
kit-a'p-a-issto-ok-wa
2-around-IMPF-wave.AI-INV-PROX
"S/he is waving at you."

Unlike agreement affixes, enclitics are sensitive to the distribution of the nominal expression. In particular, they are used under two conditions: (i) if the nominal expression is null and (ii) if the nominal expression is preverbal. An example is given in below.

(61)	a.	*Máánoʼtooyi*	*nóhpapiiyihpiksi.*
		maan-oʼtoo-yi	n-ohpapiiyihp-iksi
		just-arrive.AI-PL	1-relative-PL
		"My relatives just arrived."	
	b.	*Nóhpapiiyihpiksi*	*máánoʼtooy**aaw**.*
		n-ohpapiiyihp-iksi	maan-oʼtoo-yi-**aawa**
		1-relative-PL	just-arrive.AI-PL-**3PL.PRN**
		"My relatives just arrived."	

c. *Máánoʼtooy**aaw.***
maan-oʼtoo-yi-**aawa**
just-arrive.AI-PL-**3PL.PRN**
"They just arrived."

In short, whereas affixes are not sensitive to the distribution of nominal expressions, enclitics are.

Regarding the second diagnostic, affixes are not stackable. For example, there is only one morphological position in the verbal complex for the number suffixes; two or three suffixes cannot be concurrently realized on a single form. Conversely, enclitics are able to stack, with more than one enclitic appearing on a single verb. The precise conditions under which a single verb can host multiple enclitics are yet unclear[26], but below are some examples of verbs with multiple enclitics (referencing multiple arguments).

(62) *Anniksisk* *nitákkaiks* *nitóhkokiy**aawaists**.*
ann-iksi-hk n-itakkaa-iksi nit-ohkot-ok-yi-**aawa-aistsi**
DEM-PL-INVIS 1-friend-PL 1-give.TA-INV-PL-**3PL.PRN-3PL.PRN**
"My friends gave them to me."

(63) *Aakaitapi* *matapiiksi* *aisaakiohtayissitapiiy**aawaiksi**.*
waaka-itapi matapi-iksi a-isaaki-oht-ayissitap-yii-yi-**aawa-aiksi**
many-person person-PL IMPF-still-CONT-keep.sacred-3:4-PL-**3PL.PRN-3PL.PRN**
"Many people still keep them as sacred bundles." (Innisskimm, Line 14)

Regarding the third diagnostic, both affixes and enclitics may or may not be lexically specified with a pitch accent. However, in cases where they do have an inherent pitch accent, affixes and enclitics differ with respect to the realization of the pitch accent in the verbal complex. With affixes, pitch accent is transferable: if an affix with an inherent pitch accent is affixed to a word, the main pitch accent of the word transfers to the affix. With enclitics, on the other hand, pitch accent is additive: if an enclitic with inherent pitch accent is cliticized to a word, the main pitch accent of the word is maintained, and the enclitic adds a second pitch accent. This is illustrated below.

(64) a. *Iikská'siwa*.
ii-okska'si-wa
IC-run.AI-PROX
"S/he ran."

b. *Áákokska'siwa*.
yaak-okska'si-wa
FUT-run.AI-PROX
"S/he will run."

c. *Áókska'siwa*.
a-okska'si-wa
IMPF-run.AI-PROX
"S/he is running."

[26] See Fox and Frantz (1979), and Frantz (2009) for discussion. According to these sources, a maximum of two enclitics can attach to the verb, and the leftmost enclitic must index either the subject or the object. I have yet to replicate these findings in my own fieldwork.

(65) a. *Iikská'siiyin**áyi***.
ii-okska'si-yini-**ayi**
IC-run.AI-OBV-**3PRN**
"S/he (OBV) ran."

b. *Áákokska'siyin**áyi***.
yaak-okska'si-yini-**ayi**
FUT-run.AI-OBV-**3PRN**
"S/he (OBV) will run."

c. *Áókska'siyin**áyi***.
a-okska'si-yini-**ayi**
IMPF-run.AI-OBV-**3PRN**
"S/he (OBV) is running."

In (64a), the pitch accent falls on the second syllable, and in (64b) and (64c), we see that if the future prefix *yáák*- or the imperfective prefix *á*- is affixed to the verb, the pitch accent transfers to the prefix. The same pattern is observed in (65). However, in these examples, an enclitic *–áyi* also appears on the verb, and it contributes a second pitch accent. In short, whereas pitch accent is transferable with affixes, it is additive with enclitics. This suggests that affixes are prosodified as part of the verbal complex, but enclitics constitute their own prosodic domain. The distinction between agreement affixes and enclitics is revisited in Chapter 7.

2.5. The Phonetic Realization of Proximate and Obviative Suffixes

In this section, I discuss the phonetic realization of the proximate and obviative suffixes that appear on both nouns and verbs. These were discussed in §2.3 and §2.4.7 above; additional examples are given below.

(66) a.

*Áyo'kaa**wa***	*om**a***	*imitááw*.
a-yo'kaa-**wa**	om-**wa**	imitaa-**wa**
IMPF-sleep.AI-**PROX**	DEM-**PROX**	dog-**PROX**

"That dog (prox) is sleeping."

b.

*Áyo'kaa**yini***	*om**i***	*imitáá**yi***.
a-yo'kaa-**yini**	om-**yi**	imitaa-**yi**
IMPF-sleep-**OBV**	DEM-**OBV**	dog-**OBV**

"That dog (obv) is sleeping."

The proximate (-*wa*) and obviative (-*yi*, -*yini*) suffixes play an important role in the analysis developed in this dissertation. The reason why a discussion of their phonetic realization is relevant is that, as will become apparent, there is variation across speakers in the pronunciation of these suffixes, and not all speakers have an audible suffix in their grammar. Nevertheless, I argue that, despite a cline in audibility across speakers, the proximate and obviative suffixes are indeed active in the grammar. In §2.5.1, I summarize the findings of Gick et al. (2012), who demonstrate that, for some speakers, proximate and obviative suffixes are soundless (i.e., articulated but not acoustically realized). In §2.5.2, I summarize the findings of Bliss and Glougie (2010), who demonstrate that, for some other speakers, the suffixes are not phonetically realized but are nevertheless phonologically active. In §2.5.3, I pull these findings together and propose that, across speakers, there is a cline of audibility in the production of proximate and obviative suffixes.

2.5.1. Voiceless and Soundless Suffixes

Frantz (2009) claims that vowels are voiceless word-finally (p. 5), and that the number suffix –*wa* is "rarely audible" (p. 8). Gick et al. (2012) show that, at least for some speakers, word-final vowels are not simply voiceless but SOUNDLESS. This finding is based on two experiments, a production experiment and a perception experiment. For the production experiment, we collected a combination of ultrasound, video, and acoustic recordings of a single speaker producing minimal pairs that differ only in the final vowel of the number suffix. The target forms are given in Table 2.11 (soundless vowels are represented with underlining).

Table 2.11. Stimuli for Production Experiment (adapted from Gick et al. 2012, p. 52)

Proximate (-a) forms	**Obviative (-i) forms**	**English translation**
si'káán$\underline{a}$	*si'káán$\underline{i}$*	"blanket"
kisómm$\underline{a}$	*kisómm$\underline{i}$*	"moon"

Each form was produced in a carrier phrase ten times, yielding forty tokens in total. The carrier phrases for the proximate and obviative conditions are given in (67a) and (67b) respectively.

(67) a. *Nitsíksstta* *nááhksinowahsi* *oma* __.
nit-ik-sstaa n-aahk-in-o-a-hs-yi om-wa __
1-INTNS-want.AI 1-MOD-see-TA-DIR-CONJ-OBV DEM-PROX __
"I want to see that ___."

b. *Nitsíksstta* *mááhksinowahsi* *omi* __.
nit-ik-sstaa m-aahk-in-o-a-hs-yi om-yi __
1-INTNS-want.AI 3-MOD-see-TA-DIR-CONJ-OBV DEM-OBV __
"I want him to see that __."

Gick et al. found that the forms did not show statistically significant differences in acoustic measures; there was no audible (or visible from the spectrogram) vowel following the nasal, and the vowel preceding the nasal showed no differences in F1, F2, or F3 values. However, the forms did show significant differences in articulatory measures; at the temporal midpoint of the production of the final (soundless) vowel, the *–a* forms showed statistically significant differences from the*–i* forms in both lip aperture and tongue height. In essence, the final vowels (which instantiate the proximate and obviative suffixes) were shown to be SOUNDLESS: articulated but not acoustically realized.

The perception experiment by Gick et al. strengthened the conclusion that these vowels are indeed soundless. Given that we had only negative acoustic evidence in the production experiment, we wanted to address the possibility that there could be audible distinctions between the word-final vowels that escape our acoustic measures. The results of the perception experiment indicate that this is indeed not the case.

Using a similar set of stimuli as in the production experiment[27], we had a second Blackfoot speaker participate in a forced-choice task in which she identified whether the forms she heard belonged to the proximate (*-a*) or obviative (*-i*) context. In the control condition, the forms were presented with the demonstrative determiner *oma* or *omi* and in the experimental condition, the forms were presented in isolation without a disambiguating determiner. We found that, in the control condition, the listener could accurately identify whether the form was proximate or obviative, but in the experimental condition, she

[27] The same speaker as in the production experiment recorded the forms for the perception experiment, in the same carrier phrases as in (66). However, to lessen the chance that coarticulation with the final vowel of the demonstrative determiner, the adjectival prefix *omahk-* 'big' was added to the noun.

could not. These results confirm that, for at least some Blackfoot speakers, word-final vowels are soundless; they are not acoustically distinct.

2.5.2. Ghost Suffixes

Bliss and Glougie (2010) report on the productions of another speaker, who has no phonetic realization of the proximate and obviative suffixes in word final position, but the suffixes behave phonologically as though they are present. I refer to these as "ghost suffixes," by analogy with "ghost segments" discussed in the phonological literature (e.g., Szpyra 1992; Zoll 1996). To confirm that the proximate and obviative suffixes are not articulatorily realized, we ran a pilot experiment in which we attempted to replicate the lip aperture results from the study by Gick et al. We found no significant difference in the *–a* versus *–i* tokens, and for both *–a* and *–i* tokens, there was considerable variability; sometimes there was complete closure of the lips and sometimes the lips were spread. We take this as preliminary evidence that, for this particular speaker, there is no articulatory realization of the word final vowels.

Despite not being acoustically or articulatorily realized, the proximate and obviative suffixes in word-final position are phonologically active. It is in this sense that they are "ghosts;" although not present phonetically the suffixes can either block or trigger phonological processes. For example, as shown in the paradigm in (68), the regular process of word-final devoicing affects the stem-final vowel of 1st and 2nd person inflected verbs, but not 3rd person forms. We take this as evidence that there is an unrealized *–wa* suffix, and that this suffix blocks word-final devoicing.

(68)	a.	[niteɪtu:xʷtsim**i̥**]	b.	[kiteɪtu:xʷtsim**i̥**]	c.	[eɪtu:xʷtsim**i**]
		nit-aiitoohtsimi		kit-aiitoohtsimi		aiitoohtsimi-**wa**
		1-understand.BF.AI		2-understand.BF.AI		understand.BF.AI-**PROX**
		"I understand Blackfoot"		"You understand Blackfoot"		"S/he understands Blackfoot"

Other phonological processes that target the right boundary of the word are also blocked in 3rd person forms. For example, verb stems ending in an underlying /–m:/ elide the *–mm* word-finally.[28] However, as shown in (69), it is retained in 3rd person forms:

(69)	a. [niteɪkoʔpm̥]	b. [kiteɪkoʔpm̥]	c. [eɪkoʔpo**mm**]
	nit-a-iko'pomm	kit-a-iko'pomm	a-iko'pomm-wa
	1-IMPF-be.afraid.AI	2-IMPF-be.afraid.AI	IMPF-be.afraid.AI-**PROX**
	"I am afraid"	"You are afraid"	"S/he is afraid"

Not only are the number suffixes phonologically active even when not phonetically realized, they are distinguished from one another. The contrast between proximate *–(w)a* and obviative *–(y)i* can be seen with possessed nouns, which are obligatorily obviative if the possessor is 3rd person. According to a regular phonological rule in the grammar, sequences of /t+i/ surface as [tsi]. Nouns stems with a final /-t/ surface with final [-ts] in obviative but not proximate contexts. This is shown in (70).

(70)	a. [niksis:t]	b. [niksis:t]	c. [oksis:t**s**]
	n-iksisst-wa	k-iksisst-wa	w-iksisst-**yi**
	1-mother-PROX	2-mother-PROX	3-mother-**OBV**
	"I am afraid"	"You are afraid"	"S/he is afraid"

The data in (70) shows that, although not phonetically realized as *–yi*, the obviative suffix is nevertheless phonologically active, and triggers assibilation of the final *–t*.

The final thing to note is that, in certain environments, the proximate and obviative suffixes are fully realized. Due to a minimal word requirement in Blackfoot (Kaneko 1999; Derrick 2007), there is no word-final voicing with demonstratives. Further, when followed by enclitics, proximate*–wa* and obviative*–yini* are fully voiced. Examples are given in (71) below.

(71) a. *Iisstsimááhkatsii**wáyi**.*
ii-sstsimaahk-at-yii-**wa**-ayi
IC-hire-TA-3:4-**PROX**-3SG.PRN
"He hired her."

[28] Frantz and Russell (1995) use the notation "3mm" to identify these forms.

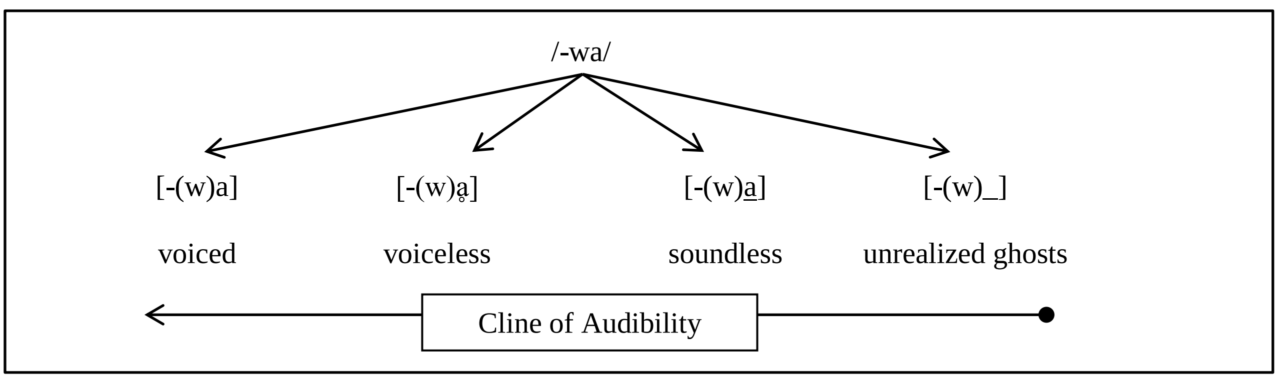
b. *Otsi'naksípokaayi áwaasai'nii***in***áyi.*
ot-i'nak-pokaa-yi a-waasai'ni-**yini**-ayi
3-small-child-OBV IMPF-cry.AI-**OBV**-3SG.PRN
"Her baby is crying."

The data in (71) show that, although the proximate and obviative suffixes are sometimes "ghosts" in this particular speaker's grammar, they are fully realized in other contexts. This further supports the claim that they play an active role in the grammar.

2.5.3. Cline of Audibility

In sum, although productions of the proximate and obviative suffixes vary across contexts and across speakers, even in their "weakest" phonetic realization (i.e., "ghosts"), the suffixes are active in the grammar. Figure 2.2. below summarizes the variable realizations of the proximate and obviative suffixes, ranging from fully articulated and voiced in non-word-final contexts, to voiceless (as reported by Frantz 2009), to soundless (as reported by Gick et al. 2012) to unrealized ghosts (as reported by Bliss and Glougie 2010).

Figure 2.2. Variable Realizations of the Proximate *–wa* Suffix



2.6. Grammatical Functions

I assume that the structural correlates of grammatical functions such as subject and object can vary cross-linguistically. As such, the phrase structure positions corresponding to the various grammatical functions must be defined on a language by language basis. In this section, I map Blackfoot's grammatical functions onto structural positions.

The section proceeds as follows. In §2.6.1, I identify *v*P-internal positions for the subject and object. In §2.6.2, I discuss a grammatical function that I refer to as the POINT-OF-VIEW (POV) HOLDER. This grammatical function is associated with a *v*P-external argument position, Spec, AspP and is determined by the direct/inverse system. In §2.6.3, I discuss the Spec, IP and Spec, CP positions and show that neither of these are correlated with the grammatical functions of subject or object. As such, subject and object can be defined as *v*P-internal in Blackfoot.

2.6.1. Subject and Object

As noted in §2.4.3, Blackfoot verb stems are morphologically complex, consisting minimally of a root plus a final. The four classes of finals were given in Table 2.3 above, repeated again below.

Table 2.3. Verb Finals

II	Inanimate Intransitive	Subject = Inanimate
AI	Animate Intransitive	Subject = Animate
TI	Transitive Inanimate	Object = Inanimate
TA	Transitive Animate	Object = Animate

As shown in Table 2.3, AI and II finals vary according to the animacy of the subject, and TA and TI finals vary according to the animacy of the object. Examples are given below.

(72) a. *Anna* *Leo* *iksísto'**si**wa.*
ann-wa L iksisto-**'si-**wa
DEM-PROX L be.hot.**AI-**PROX
"Leo has a fever" (lit: "Leo is hot.")

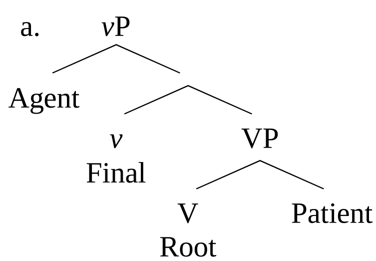
b. *Omi* *pakóyittsii* *iksísto**yi**wa.*
om-yi pakoyittsi-yi iksisto-**yi**-wa
DEM-INAN fire-INAN be.hot-**II-**PROX
"That fire is hot."

(73) a. *Iihpómm**ats**iiwa* *amoiksi* *si'káániks.*
ii-ohpomm-**at**-yii-wa amo-iksi si'kaan-iksi
PST-buy-**TA-**3:4-PROX DEM-ANIM.PL blanket-ANIM.PL
"She bought these blankets."

b	*Iihpómm**atoo**ma*	*amostsi*	*ksíístsimaanistsi*
	ii-ohpomm-**atoo**-m-wa	amo-istsi	ksiistsimann-istsi
	PST-buy-**TI**-3:INAN-PROX	DEM-INAN.PL	bead-INAN.PL
	"She bought these beads."		

It has been widely argued that Algonquian finals are light verbs that associate with the functional head *v* (cf. Bruening and Rackowski 2000 for Passamaquoddy; Hirose 2003 for Plains Cree; Brittain 2003 for Western Naskapi; Quinn 2006 for Penobscot; Mathieu 2006 for Ojibwe; Ritter and Rosen 2010a for Blackfoot). As is characteristic of the category *v* across languages (e.g., Chomsky 1995), the finals can be thought to introduce an external argument and license an internal argument. There are (at least) two ways we can conceive of this. First, if we assume a model of argument structure in which structural positions correspond with theta roles (e.g., UTAH, Baker 1988), then this suggests that the agent is mapped onto the external argument position and the patient is mapped onto the internal argument position, as follows:

(74) a.



In (74), the final introduces the agent (canonically the subject) and licenses the patient (canonically the object). The problem with this model is that it doesn't capture the generalization that the four classes of finals determine the animacy of the absolutive argument (intransitive subject / transitive object). Under the model in (74), this would mean that, in the case of intransitive verbs, the final agrees in animacy with the external argument, but in the case of transitive verbs, the final agrees in animacy with the internal argument.

It cannot simply be the case that the verb only agrees with the external argument in the case when there is no internal argument. The reason why not is that the distinction between morphologically transitive and intransitive stems is not straightforwardly a matter of transitivity. Both intransitive and transitive verb stems can license an internal argument (an object), but with different syntactic properties. The object of a morphologically intransitive verb can be either animate or inanimate and can be a bare noun, but it must be immediately postverbal. Conversely, the object of a morphologically transitive verb must agree in animacy with the final, it cannot be a bare noun, and it doesn't show strict ordering restrictions. This is summarized in Table 2.12, and examples illustrating the differences between morphologically intransitive and transitive verbs are given below.

Table 2.12. Objects of Morphologically Intransitive and Transitive Verbs

	Morphologically Intransitive	Morphologically Transitive
Bare Noun	✓	✗
Must be Immediately Postverbal	✓	✗

(75) a. *Nítsooyi ápasstaamiinaam*.
nit-ioyi apasstaamiinaam
1-eat.AI apple
"I ate an apple."

b. **Ápasstaamiinaam nítsooyi*.
apasstaamiinaam nit-ioyi
apple 1-eat.AI
intended: "I ate an apple."

(76) a. *Nitsóówatawa oma ápasstaamiinaama*.
nit-iowat-a-wa om-wa apasstaaminaam-wa
1-eat.TA-DIR-PROX DEM-PROX apple-PROX
"I ate that apple."

b. **Nitsóówatawa ápasstaamiinaam*.
nit-iowat-a-wa apasstaaminaam
1-eat.TA-DIR-PROX apple
intended: "I ate an apple."

c. *Oma ápasstaamiinaama nitsóówatawa*.
om-wa apasstaaminaam-wa nit-iowat-a-wa
DEM-PROX apple-PROX 1-eat.TA-DIR-PROX
"I ate that apple."

(77) a. *Nítsooyi sitókihkiitaan*.
nit-ioyi sitokihkiitaan
1-eat.AI pie
"I ate pie."

b.	**Sitókihkiitaan*	*nítsooyi*.
	sitokihkitaan	nit-ioyi
	pie	1-eat.AI
	intended: "I ate pie."	

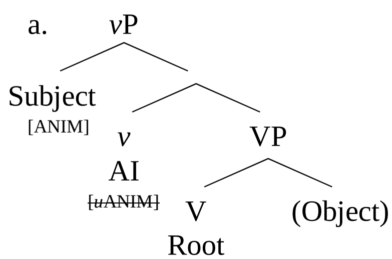
(78)	a.	*Nitsóówatoohpa*	*omi*	*sitókihkiitaan*.
		nit-iowatoo-hp-wa	om-yi	sitokihkitaan-yi
		1-eat.TI-1:INAN-PROX	DEM-INAN	pie-INAN
		"I ate that pie."		

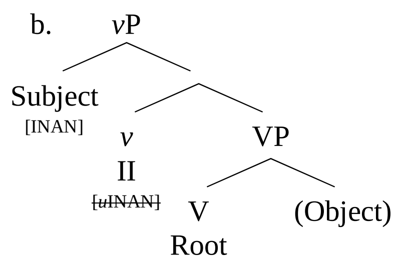
b.	**Nitsóówatoohpa*	*sitókihkiitaan*.
	nit-iowatoo-hp-wa	sitokihkitaan-yi
	1-eat.TI-1:INAN-PROX	pie-INAN
	intended: "I ate pie."	

c.	*Omi*	*sitókihkiitaan*	*nitsóówatoohpa* .
	om-yi	sitokihkitaan-yi	nit-iowatoo-hp-wa
	DEM-INAN	pie-INAN	1-eat.TI-1:INAN-PROX
	"I ate that pie."		

In (75), the intransitive verb takes an animate object, *ápasstaamiinaam* "apple," which is a bare noun and cannot appear preverbally. In (76), the transitive verb takes the same animate noun as an object, but it cannot be bare and can be preverbal. This same pattern is seen with inanimate objects in (77) and (78); both the intransitive and transitive verbs can take an inanimate object, but with different properties.

I propose an alternative to the structure in (74). In particular, I propose that finals introduce external arguments via an Agree relation. They bear an uninterpretable animacy feature ([uANIM(ate)] or [uINAN(imate)]) that is checked by a matching feature in Spec, *v*P. First consider the structure of morphologically intransitive verbs, i.e., those with an AI or II final.

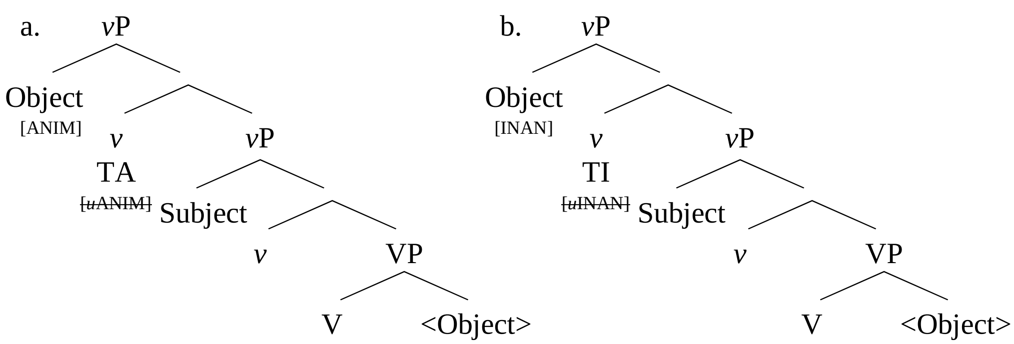
(79) a.


b.


In (79a), the AI final has an uninterpretable [ANIM] feature that requires the external argument to be animate, and in (79b), the II final has an uninterpretable [INAN] feature that requires the external argument to be inanimate. Although morphologically intransitive, these verbs can optionally take an internal argument as complement to V, akin to an incorporated noun.[29] I refer to the objects of morphologically intransitive verbs as UNINDEXED OBJECTS to reflect the fact that they are not morphologically indexed on the verb.

Now consider morphologically transitive verbs, I propose that they have a more complex structure than morphologically intransitive ones; they have a recursive *v*P structure, with the TA/TI finals appearing higher in the structure than the AI/II finals, and attracting the internal argument from VP to the Specifier of the higher *v*P. As such, the object position for morphologically transitive verbs is a derived position, as shown below.[30]

(80)



In (80a), the TA final combines with the *v*P and attracts an animate object to its Specifier via an Agree relation. Similarly in (80b), the TI final combines with the *v*P and attracts an inanimate object to its Specifier.

Evidence in support of the claim that TA/TI finals are higher than AI/II finals comes from nominalization. Bliss et al. (2012) describe and categorize the various nominalization patterns in Blackfoot, and they observe that one particular nominalization pattern (referred to by Frantz (2009: 115)

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[29] In Chapter 3, I argue that unindexed objects of morphologically intransitive verbs are pseudo-incorporated.

[30] Under this analysis, there is a derived position for objects but not for subjects. This is the opposite of, e.g., English, which has a derived subject position (Spec, IP) but is not typically thought to have a derived object position (English objects are introduced in and remain in Comp, VP, cf. Adger 2003).

as *abstract nominalization*) is formed by adding a nominalizing suffix *–(hsi)n*[31] to morphologically intransitive stems. While this pattern of nominalization requires an AI or II final, it cannot contain a TA or TI final. Examples are given below.

(81) a. *Áówaahsini* *ikáákitapsoka'piiwa* *kiistó*.
a-owaa-hsin-yi ik-yaak-itap-sok-a'pii-wa kiisto
IMPF-eat.**AI**-NOM-INAN INTNS-FUT-good-be-PROX 2SG.PRN
"Eating will be good for you."

b. **Áówa**atoo('p)**ssini* *(nikóópis)* *ikáákitapsoka'piiwa* *kiistó.*
a-owa-**atoo-('p**-)hsin-yi nit-koopis ik-yaak-itap-sok-a'pii-wa kiisto
IMPF-eat-**TI-(2-INAN-)**NOM-INAN 1-soup INTNS-FUT-good-be.II-PROX 2SG.PRN
intended: "Eating (my soup) will be good for you."

(82) a. *Ikskíím**aa**ni* *áákohkotsiksstónatapiiwa.*
Ikskim-**aa**-n-yi yaak-ohkot-ik-sstonnat-a'pii-wa
hunt-**AI**-NOM-INAN FUT-ABL-INTNS-dangerous-be.II-PROX
"Hunting can be dangerous."

b. **Ikskíím**aat(s)**sini* *(annahkayi* *ponoka)* *áákohkotsiksstónatapiiwa.*
ikskiim-**aat-(yii-)**hsin-yi annahkayi ponoka yaak-ohkot-ik-sstonnat-a'pii-wa
hunt-**TA-(3:4-)**NOM-INAN DEM elk FUT-ABLE-INTNS-dangerous-be.II-PROX
intended: "Hunting that elk can be dangerous."

Under the assumption that nominalizations target different levels of the extended verbal projection (cf. Abney 1987; Borsley and Kornfilt 2000; Schueler 2006; Kornfilt and Whitman 2011), the data in (81) and (82) can be accounted for under the analysis that TA/TI finals are higher in the structure than AI/II ones. In particular, if TA/TI finals are higher than AI/II finals, then they are outside the structure that is the target of nominalization (i.e., the *v*P headed by an AI/II final to which *–(hsi)n* attaches).[32]

Moreover, the claim that the object position for morphologically transitive verbs is a derived position is consistent with the observation that the object of a morphologically transitive verb can bear a

[31] The suffix *–(hsi)n* has two phonologically-conditioned allomorphs: It surfaces as *–n* following *a*-final verb stems, and *–hsin* elsewhere.

[32] Aside from the nominalization facts, another prediction of this analysis is that, if AI/II finals map onto the lower v head and TA/TI finals map onto the higher v head, the two should be able to co-occur. This is possible with certain derived stems (e.g., causative and accompaniment verbs, cf. Frantz 2009, chapter 18) but generally speaking, there is no morphological realization of the lower *v* head in the structures in (80). I speculate that this could be accounted for with appeal to post-syntactic spell-out restrictions, as discussed in Chapter 1.

variety of different thematic roles. In other words, it is not tied to a position that is projected as part of the verb's argument structure. Rather, the object can bear a thematic role typically attributed to a direct object, such as patient (83) or theme (84), or it can bear a thematic role typically attributed to an indirect object, such as beneficiary (85) or source (86). In the examples below, the object is in boldface.

(83) *Níksi* *nínaiks* *áísskonakatsiiyaa* ***ni*** ***áaattsistaayi***.
ann-iksi ninaa-iksi a-isskonakat-yii-yi-aawa **ann-yi** **aaattsistaa-yi**
DEM-PL man-PL IMPF-shoot.at.TA-3:4-3PL-3PL.PRN **DEM-OBV** **rabbit-OBV**
"The men shot at **the rabbit**."

(84) *Nihtááhkanayi* ***amiksi*** ***si'káániksi*** *anni* *ákssin.*
n-iht-aahkani-a-yi **am-iksi** **si'kaan-iksi** ann-yi akssin-yi
1-PURP-sew.TA-DIR-PL **DEM-PL** **blanket-PL** DEM-INAN bed-INAN
"I sewed **those blankets** for the bed."

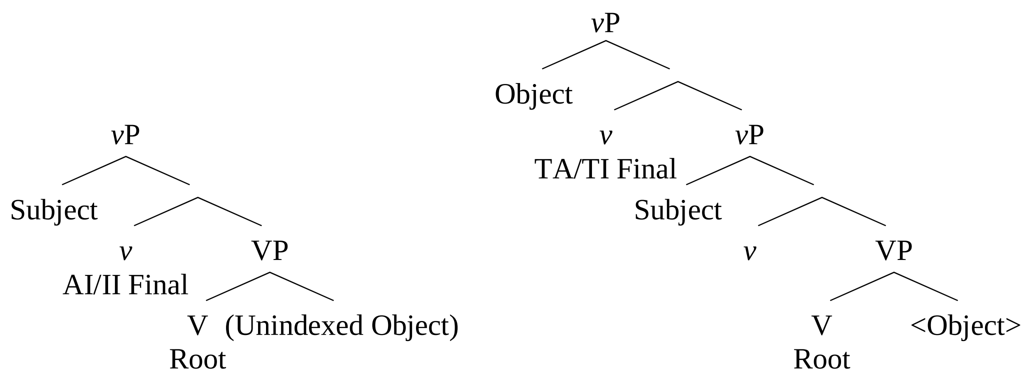
(85) *Anna* *Rosie* *íímmskatoomoyiiwa* ***annisk*** ***óómi.***
ann-wa R ii-mmsk-atoo-omo-yii-wa **ann-yi-hk** **w-om-yi**
DEM-PROX R. IC-save.food-TI-TA.BEN-3:4-PROX **DEM-OBV-NV** **3-husband-OBV**
"Rosie saved food for **her husband**."

(86) *Anna* *Rosie* ***nit****o'tómoka* *nitsiniká'simiks*.
ann-wa R **nit**-o't-omo-ok-wa nit-inika'simiks-yi
DEM-PROX R **1**-take-TA.BEN-INV-PROX 1-car-OBV
"Rosie took my car from **me**."

The examples in (83)-(86) show that the object of a morphologically transitive verb can bear a variety of different thematic roles. This is consistent with the claim that the object position is a derived position; it is not projected as part of the argument structure inherent to the verb's lexical entry.

To summarize, I have adopted the assumption that verb finals associate with the category *v*, and they agree with an external argument; AI/II finals combine with VP and agree with the subject, and TA/TI finals combine with *v*P and agree with the object. As such, in Blackfoot, the grammatical functions of subject and object both map onto external argument positions inside the *v*P. Additionally, unindexed objects may appear in Comp, VP. This is schematized for morphologically intransitive and transitive verbs below.

(87) a. Intransitive b. Transitive



2.6.2. PoV Holder

In this section, I argue that Asp in Blackfoot is associated with the direct/inverse suffixes, and introduces an external argument with a grammatical function I refer to as the Point-of-View (PoV) Holder. I present an analysis of the Blackfoot's direct/inverse, adapted from Bliss (2005a) and Bliss et al. (2010a, b).

Descriptively, direct/inverse marking is sensitive to the person hierarchy below.

(88) Direct/Inverse Hierarchy
1^{st} > 2^{nd} > 3^{rd} PROXIMATE > 3^{rd} OBVIATIVE

When a direct suffix appears on the verb, the higher-ranking participant is the subject, and when an inverse suffix appears on the verb, the higher-ranking participant is the object. Examples illustrating this are given below.

(89) a. *Nitsikámotsiipi**a**wa.*
nit-ikamotsiip-i-**a**-wa
1-rescue-TA-**DIR**-PROX
"I rescued him/her."

b. *Nitsikámotsiipi**ok**a.*
nit-ikamotsiip-i-**ok**-wa
1-rescue-TA-**INV**-PROX
"S/he rescued me."

In (89a), a higher-ranking 1st person is the subject, a lower-ranking 3rd person is the object, and a direct suffix *–a* appears on the verb. In (89b), the higher-ranking 1st person is the object, and the lower-ranking 3rd person is the subject, and an inverse suffix *–ok* appears on the verb.

Whether the direct/inverse in Algonquian is strictly a morphological phenomenon or involves syntactic inversion, akin to the passive in languages like English, has been a source of debate (e.g., Aissen 1997, McGinnis 1999 argue against a syntactic inversion account). Bruening (2001, 2009) makes a compelling case for a syntactic (A-movement) account of Passamaquoddy's direct/inverse system, using quantifier scope and variable binding data to support his claim. Building on Bruening's analysis, Bliss (2005a) develops a syntactic account of Blackfoot's direct/inverse system, which has been subsequently refined by Bliss et al. (2010a, b). Here I present an amalgamation of these analyses.

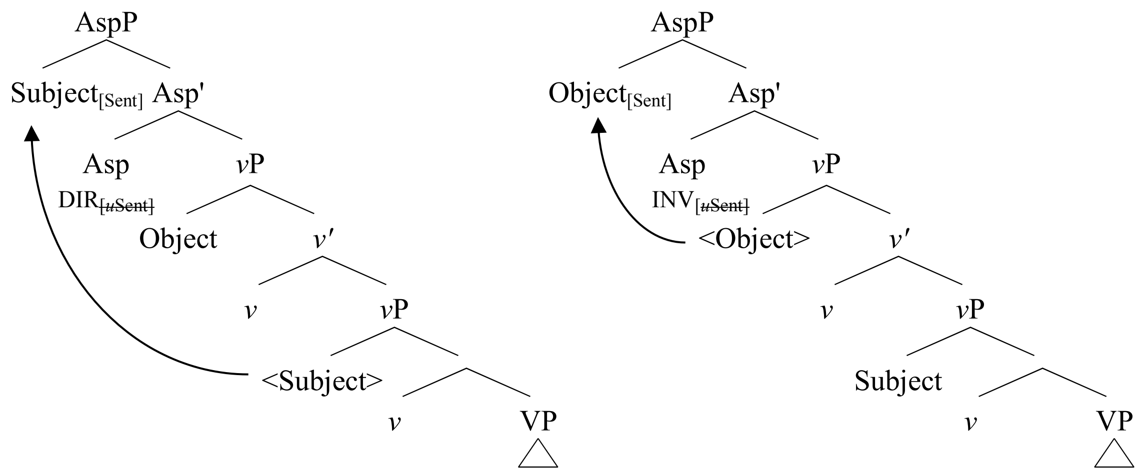
One of the main insights of Bliss (2005a) is that direct/inverse marking grammaticizes the relation between grammatical functions and point-of-view, by encoding whether the PoV holder is the subject or the object. For this reason, Bliss (2005a) argues the direct and inverse markers associate with a functional head Point-of-View (PoV). Bliss et al. (2010a, b) claim that the PoV head is located between IP and *v*P, and fulfills the same functional role as Viewpoint (i.e., Outer) Aspect in a Tense-based language like English. Following DeLancey (1981), we assume that Aspect is the temporal analog of Point-of-View; just as Aspect provides a temporal perspective on events (e.g., Smith 1997), Point-of-View provides a participant's perspective. Put another way, Aspect locates event times relative to a reference time (or point-of-view time), and Point-of-View locates event participants relative to a point-of-view holder. In what follows, I refer to both Outer Aspect and Point-of-View by the same category label: Asp.

The Asp head has different morphological realizations: the different direct and inverse suffixes.[33] Bliss (2005a) employs a feature geometric approach to ϕ features (cf. Harley and Ritter 2002), analysing the various direct/inverse markers as being specified for different person features, but all sharing the

[33] Bliss et al. (2010a, b) propose that the direct and inverse morphemes map onto three different structural positions: Asp plus two agreement positions. I abstract away from these details here.

feature [Sentient]. A desirable consequence of this analysis is that the ranking of arguments in the direct/inverse is derived from the featural content of the direct and inverse markers and the hierarchy itself is rendered epiphenomenal. Abstracting away from the details, I refer to the feature [*u*Sent(ient]) as the primary ϕ feature on the Asp head.[34] When Asp is direct, the subject moves to Spec, AspP, and when Asp is inverse, the object moves to Spec, AspP. Both of these are shown below.

(90) a Direct b. Inverse



In sum, Spec, AspP in Blackfoot can be identified with a grammatical function, the PoV holder. This is a derived position, occupied by the subject when Asp is direct, and the object when Asp is inverse.

2.6.3. Spec, IP and Spec, CP

The two remaining positions – Spec, IP and Spec, CP – are discussed in detail in Chapters 5 and 6, respectively. Here, I present a brief summary of the properties of these two positions.

As outlined in Chapter 1, I assume the IP domain is the anchoring domain; it connects the clause to the utterance situation. Ritter and Wiltschko (to appear) argue that, cross-linguistically, INFL can vary in its substantive content; INFL can be tense-based, relating event times to utterance times, location-based, relating event locations to utterance locations, or person-based, relating event participants to

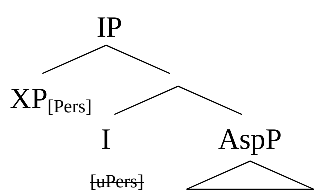
[34] The other features of the different direct and inverse markers ensure that the "right" argument moves up to Spec, AspP. For instance, in (90a) the object fails to intervene because it does not meet the featural requirements of Asp. See Bliss (2005a) for details.

utterance participants. Ritter and Wiltschko argue that Blackfoot exemplifies the latter case: INFL in Blackfoot is person-based, and the person prefixes that appear at the left edge of the verbal complex appear in Spec, IP. Examples of the person prefixes are given below.[35]

(91) a. ***Nit****siítsitapinihka'simi* *Otsskapinááki*.
nit-niit-itapi-inihka'simi otssk-apini-aakii
1-genuine-person-be.named.AI blue-eye-woman
"My Indian name is Otskapinaaki." (lit. "blue-eyed woman")

b. ***Kit****siitsitapinihka'simi* *Otskapinaaki*.
kit-niit-itapi-inihka'simi otssk-apini-aakii
2-genuine-person-be.named.AI blue-eye-woman
"Your Indian name is Otskapinaaki." (lit. "blue-eyed woman")

In Chapter 5, I develop an analysis of the Spec, IP position. I argue that INFL bears uninterpretable [Pers(on)] features, and that the person prefixes in Spec, IP check these uninterpretable features. Furthermore, I argue that Spec, IP can be occupied not only by person prefixes but also by an evidential prefix that signals speaker certainty of a past time event. Regardless of which prefix occupies Spec, IP, it is subject to the featural requirements of INFL, as schematized below.[36]

(92)


Regarding the Spec, CP position, in Chapter 6, I demonstrate that the obviative (-*yini*) and plural (-*yi*) suffixes that appear at the right edge of the verbal complex associated with C.[37] They bear

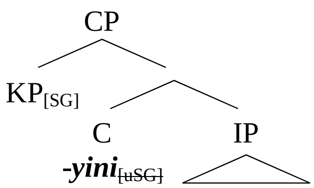
[35] In addition to 1st person *nit*- and 2nd person *kit*-, there is a 3rd person prefix *ot*-, which is restricted to matrix TA inverse clauses, and conjunct clauses.

[36] Moreover, unlike, e.g., English, Spec, IP need not be occupied in Blackfoot. As such, the status of the EPP (cf. Chomsky 1981) in this language is unclear.

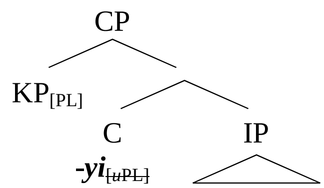
[37] The suffixes –*yini* and –*yi* alternate with proximate –*wa*, which I argue in Chapter 6 occupies the same position as –*yini* and –*yi* but does not have uninterpretable ϕ features that need to be checked in an Agree relation.

uninterpretable Number features which are checked by a third person argument (KP) in Spec, CP. Examples of each, with their respective structures, are given below.

(93) a. *Áókska'si***yini** [$_{KP}$*anni* *osskáni*].
a-okska'si-**yini** ann-yi w-isskan-yi
IMPF-run.AI-**OBV** DEM-OBV 3-sister-OBV
"His sister is running."



b. *Áókska'si***yi** [$_{KP}$*anniks* *osskániks*].
a-okska'si-**yi** ann-iksi w-isskan-iksi
IMPF-run.AI-**PL** DEM-PL 3-sister-PL
"His sisters are running."



This proposal suggests that Spec, CP is an A-position in Blackfoot, and this raises questions about the availability of the Spec, CP position for A'-extraction. In fact, the relative paucity of A'-extraction phenomena in Blackfoot support this proposal. In particular, wh-questions in Blackfoot are formed of nominalizations (cf. Frantz 2009), and it is not clear that they involve wh-movement (see chapter 8, §8.3.1.2). Similarly, Blackfoot does not have relative clauses, instead employing a nominalization strategy to fulfill the function of relative clauses (see chapter 7, §7.4.1.1, also see Bliss, to appear). The one possible case of A'-extraction involves fronting of a subordinate constituent to the matrix clause, as shown in (94b) below.

(94) a. *Nitsíkssta* *omááhksaowaatóhksaa* ***omiksi*** ***imitááíks****.*
nit-iksstaa om-aahk-saw-at-ohki-saa om-iksi imitaa-iksi
1-want.AI 3-MOD-NEG-again-bark.AI-NONAFF DEM-PL dog-PL
"I want those dogs to stop barking."

b. ***Omiksi imitááíks*** *nitsíkssta omááhksaowaatóhksaa.*

Whether fronting of this sort can be characterized as topicalization through an A'-position is yet unclear. In short, although a detailed investigation of Blackfoot's A'-extraction phenomena is pending, the data available suggest that Spec, CP may not be utilized for A'-extraction. This is predicted under the account that Spec, CP is an A-position.

2.6.4. Summary

In summary, I have argued that the grammatical functions of subject and object map onto two different Spec, *v*P positions in Blackfoot, with the object appearing in a derived position above the subject. Moreover, I have proposed that an additional grammatical function – PoV holder – is operative in Blackfoot and maps onto the Spec, AspP position. As for the higher Specifier positions in the clausal spine, Spec, IP and Spec, CP, I have argued that these are associated with person and number agreement. The Specifier positions and their associated grammatical functions are given in Table 2.13 below.

Table 2.13. Structural Correlates of Grammatical Functions

Positions	**Grammatical Functions**
Spec, *v*P (intransitive)	Subject
Spec, *v*P (transitive)	Object
Spec, AspP	PoV holder
Spec, IP	-- (locus of person prefixes)
Spec, CP	-- (locus of number agreement)

2.7. Conclusion

This chapter has provided information on Blackfoot that is relevant for this dissertation. I have discussed morphosyntactic properties of nominal expressions, and given an overview of the morphemes that comprise the verbal complex. Additionally, I have provided evidence that, despite a cline in audibility, the proximate and obviative suffixes that appear on nouns and verbs are indeed active in the grammar. Finally, I have mapped grammatical functions onto structural positions, arguing that the subject and object are both external arguments in *v*P, and there is an additional grammatical function, PoV holder, that is associated with Spec, AspP and is determined by the direct/inverse.

CHAPTER 3

MAPPING NOMINAL EXPRESSIONS ONTO THE SYNTACTIC SPINE

3.1. Introduction

Having established some background on Blackfoot morphosyntax, I now turn to the task of developing an analysis of Blackfoot's argument-typing system. The overarching goal of this dissertation is to reveal the hierarchical relations in Blackfoot that are obscured by the non-configurational properties of the language, and the main thesis is that the ways in which the various linguistic objects associated with arguments map onto the syntactic spine conspire to give Blackfoot a non-configurational profile.I begin the analysis of Blackfoot's argument-typing system with a discussion of the internal and external syntax of its nominal expressions. I look at four types of nominal expressions: proximate singular, obviative singular, plural, and uninflected (bare) nouns. Examples are given below.

(1)	a.	*Nitsikáístsimmaa*	***oma***	***aakííwa***.	
		nit-ik-a-istsimm-a-wa	om-**wa**	aakii-**wa**	
		1-INTNS-IMPF-respect-DIR-PROX	DEM-**PROX**	woman-**PROX**	
		"I respect that woman."			

b.	*Anna*	*Anna*	*iikáístsimmiiwa*	***omi***	***aakííyi***.
	ann-wa	A	ii-ik-a-istsimm-yii-wa	om-**yi**	aakii-**yi**
	DEM-PROX	A	IC-INTNS-IMPF-respect-3:4-PROX	DEM-**OBV**	woman-**OBV**
	"Anna respects that woman."				

c.	*Nitsikáístsimmayi*	***omiksi***	***aakííks***.
	nit-ik-a-istsimm-a-yi	om-**iksi**	aakii-**iksi**
	1-INTNS-IMPF-respect-DIR-PL	DEM-**PL**	woman-**PL**
	"I respect those women."		

(2)	a.	*Anna*	*Beth*	*áóyiwa*	***immistsííhkitaan***.
		ann-wa	B	a-ooyi-wa	immistsiihkitaan
		ann-wa	B	IMPF-eat.AI-PROX	frybread
		"Beth is eating frybread."			

b.	*Anna*	*Beth*	*áóyiwa*	***immistsííhkitaanists.***
	ann-wa	B	a-ooyi-wa	immistsiihkitaan-**istsi**
	DEM-PROX	B	IMPF-eat.AI-PROX	frybread-**PL**
	"Beth is eating (pieces of) frybread."			

In (1), there are examples of proximate singular, obviative singular, and plural nominal expressions functioning as the indexed object of a morphologically transitive verb. In (2), there are examples of a bare noun and a plural noun functioning as the unindexed object of a morphologically intransitive verb. (For a survey of the types of nominal expressions that can be used with each grammatical function, see Appendix A.)

I argue that the nominal expressions in (1) have more functional structure than the nominal expressions in (2). In particular, proximate singular nominal expressions like those in (1a) have a functional head I refer to as LINK; it is the highest functional head in the spine, but is neutral with respect to whether it appears in a nominal or verbal spine. The obviative singular and plural nominal expressions in (1b) and (1c) have the same amount of structure as the proximate one in (1a), but are categorized as KPs rather than LINKPS. This difference corresponds with a difference in their external syntax; LINKPS are adjoined to the clause but KPs appear in argument positions. As for the nominal expressions in (2), I propose that bare nouns are *n*Ps and bare plurals are ϕPs; both are pseudo-incorporated, in the sense of Massam (2001). Under this analysis, plural nouns are structurally ambiguous: they can be KPs or ϕPs. A summary of my analytical claims about the four types is given in Table 3.1.

Table 3.1. Four Types of Nominal Expressions

	Syntactic category	**Relation to Clause**	**Syntactic Position**
Proximate Singular (*-wa*)	LINKP	Adjunct	Adjoined to LINKP
Obviative Singular (*-yi*)	KP	Argument	A-position in the clause
Bare (Ø)	*n*P	Pseudo-incorporated	VP complement
Plural (*-iksi/-istsi*)	ϕP	Pseudo-incorporated	VP complement
	KP	Argument	A-position in the clause

This chapter proceeds as follows. In §3.2, I discuss proximate singular nominal expressions and in §3.3 obviative singular nominal expressions. Bare nouns are discussed in §3.4, and plural nouns in §3.5. In §3.6 I conclude.

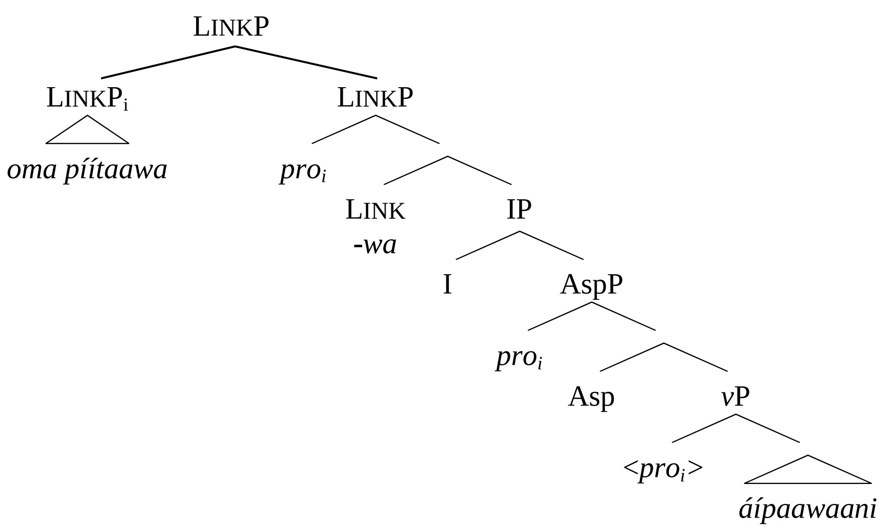
3.2. The Syntax of Proximate Singular (Nominal) Expressions

In this section, I discuss the syntax of proximate singular nominal expressions, such as that in (3) below.

(3) *Oma* *píítaawa* *áípaawaniwa.*
om-wa piitaa-wa a-ipaawani-wa
DEM-PROX eagle-PROX IMPF-fly.AI-PROX
"That eagle is flying."

The starting point for my analysis of proximate singular nominal expressions is the observation that the same suffix, *-wa*, attaches to either noun stems or verb stems. In §3.2.1, I argue that *-wa* maps onto the highest head in the spine, but that it is indiscriminate with respect to whether it associates with a nominal or a verbal spine. I adopt the label LINK to refer to this head. In §3.2.2, I propose that proximate expressions do not appear in argument positions but are adjoined to the clause and bind null *pro* argument(s), as schematized below.

(4)



3.2.1. Proximate Expressions are LINKPs

In this section, I discuss the syntactic category of the proximate suffix *–wa*. In §3.2.1.1, I propose that *-wa* associates with a functional head LINK that is neutral with respect to whether it appears in a nominal or verbal spine. I demonstrate that expressions marked with *–wa* (whether nominal or verbal) can be interpreted as predicates or arguments, and I take this as evidence for the neutral status of *–wa*. In §3.2.1.2, I discuss an alternative analysis, namely that *–wa* associates with the functional head ϕ. The ϕP analysis can capture predicate/argument flexibility (cf. Déchaine and Wiltschko 2002), but I demonstrate that proximate expressions do not have the distribution of other ϕPs (namely plural nouns), and as such the ϕP analysis is not tenable.

3.2.1.1. Proximate *–wa* Associates with LINK

In this section, I argue that *–wa* is neutral: the -*wa* suffix that appears on proximate argument expressions is the same -*wa* suffix that appears on proximate-marked clauses. Both map onto the highest functional head in the spine, which as discussed in Chapter 1 I take to be the head of the "linking" domain of the spine, i.e., the layer that is responsible for linking the phrase to a superordinate structure or the larger discourse. In the verbal spine, the linking head is C and in the nominal spine it is K, as shown in (5).

(5) a. [**CP** [IP [AspP [*v*P [VP]]]]]
    b. [**KP** [DP [ϕP [*n*P [NP]]]]]

I propose that *–wa* associates with the head of the linking layer of the spine, but it is not categorized as either C or K. Rather, it is a neutral instantiation of the linking head, not specified as either verbal (C) or nominal (K). I refer to its category label as LINK.[38] The LINK head can combine with either a verbal or nominal spine, as schematized in (6).

(6) a. [**LINKP** -*wa* [IP [AspP [*v*P [VP]]]]]
    b. [**LINKP** -*wa* [DP [ϕP [*n*P [NP]]]]]

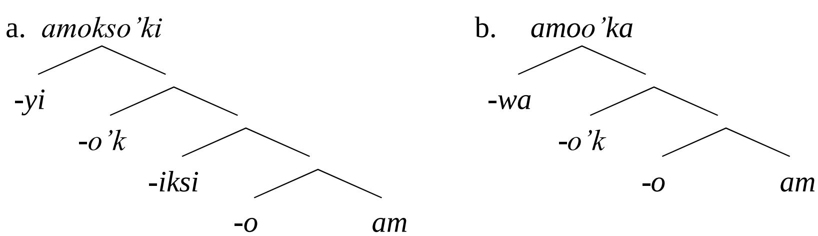
What evidence is there that the *–wa* suffix that appears in the nominal spine maps onto the same syntactifc category as the one that appears in the verbal spine? The first piece of evidence is that the two do not co-occur. Consider the data in (7).

[38] Choosing the appropriate label for this head is difficult. With lexical categories, we use the term ROOT (or √) to refer to lexical items that are neither N nor V but category-neutral (e.g., Marantz 1997; Borer 2004; Arad 2005). However, there is no equivalent terminology to refer to category-neutral functors. The motivation for the term LINK is to capture the observation that *–wa* is neutral with respect to the nominal/verbal distinction but is still associated with the linking layer in the spine.

(7) a. *Amo**ks**o’k**i*** *nitómitaamiksi.*
am-o-**iksi**-o’k-**yi** nit-omitaa-m-iksi
DEM-RESTR-**PL**-*o’k*-**PL** 1-dog-POSS-PL
“My dogs are these ones.”

b. *Amoo’k**a*** *nitómitaama.* (not **amo*-***wa***-*o’k*-***wa****)*
am-o-o’k-**wa** nit-omitaa-m-wa
DEM-RESTR-*o’k*-**PROX** 1-dog-POSS-PROX
“My dog is this one.”

In (7), there are two examples of so-called “verbalized” demonstratives (cf. Uhlenbeck 1938), i.e., demonstratives that have been modified with a suffix *–o’k* that allows them to function predicatively. The syntax of demonstratives is discussed in Chapter 4, but for now, the observation to be gleaned from the data in (7) is that a demonstrative marked with *–o’k* may take both nominal and verbal morphology. In (7a), the demonstrative is modified by both the nominal plural suffix *–iksi* and the verbal plural suffix *–yi* (separated by the suffix *–o’k*.) However, in (7b) we see that the same is not possible with a proximate singular demonstrative; the *–wa* suffix only appears in the position of the verbal number suffix, following *–o’k*. Representations of the two demonstratives (without category labels) are given below.

(8)


(8a) corresponds to (7a); there are two number suffixes: nominal *–iksi*, and verbal *–yi*. (8b) corresponds to (7b); here there is only one number suffix: -*wa*, in the higher position, corresponding to verbal -*yi*. There is no *–wa* suffix that appears in the same position as nominal *–iksi*, suggesting that *–wa* necessarily maps onto the higher position.

Although examples like this are rare (and perhaps impossible except with this small class of verbalized demonstratives), the fact that they exist at all supports the claim that there is only one position for *–wa*. Furthermore, the examples in (7) support the view that *–wa* is structurally higher than the nominal plural suffixes; -*iksi* in (7a) attaches closer to the demonstrative root than does –*wa* in (7b). I return to this point in §3.5, when I consider the syntax of plural nouns.

With respect to its syntactic position, in Chapter 6 I consider the syntax of –*wa* on verbs and I demonstrate that it maps onto the highest functional head in the verbal spine. Part of the evidence I give is negative; I show that it does not occupy any of the lower functional heads in the verbal spine, namely *v*, Asp, or INFL. The positive evidence I provide is that the distribution of –*wa* is sensitive to illocutionary force and clause type, both of which are associated with the linking domain of the clause (i.e., the CP layer). In short, -*wa* maps onto the highest functional head in the verbal spine. By extension, I propose that –*wa* occupies this same position when it associates with a nominal spine: whether it appears with nouns or verbs, it maps onto LINK, the highest functional head in the spine.

As for the claim that –*wa* is a neutral head LINK and not categorized as C or K, the primary piece of evidence in support of this proposal is the fact that both nouns and verbs can be construed as either predicates or arguments when suffixed with –*wa*. Consider the examples below.[39]

(9) a. (*Anna*) *áíhpiyi**wa**.*
(ann-wa) a-ihpiyi-**wa**
(DEM-PROX) IMPF-dance.AI-**PROX**
"S/he is dancing."

b. *Anna* *áíhpiyiwa* *ákaomatapóówa.*
ann-wa a-ihpiyi-**wa** akaa-omatap-oo-wa
DEM-PROX IMPF-dance.AI-**PROX** PERF-begin-go.AI-PROX
"The one who dances has just left."

(10) a. *Piitáá**wa**.*
piitaa-**wa**
eagle-**PROX**
"S/he is an eagle."

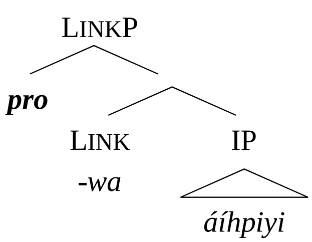
b. *Oma* *piitáá**wa**.*
om-wa piitaa-**wa**
DEM-PROX eagle-**PROX**
"That is an eagle."

[39] My consultants typically translate proximate-marked verbs as relative clauses when they function as arguments, and I have maintained these translations in the examples presented here. A more literal translation of, e.g., (9b) would be "The dancing one just left."

c. *Oma* *pittáá**wa*** *áípottawa*.
om-wa piitaa-**wa** a-ipottaa-wa
DEM-PROX eagle-**PROX** IMPF-fly.AI-PROX
"That eagle is flying."

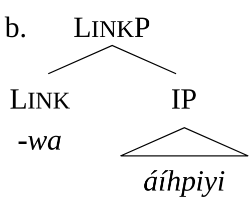
In (9), the verb *ihpiyi* "dance" is suffixed with *–wa* and it can be interpreted as either a predicate (a) or an argument (b). Similarly in (10), the noun *piitaa* "eagle" is suffixed with *–wa* and it can be interpreted as either a predicate (a/b) or an argument (c). Note that even when the demonstrative is absent, the predicate construals of both the verb and the noun are available. Moreover, note that the predicate construals do not require an overt argument expression to form a complete proposition. Rather, they permit null arguments, which I take to be instantiated by *pro*. I propose that the predicate/argument flexibility reflects a structural ambiguity observed with LINKPS: LINK may or may not license null *pro* in its Specifier.[40] In the former case, the resulting structure is interpreted as a saturated predicate, i.e., a complete proposition. In the latter case, the resulting structure is interpreted as an argument.[41] This is illustrated for the examples in (9) and (10) above in (11) and (12) below.

(11) a.



"S/he is dancing"

b.



"the one who dances"

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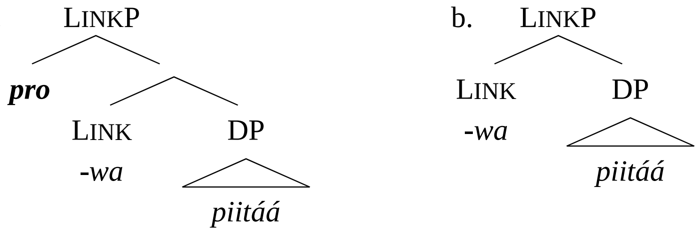
[40] The proposal that *pro* is licensed in Spec, LinkP suggests that Spec, LinkP is an A-position, and not an A'-position. This parallels the proposal introduced in Chapter 2 (and elaborated on in Chapter 6, §6.3.2.1) that Spec, CP is also an A-position. See Chapter 2, §2.6.3 for discussion.

[41] Although taken here to reflect a structural ambiguity, the question remains whether the predicate/argument flexibility observed with proximate expressions is indeed a case of ambiguity at the level of semantics. In other words, are there indeed two construals (predicate and argument) for proximate expressions, or are they unspecified with respect to the predicate/argument distinction? It is unclear to me whether and how to test this empirically, as well as how to model predicate/argument flexibility if it were found not to be a case of ambiguity.

(12) a. / b.



a. "S/he is an eagle" b. "eagle"

In (11a) and (12a), a null *pro* appears in the Specifier of LINK, and the LINKP is interpreted as a saturated predicate, i.e., a proposition. In (11b) and (12b), there is no *pro* in Spec, LINKP, and the LINKP is interpreted as an argument.

This flexibility in interpretation is a property of –*wa*, and not a property of verb and noun roots. Armoskaite (2011) demonstrates that noun and verb roots in Blackfoot are inherently categorized as nominal and verbal respectively. The evidence for this is that roots themselves are restricted in terms of what functional material they can combine with. Nominal roots can combine with nominal but not verbal inflection (e.g., verb class finals), and verbal roots cannot combine with verbal but not nominal inflection (e.g., plural marking). Examples are given below.

(13) a. *ó'kapayin**ists***
o'k-napayin-**istsi**
raw-bread-**PL**
"flours" (Frantz and Russell 1995, p. 119)

b. ***Anna** Jane ó'kapayin**at**siiwa omi ni'tawáákii.*
ann-wa J o'kapayin-**at**-yii-wa om-yi ni'tawaakii-yi
DEM-PROX J flour-**TA**-3:4-PROX DEM-OBV chicken-OBV
intended: "Jane breaded the chicken." (adapted from Armoskaite 2011, p. 92)

(14) a. *Áákottakiwa*.
yaak-ottak-i-wa
FUT-give.drink-AI-PROX
"S/he will serve drinks." (Frantz and Russell 1995, p. 145)

b. **ottakiks*
ottak-iksi
give.drink-PL
intended: "bartenders" (Armoskaite 2011, p. 62)

In (13), we see that the noun root *napayin* can take nominal inflection (plural –*istsi*) but not verbal inflection (TA final –*at*). Conversely in (14), we see that the verb root *ottak* can take verbal inflection (AI final –*i*) but not nominal inflection (plural –*iksi*). These data show that the nominal and verbal roots are not category-neutral; they are inherently categorized. As such, the predicate/argument flexibility observed with proximate expressions does not reduce to a property of the roots.

Furthermore, unless the form is marked with –*wa* it is not flexible in its interpretation. For example, if a form is marked with obviative –*yi*, it can only be interpreted as an argument, as shown below.

(15) a.

*(*Anni)*	*áíhpiyi**yi**.*
(ann-yi)	a-ihpiyi-**yi**
(DEM-OBV)	IMPF-dance.AI-**OBV**

intended: "S/he is dancing."

b.

Anni	*áíhpiyi**yi***	*ákaomatapóóyináyi.*
ann-yi	a-ihpiyi-**yi**	akaa-omatap-oo-yini-ayi
DEM-OBV	IMPF-dance.AI-**OBV**	PERF-begin-go.AI-OBV-3SG.PRN

"The one who dances has just left."

(16) a. **Piitáá**yi**.*
piitaa-**yi**
eagle-**OBV**
intended: "S/he is an eagle."

b.

**Omi*	*piitáá**yi**.*
om-wa	piitaa-**yi**
DEM-PROX	eagle-**OBV**

intended "That is an eagle."

b.

Om-yi	*pittáá**yi***	*áípottayináyi*.
om-yi	piitaa-**yi**	a-ipottaa-yini-ayi
DEM-OBV	eagle-**OBV**	IMPF-fly.AI-OBV-3SG.PRN

"That eagle is flying."

The examples in (15) and (16) are identical to those in (9) and (10), except that obviative –*yi* is used in place of proximate –*wa*. Unlike proximate expressions, which can be interpreted as predicates or arguments, obviative expressions can only function as arguments. Additionally, expressions that are unmarked for the proximate/obviative contrast do not exhibit the flexibility observed with proximate-marked expressions. For example, whereas bare noun stems can function as unindexed objects of morphologically intransitive verbs, verb stems cannot.

(17) a. *Nitsííyaapi piitáá*.
nit-ii-yaapi piitaa
1-IC-see.AI eagle
"I saw an eagle."

b. **Nitsííyaapi áíhpiyi*.
nit-ii-yaapi a-ihpiyi
1-IC-see.AI IMPF-dance.AI
intended: "I saw a dancer."

In (17), the same stems that exhibited predicate/argument flexibility when suffixed with *–wa* appear without *–wa* and only the noun is grammatical. The fact that *áíhpiyi* "dance" cannot be interpreted as an argument unless it is suffixed with *–wa* indicates that the predicate/argument flexibility is a property of *–wa* and not a property of the thing to which it attaches. Conversely, whereas verb stems are used without proximate/obviative suffixes when they form imperative clauses[42], nouns cannot be used in this context, as shown below.

(18) a. **Piitáát!*
piitaa-t
eagle-IMP
intended: "Be an eagle!"

b. *Ihpiyít*!
ihpiyi-t
dance-IMP
"Dance!"

Again, for a nominal or verbal form to be flexible in its interpretation, it requires *–wa*. Put another way, the predicate/argument flexibility is a property of *–wa*.

To this point, the examples illustrating predicate/argument flexibility have been limited to verb or noun stems suffixed with *–wa*. However, any form with a noun or verb stem is ambiguous between clause and argument readings if it is suffixed with *–wa*. Some additional examples are given below.

[42] Proximate/obviative suffixes cannot be used in imperative clauses. This is discussed in detail in Chapter 6.

(19) a. *Oma* *ninάά* *itáómiihkaa**wa*** *omi* *niyítahtaani.*
om-wa ninaa-wa it-a-omii-hkaa-**wa** om-yi niyitahtaan-yi
DEM-PROX man-PROX LOC-IMPF-fish-acquire.AI-**PROX** DEM-INAN river-INAN
"That man is fishing at the river."

b. *Nitsikáyaahsimaa* *oma* *ninάά* *itáómiihkaa**wa*** *omi* *niyítahtaani.*
nit-ik-a-yaahsimaa oma ninaa-wa it-a-omii-hkaa-**wa** omi niyitahtaan-yi
1-INTNS-IMPF-like.AI DEM man-PROX LOC-IMPF-fish-acquire.AI-**PROX** DEM river-INAN
*"*I like that man who is fishing at the river."

(20) a. *Oma* *nitáíhkiitook**a*** *napayín.*
om-wa nit-a-ihkiit-o-ok-**wa** napayin
DEM-PROX 1-IMPF-bake-TA.BEN-INV-**PROX** bread
"S/he bakes bread for me."

b. *Oma* *nitáíhkiitook**a*** *napayín* *ákao'toowa.*
om-wa nit-a-ihkiit-o-ok-**wa** napayin akaa-o'too-wa
DEM-PROX 1-IMPF-bake-TA.BEN-INV-**PROX** bread PERF-arrive.AI-PROX
"The one who bakes bread for me is here."

(21) a. *Oma* *i'nakáákiikoan**a**.*
om-wa i'nak-aakii-koan-**wa**
DEM-PROX small-woman-DIM-**PROX**
"That's a small girl."

b. *Oma* *i'nakáákiikoan**a*** *ááksiksspitaawa* *áísopoksistawa'ssi.*
om-wa i'nak-aakiikoan-**wa** yaak-ik-sspiitaa-wa a-sopok-istawa'si-hs-yi
DEM-PROX small-girl-**PROX** FUT-INTNS-be.tall.AI-PROX IMPF-finish-grow.AI-CONJ-OBV
"That small girl will be tall when she stops growing."

(22) a. *Anna* *nitsikoká'pomitaam**a**.*
ann-wa nit-ik-oka'p-imitaa-m-**wa**
DEM-PROX 1-INTNS-bad-dog-POSS-**PROX**
"He is my bad dog."

b. *Anna* *nitsikoká'pomitaam**a*** *áísikstakiwa.*
ann-wa nit-ik-oka'p-imitaa-m-**wa** a-sikstaki-wa
DEM-PROX 3-INTNS-bad-dog-POSS-**PROX** IMPF-bite.AI-PROX
"My bad dog bites."

(19) and (20) are examples of verbal forms marked with *–wa*. In (19a), a verb modified by an adpositional prefix *it-* that introduces a locative oblique is construed as a predicate, and in (19b) it is construed as the object. In (20a), a morphologically intransitive verb with an unindexed object is construed as a predicate, and in (20b) it is construed as the subject. (21) and (22) are examples of nominal forms marked with *–wa*. In (21a), a noun with an adjectival prefix and diminutive suffix is construed as a predicate, and in (21b) it

is construed as the subject. In (22a), a possessed noun marked with an adjectival prefix and an intensifier prefix is construed as as a predicate, and in (22b) it is construed as the subject. In short, so long as an expression is marked with *–wa*, it can be interpreted as either a predicate or an argument.

Given that any expression formed from a noun or verb stem and suffixed with *–wa* can be interpreted as either a predicate or an argument, it is clear that the flexibility is a property of *–wa*. In comparision, neither plural nor obviative forms are flexible between predicate and argument readings, as shown below.

(23) a. *Omiksi áíkskimaa**y**aawa.*
om-iksi a-ikskimaa-**yi**-aawa
DEM-PL IMPF-hunt.AI-**PL**-3PL.PRN
"Those guys hunt."

b. *Omiksi *áíkskimaa**y**aawa* *akáísko'tooyaawa*.
om-iksi a-ikskimaa-**yi**-aawa akaa-ssk-o'too-yi-aawa
DEM-PL IMPF-hunt.AI-**PL**-3PL.PRN PERF-back-arrive.AI-PL-3PL.PRN
intended: "Those hunters have come back."

(24) a. **Omiksi áíkskima**iks**.*
om-iksi a-ikskimaa-**iksi**
DEM-PL IMPF-hunt.AI-**PL**
intended: "Those are hunters.'

b. *Omiksi áíkskima**iks*** *akáísko'tooyaawa*.
om-iksi a-ikskimaa-**iksi** akaa-ssk-o'too-yi-aawa
DEM-PL IMPF-hunt.AI-**PL** PERF-back-arrive.AI-PL-3PL.PRN
"Those hunters have come back."

(25) a. *Ni Myaani ikaisskahsa'páó'taki**yin**áyi.*
ann-yi M ik-aisskahs-a'p-a-o'taki-**yini**-ayi
DEM-OBV M INTNS-always-around-IMPF-work.AI-**OBV**-3SG.PRN
"Mary is always working."

b. **Ni ikaisskahsa'páó'taki**yini*** *ákao'tooyináyi*.
ann-yi ik-aisskahs-a'p-a-o'taki-**yini** akaa-o'too-yini-ayi
DEM-OBV INTNS-always-around-IMPF-work.AI-**OBV** PERF-arrive.AI-OBV.3SG.PRN
intended: The one who is always working is here."

(26) a. **Annihk aahksáóy**ii**hk.*
ann-yi-hk aahksa-a-ooyi-**yi**-hk
DEM-OBV-INVIS always-IMPF-eat.AI-**OBV**-INVIS
intended: "S/he is always eating."

b. *Annihk* *aahksáóy**ii**hk* *iyíísta'pooyináyi*.
ann-yi-hk aahksa-a-ooyi-**yi**-hk ii-yiistap-oo-yini-ayi
DEM-OBV-INVIS always-IMPF-eat.AI-**OBV**-INVIS IC-away-go.AI-OBV-3SG.PRN
"That one who is always eating went away."

In (23), we see that forms marked with the verbal plural marker –*yi* are necessarily predicative; they cannot be used to form arguments. Conversely, in (24), we see that forms marked with the nominal plural marker –*iksi* are necessarily arguments; they cannot be used predicatively. This follows if –*yi* and –*iksi* differ in terms of their syntactic categories; whereas –*yi* maps onto a functional category in the verbal domain (namely C, as I will argue in Chapter 5), -*iksi* maps onto a functional category in the nominal domain. A similar contrast is observed in (25) and (26); the obviative marker –*yini* is restricted to predicative contexts, whereas obviative –*yi* is restricted to argument interpretations. Again, this follows if –*yini* and –*yi* differ with respect to their syntactic categories; whereas –*yini* is verbal, -*yi* is nominal. This is summarized in Table 3.2 below.

Table 3.2. Number/obviation morphology

		Verbal	**Nominal**
Proximate	*-wa*	✓	✓
Plural	*-iksi / -istsi*	×	✓
	-yi	✓	×
Obviative	*-yi*	×	✓
	-yini	✓	×

In comparison to the plural and obviative markers, –*wa* can associate with the highest head position of either the verbal or nominal spine. As such, it is not inherently categorized as either verbal (C) or nominal (K). Rather, it is neutral, as schematized below.

(27) a. [LINKP ***-wa*** [IP [AspP [*v*P [VP]]]]]
b. [LINKP ***-wa*** [DP [ϕP [*n*P [NP]]]]]

In (27), -*wa* maps onto the head LINK, and can combine with either verbal (IP) or nominal (DP) structures. This is qualitatively different from saying that, in the verbal spine –*wa* maps onto C, but in the nominal spine it maps onto the nominal equivalent of C, namely K. Instead, by using the label LINK for both structures, I am claiming that –*wa* is not categorized as either nominal nor verbal, but can associate with both nominal and verbal structures. Empirically, the consequence of this is that –*wa*-marked expressions themselves are ambiguous; they can have the distribution and interpretation of either CPs or KPs.

Note that the alternative option of employing different category labels for –*wa* depending on whether it is nominal or verbal (i.e., K or C) would suggest that -*wa* can function as a "switch" head, i.e., something that can either nominalize something otherwise verbal, or "verbalize" something otherwise nominal (see Panagiotidis and Grohmann 2009; Kornfilt and Whitman 2011 for a discussion of "switch" heads in nominalizations). In other words, under this analysis, when –*wa* associates with K it would nominalize, and when it associates C it would verbalize. However, this analysis fails to capture the insight that –*wa* is not inherently categorized as either nominal or verbal; it maps onto the linking layer of the spine, but is neutral with respect to the K/C distinction.

3.2.1.2. Proximate –*wa* does not Associate with ϕ

In the preceding section, I argued that –*wa* associates with the highest functional head in the spine, and that it is neutral with respect to the nominal/verbal distinction. I proposed the label LINK to refer to this neutral functional head, and I demonstrated that phrases suffixed with –*wa* can be intepreted as predicates or arguments. In this section, I argue against an alternative analysis, namely that –*wa* maps onto the functional head ϕ. The reason for entertaining this analysis is that, as argued by Déchaine and Wiltschko (2002), ϕPs can function either as predicates or arguments. Given the flexibility observed with proximate expressions (i.e., that they can be construed as predicates or arguments), it is worth considering whether –*wa* associates with ϕ, rather than LINK.

I have two arguments against the ϕP analysis of proximate nominal expressions. First, as discussed in §3.2.1.1 and elaborated in detail in Chapter 6, there is evidence to suggest that, in the verbal domain, –*wa* is associated with the linking layer (i.e., that it maps onto the highest functional head in the spine). I do not have compelling reasons to think that this same morpheme sits lower in the nominal spine, and in fact, as observed in (7) with the "verbalized" demonstratives, the lower position that is occupied by nominal plural morphology is not occupied by –*wa*, suggesting that –*wa* is consistently high.

Second, in §3.5, I argue that the nominal plural suffixes map onto ϕ. Part of my evidence for this is that plural nouns can function as unindexed objects of morphologically intransitive verbs. In §3.4 and §3.5, I argue that unindexed objects of morphologically intransitive verbs are pseudo-incorporated, and that they restrict the predicate without saturating an argument position. An example is given below.

(28) *Nitsáápi pi'kssííks.*
nit-yaapi pi'kssi-iksi
1-see.AI bird-PL
intended: "I saw (some) birds."

In (28), the animate plural noun *pi'kssííks* "birds" functions as the unindexed object of a morphologically intransitive verb, a grammatical function I argue is associated with pseudo-incorporation. Moreover, I argue that pseudo-incorporation can maximally target ϕPs; nominal expressions with more functional structure cannot be pseudo-incorporated. Thus, if proximate –*wa* mapped onto ϕ, we would predict that proximate nominal expressions could be pseudo-incorporated, i.e., they could function as unindexed objects of morphologically intransitive verbs. This prediction is not borne out, as shown below.

(29) **Nitáíkskimaa ponokáwa.*
nit-a-ikskimaa ponoka-wa
1-IMPF-hunt.AI elk-PROX
intended: "I am hunting an/the elk (proximate)."

The fact that proximate nouns such as *ponokáwa* "elk" cannot be pseudo-incorporated suggests that they are not ϕPs.

In sum, because proximate –*wa* maps onto the highest functional head in the verbal spine, and because proximate nominal expressions do not have the distribution of other ϕPs (i.e., plural nouns), I conclude that they are not ϕPs.

3.2.2. Proximate Expressions are Adjuncts

What is the syntactic function of *–wa*? I have argued that it associates with LINK, the highest head in the spine. As discussed in Chapter 1, the syntactic function of the linking layer is to connect the clause to a superordinate structure or the larger discourse. Cross-linguistically, we see these functions exemplified with, for example, complementizers (C heads) that connect a subordinate clause to a higher clause, or case marking (K heads) that connect an argument expression to the clause. How does *–wa* fit into this class of linking heads? I propose that *–wa* signals that the expression is *not* linked, i.e., that it is syntactically independent.

On clauses, this is evidenced by the fact that *–wa* is restricted to matrix clauses only; it does not appear on subordinate clauses, as shown below (and discussed in detail in Chapter 6).

(30) *Imáátaatsootaa**wa***.
ii-maat-matt-sootaa-**wa**
IC-NEG-again-rain-**PROX**
"It's not raining anymore."

(31) a. *Nitsíkssta* *mááhksawaatsootaahsi*.
nit-ik-sst-aa m-aahk-saw-matt-sootaa-hs-yi
1-INTNS-want-AI 3-MOD-NEG-again-rain.AI-CONJ-OBV
"I want it to stop raining." (lit: "I want it not to rain again.")

b. *Nitsíkssta *mááhksawaatsootaahsi**wa***.
nit-ik-sst-aa m-aahk-saw-matt-sootaa-hs-yi-**wa**
1-INTNS-want-AI 3-MOD-NEG-again-rain.AI-CONJ-OBV-**PROX**
intended: "I want it to stop raining."

In (30), we see that *–wa* is obligatory on the matrix clause, but in (31) we see that it is ungrammatical on the subordinate clause.

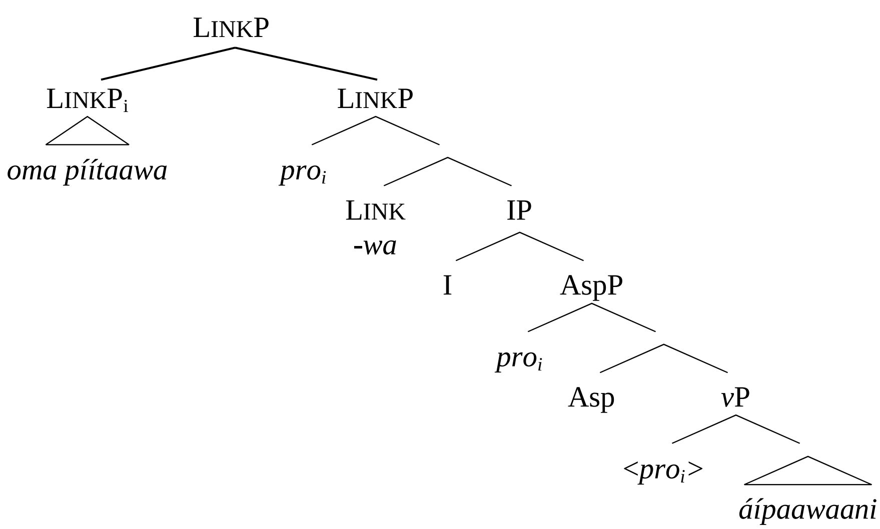
As for proximate nominal expressions, I propose that they too cannot be syntactically dependent. In other words, although they can be interpreted as arguments, they do not have the syntactic distribution of arguments; they do not appear in argument positions. To formalize this insight, I suggest that they are subject to an anti-A-position condition that is part of the lexical entry for *-wa*, as stated in (32).

(32) **<u>Anti-A-Position Condition</u>**
-*wa* cannot head an XP in an A-Position.

Whether the condition in (32) can be derived from other primitives in the grammar is yet unclear. Although it is a “brute force” stipulation, the anti-A-position condition on –*wa* nevertheless ensures that phrases headed by –*wa* are syntactically independent. The consequence of this for proximate argument expressions is that, although interpreted as arguments, they do not function as syntactic arguments and they do not appear in argument positions inside the clause. Rather, I propose that they are adjoined outside the clause, and bind a null *pro* inside the clause.

In essence, this is the same implementation as Baker’s (1991, 1996) Pronominal Argument Hypothesis (PAH): the argument position with which a proximate argument expression is associated is occupied by a null *pro*. However, as discussed in 3.2.1.1, when LINKP is interpreted predicatively, it licenses a null *pro* in its Specifier. Under my proposal, the *pro* introduced in LINKP binds a null *pro* in argument position, as shown below.

(33)



“The eagle is flying”

In (33), the nominal expression *oma píítaawa* “that eagle” is sister to the verbal expression *áípaawaaniwa*, and it binds a null *pro* in Spec, LINKP. This *pro* binds a *pro* in argument position, i.e., that maps onto Spec,*v*P and moves to Spec, AspP. (See Chapter 2 for a discussion of these argument positions.

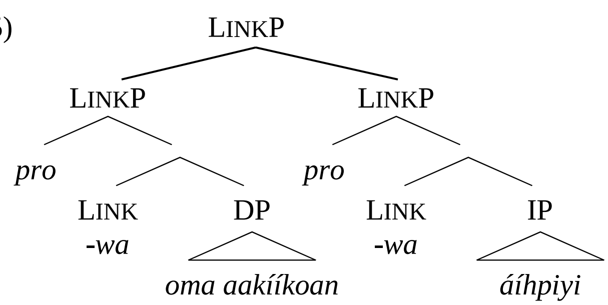
In a nutshell, I assume that the subject is introduced in Spec, *v*P and the Point-of-View (PoV) holder occupies Spec, AspP; if the subject is the PoV holder, then it moves to Spec, AspP.)

The proposal that –*wa* can optionally license a null *pro* Specifier captures the empirical observation that proximate nominal expressions are ambiguous. They can be interpreted as arguments (as in (33)) or they can be interpreted as predicates, as shown below.

(34)	*Om**a***	*aakííkoan**a***	*áíhpiyi**wa**.*
	om-**wa**	aakii-koan-**wa**	a-ihpiyi-**wa**
	DEM-**PROX**	woman-DIM-**PROX**	IMPF-dance.AI-**PROX**
	"She is a girl (and) she is dancing."		

In (34), a proximate nominal expression *oma aakiikoana* "that girl" combines with a proximate clause *áíhpiyiwa*. Indeed this can yield a subject-predicate structure (i.e., "That girl is dancing"). However, it can be equally interpreted as in (34), as a conjunction of two clauses, both of which license a null *pro*, as in (35).

(35)



Moreover, because LINKPS are ambiguous and can be formed from either nominal or verbal stems, either two proximate nouns or two proximate verbs can combine with each other, as shown below.

(36)	*Om**a***	*ninaá**wa***	*imitaá**wa!***
	om-**wa**	ninaa-**wa**	imitaa-**wa**
	DEM-**PROX**	man-**PROX**	dog-**PROX**
	"That man is a dog!" (OR "That dog is a man.")		

(37)	*Ann**a**hk*	*níssi'**sa***	*ístohkanainaa**wa***	*ítsskinaa'yiks.*
	ann-**wa**-hk	n-iss-i's-**wa**	isstohkana-ninaa-wa	iitsskina'yiiksi
	DEM-**PROX**-INVIS	1-young-brother-**PROX**	most-man-**PROX**	Horns.Society

“My younger brother is head of the Horn Society.”
(OR “The head of the Horn Society is my brother.”)

(38)	*Om**a***	*áíkskimaa**wa***	*áyo'kaa**wa**.*
	om-**wa**	a-ikskimaa-**wa**	a-yo'kaa-**wa**
	DEM-**PROX**	IMPF-hunt.AI-**PROX**	IMPF-sleep-**PROX**

“That hunter is sleeping.” (OR “That sleeping one is hunting.”)

In (36), there are two nouns in a predicative relationship, and in (37), two nouns are in equative relationship.[43] In both cases, the nouns are both marked with *–wa*. In (38) there are two proximate verbs. All three sentences are ambiguous as to to which proximate expression is interpreted as the argument and which one is interpreted as the predicate.

In fact, clauses with two proximate expressions are many ways ambiguous with respect to what is interpreted as the predicate and what is interpreted as the argument. This is shown in (39) and (40).

(39)	*Om**a***	*aakíí koan**a***	*áókska'si**wa**.*
	om-**wa**	aakii-koan-**wa**	a-okska'si-**wa**
	DEM-**PROX**	woman-DIM-**PROX**	IMPF-run-**PROX**

“That girl is running.”
… OR “That girl is a runner.”
… OR “That runner is a girl.”
… OR “She is a girl (and) she is running.”
… OR “She is a girl (and) she is a runner.”

(40)	*Om**a***	*aakííkoan**a***	*áókska'si**wa***	*mááno'too**wa**.*
	om-**wa**	aakii-koan-**wa**	a-okska'si-**wa**	maan-o'too-**wa**
	DEM-**PROX**	woman-DIM-**PROX**	IMPF-run.AI-**PROX**	recent-arrive.AI-**PROX**

“The girl who is running just arrived.”
OR “The girl who is a runner just arrived.”

The sentence in (39) has both a proximate noun (modified by a demonstrative) and a proximate verb. One interpretation of this sentence has the noun interpreted as the argument, and the verb interpreted as the predicate (“That girl is running / is a runner”). However, a number of alternative interpretations are

[43] There is seemingly no empirical difference between predicative and equative sentences; under the right discourse conditions, (36) could be interpreted as equative (“That man is the dog”) and (37) could be interpreted as predicative. Whether the predicatives versus equative interpretations correspond to predicative versus equative structures is yet to be explored.

available. For example, the sentence can be interpreted in the opposite way, with the verb as the argument and the noun as the predicate ("That runner is a girl.") Additionally, both the noun and the verb could be interpreted predicatively, with translations along the lines of "She is a girl (and) she is running" or "She is a girl (and) she is a runner." Finally, both the noun and verb could be interpreted as arguments, as shown in (40).[44]

In short, whether *–wa* combines with a nominal or verbal spine, it can yield either predicate or argument interpretations. Regardless of their interpretation, however, LINKPs do not appear in argument positions; they are adjoined outside the clause. As adjuncts, they are predicted to be optional and able to adjoin to the right or the left of the clause.[45] This prediction is borne out, as shown below.

(41) a. *Nítsspommoawa* *anna* *nínsstsinaana.*
nit-sspommo-a -wa ann-wa n-insst-innaan-wa
1-help.TA-DIR-PROX DEM-PROX 1-sister-1PL-PROX
"I helped our sister."

b. *Anna* *nínsstsinaana* *nítsspommoawa.*
ann-wa n-insst-innaan-wa nit-sspommo-a -wa
DEM-PROX 1-sister-1PL-PROX 1-help.TA-DIR-PROX
"I helped our sister."

c. *Nítsspommoawa.*
nit-sspommo-a -wa
1-help.TA-DIR-PROX
"I helped her."

In (41a), the proximate argument expression *anna nínsstsinaana* "our sister" appears postverbally, and in (41b) it appears preverbally. In (41c), the argument expression is null. The flexibility and optionality of proximate expressions is predicted by the adjunction analysis.[46]

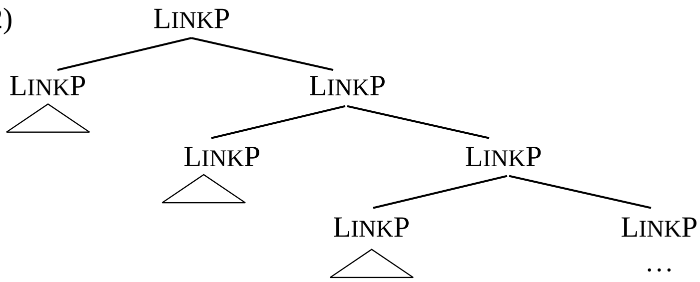
[44] Regarding eliciting these interpretations in fieldwork contexts, it is not the case that my consultants supply all of the different interpretations for a given Blackfoot sentence, but rather that each of the English translations can be rendered with the same Blackfoot sentence.

[45] The idea that there is both right- and left-adjunction is contra Kayne (1994), who claims that, universally, adjunction is strictly on the left. However, it is consistent with Baker's (1996, 2006) claim that (many) polysynthetic languages permit both right- and left- adjunction.

[46] Obviative and plural expressions do not show the same flexibility as proximate ones. Unlike proximate expressions, when obviative and plural argument expressions are preverbal or null, they are obligatorily indexed by an enclitic on the verb. This is discussed in detail in Chapter 7.

Furthermore, the adjunction analysis predicts that, if proximate expressions are adjuncts, they should be able to iterate, as schematized below.[47]

(42)



This prediction is borne out, as shown in (43) and (44).

(43)					
	*Ann**a***	*imitaa**wa***	*kakokihka'si**wa***	*áísikstaki**wa***	*áóhki**wa**.*
	ann-**wa**	imitaa-**wa**	kak-okihka'si-**wa**	a-sikstaki-**wa**	a-ohki-**wa**
	DEM-**PROX**	dog-**PROX**	only- INTNS-misbehave.AI-**PROX**	IMPF-bite.AI-**PROX**	IMPF-bark.AI-**PROX**

"That dog acts badly (and) he bites (and) he barks."

(44)					
	*Ann**a***	*Rosie*	*iissápihkitaa**wa***	*í'ksisako*	*iihpihkítaa**wa** …*
	ann-**wa**	R	ii-ssap-ihkitaa-**wa**	i'ksisako	ii-ohp-ihkitaa-**wa**
	DEM-**PROX**	R	IC-inside-cook.AI-**PROX**	meat	IC-ACCOMP-cook.AI-**PROX**

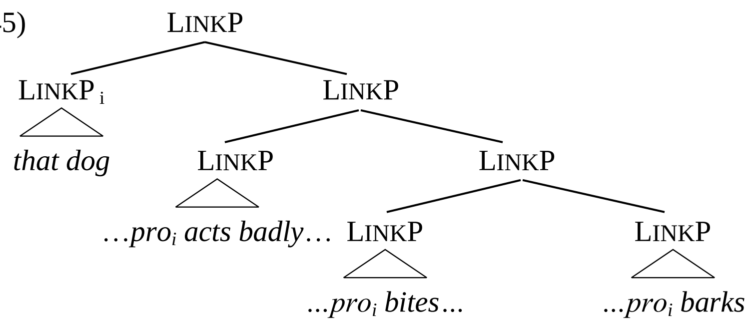
… *niistsikápa'si*	*ki*	*pisátsiinikim*
niiststsika'a'si	ki	pisatsiinikimm
carrot	and	onion

"Rosie roasted meat with carrots and onions."
Lit: "Rosie cooked meat inside and she cooked it with carrots and onions."

(43) and (44) are each judged as single sentences. In (43), a series of proximate expressions are in a single clause and all refer to the same individual. In (44) the first verb *iissápihkitaawa* "roasted" has an unindexed object *í'ksisako* "meat," and the second verb *iihpihkítaawa* "cooked with" has an oblique argument *niistsikápa'si ki pisátsiinikim* "carrots and onions," introduced by the adposition *ohp-*. Under the analysis developed here, each proximate expression in these two clauses is a LINKP adjunct that binds a null *pro* in the LINKP following it, as shown in (45).

[47] In fact, the adjunction analysis predicts that there could be many other tree structures as well. The implications of this are yet to be explored.

(45)



3.2.3. Summary

In summary, in this section, I have argued that proximate nominal expressions are LINKPs that adjoin outside the clause. They may be interpreted as predicates or arguments, but in either case they are subject to an anti-A-position condition on *–wa*, ensuring that they do not appear in argument positions. As adjuncts, they can be omitted, can be freely ordered with respect to one another, and can iterate. This contrasts with obviative argument expressions, which I demonstrate in the following section are neither neutral with respect to the nominal/verbal distinction, nor adjoined outside the clause.

3.3. The Syntax of Obviative Singular Nominal Expressions

In this section, I discuss the syntax of obviative singular nominal expressions. I argue that they are headed by the obviative suffix *–yi*, which maps onto a functional head K. In terms of its syntactic function, I propose that obviative *–yi* links the argument expression to the clause. More specifically, I develop an analysis of *–yi* as a generalized case marker; it is required on all argument expressions inside the clause, but it does not co-vary with grammatical function. Under this analysis, obviative nominal expressions are KPs that map onto argument positions inside the clause. This section proceeds as follows: In §3.3.1, I argue for the categorial status of obviative nominal expressions as KPs, and in §3.3.2, I develop an analysis of obviative *–yi* as a case marker.

3.3.1. Obviative Singular Nominal Expressions are KPs

In §3.2, I argued that the proximate suffix *–wa* maps onto the highest functional head in the spine. Here I propose that the same is true of the obviative suffix *–yi*. The two suffixes, *-wa* and *–yi*, are in complementary distribution, both occurring at the right edge of a nominal expression. Examples are given below.

(46) a. *si'káána*
si'kaan-wa
blanket-PROX

b. *si'kááni*
si'kaan-yi
blanket-OBV

b. **si'káán-wa-yi*

c. **si'káán-yi-wa*

Given the complementarity of *–wa* and *–yi*, I assume that *–yi* occupies the same syntactic position as *–wa*. However, I propose that the two differ with respect to their categorial identity; whereas *–wa* maps onto the head LINK, *-yi* maps onto K. This proposal is based on the observation that, whereas *–wa* is neutral with respect to whether it can head a nominal or verbal structure, *-yi* is restricted to nominal contexts only. Evidence for this comes from the observation that *–yi* cannot appear on clauses; it is restricted to argument expressions. Examples are given below.

(47) a.

Anni	*otakkáá**yi***	*otohkókináyi*	*omistsi*	*pisátssaisskists.*
ann-yi	w-itakkaa-**yi**	ot-ohkot-ok-yini-ayi	om-istsi	pisatssaisski-istsi
DEM-OBV	3-friend-**OBV**	3-give.TA-INV-OBV-3SG.PRN	DEM-PL	flower-PL

"Her friend gave her those flowers."

b.

**Anni*	*otakkáá**yi**.*
ann-yi	w-itakkaa-**yi**
DEM-OBV	3-friend-**OBV**

intended: "That is her friend."

c.

Anni	*otakkáá**yin**áyi.*
ann-yi	w-itakkaa-**yini**-ayi
DEM-OBV	3-friend-**OBV**-3SG.PRN

"That is her friend."

(48) a. *Annahk Beth ikáísstsi'imii annisk otáíssksinima'tsok**i**.*
annahk B ik-a-istsimm-yii-wa annisk ot-a-issksinima'tsi-ok-**yi**
DEM B INTNS-IMPF-admire.TA-3:4-PROX DEM 3-IMPF-teach.TA-INV-**OBV**
"Beth admires her teacher." (lit: the one who teaches her)

b. **Annisk otaissksinima'tsok**i**.*
annisk ot-a-issksinima'tsi-ok-**yi**
DEM 3-IMPF-teach.TA-INV-**OBV**
Intended: "S/he teaches him/her."

c. *Annisk otaissksinima'tsok**a**.*
annisk ot-a-issksinima'tsi-ok-**wa**
DEM 3-IMPF-teach.TA-INV-**PROX**
"S/he teaches him/her."

d. *Annisk otaissksinima'tsok**in**áyi.*
annisk ot-a-issksinima'tsi-ok-**yini**-ayi
DEM 3-IMPF-teach.TA-INV-**OBV**-3SG.PRN
"S/he teaches him/her (obv)"

In (47a), the obviative noun *otakkááyi* functions as an argument (the subject), and in (47b) it functions as a clause and this is ungrammatical. For the noun to function predicatively, it must be marked with the obviative suffix from the verbal paradigm, -*yini*, as in (47c). Similarly, in (48a), the inflected verb form *otáíssksinima'tsok* "s/he teaches him/her" is marked with the obviative suffix –*yi*, and as such, it can function as an argument (the object). However, this form cannot function as a clause, as shown in (48b). A predicative reading is available only if the inflected verb is suffixed with the –*wa* (if the object is proximate, as in (48c)) or –*yini* (if the object is obviative, as in (48d)).

In short, obviative expressions marked with –*yi* are necessarily argument expressions; they cannot be interpreted as predicates. This distinguishes –*yi* from its proximate counterpart –*wa*. In other words, whereas –*wa* is neutral with respect to whether it can head nominal or verbal structures, -*yi* is inherently nominal. As such, I propose that it maps onto the functional head K.

3.3.2. Obviative Singular –*yi* is a Generalized Case Marker

What is the syntactic function of K? As discussed in Chapter 1, I assume that the core function of K is to link an argument expression to the superordinate structure, i.e., the clause. Moreover, I assume that, in at least some languages, K is associated with case morphology. Thus, I claim that obviative *–yi* is a case marker.[48]

In more familiar case systems (e.g., the nominative/accusative systems of Indo-European languages), case (K) features co-vary with grammatical function: nominative case is assigned to the subject, and accusative case to the direct object.[49] This can be observed in the pronominal system of English, as shown below.

(49) a. **She** walked the dog.

b. The dog walked **her**.

Not all case systems are organized in this way. Argument expressions in ergative/absolutive case systems also co-vary with grammatical functions, but along different lines: the subject of an intransitive clause and the object are marked with one case (absolutive), and the subject of a transitive clause with another (ergative). This is illustrated with data from Dyirbal below.

(50) a. *ŋuma banaga-n^{y}u.*
father.**ABS** return-NONFUT
"Father returned."

b. *yabu ŋuma-**ŋgu** bura-n.*
mother.**ABS** father-**ERG** see-NONFUT
"Mother saw father." (Dixon 1994: 10)

There are various formalizations of nominative/accusative and ergative/absolutive case systems in the literature. For instance, case alternations have been be formalized with appeal to Agree relations with case-assigning heads (e.g., finite T assigns nominative, *v* assigns accusative, e.g., Chomsky 1995) or with appeal to spell-out operations that are sensitive to the dependency of one case on another (e.g.,

[48] This analysis is contra Ritter and Rosen (2005), who claim that Algonquian languages lack case altogether. See also Bruening (2009) for arguments against Ritter and Rosen's analysis.

[49] This characterization simplifies the facts somewhat. For example, ECM subjects in English are not nominative but accusative case-marked (Chomsky 1981) and quirky subjects in Icelandic are not nominative but dative case-marked (Maling 1990).

accusative/ergative case is a dependent case, spelled out in the presence of a nominative/absolutive, e.g., Marantz 1991, McFadden 2004). Setting aside the question of which model best captures these types of case alternations, the empirical observation is that Blackfoot's case system is markedly different: it does not co-vary with grammatical function. Rather, aside from at most one proximate expression adjoined to the clause, all argument expressions in a clause are marked with the K head *–yi*, regardless of their grammatical function.[50] This is summarized in Table 3.3 below.

Table 3.3. Case Systems

<table>
<tr><th>Grammatical function</th><th>English</th><th>Dyirbal</th><th>Blackfoot</th></tr>
<tr><td>Subject - transitive</td><td rowspan="2">Nominative</td><td>Ergative</td><td rowspan="3">Obviative</td></tr>
<tr><td>Subject - intransitive</td><td rowspan="2">Absolutive</td></tr>
<tr><td>Object - transitive</td><td>Accusative</td></tr>
</table>

In what sense is obviative *-yi* a case marker? I propose that *–yi* simply signals that an argument expression is linked to the clause. Just as nominative case, for example, links an argument expression to the clause by signalling that it is in the subject position, obviative *–yi* links an argument expression to the clause by signalling that it is in an argument position. As such, it can be thought of as a generalized case marker, not specified for any particular case position, but marking argument expressions as linked to the clause.

Just as case is thought to be required on argument expressions in languages with case alternations (e.g., the Case Filter, Chomsky 1981), I propose that case is also required on argument expressions in Blackfoot. I formalize this via the following condition:

(51) **Linking Condition on Argument Expressions**
An argument expression can appear in an argument position inside the clause *iff* it is a KP.

The insight that (51) is intended to capture is that, if the function of K is to link argument expressions to the clause, then an argument expression cannot be linked unless it is a KP. The empirical consequence of this is that, in Blackfoot, all argument expressions are KPs.

[50] This is an overgeneralization; plural argument expressions are not marked with *-yi*. However, in §3.5 below I argue that plural argument expressions are case marked, but the realization of *–yi* in the surface string is blocked by the plural suffix.

The analysis of obviative *–yi* as a K head that links the argument expression to the clause accounts for a number of generalizations about obviative nominal expressions. First, it correctly predicts that obviative nominal expressions cannot function independently as clauses; examples illustrating this were given in (47) and (48) above, and an additional example is given below.

(52)	a.	*Annísk*	*onssts*	*ookóówa**yi***	*iisstsitsííyináyi.*
		an-yi-hk	w-insst-yi	w-ookoowa-**yi**	ii-sstsitsii-yini-ayi
		DEM-OBV-INVIS	3-sister-OBV	3-home-**OBV**	IC-burn.II-OBV-3SG.PRN
		"His sister's home burnt down."			
	b.	**Annísk*	*onssts*	*ookóówa**yi.***	
		an-yi-hk	w-insst-yi	w-ookoowa-**yi**	
		DEM-OBV-INVIS	3-sister-OBV	3-home-**OBV**	
		intended: "That is his sister's home."			

In (52), we see that the obviative nominal expression *annísk onssts ookóówayi* "his sister's home" can function as argument (here the subject), but it cannot function independently as a clause. This is consistent with the analysis of obviative *–yi* as a K head that signals dependency.

Furthermore, if *–yi* is a case marker that appears on all arguments, then nominal expressions marked with *-yi* should not be restricted in terms of which grammatical function they associate with. This prediction is borne out; as shown in Table 3.3, obviative nominal expressions can fulfill the grammatical roles associated with both nominative and accusative (or ergative and absolutive) cases. This is shown below.

(53)	*Áísoksstayini*	***anni***	***otssitsimaani*.**
	a-sok-sstaa-yini	ann-yi	ot-issitsimaan-yi
	IMPF-well-nurse.AI-OBV	DEM-OBV	3-baby-OBV
	"Her baby is nursing well."		
(54)	*Íihpommatooma*	***omi***	***asóka'simi.***
	ii-ohpomm-atoo-m-wa	om-yi	asoka'sim-yi
	IC-buy-TI-3:INAN-PROX	DEM-OBV	dress-OBV
	"She bought that dress."		

In (53), the obviative nominative nominal expression funtions as the subject, and in (54) it functions as the indexed object. In addition, obviative nominal expressions can fulfill all other grammatical functions as well (aside from unindexed objects of morphologically intransitive verbs, which I will argue in §3.4.1 are pseudo-incorporated.) Examples are given below.

(55)	*Íihpommoyiiwa*	*anni*	*otáni*	***amoyi***	***asóka'simi.***
	ii-ohpomm-o-yii-wa	ann-yi	w-itan-yi	amo-yi	asoka'sim-yi
	IC-buy-TA-3:4-PROX	DEM-OBV	3-daughter-OBV	DEM-OBV	dress-OBV
	"She bought that dress for her daughter."				

(56)	*Anna*	*Beth*	*áákohtahtsaowaihkitaawa*	***annisk***	***Heather***.
	ann-wa	B	yaak-ohtahtsaowa-ihkitaa-wa	ann-yi-hk	H
	DEM-PROX	B	FUT-instead.of-cook.AI-PROX	DEM-OBV-INVIS	H
	"Beth will take Heather's place in cooking."				

In (55), the obviative nominal expression functions as the unindexed object of a ditransitive verb, and in (56) it functions as an oblique. In short, obviative nominal expressions are unrestricted with respect to grammatical function. This is consistent with the analysis of *–yi* as a case marker that is required on every argument expression inside the clause.

Finally, if *–yi* simply spells out the dependency relation between a clause and its arguments, then we predict that it should not be restricted to nominal arguments. Rather, under the Linking Condition in (51), regardless of whether a linguistic object in an argument position refers to an individual or a proposition, it should be a KP. This prediction is borne out. Just as nominal argument expressions are marked with the suffix *–yi*, so are clausal arguments. In particular, in addition to the conjunct suffix *–hs*, subordinate conjunct clauses require a morpheme *–yi* whose function has until now been unexplained (cf. Frantz 1991, 2009). Examples are given below.

(57)	*Anna*	*Rosie*	*íísssksinima*	*nitááksspommowa**hsi***	*anni*	*Leo.*
	ann-wa	R	ii-ssksin-i-m-wa	nit-aak-sspomm-o-a-**hs-yi**	ann-yi	L
	DEM-PROX	R	IC-know-TI-3:INAN-PROX	1-FUT-help-TA-DIR-**CONJ-OBV**	DEM-OBV	L
	"Rosie knows that I'm going to help Leo."					

(58)	*Íkssoka'piiwa*	*kitáyiitsittsimaa**hs**oaa**yi**.*
	ik-sok-a'pii-wa	kit-a-yiitsittsimaa-**hs-**oaawa-**yi**
	INTNS-good-be.AI-PROX	2-IMPF-slice.meat.AI-**CONJ-**2PL-**OBV**
	"It's good that you (pl) are thinly slicing meat."	

In (57), the subordinate clause is marked with a conjunct suffix *–hs* plus a suffix *–yi*. In (58), these two suffixes are separated by the 2nd person plural suffix *–oaawa*. As such, *-yi* occupies the same morphological position as the proximate and obviative suffixes that appear on clauses. Unlike *-yi*, proximate *–wa* is not permitted on conjunct clauses (see (31) above) and neither is the obviative agreement suffix *–yini* that appears on matrix clauses. (This is discussed in detail in Chapter 6.) However, the fact that *–yi* appears on conjunct clauses is predicted by the analysis of *–yi* as a case marker; as a complement of the matrix verb, the conjunct clause occupies an argument position.[51]

3.3.3. Summary: Proximate versus Obviative Nominal Expressions

In this section, I have discussed the syntax of obviative nominal expressions. I have claimed they are headed by the obviative suffix *–yi* which maps onto a functional head K. The obviative suffix is case marker; it functions to link the expression to the clause, and it is required on all expressions occupying argument positions. Compared with proximate *–wa*, which I argued in §3.2 marks the expression as independent, obviative *–yi* marks the expression as dependent; by linking it to the clause, it signals a dependency relation between the argument expression and the clause. A summary of the differences between proximate and obviative nominal expressions is given in Table 3.4.

Table 3.4. Proximate versus Obviative Nominal Expressions

	Proximate (-*wa*)	**Obviative (-*yi*)**
Syntactic *category*	LINKP	KP
Syntactic *function*	Marks phrase as independent	Marks phrase as dependent / linked
Syntactic *position*	Adjoined to LINKP	Argument position inside the clause

[51] The claim that clausal arguments in Blackfoot are case-marked goes against Stowell's (1981) Case Resistance Principle (CRP), which states that clausal arguments resist case. However, the lack of a clear partition between clausal and nominal arguments appears to a more general property of Blackfoot. For instance, there are no relative clauses in Blackfoot; clausal nominalizations (which may also be case-marked with *–yi*) are used instead (cf. Bliss, to appear). As such, there is ample evidence to suggest that the CRP does not hold up in Blackfoot.

3.4. The Syntax of Bare Nouns

In this section, I discuss the syntax of bare nouns.[52] Bare nouns are restricted in distribution; they cannot function as subjects or indexed objects, as shown below.

(59) a. **Issítsimaan áwaasai'niwa*.
issitsimaan a-waasai'ni-wa
baby IMPF-cry.AI-PROX
intended: "A baby was crying."

b. *Oma issítsimaana áwaasai'niwa*.
om-wa issitsimaan-wa a-waasai'ni-wa
DEM-PROX baby-PROX IMPF-cry.AI-PROX
intended: "The baby was crying."

(60) a. **Nitaahkániay si'káán*.
nit-waahkani-a-yi si'kaan
1-sew.TA-DIR-PL blanket
intended: "I sewed a blanket."

b. *Nitaahkániay amoksi si'káániks*.
nit-waahkani-a-yi amo-iksi si'kaan-iksi
1-sew.TA-DIR-PL DEM-PL blanket-PL
"I sewed those blankets."

In (59a), the bare noun *issítsimaan* is ungrammatical as the subject, and similarly in (60a), the bare noun *si'káán* is ungrammatical as the object. (59b) and (60b) demonstrate that subjects and indexed objects require number marking, as well as demonstratives (see Appendix A for a detailed survey). However, bare nouns can function as the unindexed objects of morphologically intransitive (AI) verbs, henceforth referred to as AI OBJECTS. An example is given below.

(61) *Nitsáápi áípapomm*.
nit-yaapi aipapomm
1-see.AI lightning
"I saw (a flash of) lightning."

In this section, I propose that AI objects are pseudo-incorporated, in the sense of Massam (2001). In §3.4.1, I discuss the properties of pseudo-incorporation cross-linguistically, and I establish a set of

[52] Frantz (2009: 11-12) discusses a "non-particular" suffix *–i* that appears on otherwise bare nouns. This suffix is absent from the grammars of both of my consultants.

diagnostics for pseudo-incorporation in Blackfoot. In the remaining subsections, I demonstrate that AI objects meet these diagnostics; they have the external syntax (§3.4.2), semantic characteristics (§3.4.3), and internal symtax (§3.4.4) of pseudo-incorporated nominal expressions.

3.4.1. Diagnosing Pseudo-Incorporation

Cross-linguistically, there are various constructions in which a nominal expression has a "tighter-than-normal" relation to the verb. Put another way, in many languages, there are semantically and/or syntactically impoverished nominal expressions that may satisfy the thematic requirements of a verb, but fail to function as full-fledged arguments of the predicate. For example, Hungarian (Farkas and de Swart 2003), Turkish (Bliss 2003), Mandarin (Rullmann and You 2006), and many other languages contrast bare nouns (NPs) with DP arguments; the former show a tighter connection to the verb (e.g., they may be restricted to positions adjacent to the verb) and they are typically narrow-scoping, indefinite or non-specific, and are often number-neutral.[53] Similarly, many languages (including Blackfoot)[54] exhibit noun incorporation, a phenomenon in which a noun forms a morphological and/or syntactic unit with the verb, e.g., an N-V compound. While there is considerable variation in these types of constructions, the general observation is that many languages permit close relationships between a verb and a nominal expression, and in such cases the nominal expression is typically in some way deficient, i.e., not a full DP.

Acknowledging the heterogeneity of such constructions, van Geenhoven (1998) develops a model that distinguishes what she calls SEMANTICALLY INCORPORATED nominal expressions from other types of indefinite DPs. For van Geenhoven, semantic incorporation allows a property-denoting nominal expression to function as an argument, despite being semantically incomplete. Chung and Ladusaw

[53] This is not to say that bare nouns in all languages bear these properties. For example, Paul (2009) shows that bare nouns in Malagasy are narrow-scoping but may be interpreted as either definite or indefinite and Wilhelm (2008) shows that bare nouns in Dëne Sųłiné are number-neutral but can be interpreted as either definite or indefinite.

[54] In addition to pseudo-incorporated AI objects, Blackfoot has noun incorporation at the stem-level. As discussed briefly in Chapter 2, bound morphemes denoting, e.g., body parts and other entities can combine with a verb root and a verb final to form a complex stem. For further details, see Barrie and Dunham (2008), Dunham (2009). The similarities and differences between these types of noun incorporation and pseudo-incorporation of AI objects are yet unexplored.

(2004) offer an alternative approach to understanding the semantics of this "tighter-than-usual" way of associating a nominal expression with a predicate. Whereas nominal expressions of the "usual" (e.g, full DP or KP) variety can be said to SATURATE an argument position, the impoverished (or "semantically incomplete") ones simply RESTRICT the predictate, without saturating the argument position.

Abstracting away from the specific details of how to model the mode of composition semantically, we can observe that many languages have nominal expressions that form a tight connection with the verb, and are semantically and/or syntactically impoverished in some way. Blackfoot, I propose, is one such language. In particular, whereas the various grammatical functions that permit proximate and/or obviative nominal expressions (i.e, subject, indexed object, unindexed object of a ditransitive verb, and oblique) are associated with argument positions that need to be saturated, AI objects simply restrict the predicate. Following Massam (2001), I refer to the latter as pseudo-incorporated.

Massam's (2001) insight was that, in Niuean, constituents larger than N can exhibit the properties normally associated with noun incorporation. She argues that these phrasal constituents (specifically NPs, under her analysis) do not move to case positions but are instead incorporated as complements to V. She dubs this phenomenon pseudo-incorporation to reflect the fact that these NPs show the hallmark properties of noun incorporation but do not form N-V compounds with the verb. I argue that the same is true of AI objects in Blackfoot. In what follows, I show that AI objects bear the semantic and syntactic properties of pseudo-incorporated nominal expressions. The diagnostics are given in Table 3.5 and are discussed in the subsections that follow.

Table 3.5. Diagnostics for Pseudo-incorporation

	Diagnostic	**AI Objects**
External Syntax	"tigher-than-normal" relation (*v*P-internal)	✓
Semantics	"semantically incomplete" (narrow-scoping, non-specific, number-neutral)	✓
Internal Syntax	syntactically impoverished (not DPs)	✓

3.4.2. The External Syntax of Pseudo-Incorporated Objects

The first clue that AI objects have a different relationship to the verb than other argument positions is their restricted word order. Although subjects and indexed objects can be freely ordered with respect to each other and the verb, AI objects must immediately follow the verb. Representative examples are given below.

(62)	a.	*Náyiisoyiiwa*	*anni*	*óta'si*.	
		na-yiis-o-yii-wa	ann-yi	w-ot'as-yi	
		EVID-feed-TA-3:4-PROX	DEM-OBV	3-horse-OBV	
		"He fed his horse."			(V – Object)
	b.	*Anni óta'si náyiisoyiiwa*.			(Object – V)

(63)	a.	*Náyiisakiwa*	*ponokáómitaa*.	
		na-yiis-aki-wa	ponokaomitaa	
		EVID-feed-AI-PROX	horse	
		"He fed a horse / horses."		(V – AI Object)
	b.	**Ponokáómitaa náyiisakiwa*.		(*AI Object – V)

The fact that AI objects must immediately follow the verb supports the claim that they are pseudo-incorporated and form a tight constituent with the verb. Further evidence comes from constituency tests. If the AI object is a complement to V but the subject and indexed object are external arguments, this yields the prediction that constituency tests that target the VP (or the intermediate projection of *v*, i.e., *v*′) should include the AI object, but exclude the subject and the indexed object. This prediction is borne out, as evidenced by *v*′ replacement tests.

Much like English *do so*, Blackfoot has a proform *ni'tóyi* that appears to replace the *v*′. An example is given in (64).

(64)	*Nítsspiyi*	*ki*	*anna*	*Aapááni*	***ni'tóyi***.
	nit-ihpiyi	ki	ann-wa	A	**ni'to-yi**
	1-dance.AI	and	DEM-PROX	A	**same-be.II**
	"I danced and Aapaani did so too."				

In (64), *ni'tóyi* appears to play the same role as the English proform *did so*. However, it also includes within its meaning additive focus, which in English is contributed by the focus particle *too* or the adverb *also*. Given this, how can we be sure that *ni'tóyi* is indeed a proform, and not simply a focus particle or adverb? In other words, how do we know that a more literal translation of (64) isn't something like "I danced and Aapaani too." The answer is that the *ni'tóyi* necessarily replaces the verb; it cannot be used to contribute additive focus to a second predicate, as shown in (65).

(65)	a.	**Nítsspiyi*	*ki*	*anna*	*Aapááni*	*ííhpiyiwa*	***ni'tóyi***.
		nit-ihpiyi	ki	ann-wa	A	ihpiyi-wa	**ni'to-yi**
		1-dance.AI	and	DEM-PROX	A	dance.AI-PROX	**same-be**
		intended: "I danced and Aapaani (did) too."					
	b.	**Nítsspiyi*	*ki*	*anna*	*Aapááni*	*íínihkiwa*	***ni'tóyi.***
		nit-ihpiyi	ki	ann-wa	A	inihki-wa	**ni'to-yi**
		1-dance.AI	and	DEM-PROX	A	sing.AI-PROX	**same-be**
		intended: "I danced and Aapaani sang too."					

In (65) we see that *ni'tóyi* does not have the same distribution as English *too* or *also*; it cannot contribute an additive focus meaning to a second predicate. Rather, it obligatorily replaces the verb. This contrasts with the verbal prefix *nohkatt-*[55], which contributes additive focus and does not necessarily replace the verb. Examples are given in (66).

(66)	a.	*Nítsspiyi*	*ki*	*anna*	*Aapááni*	***nohkátt****sspiyiwa*.
		nit-ihpiyi	ki	ann-wa	A	**nohkatt**-ihpiyi-wa
		1-dance.AI	and	DEM-PROX	A	**also**-dance.AI-PROX
		"I danced and Aapaani also danced."				
	b.	*Nítsspiyi*	*ki*	*anna*	*Aapááni*	***nohkátt****sinihkiwa*.
		nit-ihpiyi	ki	ann-wa	A	**nohkatt**-inihki-wa
		1-dance.AI	and	DEM-PROX	A	**also**-sing.AI-PROX
		"I danced and Aapaani also sang."				

In short, *ni'tóyi* functions as proform that replaces a verbal constituent. I assume that the constituent it replaces is *v*′, because although *ni'tóyi* contains a verb final *–yi* (which maps onto *v*, see Chapter 2), it cannot host the morphology corresponding to the higher functional layers. It does not permit

[55] The verbal prefix *nohkatt-* is in fact bimorphemic, consisting of two prefixes, *nohk-* and *matt-*. See Louie (2011a, b) for details.

direct/inverse morphology (in Aspect, see Chapter 2), person prefixes (in Spec, IP, see Chapter 5), or the number suffixes (in C, see Chapter 6).

The *ni'tóyi* proform also does not replace either the subject or the indexed object, which as argued in Chapter 2, I take to be external arguments of *v*. Regarding the subject, the example in (64) demonstrates that it is not replaced by *ni'tóyi*, and a second example is given in (67) below.

(67)	*Anna*	*Aapááni*	*ííhpokihpiyimiiwa*	*annisk*	*Mai'stóó*	*ki*	*anna*	*Pitááki*	*ni'tóyi*.
	anna	A	ii-ohpok-ihpiyi-m-yii-wa	annisk	M	ki	ann-wa	P	ni'to-yi
	DEM	A	IC-ACCOMP-dance-TA-3:4-PROX	DEM	M	and	DEM-PROX	P	same-be

“Aapaani danced with Mai'stoo and Pitaaki did so too.”

In (67) the subject is not included in the constituent replaced by *ni'tóyi*. What about the indexed object? At first glance it appears that the proform replaces the entire string consisting of the verb plus its object. However, this is not the only possible analysis of these data. An alternative analysis that is amenable to the data in (67) is that the nominal expression referencing the indexed object is in fact outside the *v*P. The first analysis, that the nominal expression is inside the *v*P, is schematized in (68a) and the alternative in (68b).

(68) a. Aapaani [*v′* danced with [Mai'stoo]] and Pitaaki [*v′* __ too].

b. Aapaani [*v′* danced] [with Mai'stoo$_i$] and Pitaaki [*v′* __ too].

If (68a) is the correct analysis, then *annisk Mai'stóó* should necessarily be included in the constituent that is replaced by *ni'tóyi*. However if (68b) is correct, then the nominal expression in the second conjunct, should be able to be construed as the object. This second prediction is borne out, as shown in the sentence below.

(69)	*Anna*	*Aapááni*	*ííhpokihpiyimiiwa*	*anisk*	*Mai'stóó*	*ki*	*anni*	*Pitááki*	*ni'tóyi*.
	anna	A	ii-ohpok-ihpiyi-m-yii-wa	annisk	M	ki	ann-yi	P	ni'to-yi
	DEM	A	IC-ACCOMP-dance-TA-3:4-PROX	DEM	M	and	DEM-OBV	P	same-be

Aapaani danced with Mai'stoo and she danced with Pitaaki too.

The first conjunct of (69) is identical to that of (67) above, and the only difference in the second conjunct is that *anni Pitááki* is not proximate but obviative, as evidenced by the obviative suffix *–yi* on the demonstrative. With this change in the obviation marking, *anni Pitááki* can be construed as the object, replacing *anisk Mai'stóó* from the first conjunct.

A second example is given in (70). In this case, the sentence is ambiguous; the nominal expression that is construed as the object in the first conjunct is not replaced by *ni'tóyi*, and the one in the second conjunct can be construed as either the subject or the object. (Because the object in the first conjunct is proximate and not obviative, the obviation marking of the nominal expression in the second conjunct need not change.)

(70)	*Nitohpókihpiyimawa*	*oma*	*ninááá*	*ki*	*anna*	*Aapááni*	*ni'tóyi.*
	nit-ohpok-ihpiyi-m-a-wa	om-wa	ninaa-wa	ki	ann-wa	A	ni'to-yi
	1-ACCOMP-dance-TA-DIR-PROX	DEM-PROX	man-PROX	and	DEM-PROX	A	same-be

“I danced with that man and Aapaani danced with him too.”
OR “I danced with that man and I danced with Aapaanii too.”

In (70), *anna Aapááni* can be construed as either the subject or the object of the second *v*P. This indicates that the nominal expression that references the object in the first conjunct is outside of the constituent that is replaced by *ni'tóyi*.

To summarize what we have seen so far, *ni'tóyi* is a *v′* proform, and it does not replace the subject or indexed object, suggesting they are not part of the *v′* constituent. In contrast, when *ni'tóyi* substitutes for an AI verb, it does replace the AI object, supporting the claim that the AI object is generated lower than subject and indexed object, within the *v′*, as sister to V. An example is given below.

(71)	*Nitsóóyi*	*immisstsíhkitaan*	*ki*	*anna*	*Máí'stóó*	*ni'tóyi*.
	nit-ioyi	immisstsihkitaan	ki	ann-wa	M	ni'to-yi
	1-eat.AI	frybread	and	DEM-PROX	M	same-be

I ate frybread and Mai'stoo did so too.

The first conjunct in (71) has an AI object. A first glance suggests that the object *immisstsíhkitaan* is included in what is replaced by *ni'tóyi*. However, as we saw with objects of transitive verbs in the preceding section, this data alone does not tell us whether the object is part of the *v′* constituent or not. The two analytical options are schematized in (72).

(72) a. I [*v*P ate [NP frybread]] and Mai'stoo [*v*P __] too.

b. I [*v*P ate] [NP frybread] and Mai'stoo [*v*P ___] too.

If the object is part of the *v′* constituent (as in (72a)), we predict that it is necessarily included in what is replaced by *ni'tóyi*. However, if the object is outside the *v′* (as in (72b)), then we predict that *ni'tóyi* can replace the verb without its object, and consequently, a nominal expression in the second conjunct can be construed as either the subject or the object. The first prediction is borne out.

The first piece of evidence for this is that (71) is not ambiguous; it cannot mean something like "I ate frybread and I ate Mai'stoo too," in which *anna Mai'stóó* is construed as the object. This example, however, is problematic for two reasons. First, *anna Mai'stóó* is a proper noun with a demonstrative, and this disqualifies it from functioning as an AI object. Further, the interpretation of the sentence is pragmatically odd, and this may contribute to its unavailability. Examples without these problems are given below.

(73) **Nitsíkskimaa awááka'si ki ponoká ni'tóyi*.
nit-ikskim-aa awaaka'si ki ponoka ni'to-yi
1-hunt-AI deer and elk same-be
intended: "I hunt deer and I hunt elk too."

(74) **Nítsooyi sitókihkitaan ki pisátsskitaan ni'tóyi*.
nit-ioyi sitokihkitaan ki pisatsskitaan ni'to-yi
1-eat.AI pie and cake same-be
intended: "I ate pie and I ate cake too."

The sentences in (73) and (74) both have an bare noun AI object in the first conjunct, and another bare noun AI object in the second conjunct. Because Blackfoot does not permit bare nouns as subjects, these sentences cannot be construed in a parallel way to (71), with the nominal expression in the second conjunct referring to the subject (e.g. "…and elk hunt deer too"). Like (71), the reading in which the second nominal expression is construed as the object is also unavailable, and the sentence is therefore ungrammatical. This indicates that the AI object of the first conjunct is necessarily included in what is replaced by *ni'tóyi*; it is part of the *v′* constituent. In other words, the sentences in (73) and (74) have a structure like that in (72a) and not (72b).

In summary, the *v′* replacement facts provide evidence in favour of a pseudo-incorporation analysis of AI objects. Unlike subjects and indexed objects, which are introduced as external arguments to *v* heads, AI objects are generated as sisters to V. This situates them inside a *v′* constituent, which can be the target of replacement by the proform *ni'tóyi*.

3.4.3. Semantic Properties of Pseudo-Incorporated Objects

An integral property of incorporated or pseudo-incorporated nominal expressions is that they are necessarily narrow-scoping (cf. van Geenhoven 1998). This is also true of Blackfoot AI objects, as observed by Glougie (2001), and exemplified below.

(75)	*Ííhkaniyaapiyaawa*	*píítaa*.
	ii-ohkan-yaapi-yi-aawa	piitaa
	IC-all-see.AI-PL-3PL.PRN	eagle
	"They all saw an eagle"	
	∀ > ∃ (not ∃ > ∀)	(adapted from Glougie 2001: 7)

In (75), the AI object *píítaa* takes narrow scope with respect to the universal quantifier *ohkan-*; the wide scope reading of the AI object is not possible. In contrast, subjects and indexed objects are necessarily wide-scoping with respect to the universal quantifier. An example is given below.

(76)	*Ííhkanainoayaawa*	*oma*	*píítaawa*.
	ii-ohkana-ino-a-yi-aawa	om-wa	piitaa-wa
	IC-all-see.TA-DIR-PL-3PL.PRN	DEM-PROX	eagle-PROX
	"They all saw that eagle."		
	∃ > ∀ (not ∀ > ∃)		(adapted from Glougie 2001: 6)

In (76), the indexed object *oma píítaawa* takes obligatory wide scope with respect to the universal quantifier. This contrasts with AI objects, which are obligatorily narrow-scoping. In addition to scoping under the universal quantifier, AI objects also scope under desiderative predicates and negation, as demonstrated in the examples below.

(77)	*Nitsíkssta*	*ninááhksoyissi*	*pistátsskitaan.*
	nit-iksstaa	n-aahk-ioyi-hs-yi	pisatsskitaan
	1-want.AI	1-MOD-eat.AI-CONJ-OBV	pastry
	"I want to eat a pastry."		
	want > ∃ (not ∃ > *want*)		

(78)	*Nimáátsooyo'sihpa*	*akóópi.*
	nit-maat-ooyo'si-hpa	akoopis
	1-NEG-cook.AI-NONAFF	soup
	"I didn't cook any soup."	
	NEG > ∃ (not ∃ > NEG)	

(77) is infelicitious in a context in which the AI object scopes over "want," e.g., if the speaker has in mind a particular pastry s/he wants to eat. Similarly, (78) is infelicitous (and in fact false) in a context in which the AI object scopes over negation, e.g., if the speaker cooked any soup. The fact that AI objects cannot scope out of the VP is consistent with the observation made in the preceding section that AI objects form a constituent with V.

In addition to having narrow scope, (pseudo-)incorporated nominal expressions across languages are observed to be semantically impoverished in some sense (or "semantically incomplete," in Chung and Ladusaw's terms). Abstracting away from cross-linguistic variation, indefiniteness and number-neutrality are two properties that have been commonly associated with pseudo-incorporation (e.g., van Geenhoven 1998; Massam 2001; Farkas and de Swart 2003). In what follows, I demonstrate that Blackfoot AI objects have both of these properties.

Regarding the lack of definiteness and/or specificity, AI objects in Blackfoot are interpreted as non-specific and indefinite. Enç (1991) describes specificity by invoking a COVERT PARTITIVE reading[56]; specific NPs refer to individuals included in the set of previously mentioned discourse referents, and non-

[56](Non-)specificity is also often correlated with scope; specific NPs are wide-scoping, and non-specific NPs are narrow-scoping. Moreover, the covert partitive diagnostic for specificity has been called into question (cf., Abbott 1995). I don't take a stand on how precisely to characterize (non-)specificity, but rather point to the fact that Blackfoot's AI objects pattern as non-specific both with respect to their scopal properties and the absence of the covert partitive reading.

specific NPs do not. As shown in (79) below, AI objects do not invoke a covert partitive reading, and as such can be understood to be non-specific.

(79) a.

?*Omi*	*níítahtaani*	*nitsítsaapi*	*pi'kssííks*	*ki*	*nitsítsaapi*	*mamiá'tsikimi.*
om-yi	niitahtaan-yi	nit-it-yaapi	pi'kssi-iksi	ki	nit-it-yaapi	mamia'tsikimi
DEM-INAN	river-INAN	1-LOC-see.AI	bird-PL	and	1-LOC-see.AI	magpie

intended: "At the river I saw some birds and I saw a magpie there."

b.

Omi	*níítahtaani*	*nitsítsaapi*	*pi'kssííks*	*ki …*
om-yi	niitahtaan-yi	nit-it-yaapi	pi'kssi-iksi	ki
DEM-INAN	river-INAN	1-LOC-see.AI	bird-PL	and

… *nitsitsíínoawa*	*annahkayi*	*mamiá'tsikimiwa.*
nit-it-iino-a-wa	ann-wa-hk-ayi	mamia'tsikimi-wa
1-LOC-see.TA-PROX	DEM-PROX-INVIS-*ayi*	magpie-PROX

"At the river I saw some birds and I saw this one certain magpie there."

In (79a), a group of birds are introduced into the discourse in the first conjunct, and it is infelicitous to use an AI object in the second conjunct to refer to a subset of these birds (i.e., one particular bird, a magpie.). (This sentence is marginally acceptable under a reading in which magpies are singled out, treated as not being a type of bird.) To refer to a magpie that is within the set of birds introduced in the first conjunct, a transitive verb can be used to introduce an indexed object with a demonstrative, as in (79b). In other words, the covert partitive reading is unavailable with the AI object; it is non-specific.

Furthermore, Blackfoot AI objects behave as indefinites in that they can introduce new discourse referents, but they cannot refer to previously mentioned ones.[57] This is demonstrated below.

(80)

Nitsáápi	*aapí'si.*
nit-yaapi	aapi'si.
1-see.AI	coyote

"I saw a coyote"

… *Iksskai'piksiniwa.*
Ik-sska'-ipiksini-wa
INTNS-extremely-be.skinny.AI-PROX
"…He was really skinny."

[57] By some accounts (e.g., Farkas and de Swart 2003), incorporation cannot introduce new discourse referents. However, others have argued that incorporation structures do permit this (cf., Chung and Ladusaw 2004: 118-126, and references therein.)

(81) *Isstsiiyit!* *Omiksi* *aapí'siks* *áwaatoyaawa*.
yisstsiiyi-t om-iksi aapi'si-iksi a-yaato-yi-aawa
listen.AI-IMP DEM-PL coyote-PL IMPF-howl-PL-3PL.PRN
"Listen! Those coyotes are howling."

… #*Nitáyoohto* *aapí'si.*
nit-a-yoohto aapi'si
1-IMPF-hear.AI coyote
… "I see a coyote / coyotes."

In (80), the AI object *aapí'si* in the first clause introduces a new discourse referent that is referenced in the second clause. In (81), on the other hand, a discourse referent (*omiksi aapí'siksi* "those coyotes") is introduced in the first clause as the subject, and the AI object in the second clause cannot be used to refer to it. In short, AI objects cannot refer to previously mentioned discourse referents, either partitively or in whole. They are non-specific and indefinite.

Regarding number-neutrality, bare noun AI objects in Blackfoot are number-neutral, as shown below.

(82) *Nitayááksooyo'si* *maatááki*.
nit-yaak-ioyo'si maataaki
1-FUT-cook.AI potato
"I am going to cook a potato / some potatoes."

In summary, unlike proximate and obviative nominal expressions, bare noun AI objects show semantic properties associated with pseudo-incorporation; this is shown in Table 3.6.

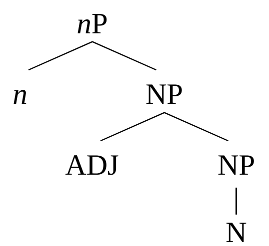
Table 3.6. Semantic Properties of Pseudo-Incorporation

	Bare Noun AI Objects
Narrow-scoping	✓
Non-specific	✓
Indefinite	✓
Number-neutral	✓

3.4.4. The Internal Syntax of Pseudo-Incorporated Objects

Massam's (2001) dubbing of the term pseudo-incorporation gave us a way of acknowledging that phrasal constituents can behave as though they are incorporated. Once we've opened the door to allow incorporation of phrases, the question becomes: how big can the incorporated phrase be? In this section, I demonstrate that bare noun AI objects are *n*Ps, and have the structure in (88) below. (In §3.5.2, I demonstrate that bare plurals can also be pseudo-incorporated, and I propose that they are ϕPs.)[58]

(83)



Chung and Ladusaw (2004) show that incorporated NPs in Chamorro can contain compound nouns, adjectival modifiers, relative clauses, PP-like complements, and coordinate structures. In a similar vein, Barrie and Mathieu (2012) show that incorporated nouns can have various modifiers in languages such as Oneida and Ojibwe, including adjectives and number/gender morphology. Furthermore, Dayal (2011) argues that incorporated nouns in Hindi are not simply nouns but NumPs. In short, across languages, there is good evidence to suggest that pseudo-incorporation is somewhat permissive in the amount of functional structure it allows. (This is not to say there is no upper limit to the amount of functional structure permitted with pseud-incorporation. I argue below that DPs cannot be pseudo-incorporated.)

Similarly, in Blackfoot AI objects are not restricted exclusively to bare nouns. In §3.5, I discuss bare plurals that function as AI objects. Here, I focus on the observation that bare nouns can be modified by adjectival prefixes, as illustrated below.

(84)	*Nitsitóhtohkoonimaahpinnaan*	***pokómitaa***	*na*	*Leo*	*oomi*	*okóówayi*.
	nit-it-oht-ohkoonimaa-hpinnaan	**pok-omitaa**	ann-wa	L	oom-yi	w-ookoowa-yi
	1-LOC-near?-find.AI-1PL	**little-dog**	DEM-PROX	L	DEM-INAN	3-house-INAN
	"We found a little dog near Leo's house."					

[58] With both bare nouns and bare plurals, there is no morpheme that is associated with *n*. I assume that both have a null *n*.

I propose that adjectival prefixes, such as *pok-* in (84), are modifiers that adjoin to NP. Cross-linguistically attributive adjectives can vary with respect to their syntactic position within the nominal phrase, and there are varying proposals in the literature regarding the syntax of attributive adjectives (see Cabredo Hofherr 2010 for a summary). Evidence for my claim that Blackfoot adjectives are adjoined to NP comes from their linearization with respect to the person prefixes that function as possessors on nouns.

As discussed in Chapter 2 (and in more detail in Chapter 5), there are two forms of the person prefixes (short and long). Following Bliss and Gruber (2011a,b) (see also Ritter and Rosen 2010b), I argue that the short and long form prefixes appear in different syntactic positions. Whereas the short forms are introduced in Spec, NP the long forms are introduced in Spec, *n*P. The two structures are given below.

(85)

a. "your grandmother" b. "your rabbit"

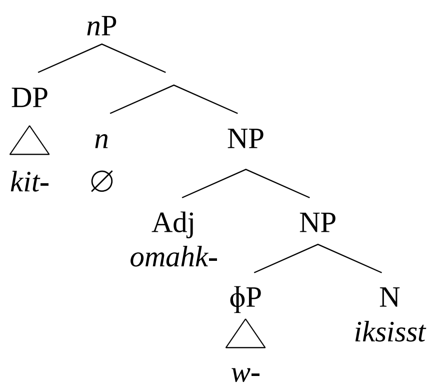
In (85a), the short form prefix *k-* (which signals inalienable possession) combines directly with the noun. In (85b), the long form prefix *kit-* (which signals alienable possession) is introduced in the Specifier of *n*, which in the case of (some) possessed nouns, is associated with a possessive suffix *–m*. Part of the argument for the two positions comes from the fact that, in certain contexts, a long form person prefix can co-occur with the 3rd person short form prefix *w-*. In such cases, it is possible for an adjective to intervene between the two prefixes, as shown below.

[59] The possessive *–m* is a suffix, linearized after the noun. To derive this order, I assume the noun (N) undergoes head movement to *n*. (See Chapter 1 for a discussion of linearization of suffixes.)

(86) *nits**iká**óksissta*
nit-**ika**-w-iksisst-wa
1-**past**-3-mother-PROX
"my former mother"

(87) *kít**omahk**onssta*
kit-**omahk**-w-insst-wa
2-**big**-3-sister-PROX
"your big sister" (pejorative connotation, i.e., obese)

In (86) and (87), an adjectival prefix intervenes between the long and short form prefixes. Under the assumption that the person prefixes have the syntax in (85), this would situate the adjective between NP and *n*P, as in (88).

(88)


In (88), the adjective adjoins to NP, which contains the short form prefix, and the long form prefix is introduced above the adjective, in Spec, *n*P. The fact that adjectives can intervene between long and short form possessive prefixes indicates that they adjoin to NP.[60]

Although cross-linguistically pseudo-incorporation permits a certain degree of functional structure, the line seems to be drawn with D(eterminers). It has been widely observed that the contribution of D in many languages is to turn a predicate into an argument (Longobardi 1994; Stowell 1989;

[60] In fact, there are also adjectives that can follow the short form prefix instead:
***níss**oko'siksi*
n-iss-o'kos-iksi
1-young-offspring-PL
"my grandchildren"
This suggests that adjectives can adjoin to either NP or N'. The differences between NP- and N'-adjunction is a topic I leave for future research.

Déchaine and Tremblay 2011) and as such DPs are not possible candidates for pseudo-incorporation, which does not involve full-fledged arguments. This generalization extends to Blackfoot's AI objects, which, as exemplified below, cannot be used with demonstratives (89), and cannot be marked as proximate or obviative (90).

(89) a. *Annáhk* *Carmelle* *ááhksikkamaapi* *ksísskstaki.*
ann-wa-hk C aahk-ikkam-yaapi-wa ksisskstaki
DEM-PROX-INVIS C MOD-if-see.AI-PROX beaver
"Carmelle might see a beaver / some beavers."

b. ***Annáhk** *Carmelle* *ááhksikkamaapi* ***omi*** *ksísskstaki.*
ann-wa-hk C aahk-ikkam-yaapi-wa **om-yi** ksisskstaki(-yi)
DEM-PROX-INVIS C MOD-if-see.AI-PROX **DEM-OBV** beaver(-OBV)
intended: "Carmelle might see a beaver / some beavers."

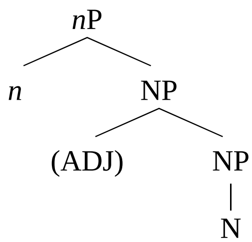
(90) a. *Nitáíkskimaa* *ponoká.*
nit-a-ikskimaa ponoka
1-IMPF-hunt.AI elk
"I am hunting elk / an elk."

b. ***Nitáíkskimaa** *ponoká**wa**.*
nit-a-ikskimaa ponoka-**wa**
1-IMPF-hunt.AI elk-**PROX**
intended: "I am hunting an/the elk (proximate)."

c. **Nitáíkskimaa* *ponoká**yi**.*
nit-a-ikskimaa ponoka-**yi**
1-IMPF-hunt.AI elk-**OBV**
intended: "I am hunting an/the elk (obviative)."

(89) demonstrates that a demonstrative cannot be used with an AI object. In Chapter 4, I propose that demonstratives are in Spec, DP. The fact that they cannot be used with AI objects suggests that AI objects are not DPs. Moreover, in (90) we see that proximate –*wa* (which I argued in §3.2 associates with LINK) and obviative –*yi* (which I argued in §3.3 associates with K) are not permitted with AI objects, suggesting that AI objects are not LINKPS or KPs. In sum, bare noun AI objects are *n*Ps, with the structure given below.

(91)



3.4.5. Summary

In sum, in this section, I have demonstrated that bare noun AI objects have the external syntax, semantic characteristics, and internal syntax of pseudo-incorporated nominal expressions. This is summarized in Table 3.5 (repeated from above).

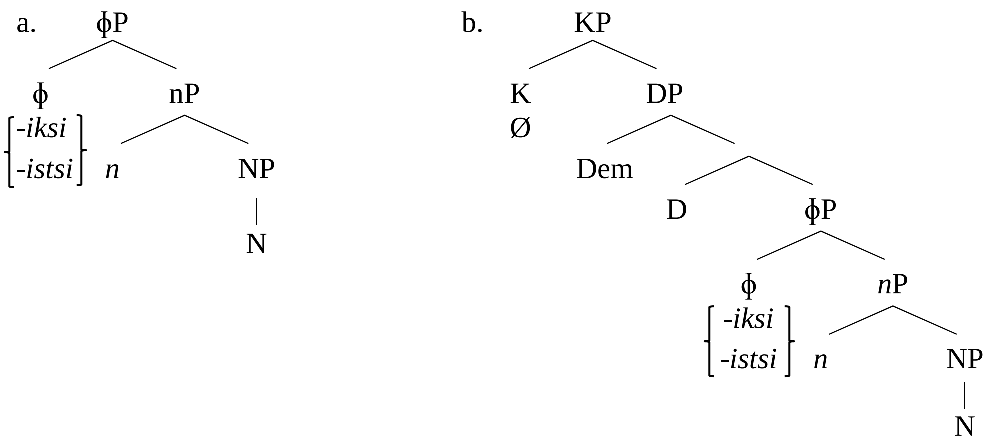
Table 3.5. Diagnostics for Pseudo-incorporation

	Diagnostic	**AI Objects**
External Syntax	"tigher-than-normal" relation (*v*P-internal)	✓
Semantics	"semantically incomplete" (narrow-scoping, non-specific, number-neutral)	✓
Internal Syntax	syntactically impoverished (not DPs)	✓

3.5. The Syntax of Plural Nominal Expressions

In this section, I discuss the syntax of plural nominal expressions. I demonstrate that plural nominal expressions partition according to whether they appear with a demonstrative or not. Without a demonstrative, plural nouns can function as AI objects, and with a demonstrative they can function as arguments (e.g., subject and indexed object). I propose that plural nominal expressions are structurally ambiguous. When they function as AI objects, they are pseudo-incorporated ϕPs, and when they function as arguments, they are KPs with a null K head. These two structures are given below.

(92)



This section proceeds as follows. In §3.5.1, I argue that plural morphology associates with the functional head ϕ. In §3.5.2, I discuss plural nouns (without a demonstrative) that function as AI objects, and I argue that, like bare noun AI objects, these are pseudo-incorporated. In §3.5.3, I discuss plural nominal expressions (with a demonstrative) that function as arguments, and I argue that, in accordance with the linking condition that requires that all argument expressions be KPs (see (51)), plural nominal expressions license a null K. I propose a spell-out rule to account for why K is null with plural nouns.

3.5.1. Plural Marking Associates with ϕ

Plurality on nouns is marked with one of two suffixes, depending on the animacy of the noun. This is shown below.

(93) *áísaayoohkomi**iks***
aisaayoohkomi-**iksi**
bull-**PL**
"bulls"

(94) *ksíístsimaan**istsi***
ksiistsimaan-**istsi**
bead-**PL**
"beads"

In (93), the grammatically animate noun *aisaayoohkomi* "bull" is marked with the plural suffix –*iksi*, and in (94), the grammatically inanimate noun *ksiistsimaan* "bead" is marked with the plural suffix –*istsi*. In this section, I argue that the plural suffixes *–iksi* and *-istsi* associate with the functional head ϕ. Evidence for this claim comes from the following considerations. First, under the assumption that the linearization of suffixes inversely correlates with their height in the tree (see Chapter 1), the fact that plural marking follows the possessive suffix *–m* suggests that plural marking is higher in the structure than *-m*. An example is given below.

(95) *kitómitaa**m**iks*
kit-imitaa-**m-**iksi
2-dog**-POSS-**PL
"your dogs"

In (95), the *–m* suffix is closer to the noun than the plural suffix *–iksi*. As discussed in §3.4.4, the possessive suffix associates with the functional head *n*, and this suggests that the plural suffix is higher than *n*.[61]

Regarding its status as a ϕ head, as discussed in Chapter 1, I adopt the widely held assumption that, in many languages, number marking acts a syntactic head in a functional layer sandwiched between DP and *n*P. This layer was originally referred to as NumP (e.g., Ritter 1995), but following Déchaine and Wiltschko (2002) and Wiltschko (to appear b) I adopt the label ϕP.

Wiltschko (2008) demonstrates that number marking is not universally associated with a ϕ head; in Halkomelem, for example, plural marking is not a syntactic head but a modifier. She develops a number of diagnostics for determining whether plural marking in a given language functions as a head or a modifier, and Blackfoot's plural marking meets the criteria for being a head. The diagnostics are given in Table 3.7, and discussion of how Blackfoot meets the diagnostics follows.

[61] Déchaine (1999) offers an alternative analysis for Algonquian nominal forms, in which plural morphology combines with NP and possessor morphology attaches higher. The surface order is derived via movement of the NP to the Specifier of the phrase hosting the possessor morphology. The two analyses differ with respect to the scope of the plural marking: under my account, plural always scopes over the possessed NP, and under Déchaine's account it scopes over N. Moreover, under the assumption that the possessor attaches to NP with inalienable possessed nouns (see the discussion around (85) above), in Déchaine's model, plural has different scope relations depending on in/alienability. It is yet unclear to me whether these different models yield empirically testable predictions.

Table 3.7. Diagnostics for Plural Marking as a Functional Head

Diagnostic	**Blackfoot plural**
Obligatory	(✗)
Triggers agreement	✓
Not inside compounds	✓
Not inside derivational morphology	✓

As shown in Table 3.7, Blackfoot's plural marking meets (most of) the criteria for being a head.

Regarding obligatoriness, Wiltschko suggests that plural marking in a given language can be considered obligatory if, in order to refer to a set of individuals with cardinality greater than one, a plural suffix must be used. Blackfoot's plural marking is indeed obligatory with quantifiers such as *waaka-* "many," *wayak-* "both" as well as with numerals, as shown below.

(96) a.

Ikáákayimii	*poos**iks**.*
ik-waakayimm-yi	poos-**iksi**
INTNS-be.many.AI-PL	cat-**PL**

"There were many cats."

b.

**Ikáákayimii*	*poos.*
ik-waakayimm-yi	poos
INTNS-be.many.AI-PL	cat

intended: "There were many cats."

(97) a.

Na	*Myaaniwa*	*ayakohkóónoyiiwa*	*om**iksi***	*póós**iks.***
ann-wa	M-wa	wayak-ohkoono-yii-wa	om-**iksi**	poos-**iksi**
DEM-PROX	M-PROX	both-find.TA-3:4-PROX	DEM-**PL**	cat-**PL**

"Mary found both of those cats."

b.

**Na*	*Myaaniwa*	*ayakohkóónoyiiwa*	*om**i***	*póós**i.***
ann-wa	M-wa	wayak-ohkoono-yii-wa	om-**yi**	poos-**yi**
DEM-PROX	M-PROX	both-find.TA-3:4-PROX	DEM-**OBV**	cat-**OBV**

intended: "Mary found both of those cats."

(98) a.

Nitohkómiihka	*níísitsim*	*mamíí**ks.***
nit-ohkott-omii-hkaa	niisitsim	mamii-**iksi**
1-ABL-fish-acquire.AI	five	fish-**PL**

"I was able to catch five fish."

b.

**Nitohkómiihka*	*níísitsim*	*mamíí.*
nit-ohkott-omii-hkaa	niisitsim	mamii
1-ABL-fish-acquire.AI	five	fish

intended: "I was able to catch five fish."

In (96) through (98), we see that plural marking cannot be omitted in nominal expressions that associate with quantifiers. In other words, plural marking is required if there is another morpheme in the sentence (e.g., a quantifier, numeral, or plural demonstrative) that entails that the referent is a plurality. However, as observed in §3.4.3 plural marking is not required with AI objects, which can receive a number-neutral interpretation. That a bare noun can be interpreted as either singular or plural suggests that plural marking is only obligatory in some syntactic environments in Blackfoot. However, given that the other three diagnostics are met, I nevertheless propose that plural marking is a head.

Turning to the next diagnostic, Blackfoot's plural marking triggers agreement, in that the number suffix on the verb reflects the plurality of a 3rd person argument. Demonstratives also (typically)[62] agree with the noun in number. An illustrative example showing both these properties is given below.

(99) *Niksi* *sááhkomaap*(**iks**)* *náótoikskimaayaawa*.
ann-iksi saahkomaapi-**iksi** na-oto-ikskimaa-yi-aawa
DEM-PL boy-**PL** EVID-go-hunt.AI-PL-3PL.PRN
"The boys went hunting."

In (99), we see that plural marking on the noun is required for a plural interpretation, and that it triggers plural marking on the demonstrative and the verb. Regarding the final two diagnostics, plural marking cannot occur inside compounds or derivational morphology, as shown below.

(100) a. *píítaiki'somm*
piitaa-ki'somm
eagle-moon
"February"

b. *píítaiki'sommiks*
piitaa-ki'somm-iksi
eagle-moon-PL
"Februaries"

c. **pííta**iksi**ki'somm(iks)*
piitaa-**iksi**-ki'somm(-iksi)
eagle-**PL**-moon(-PL)
intended: "Februaries"

[62] There are exceptional cases in which the demonstrative and the noun do not agree. These are discussed in Chapter 4.

(101) a. *aakííkoan*
aakii-koan
woman-DIM
"girl"

b. *aakííkoaiks*
aakii-koan-iksi
woman-DIM-PL
"girls"

b. **aakííkskoa(iks)*
aakii-iksi-koan(-iksi)
woman-PL-DIM(-PL)
intended: girls"

In (100), we see that the compound noun *píítaiki'somm* "February" can be pluralized by suffixing *–iksi* to the rightmost member of the compound (b), but it cannot appear inside the compound (c). Similarly in (101), the noun *aakíí* can take the diminutive suffix *–koan* (a), and the derived form can be pluralized by suffixing *–iksi* at the right edge (b), but the plural suffix cannot intervene between the noun and the diminutive suffix (c). Plural marking cannot appear inside compounds or derivational morphology.

In sum, Blackfoot's nominal plural marking functions as a syntactic head ϕ.

3.5.2 Plural Nouns can be Pseudo-Incorporated

In §3.4, I demonstrated that bare nouns can function as AI objects, and I proposed that AI objects are pseudo-incorporated. In this section, I demonstrate that plural nouns (without a demonstrative) can also function as AI objects, and I extend the pseudo-incorporation analysis to plural AI objects as well. Examples of plural AI objects are given below.

(102) *Náihkiitaawa* *napayínists.*
na-ihkitaa-wa napayin-istsi
EVID-bake.AI-PROX bread-PL
"S/he baked breads."

(103) *Anna* *Joel* *áí'pihtakiwa* *omahkóóhkotokists*.
ann-wa J wai'piht-aki-wa omahk-oohkotok-istsi
DEM-PROX J haul-AI-PROX big-rock-PL
"Joel hauled some big rocks."

In (102), the plural noun *napayínists* “breads” functions as an AI object, and in (103), the AI object *omahkóóhkotokists* “big rocks” consists of a plural noun modified by an adjectival prefix. Although both of the consultants I have worked with permit plural nouns as AI objects, Don Frantz (p.c.) reports that plural nouns do not appear as objects of AI verbs in his data set. The analysis of the plural developed in this chapter follows the generalizations from my fieldwork.[63] (See Appendix A for additional examples of bare plural AI objects.)

Recall that my motivation for analysing AI objects as pseudo-incorporated was based on the diagnostics in Table 3.5 (repeated from above).

Table 3.5. Diagnostics for Pseudo-incorporation

	Diagnostic	**AI Objects**
External Syntax	“tigher-than-normal” relation (*v*P-internal)	✓
Semantics	“semantically incomplete” (narrow-scoping, non-specific, number-neutral)	✓
Internal Syntax	syntactically impoverished (not DPs)	✓

In §3.2, I demonstrated that these diagnostics are met for bare nouns functioning as AI objects. The same is true of plural nouns functioning as AI objects. However, plural nouns diverge from bare nouns in two respects: (i) they are not number-neutral. (ii) they are ϕPs, not *n*Ps.

Regarding (i), although bare nouns are number neutral, number-neutrality is not a necessary condition for incorporation, as evidenced by the fact that number-marked nouns may be (pseudo-) incorporated in languages such as Hindi (Dayal 2011) and Ojibwe (Barrie and Mathieu 2012). Thus, the fact that Blackfoot AI objects can be pluralized does not rule out a pseudo-incorporation account. Moreover, the fact that plural (but not singular) nouns can be pseudo-incorporated in Blackfoot is consistent with an asymmetry that is commonly attested cross-linguistically, in which languages permit bare plural nouns (with obligatory narrow scope) but not bare singular nouns (cf. Carlson 1977).

[63] I have yet to analyse the Glenbow texts for instances of plural AI objects. Although I am hesitant to draw conclusions about varieties of Blackfoot I have not myself studied, I speculate that for those speakers that do not permit plural AI objects, plural marking may originate in ϕ, but obligatorily moves to a higher position (e.g., K).

Semantically, plural and number-neutral nominals pattern together apart from singular ones, in that they are both cumulative (cf. Link 1983).

Regarding (ii), the message is similar: across languages, pseudo-incorporated nominal expressions can have limited functional structure, up to but excluding D. For instance, Dayal (2011) argues that Hindi NumPs can be pseudo-incorporated. Consistent with this, I propose that Blackfoot permits pseudo-incorporated ϕPs**.** Furthermore, just as bare noun AI objects do not permit demonstratives (which I argue in Chapter 4 are in Spec, DP), plural AI objects do not permit demonstratives either, as shown below.

(104) a.

Annáhk	*Carmelle*	*ááhksikkamaapi*	*ksísskstak**iks**.*
annwa-hk	C	aahk-ikkam-yaapi-wa	ksisskstaki-**iksi**
DEM-PROX-INVIS	C	MOD-if-see.AI-PROX	beaver-**PL**

“Carmelle might see (some) beavers.”

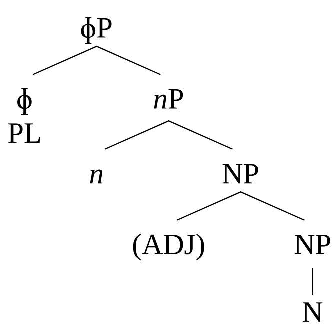
b.

*******Annáhk*	*Carmelle*	*ááhksikkamaapi*	***omiksi***	*ksísskstakiks.*
annwa-hk	C	aahk-ikkam-yaapi-wa	**om-iksi**	ksisskstaki-iksi
DEM-PROX-INVIS	C	MOD-if-see.AI-PROX	**DEM-PL**	beaver-PL

“Carmelle might see (some) beavers.”

In sum, plural nouns can function as AI objects, in which case they are pseudo-incorporated and have the structure in (105) below.

(105)



3.5.3 Plural Nominal Expressions can be Arguments

In the predecing section, I demonstrated that plural nouns can function as AI objects, in which case they have the syntactic category of ϕP. In this section, I demonstrate that plural nominal expressions can also function as arguments, i.e., subject, object, and oblique. Furthermore, I show that, in these contexts, plural nominal expressions pattern like obviative ones; they cannot function as clauses, and they host demonstratives. Based on this, I argue that plural nominal expressions functioning as arguments (subject, object, oblique) have the same syntactic category as obviative ones: they are KPs. This is summarized in Table 3.8 below.

Table 3.8. Structural Ambiguity with Plural Nouns

Grammatical function	**Category**	**Bare noun**	**Plural noun**	**Obviative noun**
AI object	(maximally) ϕP	✓	✓	✗
Subject	KP	✗	✓	✓
Object		✗	✓	✓
Oblique		✗	✓	✓

With the exception of the fact that they can also be pseudo-incorporated as AI objects, plural nouns have the same distribution as obviative ones; they can function as a subject, indexed object, unindexed object of a ditransitive verb, or oblique. Examples are given below.

(106)

Áyo'kaayi	*om**iksi***	*kiááyo**iks**.*
a-yo'kaa-yi	om-**iksi**	kiaayo-**iksi**
IMPF-sleep.AI-PL	DEM-**PL**	bear-**PL**

"Those bears are sleeping."

(107)

Nomóhto'tsi'piyi	*amo**stsi***	*pisátssaissk**istsi***	*nitsitáí'pisatssinssimaani.*
n-omoht-o'tsi-'p-yi	amo-**istsi**	pisatssaisski-**istsi**	nit-itai'pisatssinsimaan-yi
1-SOURCE-take.TI-1:INAN-3PL	DEM-**PL**	flower-**PL**	1-garden-OBV

"I took these flowers from my garden."

(108)

Ííhpmmoyiiwáyi	*anni*	*otáni*	*amo**stsi***	*ksiistsimáán**ists.***
ii-ohpomm-o-yii-wa-ayi	ann-yi	w-itan-yi	amo-**istsi**	ksiistsimaan-**istsi**
IC-buy.TA-BEN-DIR-PROX-3SG.PRN	DEM-OBV	3-daughter-OBV	DEM-**PL**	bead-**PL**

"She bought those beads for her daughter."

(109)

Itóhpotaawa	*om**istsi***	*miisták**istsi***	*matónni.*
it-ohpotaa-wa	om-**istsi**	miistak-**istsi**	matonni
LOC-snow.II-PROX	DEM-**PL**	mountain-**PL**	yesterday

"It snowed in the mountains yesterday."

In the examples above, a plural nominal expression functions as an argument: the subject (106), indexed object (107), unindexed object of a ditransitive verb (108), and oblique (109), respectively. Unlike plural nouns functioning as AI objects, these plural nouns all appear with a demonstrative. I return to to this point shortly.

As discussed in §3.2, plural *–istsi* and *-iksi* pattern with obviative *–yi* in being restricted to argument expressions. Unlike proximate expressions, plural nominal expressions cannot function as clauses, as demonstrated below.

(110) a. *Omiksi áóksa'siks ikaisstónnatokska'siyaawa*.
om-iksi a-okska'si-iksi ik-a-sstonnat-okska'si-yi-aawa
DEM-PL IMPF-run.AI-PL INTNS-extremely-run.AI-PL-3PL.PRN
"Those runners really run fast."

b. * *Omiksi áóksa'siks*.
om-iksi a-okska'si-iksi
DEM-PL IMPF-run.AI-PL
intended: "Those are runners."

In (110a), the plural nominal expression *omiksi áóksa'siks* "those runners" functions as the subject; in (110b) it functions as a clause and this is ungrammatical. In short, plural nominal expressions pattern like obviative ones: they can function as arguments but not clauses.

In §3.3, I developed an analysis of the obviative marker *–yi* as mapping onto the functional head K and I argued that it is a case marker, whose function is to link the argument expression to the clause. Moreover, I proposed the following linking condition that requires all argument expressions to be case-marked:

(111) **Linking Condition on Argument Expressions**
An argument expression can appear in an argument position inside the clause *iff* it is a KP.

Plural argument expressions appear to violate the linking condition in (111); they are not marked with the K head *–yi*. This is schematized below.

(112) [KP Ø [DP [ϕP *–iksi* [*n*P [NP]]]]]
* [KP *–yi* [DP [ϕP *–iksi* [*n*P [NP]]]]]

Why are plural argument expressions not marked with *–yi*? I propose this is due to the following post-syntactic spell-out restriction (see Chapter 1 for a discussion of spell-out restrictions):

(113) K is spelled out as *–yi iff* ϕ is Ø.

The spell-out restriction in (113) effectively blocks both plural morphology in ϕ and dependent case marking in K from appearing simultaneously. However, under this analysis, even though *–yi* is not spelled out on plural argument expressions, they are nevertheless KPs that are dependent on the clause. In other words, plural argument expressions are linked to the clause by virtue of a null K head, regardless of the fact there is no overt morpheme that maps onto K.

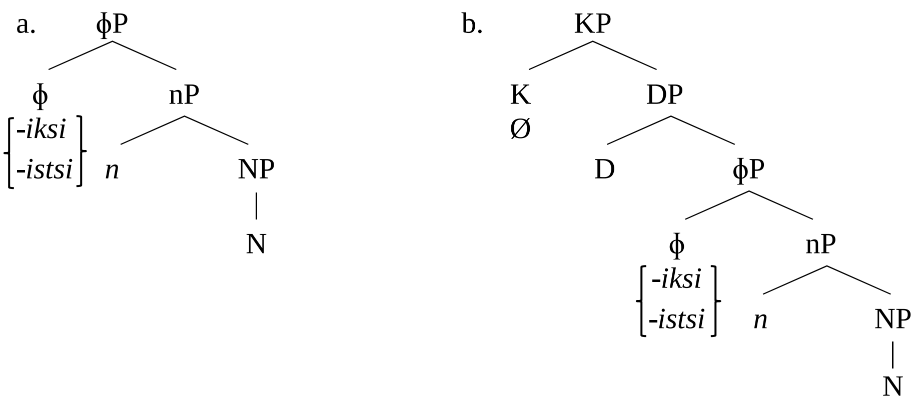
What evidence is there for a null K with plural argument expressions? Often the existence of null heads is evidenced by overt material in their Specifiers (e.g., null C in languages like English can be evidenced by a wh-phrase in Spec, CP.) In Chapter 4, I will argue that demonstratives are associated with Spec, DP and raise to Spec, KP. The fact that plural argument expressions can be used with demonstratives (but pseudo-incorporated plural nouns cannot) suggests that the former and not the latter are KPs. Examples are given below.

(114) *Nitohpómmatoo'pi* ***amostsi*** *míínists.*
nit-ohpommatoo-'p-yi amo-stsi miin-istsi
1-buy.TI-1:INAN-PL DEM-PL berry-PL
"I bought these berries."

(115) *Nitohpómma* ***(*amostsi)*** *míínists.*
nit-ohpomma miin-istsi
1-buy.AI berry-PL
"I bought some berries."

In (114), the plural noun *míínists* "those berries" functions as the indexed object and is modified by a demonstrative, and in (115) the same noun functions as an AI object, and if it is modified by a demonstrative, this is ungrammatical. Under the assumption that demonstratives appear in Spec, KP, this suggests that plural nouns have a K head when they function as arguments, but not when they function as AI objects. In other words, plural nouns are structurally ambiguous; they have a ϕP structure when they are pseudo-incorporated, and a KP structure when they function as arguments. These two structures are given below.

(116)



3.6. Conclusion

In summary, in this chapter I have discussed the internal and external syntax of four types of nominal expressions: proximate singular, obviative singular, bare, and plural. My analytical generalizations are given in Table 3.1 (repeated from above).

Table 3.1. Four Types of Nominal Expressions

	Syntactic category	**Relation to Clause**	**Syntactic Position**
Proximate Singular (-*wa*)	LINKP	Adjunct	Adjoined to LINKP
Obviative Singular (-*yi*)	KP	Argument	A-position in the clause
Bare (Ø)	*n*P	Pseudo-incorporated	VP complement
Plural *(-iksi/-istsi*)	ϕP	Pseudo-incorporated	VP complement
	KP	Argument	A-position in the clause

I proposed that proximate nominal expressions are LINKPs, syntactically independent phrases that cannot appear in argument positions, but may be adjoined to the clause and bind a null *pro* in argument position. Obviative argument expressions, on the other hand are KPs, I analysed the obviative suffix –*yi* as a generalized case marker that signals that the argument expression is linked to the clause. I argued that bare nouns are pseudo-incorporated *n*Ps, appearing as a complement to V and restricting the predicate without saturating an argument position. As for plural nouns, I argued that these are structurally ambiguous; when pseudo-incorporated, they are ϕPs and when functioning as arguments, they are KPs with a null K head.

An interesting observation that arises by virtue of this analysis is that, whereas at the level of ϕP Blackfoot nominal expressions are relatively ordinary from a typological standpoint, they are not ordinary above the level of ϕP. In other words, Blackfoot's pseudo-incorporated nominal expressions bear many similarities to pseudo-incorporated phrases cross-linguistically, but Blackfoot's KPs and LINKP are typologically more unusual. In essence, then, the primary locus of variation between Blackfoot's nominal expressions and those of other languages is in Blackfoot's proximate/obviative contrast. The proximate/obviative contrast is a key component Blackfoot's non-configurational profile. In Chapter 7, I demonstrate that proximate – but not obviative, plural, or bare - nominal expressions display non-configurational properties.

Moreover, the proximate/obviative contrast is also a source of variation between Blackfoot and other Algonquian languages. In addition to its syntactic function, the proximate/obviative distinction is associated with discourse functions such as topicality (cf. Genee 2009). I revisit this in Chapter 8, wherein I compare the discourse functions of Blackfoot's obviation system with that of other Algonquian languages.

CHAPTER 4

MAPPING DEMONSTRATIVES ONTO THE SYNTACTIC SPINE

4.1. Introduction

In many languages, determiners (which are typically analysed as associating with the functional head D, cf. Abney 1987) are required with nominal arguments, and it has been widely claimed that determiners convert NPs from predicates into arguments (e.g., Longobardi 1994; Stowell 1989). Under the analysis developed in Chapter 3, the functional head D does not play a role in Blackfoot. Rather, I have focused on the functional head K, which I argue is present on all argument expressions inside the clause.

This leaves to be explained the role of the demonstratives, which exhibit a distribution much like that of determiners in other languages. In particular, demonstratives are required with subjects and with objects of morphologically transitive verbs (i.e., INDEXED OBJECTS), as exemplified below (see also Appendix A).[64]

(1) a. ***A'sitápiks** *íîhkanaitapooyaawa* *annisk* *passkááni*.
wa's-itapi-iksi ii-ohkana-itap-oo-yi-aawa ann-yi-hk passkaan-yi
young-person-PL IC-all-toward-go.AI-PL-3PL.PRN DEM-INAN-INVIS dance-INAN
intended: "The young people all went to the dance."

b. ***Omiksi*** *a'sitápiks* *íîhkanaitapooyaawa* *annisk* *passkááni*.
om-iksi wa's-itapi-iksi ii-ohkana-itap-oo-yi-aawa ann-yi-hk passkaan-yi
DEM-PL young-person-PL IC-all-toward-go.AI-PL-3PL.PRN DEM-INAN-INVIS dance-INAN
"The young people all went to the dance."

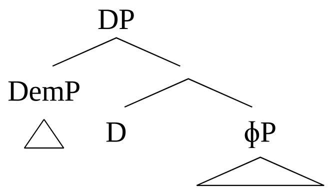
(2) . **Kikatao'tsiksiiststoo'paatsiks* *iitáí'nssimao'pi?*
kit-kata'-otsiksiiststoo-'p-wa-atsiks iitai'nssimao'p-yi
2-INTERR-water.TI-1:INAN-PROX-3PRN garden-INAN
intended: "Did you water the garden?"

b. *Kikatao'tsiksiiststoo'paatsiks* ***omi*** *iitáí'nssimao'pi?*
kit-kata'-otsiksiiststoo-'p-wa-atsiks **om-yi** iitai'nssimao'p-yi
2-INTERR-water.TI-1:INAN-PROX-3PRN **DEM-INAN** garden-INAN
"Did you water the garden?"

[64] The one exception to this generalization is that plural nouns can function as generic (non-referential) subjects. See Appendix A for examples.

The goal of this chapter is to discuss the syntax of demonstratives. I demonstrate that the demonstratives are not themselves D heads, but they nevertheless fulfill what I take to be the core syntactic function of the DP, namely anchoring the nominal expression to the utterance situation. I propose that the demonstratives map onto Spec, DP serve as ANCHORING ARGUMENTS; they are external arguments of the anchoring head in the nominal spine.

(3)



This chapter proceeds as follows. In §4.2, I demonstrate that the demonstratives are not D heads. My evidence for this is based largely on the morphosyntactic complexity of demonstratives: I discuss the morphemes that comprise demonstratives, and I give some clues to their internal syntax. Additionally, I provide phonological evidence that suggests that demonstratives form a constituent that excludes the noun, and I survey demonstratives in some other Algonquian languages, showing that they too are not D heads. In §4.3, I develop my analysis of the demonstratives as anchoring arguments in Spec, DP. The evidence is based on parallelisms with the person prefixes, which I argue in Chapter 5 function as anchoring arguments in Spec, IP. In §4.4 I conclude.

4.2. Demonstratives are not D Heads

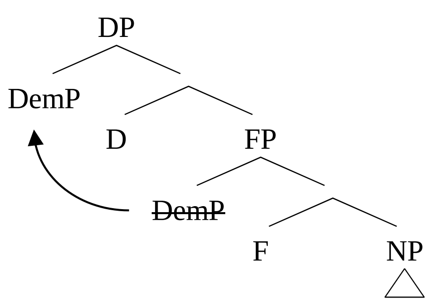
There is cross-linguistic variation in (and/or disagreement about) the syntax of demonstratives. In particular, in some languages, demonstratives behave as adnominal modifiers (appearing in adjunct or specifier positions), whereas in other languages they may behave as D heads.

In numerous languages, there is compelling evidence in favour of the adnominal modifier analysis: demonstratives and determiners (e.g., articles[65]) can co-occur (e.g., Hungarian, Javanese, Greek, Romanian amongst many others, cf. Alexiadou et al. 2007). For illustration, an example from Greek is given below.

(4) a. *aftos o andras*
this the man
"this man"

b. **aftos andras*
this man
intended: "this man" (Panagiotidis 2000: 718)

Although the specific details vary across languages and analyses, the general consensus seems to be that, in these languages, demonstratives associate with the Specifier of some functional head (F) in the nominal spine, and in many cases, there is evidence that the demonstrative can raise to a higher functional layer, which under most accounts, is taken to be DP (e.g., Giusti 1997; Bernstein 1997; Panagiotidis 2000; Rosen 2003; Roehrs 2010). This is schematized in (5) below.

(5)


In languages in which demonstratives and determiners are in complementary distribution, it is less clear whether demonstratives function as D heads or adnominal modifiers. An example from English is given below.

[65] I assume that ARTICLE defines a word class characterized by semantic properties such as, e.g., definiteness, and not a syntactic category (see Chapter 1 for a discussion of the distinction between word classes and syntactic categories.) As such, while articles may or may not be associated with the category of D across (and within) languages, in the literature discussed in this section, articles are assumed to associate with D. In lieu of evidence to the contrary, I adopt this assumption.

(6) a. *the puppy*

b. *this puppy*

c. **the this puppy*

d. **this the puppy*

Some maintain that, universally, demonstratives are adnominal modifiers, and that, in languages in which demonstratives and (overt) determiners cannot co-occur, the demonstrative licenses a null D (e.g., Campbell 1996, Leu 2008). Other researchers argue that demonstratives do not form a homogenous syntactic category cross-linguistically. On the basis of word order correlations across languages, Dryer (1992) proposes that demonstratives pattern as modifiers in some languages and as heads in other languages. Panagiotidis (2000) makes a similar claim, arguing that in languages such as Modern Greek, demonstratives are XP modifiers (see above), but in languages like English, they are D heads. This is consistent with, for example, Abney (1987), who assumed, on the basis of the complementary distribution of demonstratives and determiners, that English demonstratives are D heads.

Even in languages without articles, there is evidence to suggest that demonstratives can pattern either as adnominal modifiers or D heads. In a comparison of Chinese and Zhuang (a Tai language), Sybesma and Sio (2008) claim that demonstratives in Chinese are adnominal modifiers, but in Zhuang they are determiners. Examples of both are given below.

(7) ***zhè*** *sān* *běn* *shū*
DEM three CL book
"these three books" (Mandarin Chinese, Sybesma and Sio 2008: 463)

(8) *duz* *ma* *henj* ***haenx***
CL dog yellow **DEM**
"that yellow dog / the yellow dog" (Zhuang, Sybesma and Sio 2008: 461)

One of their main arguments for the distinction is that demonstratives are XPs in Chinese but they are heads in Zhuang. In both cases, however, the demonstrative is located within a DP; the phrasal demonstrative in Chinese is argued to be in Spec, DP.[66] In Russian, another language lacking articles, demonstratives pattern as phrasal modifiers, and, like Sybesma and Sio's (2008) analysis of Chinese demonstratives, Pereltsvaig (2007) argues the Russian demonstratives are in the Specifier of a null D.[67] An example from Russian is given below.

(9) *Ja prodala { ètot / tot} dom.*
I sold this / that house
"I sold {this/that} house." (Pereltsvaig 2007: 73)

In short, regardless of whether a language has articles or not, demonstratives may pattern as either D heads or adnominal modifiers.

Blackfoot is similar to Chinese, Zhuang, and Russian in lacking articles, and in what follows I argue that it patterns with Chinese and Russian in having phrasal demonstratives that are hosted in the Specifier of a functional head in the nominal spine. There are two pieces of evidence that suggest that Blackfoot demonstratives are not D heads: their morphological complexity, and the fact that they form a constituent to the exclusion of the noun. In addition, comparative and synchronic facts from Algonquian support the claim that Blackfoot demonstratives are not D. These are each discussed in turn in the subsections that follow.

4.2.1 Demonstratives are Morphosyntactically Complex

The morphological template for the demonstratives, along with the list of morphemes that can occupy each slot is given in Figure 4.1 below.

[66] More accurately, Sybesma and Sio (2008) claim that the demonstrative in Chinese is in Spec, XP, one of a series of functional heads comprising an articulated D layer. I abstract away from these details here.

[67] Pereltsvaig (2007) claims are contra Bošković's (2005) proposal that article-less languages like Russian do not project a DP. Pereltsvaig argues convincingly that Bošković's claim that demonstratives are adjectival cannot be maintained.; I refer the reader to Pereltsvaig's paper for elaboration.

Figure 4.1. Demonstrative template

Root	**diminutive**	**restricted**	**inflection**	**post-inflection**	**verbalizing suffix**
am *ann* *om*	*-sst*	*-o*	*-wa* *-yi* *-iksi* *-istsi*	*-ma* *-ya* *-hka* *-ka*	*-o'k(a)* *-(a)yi*
Stem			**Suffixes**		

As evidenced by the template in Figure 1, Blackfoot demonstratives can be remarkably complex. If all logically possible combinations were attested, there would be 900 unique demonstrative forms.[68] Although my corpus does not have examples of each possible form (and eliciting the different forms outside of the appropriate discourse context is difficult if not impossible), a wide and diverse enough range of demonstrative forms is found in texts and elicitation to suggest that the demonstratives have a compositional structure. My goal here is not to provide a comprehensive analysis of the internal syntax of the demonstratives, but simply to make the argument that they do indeed have an internal syntax, i.e., that they are phrases. To this end, I discuss the composition of demonstratives and give some illustrative examples. Additional details can be found in Frantz (2009, chapter 13), and Forbes (2012). The discussion follows the template in Figure 4.1 from left to right; the material comprising what I take to be the demonstrative stem is discussed in §4.2.1.1, inflection is discussed in §4.2.1.2, and the remaining suffixes ("post-inflection" and "verbalizing") are discussed in §4.2.1.3.

4.2.1.1. Demonstrative Stems

Blackfoot demonstratives consist minimally of one of three roots, which encode the relative proximity to the discourse participants. These are given in Table 4.1 below (adapted from Frantz 2009, p. 64).

[68] This number is based on the following calculation: 3 roots x 4 stem-forming possibilities (root, root+diminutive, root+restricting vowel, root+diminutive+restricting vowel) x 5 inflectional paradigms (no inflection, proximate, obviative, inanimate plural, animate plural) x 5 post-inflectional paradigms (including no post-inflection) x 3 "verbalizing" paradigms (including no verbalizing suffixes).

Table 4.1. Demonstrative Roots

Form	Meaning
am	Proximity/familiarity[69] to speaker
ann	Proximity/familiarity to addressee
om	Proximity/familiarity to neither speaker nor addressee

Although somewhat rare, it is possible for a demonstrative root to occur without any suffixes, as shown below.

(10) *Nimáátowaanihpa* *ann*.
nit-maat-waanii-hpa ann
1-NEG-say.AI-NONAFF DEM
"I am not saying that."

In (10), the demonstrative root *ann* functions as the object of a morphologically intransitive verb, i.e., an AI OBJECT. Notably, the demonstrative is not inflected with number marking, and the addition of such inflection to the demonstrative renders it ungrammatical, as shown in (11).

(11) **Nimáátowaanihpa* *anni*.
nit-maat-waanii-hpa ann-yi
1-NEG-say.AI-NONAFF DEM-INAN
intended: "I am not saying that."

The grammaticality of (10) is at first glance surprising, given that demonstratives cannot modify nouns when they function as AI objects. However, the fact that the demonstrative cannot be inflected with the obviative suffix *–yi* is consistent with the fact that nominal AI objects also cannot be inflected with *–yi*. In Chapter 3, I argued that AI objects are maximally ϕPs. The fact that demonstrative roots can function as AI objects suggests that they do not associate with a category higher than ϕP. Moreover, it predicts that demonstratives should show the same syntactic and semantic restrictions as nouns when they function as

[69] The relationship between "proximity" and "familiarity" is yet to be explored. More generally, much research is still needed regarding the contexts of use for the different demonstrative roots.

AI objects (e.g., they should be immediately postverbal, narrow-scoping, non-specific, and indefinite). It remains to be seen whether these predictions are borne out.[70]

In other grammatical functions, the demonstratives appear with the inflectional suffixes from the nominal paradigm that signal number and obviation. The inflectional suffixes are presented in Table 4.2 and examples are given below.

Table 4.2. Nominal Inflection

		Animate	**Inanimate**
Singular	**Proximate**	*-wa*	--
	Obviative	*-yi*	
Plural		*-iksi*	*-istsi*

(12) a. *Nitsíkssta kááhkoksisawaatahsi ann**a** aakííwa.*
nit-iksstaa k-aahk-oksisawaat-a-hs-yi ann-**wa** aakii-wa
1-want.AI 2-MOD-visit.TA-CONJ-OBV DEM-**PROX** woman-PROX
"I want you to visit that woman."

b. *Nitsíkssta na Leo mááhkoksisawaatahsi ann**i** aakííyi.*
nit-iksstaa ann-wa L 3-aahk-oksisawaat-a-hs-yi ann-**yi** aakii-yi
1-want.AI DEM-PROX L 3-MOD-visit.TA-CONJ-OBV DEM-**OBV** woman-OBV
"I want Leo to visit that woman."

c. *Nitsíkssta kááhkoksisawaatahsi ann**iksi** aakiiks*
nit-iksstaa k-aahk-oksisawaat-a-hs-yi ann-**iksi** aakii-iksi
1-want.AI 2-MOD-visit.TA-CONJ-OBV DEM-**PL** woman-PL
"I want you to visit those women."

(13) a. *Nitsíkssta kááhka'pistotssi ann**i** áínaka'si.*
nit-iksstaa k-aahk-a'pistotsi-hs-yi ann-**yi** ainaka'si-yi
1-want.AI 2-MOD-repair.TI-CONJ-OBV DEM-**INAN** wagon-INAN
"I want you to fix that wagon."

b. *Nitsíkssta kááhka'pistotssi ann**istsi** áínaka'sists.*
nit-iksstaa k-aahk-a'pistotsi-hs-yi ann-**istsi** ainaka'si-istsi
1-want.AI 2-MOD-repair.TI-CONJ-OBV DEM-**PL** wagon-PL
"I want you to fix those wagons."

In (12) and (13), we see that the same demonstrative root can appear with any of the four number/obviation suffixes that appear on nouns. This is true of each of the three demonstrative roots.

[70] Another logical possibility that I have yet to test is whether bare nous preceded by uninflected demonstratives can function as unindexed objects.

Intervening between the root and the number/obviation suffixes are two additional suffixes, the diminutive suffix *–sst* and the suffix *–o*, which, following Proulx (1988), I refer to as the RESTRICTED suffix. Contra Taylor (1978), Frantz (2009) analyses the *–o* suffix as part of the demonstrative root, but he acknowledges that the diminutive suffix intervenes. Proulx's rationale for treating the *–o* as a restricted suffix is that demonstratives formed with *–o* allegedly "restrict" the deictic space to locations near the speaker. I adopt Proulx's analysis, but I acknowledge that additional research on the context of use for restricted demonstratives is needed. Examples of demonstratives with diminutive and restricted suffixes are given below.

(14)	*Nítsskóhkotayini*	*ann**sst**s*	*Lucy*	*anni*	*oksíssts.*
	nit-ssk-ohkot-a-yini	ann-**sst**-yi	L	ann-yi	w-iksisst-yi
	1-back-give.TA-DIR-OBV	DEM-**DIM**-OBV	L	DEM-OBV	3-mother-OBV
	"I gave poor little Lucy back to her mother."				

(15)	*Nitóhtohkanooyi*	*am**o**ksi*	*iihtáóyo'piks.*
	nit-oht-ohkana-ooyi	am-**o**-iksi	iihtaoyo'p-iksi
	1-INSTR-all-eat.AI	DEM-**RESTR**-PL	fork-PL
	"I ate with all these forks."		

(16)	*Íksstaawa*	*omááhkaohpopaatahsi*	*am**ssto**yi*	*pookááyi.*
	ik-isstaa-wa	om-aahk-a-ohpopaat-a-hs-yi	am-**sst**-**o**-yi	pookaa-yi
	INTNS-want.AI-PROX	3-MOD-IMPF-hold.TA-DIR-CONJ-OBV	DEM-**DIM**-**RESTR**-OBV	child-OBV
	"She wants to hold that poor little child on her lap."			

In (14), the demonstrative has a diminutive suffix, in (15) it has a restricted suffix , and in (16) it has both.

4.2.1.2. Demonstrative Inflection

In this section, I discuss demonstrative inflection, which appears immediately after the demonstrative stem, as shown in Figure 4.1 (repeated from above).

Figure 4.1. Demonstrative template

Root	-	**diminutive**	-	**restricted**	-	**inflection**	-	**post-inflection**	-	**verbalizing suffix**
am						*-wa*		*-ma*		
ann		*-sst*		*-o*		*-yi*		*-ya*		*-o'k(a)*
om						*-iksi*		*-hka*		*-(a)yi*
						-istsi		*-ka*		

$\underbrace{\textbf{Root - diminutive - restricted}}_{\textbf{Stem}}$ - $\underbrace{\textbf{inflection - post-inflection - verbalizing suffix}}_{\textbf{Suffixes}}$

In the examples seen thus far there is a pattern of concordial agreement between the demonstrative and the noun; the two have identical inflection. In this section, I demonstrate that this is not always the case, and I argue that the lack of concord indicates that the inflectional suffix on the demonstrative is a syntactic head that combines with the demonstrative (just as it is on nouns), rather than a COPY, spelled out on the demonstrative post-syntactically as a reflex of concord with the noun. (See Chapter 1 for a discussion of copying). Because the inflectional suffix combines with the demonstrative stem as a syntactic head, this lends support to the larger claim that demonstratives are phrases and not D heads. These two hypotheses – that demonstratives are heads versus phrases– are schematized below. Arguments against the head hypothesis (17a) and in favour of the phrasal hypothesis (17b) follow.

(17) a. XP

X
Dem+Inflection

b. XP

X Y
Dem Inflection

First, let's consider what it would mean if the inflection on the demonstratives were strictly concordial. As discussed in Chapter 1, concordial agreement may be a reflex of copying, which involves a many-to-one relation between morphemes and syntactic positions: a morpheme has multiple spell-outs in the surface string, but occupies one position in the syntax. If the number marking on the demonstratives was always formally identical to that on the noun, then one could argue that it does not have the status of a syntactic head itself, but rather is a copy of the number suffix of the noun, spelled out on the surface form but not playing an active role in the syntax.

Wiltschko (2009) argues for a copying analysis of the Blackfoot demonstratives. Emphasizing the fact that the same form of the morpheme appears on both the noun and the demonstrative, Wiltschko proposes that the number feature of the noun is spelled out early in the derivation, allowing it to copy the number feature to the demonstrative. If this were always the case, then we could maintain hypothesis (17a), in which the demonstrative is a head that simply gets a phonological copy of the noun's number inflection.

However, if the relationship between the noun and the demonstrative is not strictly concordial, then the number inflection on the demonstrative must be viewed as its own syntactic head, as in (17b), rather than a copy. This is indeed the case. The first observation is that demonstratives formed with the restricted suffix *-o* need not be marked as proximate or obviative, but can modify either proximate or obviative (singular) nouns, as illustrated below.

(18)	*Nitsitapáápiksistaw*	***amo***	*pokón**a***	*omi*	*sááhkomaapii.*
	nit-itap-aapiksist-a-wa	**amo**	pokon-**wa**	om-yi	saahkomaapi-yi
	1-toward-throw.TA-DIR-PROX	**DEM**	ball-**PROX**	DEM-OBV	boy-OBV
	"I threw this ball towards that boy."				

(19)	*Na*	*John*	*iisstsimááhkatsiiw*	***amo***	*nínaa**y**.*
	ann-wa	John	ii-sstsimaahkat-yii-wa	**amo**	ninaa-**yi**
	DEM-PROX	John	IC-hire.TA-DIR-PROX	**DEM**	man-**OBV**
	"John hired this man."				

In (18), the demonstrative *amo* modifies the proximate noun *pokóna* "ball" and in (19), it modifies the inanimate noun *nínaay* "man." The fact that *amo* does not need to be inflected for number/obviation, but it can nevertheless modify an inflected noun suggests that when inflectional marking does appear on the demonstrative it is not strictly concordial.

Perhaps more striking are examples from texts in which the demonstrative and the noun bear different inflection.[71] The examples below are taken from texts (Glenbow 2012).

(20)

Amoksk	*omahkitapiihki*
amo-ksi-ka	omahk-itapi-hki
DEM-PL-OT	old-person-REP

ihpokaopiimiihkiaawa	*mi*	*oissowaway.*
ii-ohpok-a-opi-imm-yii-hk-yi-aawa	om-yi	w-oiss(im)-oaawa-yi
IC-ACCOMP-IMPF-live.TA-3:4-REP-PL-3PL.PRN	DEM-PL	3-sil-3PL-OBV

"An old couple lived with their son-in-law." (Katoyissa, line 1)

(21)

Annihkayi	*siikokiinistsiiksi*	*ihtaisisakksinammiawa*	*annohk.*
ann-yi-hk-ayi	siikokiinis-iksi	iht-a-isisakks-inaamm-yi-aawa	annohk
DEM-INAN-INVIS-*ayi*	birch-PL	CONT-IMPF-striped?-appear.AI-3PL-3PL.PRN	now

"The birches now appear striped." (Naapi ki Siikokiinis, Line 11)

In (20), a plural demonstrative *amoksk* is used with a noun that is not marked in the text as singular or plural, but presumably has an underlying –*wa* suffix (see the discussion regarding the cline of audibility of proximate and obviative marking in Chapter 2). In (21), the opposite is found; a singular demonstrative *annihkayi* is used with a plural noun. Interestingly, in this second text, the birch trees (*siikokiinistsiiksi*) switch from being marked as inanimate to animate and then back to inanimate during the course of the story, as a way of indicating their role as a sentient character at a particular point in the narrative. The line given in (21) shows not only a singular/plural mismatch but also an animacy mismatch; the demonstrative is inanimate and the noun is animate. Presumably, this marks a transition from the birches being treated as animate and sentient to being inanimate and non-sentient. (See also Johansson 2008, who explores animacy mismatches in Blackfoot and Plains Cree.)

Although the precise discourse effects of (and the licensing conditions for) these types of mismatches is not clear, the point that is important to note here is that there is a mismatch, and this demonstrates that the number(/obviation) marking that appears on demonstratives and nouns is not strictly

[71] I have not been able to elicit examples like these in field contexts. I assume that this is because they require a particular discourse context to be licensed.

concordial.[72] As such, this supports the view that number marking on the demonstrative is a syntactic head, rather than a copy of the number marking on the noun. In Chapter 3 I argued that, on nouns, proximate *–wa* maps onto the head LINK, obviative *–yi* maps onto K, and plural *–iksi* and *–istsi* map onto ϕ. By extension, I assume they do the same with demonstratives.

4.2.1.3. Demonstrative Post-Inflectional and Verbalizing Suffixes

To this point, I have discussed four pieces of demonstrative morphology: the roots, the diminutive suffix, the restricted suffix (which together comprise a demonstrative stem), and the number inflection. As a reminder, the morphological template for demonstratives is given below.

Figure 4.1. Demonstrative template

Root	**diminutive**	**Restricted**	**inflection**	**post-inflection**	**verbalizing suffix**
am *ann* *om*	*-sst*	*-o*	*-wa* *-yi* *-iksi* *-istsi*	*-ma* *-ya* *-hka* *-ka*	*-o'k(a)* *-(a)yi*
Stem			**Suffixes**		

Immediately following the number inflection, one of (at least) four post-inflectional suffixes may optionally appear on the demonstrative. The suffixes are described by Frantz (2009: 66) as follows:

Table 4.3. Post-Inflectional Demonstrative Suffixes

Form	**Meaning**	**Gloss (mine)**
-ma	"stationary"	STAT
-ya	"moving, but not towards speaker"	MVG
-hka	"not visible to speaker"	INVIS
-ka	"proximity information in the demonstrative is relative to the location of the speaker or addressee at a time other than the time of the speech act"	OTH.TM

[72] A possible alternative analysis for (20) and (21) is that the demonstrative does not form a constituent with the noun, and hence concord is not expected. In particular, it may be possible to analyse the demonstrative in (20) as an appositive (i.e., "they, the old couple…") and the one in (21) as a predicate (i.e., "it's that the birches now appear striped"). Thank you to Marcel den Dikken for pointing me in this direction; it is clear that further research on these cases and other demonstrative-noun mismatches is needed.

The precise semantic contribution of these suffixes is not yet well-understood (see Frantz 2009: 66-67 for discussion), and aside from sharing a morphological position, they do not seem to form a homogeneous class. I leave a more detailed investigation of these suffixes for future research,[73] but examples of each are given below.

(22)	*Nikáíto'too*	*ánno**ma***	*itaoyo'pi*.
	n-ikaa-it-o'too	ann-o-**ma**	itaoyo'p-yi
	1-PERF-LOC-arrive.AI	DEM-RESTR-**STAT**	restaurant-INAN
	"I'm here at the restaurant."		

(23)	*Na*	*Leo*	*a'páóhtoihkahtooma*	*amo**ya***	*pisstááhkaani*.
	ann-wa	L	a'p-a-ohto-ihkahtoo-m-wa	am-o-**ya**	pisstaahkaan-yi
	DEM-PROX	L	around-IMPF-close-pass.TI-3:INAN-PROX	DEM-RESTR-**MVG**	tobacco-INAN
	"Leo is passing around this tobacco."				

(24)	*Anna**hka***	*Saako*	*ita'páíssiwa*	*omi*	*itáóhpommao'pi*.
	ann-wa-**hka**	S	it-a'p-a-ssi-wa	om-yi	itaohpommao'p-yi
	DEM-PROX-**INVIS**	S	LOC-around-IMPF-be.AI-PROX	DEM-INAN	store-INAN
	"Saako is in that store."				

(25)	*Amo*	*iihtáíssákio'pa*	*nitóhtsitáyissitapi*	*ami**k***	*itáípsstsoyo'so'pi*
	amo	iihtaissakio'p-wa	nit-oht-it-a-yissitapi	am-yi-**ka**	itaipsstooyo'so'p-yi
	DEM	dishrag-PROX	1-INSTR-LOC-IMPF-use.AI	DEM-INAN-**OT**	kitchen-INAN
	"I use this dish rag in the kitchen."				

Finally, at the right edge of the demonstrative, there may optionally appear one of two suffixes described by Uhlenbeck (1938) as "verbalizing." These are listed by Frantz (2009: 68) as having the forms *–o'k(a)* and *–(a)yi*. Demonstratives used with a verbalizing suffix can function as the verbal predicate in equative or existential clauses. As with the other morphemes in the demonstrative complex, a more detailed investigation of the verbalizing suffixes is pending, but in what follows I provide some illustrative examples and discuss their significance.

[73] The literature on the syntax of demonstrative includes discussions of a class of items referred to as REINFORCERS (e.g., Bernstein 1997; Choi 2012; Leu 2008; Roehrs 2010). Like the post-inflectional suffixes in (22)-(25), reinforcers contribute to the deictic content of the demonstrative. A syntactic treatment of reinforcers, such as that developed by Bernstein (and/or others) may be a promising avenue for analysing Blackfoot's post-inflectional suffixes.

(26) *Om**o'k**a* *anna* *nipitááma.*
om-**o'k**-wa ann-wa n-ipitaam-wa
DEM-***o'k***-PROX DEM-PROX 1-wife-PROX
"There is my wife."

(27) a. *Amo**o'k**a* *nitómitaama.*
am-o-**o'k**-wa nit-omitaa-m-wa
DEM-RESTR-***o'k***-PROX 1-dog-POSS-PROX
"This is my dog."

b. *Amoks**o'k**i* *nitómitaamiksi.*
am-o-iksi-**o'k**-yi nit-omitaa-m-iksi
DEM-RESTR-PL-***o'k***-PL 1-dog-POSS-PL
"These are my dogs."

In (26), the suffix *–o'k(a)* appears on the demonstrative, and the demonstrative functions as the predicate. This example is interesting, in that the argument of this predicate contains a second demonstrative that modifies the noun. In (27), this same suffix appears on verbalized demonstratives that reference both singular (a) and plural (b) nouns, and the final vowel of the suffix varies; it is *–a* when singular and *–i* when plural. This suggests that the vowel is in fact a distinct morpheme, and specifically, as I argued in Chapter 3, it is one of the number suffixes from the verbal paradigm, i.e., *-wa* for singular (proximate) and *–yi* for plural. To my knowledge, it has not been previously documented that the demonstratives can take inflection from the verbal paradigm, and the conditions under which this occurs are yet unclear. Regardless, the observation that the demonstrative can take the verbal number/obviation suffixes lends further support to the claim that the demonstratives are phrasal. In Chapter 6, I argue that the plural number suffix *–yi* in the verbal paradigm maps onto the functional head C. I assume it occupies this same syntactic position when modifying demonstratives, and as such, the verbalized demonstratives are CPs.

The other suffix that is described as having a "verbalizing" function is *–(a)yi*; examples are given below.

(28) *Ánnik**ayi*** *itáyo'kaa* *(kíípo).*
ann-yi-ka-**ayi** it-a-yo'kaa (kiipo)
DEM-INAN-OTH.TM-***ayi*** LOC-IMPF-sleep.AI (ten)
"That's when he sleeps, (at 10)."

(29)

	*Annim**ayi***	*nitáákitsoyi*.
	ann-yi-ma-**ayi**	nit-yaak-it-ioyi
	DEM-INAN-STAT-***ayi***	1-FUT-LOC-eat.AI

“That’s when I will eat.” (Frantz 2009: 68, (x), and replicated in my fieldwork)

(30)

	Oma	*imitááw*	*ann**ayi***	*áóhkiwa.*
	om-wa	imitaa-wa	ann-wa-**ayi**	a-ohki-wa
	DEM-PROX	dog-PROX	DEM-PROX-***ayi***	IMPF-bark.AI-PROX

“That dog is the one that’s barking.”

Unlike the examples with *–o’k* above, in these examples the demonstrative does not function as the sole predicate; it co-occurs with a verb that has an adposition *it-* which functions to introduce a temporal or spatial oblique (cf. Bliss 2011, 2012a). This suggests that, whatever the function of *–ayi* is, it is not (strictly) predicative, as we saw with *-o’k*.

Furthermore, the forms with *–ayi* can modify nouns, just like their “non-verbalized” counterparts. This is shown below.

(31)

	Kamáíksskimaatainiki	*annahk**ayi***	*ponokáwa*	*ááksiksstónnata’piiwa*.
	kam-a-ikskimat-a-iniki	ann-wa-hk-**ayi**	ponoka-wa	yaak-ik-sstonnat-a’pii-wa
	if-IMPF-hunt.TA-DIR-SBJN	DEM-PROX-INVIS-***ayi***	elk-PROX	FUT-INTNS-dangerous-be.II-PROX

“If you are hunting this one certain elk, it will be really dangerous.”

Interestingly, unlike other demonstratives, those suffixed with *–ayi* can modify nouns that appear to function as the unindexed object of some[74] morphologically intransitive (AI) verbs. An example is given below.

(32)

a.	*Oma*	*imitááw*	*íímsstakiwa*	*annihk**ayi***	*napayín.*
	om-wa	imitaa-wa	ii-omsstaki-wa	ann-yi-hk-**ayi**	napayin
	DEM-PROX	dog-PROX	IC-steal.portion.AI-PROX	DEM-INAN-INVIS-**ayi**	bread

“The dog grabbed that one certain piece of bread.”

b.	**Oma*	*imitááw*	*íímsstakiwa*	*annihk*	*napayín.*
	om-wa	imitaa-wa	ii-omsstaki-wa	ann-yi-hk	napayin
	DEM-PROX	dog-PROX	IC-steal.portion.AI-PROX	DEM-INAN-INVIS	bread

intended: “The dog grabbed that one piece of bread.”

[74] The generalizations are not yet well-established, but it seems that *–ayi* demonstratives are permitted only with AI verbs that are formed with finals of the form *–aki* or *–imaa* (Meagan Louie and Solveiga Armoskaite, p.c.)

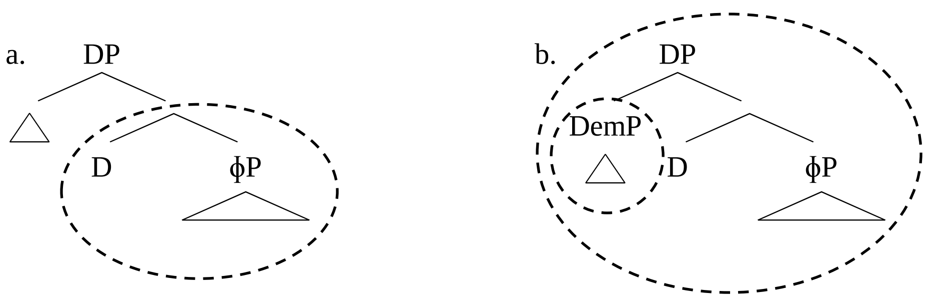
In (32), *annihkayi* modifies the AI object, but without the *–ayi*, the demonstrative is not grammatical. Given the “verbalizing” function of *–ayi*, I assume that in examples like (28a) the demonstrative functions predicatively, but in the absence of a complete data set, I leave the details of such an analysis for future research.

To summarize, demonstratives are morphosyntactically complex. Their inflectional and post-inflectional suffixes are amenable to a syntactic analysis, suggesting that the demonstratives are phrasal. The implication of this is that the demonstratives themselves are not D heads.

4.2.2. Demonstratives Form a Constituent that Excludes the Noun

Consistent with the claim that the demonstratives are not D heads but phrasal modifiers is the claim that demonstratives form a constituent that excludes the noun. As schematized in (33a) below, if demonstratives were D heads, we predict that they would form a constituent with the ϕP. However, if they were in Spec, DP, as in (33b), we predict that the whole DP would form a constituent, but so would the demonstrative, to the exclusion of the ϕP.

(33)



In this section I provide two pieces of evidence in favour of (33b): discontinuity and prosodic constituency.

First, regarding discontinuity, demonstratives may appear in a position that is not string-adjacent to the noun. Examples are given below. (Discontinuous expressions are discussed in detail in Chapter 7.)

(34) a. *Áóhkiwa* ***oma*** ***imitááw.***
a-ohki-wa om-wa imitaa-wa
IMPF-bark.AI-PROX DEM-PROX dog-PROX
"That dog is barking."

b. ***Óóma*** *áóhkiwa* ***imitááw.***

In (34a), the demonstrative is string-adjacent to the noun, but in (34b) it is not. The fact that the demonstrative and the noun are not required to be string-adjacent supports the claim that the demonstrative forms a constituent that excludes the noun.[75]

Second, regarding prosodic constituency, I assume that syntactic boundaries tend to align with prosodic boundaries (e.g., Nespor and Vogel 1986, Selkirk 1986, Truckenbrodt 1999). As such, the prediction is that in environments where we observe a prosodic boundary, this corresponds to a syntactic boundary. In what follows, I provide evidence for a prosodic boundary between the demonstrative and the noun, and I conclude that the prosodic boundary equates with a syntactic boundary.

The main piece of evidence in favour of a prosodic boundary between the demonstrative and the noun is the observation that demonstratives and nouns are distinct words.[76] While in a language like English, a word boundary may not be a relevant signal for determining syntactic constituency, in a highly polysynthetic language like Blackfoot a word boundary is a significant factor for determining constituency.

Notably, most functional categories in Blackfoot are not expressed via independent words. As discussed in Chapter 2, functional categories such as complementizers, negation, quantifiers, adpositions, adverbs, adjectives, modals, and pronouns (i.e., person prefixes) are all expressed via affixes or clitics in

[75] For Jelinek (1984), discontinuity is taken as evidence that the two words do not form a constituent. However, Reinholtz (1999) argues that, in Swampy Cree, demonstratives and nouns form underlying constituents, and the demonstrative undergoes focus movement to derive the discontinuous ordering (see also Lochbihler 2009 for a similar claim about Ojibwe). Regardless of whether the demonstrative forms a constituent with the noun or not, if it can undergo movement, it is a constituent. Thus, both analyses treat demonstratives as constituents apart from the noun.

[76] Defining the notion of *word*, particularly in polysynthetic languages, is not a trivial matter (cf. Russell 1999). Words can be defined by language-specific phonological criteria: there are phonological processes that operate within word boundaries only. For example in Blackfoot, as discussed in this section, diphthongization and glide deletion operate within words, but not across words. Moreover, the right boundary of a vowel-final word is demarcated by devoicing (see Chapter 2).

Blackfoot. In contrast, the demonstratives are rather striking in not being affixal, and the fact that the demonstratives are not affixes but independent words suggests that they are syntactic constituents, i.e., phrases.

The same argument can be made on the basis of phonology. In many languages there are phonological processes that operate within a prosodic constituent, but not across constituent boundaries. If syntactic boundaries align with prosodic boundaries, we then expect to find phonological processes that show a sensitivity to syntactic constituent boundaries. The prediction for Blackfoot is that, if demonstratives form a constituent separate from the *n*P, we expect to find phonological processes that are active within phrase boundaries, but not across demonstrative-noun boundaries. This prediction is indeed borne out; the evidence comes from diphthongization and glide deletion.

The first phonological process to note is diphthongization. Phrase-internally, the combination of an underlying /a/ vowel with an underlying /i/ vowel yields a surface diphthong [eɪ][77] (orthographic "ai"). An example is given below.

(35)	/iʔnæksípok**a**:/	+	/**i**ksi/	→	[iʔnæksípok**eɪ**ksi̥]
	i'naksípokaa		*-iksi*		*i'naksípokaiks*
	"baby"		PL		"babies"

In (35), diphthongization applies across the boundary between the noun and the plural suffix. In comparison, consider the example in (36). Here, we see that when the same combination of vowels (/a/ + /i/) occurs across a demonstrative-noun boundary, diphthongization does not occur.

(36)	/anna/	+	/iʔnæksípoka:/	→	[ann**a** **i**ʔnæksípoka:]	(not: *[ann**eɪ**ʔnæksípoka:])
	anna		*i'naksipokaa*		*anna i'naksípokaawa*	
	DEM		baby		"that baby"	

In (36), we see that the final /a/ of the demonstrative and the initial /i/ of the noun do not coalesce into a diphthong. That the otherwise regular process of diphthongization does not occur in this context suggests

[77] There is some variation in the production of this vowel. For some speakers in some contexts, it is not a diphthong but something closer to an [ɛ] vowel.

that the demonstrative and the noun are separate prosodic constituents. Of course, it could be argued that a comparison between (35) and (36) is unwarranted, in that diphthongization occurs word-internally, but demonstratives and nouns are separate words. However, the fact is that, given the paucity of word boundaries in Blackfoot clauses, there are no phonological processes in the language that operate both within and across word boundaries. That the phonology shows such a strong sensitivity to word boundaries, and that demonstratives pattern phonologically as distinct words lends further support to the claim that demonstratives are separate prosodic constituents.

The same point can be made with reference to a second phonological process, namely glide deletion. Unlike diphthongization, which occurs only word-internally, glide deletion only occurs at word boundaries. In particular, underlying morpheme-initial glides are preserved at word-internal morpheme boundaries, as shown in (37a), but not at word boundaries, as shown in (37b).

(37) a. *Áóyoo'sí**w**aatsiks*?
a-oyoo'si-**w**a-atsiks
IMPF-cool.AI-PROX-3PRN
"Is s/he cooking?"

b.

Na	*Beth*	*ki*	*na*	*Anna*	***(*w)**ayákaawahkaawa.*
ann-wa	B	ki	ann-wa	A	**w**ayak-waawahkaa-wa
DEM-PROX	B	and	DEM-PROX	A	both-play.AI-PROX

"Beth and Anna both played."

In (37), we see that morpheme-initial glides are deleted at word boundaries. Consistent with this, initial glides are also deleted if the preceding word is a demonstrative, as shown in (38).

(38)

omiksi	***(*w)o**ta'siksi*
om-iksi	w-ota's-iksi
DEM-PL	3-horse-PL

"his/her horses"

In sum, demonstratives form a prosodic constituent that is separate from the noun. Under the assumption that prosodic boundaries align with syntactic boundaries, this suggests that the demonstrative forms a syntactic constituent that excludes the noun. This is consistent with the findings of the preceding section, namely that demonstratives are syntactic phrases, and not heads.

4.2.3. Demonstratives are not D: Cross-Algonquian Support

At this point, it is useful to draw some comparisons between Blackfoot's demonstratives and those of some of the other Algonquian languages. In these other languages, as well as in Proto-Algonquian, there are demonstratives that do not appear to function as D heads, providing diachronic support for the claim that Blackfoot's demonstratives are not D.

For instance, Cyr (1993) argues that the demonstratives of Montagnais function as definite articles (i.e., determiners), rather than adnominal modifiers. Cyr's criteria for classifying demonstratives as definite articles is based on their discourse function in texts: they are used to refer to a previously mentioned discourse referent. Citing Greenberg's (1978) observation that, crosslinguistically, articles often develop historically from demonstratives, Cyr proposes that Montagnais demonstratives have evolved into determiners. However, the demonstrative paradigm Cyr provides indicates that the demonstratives of Montagnais are morphologically complex, and as such, they may indeed by XPs, rather than D heads. A representative sample of the Montagnais demonstratives are presented in Table 4.4 (for the full paradigm, see Cyr 1993, p. 199; the morpheme boundaries in Table 4.4 are my own.)

Table 4.4. Montagnais Demonstratives (adapted from Cyr 1993: 199)

		1st distance ("closer to speaker")	2nd distance ("close to speaker")
Animate	Singular	*u-e*	*n-e*
	Plural	*u-tsh-en*	*n-tsh-en*
	Obviative	-	*n-elu*
Inanimate	Singular	*um-e*	*n-e*
	Plural	*um-en*	*n-en*
	Obviative	*um-elu*	*n-elu*

As observed in Table 4.4, the Montagnais demonstratives are morphologically complex. While this alone does not necessarily entail that the demonstratives are also syntactically complex, it is suggestive. This parallels what we find in Blackfoot; the demonstratives are phrasal but nevertheless have a syntactic distribution similar to determiners in other languages (e.g., they are required with arguments).

Similarly, Junker and MacKenzie (2003) describe the demonstratives of East Cree, a language closely related to Montagnais, and they argue that the demonstratives in this language are not determiners, but pronouns that can co-refer with a noun. Junker and MacKenzie do not elaborate on the specific details of this claim, but I interpret it to be consistent with my own claim about Blackfoot demonstratives: they are not D heads. Just as demonstratives are required with arguments in Blackfoot, demonstratives are also required with (some)[78] arguments in one particular dialect (the Southern Island dialect) of East Cree. An example is given below.

(39) a. ***Û*** *awâsh* *miyeyimeu* *atimh*.
this-PROX child-PROX like.TA-DIR(3>3')-3 dog-OBV
"It is this child who likes dogs."

b. ***?***Awâsh* *miyeyimeu* *atimh*.
this-PROX child-PROX like.TA-DIR(3>3')-3 dog-OBV
"It is this child who likes dogs." (Junker and MacKenzie 2003: 213-214)

The distributional variation in the demonstratives (i.e., the fact that they are required in a wider range of syntactic contexts in Blackfoot than in East Cree) is beyond the scope of this dissertation, but the relevant point here is that in both languages, the demonstratives behave like determiners in that they are required with (some) arguments, yet they are not D heads

A related point to note is diachronic. Proulx (1988) attempts a reconstruction of the demonstratives of Proto-Algonquian, and he argues for two series of demonstratives historically, one characterized by the presence of a glide (the GLIDE SERIES) and one characterized by the presence of a nasal (the NASAL SERIES). According to Proulx, all of the Algonquian languages preserve either the former or the latter series, but none maintain a contrast between the two. Blackfoot's demonstratives, whose roots are *ann-*, *am-*, and *om-*, are clearly from the nasal series. In terms of syntactic function, Proulx notes that, whereas that the glide series in Proto-Algonquian took nominal inflection and modified nouns, the nasal series took verbal (conjunct) inflection and had an appositive function. As appositives,

[78] In particular, they are required with preverbal proximate arguments, which receive a focus interpretation. It seems that the distribution of demonstratives in East Cree is cued to discourse functions, rather than grammatical functions.

the nasal demonstratives' relation to the noun would have been as modifiers (cf. Acuña-Fariña 1999) as opposed to functional heads taking nominal complements. Being derived from the nasal series, we can assume the Blackfoot demonstratives developed from those that functioned appositively, i.e., as modifiers. Thus, the claim that Blackfoot's demonstratives are not D heads has a historical basis.

Michif, a mixed language of French and Cree origins, is particularly informative. As documented by Rosen (2003), Michif has both determiners and demonstratives, the former being of French origin and the latter of Cree origin.[79] In Michif, demonstratives and determiners co-occur, and, although determiners do not require a demonstrative, demonstratives are only licit in the presence of an (overt) determiner. This is shown below (data is from Rosen 2003, p. 40, example (1)).

(40) a. *awa la fij*
DEM DET girl
"that girl"

b. **awa fij*
DEM girl
intended: "that girl"

Rosen adopts an analysis similar to that proposed for Modern Greek and various Romance languages (cf. Bernstein 1997; Giusti 1997). In particular, she proposes that Michif demonstratives are generated in the Specifier of an intermediate layer in the nominal structure (termed DemP) and they can raise to Spec, DP. Blackfoot, I propose, has a similar structure; the demonstratives, I will argue in the following section are mapped onto Spec, DP. However, whereas Michif has an overt determiner (notably of non-Algonquian origins), the D position in Blackfoot is not filled.

In sum, comparative and diachronic facts about Algonquian demonstratives support the claim that demonstratives in Blackfoot are not D heads. In the following section I propose that they are phrasal modifiers in Spec, DP.

[79] It has been suggested that the French determiners have been reanalysed as part of the noun stem in Michif. However, Rosen (p.c.) notes that this is unlikely, given that certain adjectives can intervene between the determiner and the noun, and the determiner can in some cases be omitted.

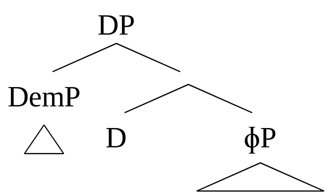
4.3. Demonstratives are Anchoring Arguments in Spec, DP

In this section, I propose that demonstratives in Blackfoot are generated in Spec, DP and raise to either Spec, KP (with obviative arguments) or Spec, LINKP (with proximate arguments). Part of the evidence for this comes from their proposed syntactic function: I claim the demonstratives function as anchoring arguments for the nominal expression, connecting it to the utterance situation. As discussed in Chapter 1 (and summarized again below), I assume that this syntactic function is associated with the DP layer, and given this assumption, the observation that demonstratives function as anchoring arguments supports the claim that they map onto Spec, DP. The section proceeds as follows: In §4.3.1, I discuss the syntactic position of the demonstratives, and in §4.3.2, I discuss their syntactic function as anchoring arguments.

4.3.1. The Syntactic Position of Demonstratives

I propose that the Blackfoot demonstratives map onto Spec, DP, as schematized below.

(41)



This analysis shares with other analyses of phrasal demonstratives the insight that the demonstrative is associated with the Specifier of a functional head in the nominal spine (e.g., Bernstein 1997; Giusti 1997; Panagiotidis 2000; Rosen 2003). However, in the absence of evidence to the contrary, I assume that the demonstrative maps directly onto Spec, DP rather than mapping onto a lower layer and raising to Spec, DP.

The empirical motivation for demonstrative raising in other analyses comes from linearization patterns. For example, Panagiotidis (2000) shows that the demonstrative in Modern Greek can appear either before or after the D head; the post-determiner ordering is argued to be the in-situ order, and the pre-determiner ordering is argued to be derived via movement of the demonstrative to Spec, DP.

Linearization patterns similarly motivate a demonstrative raising analysis in Blackfoot. The generalization is that demonstratives necessarily precede nouns, suggesting that they raise to a position above the inflected noun. An example is given below.

(42) a.

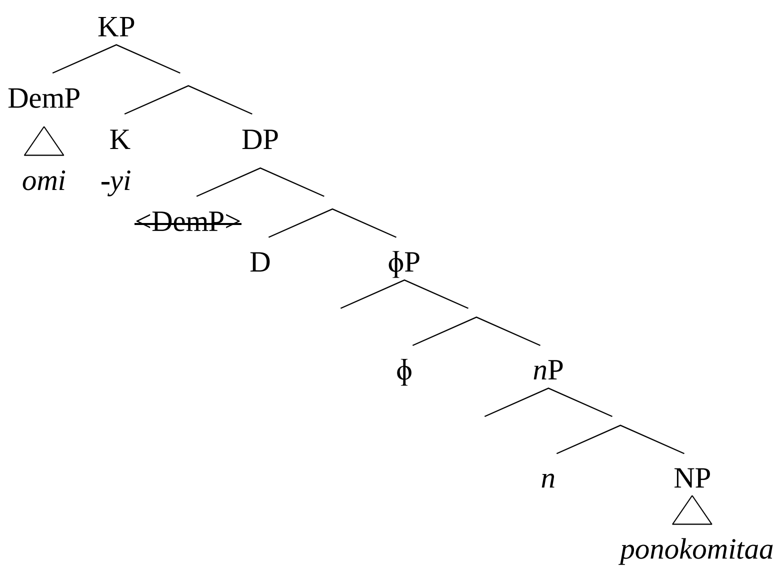
Omi	*ponokáómitaayi*	*iksíkkaayiyináyi*.
om-y i	ponokaomitaa-yi	ik-ikkaayi-yini-ayi
DEM-OBV	horse-OBV	INTNS-canter.AI-OBV-3SG.PRN

"That horse is naturally swift." (lit: canters)

b. **Ponokáómitaayi omi iksíkkaayiyináyi*.

Recall from Chapter 3 that the obviative suffix *–yi* that appears on nouns maps onto the functional head K. I assume that the noun undergoes head movement up to K, and as such it precedes the Spec, DP position where the demonstrative originates. Based on this, I propose that Blackfoot demonstratives obligatorily move to the higher position, Spec, KP (when obviative). This is schematized below.

(43)



I leave the question of what motivates movement of the demonstrative to Spec, KP for future research, but the linearization facts in (42) suggest that the demonstrative obligatorily moves.[80]

[80] Demonstratives can also be discontinuous from the noun (see Chapter 7), but even when discontinuous, they obligatorily precede the noun. I speculate that further raising of the demonstrative (to a position outside the nominal expression) is possible, deriving the discontinuous order. Along these lines, Reinholtz (1999) motivates a focus-raising analysis of discontinuous demonstratives in Swampy Cree (see also Lochbihler 2009 for a similar analysis of Ojibwe).

4.3.2. The Syntactic Function of Demonstratives

What evidence is there that the demonstratives map onto Spec, DP? As discussed in Chapter 1, I adopt the Universal Spine Hypothesis (Wiltschko, to appear b), under which each layer in the spine is universally associated with a dedicated syntactic function. In particular, in this model, the function of the DP layer is ***anchoring***. Anchoring is what connects the nominal expression to the utterance situation, i.e., to the interlocutors and their time and place of speaking. I further assume that the nominal and verbal spines parallel each other in terms of the syntactic functions associated with each layer (e.g., Abney 1987). The parallel to D is INFL, as shown in (44) below.

(44) a. [CP [**IP** [AspP [*v*P [VP]]]]]
     b. [KP [**DP** [ϕP [*n*P [NP]]]]]

Under this model, both INFL and D are associated with anchoring; INFL anchors the clause to the utterance situation and D anchors an individual to the utterance situation.

In Chapter 5, I discuss the anchoring function associated with Blackfoot INFL (see also Ritter and Wiltschko 2005, 2009, to appear) and I claim that the person prefixes that appear at the left edge of the verbal complex (1st person *nit*-, 2nd person *kit*-, and 3rd person *ot*-) function as anchoring arguments in Spec, IP. In this section, I point to the parallels between the person prefixes in the verbal domain and the demonstratives in the nominal domain, and I argue on the basis of this parallelism that the two have a similar function: they are both anchoring arguments. Whereas the person prefixes anchor the clause to the utterance situation, and are introduced in Spec, IP, the demonstratives anchor the individual denoted by the nominal expression to the utterance situation, and are introduced in Spec, DP.[81] This is schematized below.

[81] The person prefixes also appear in the nominal domain, as possessors. Following Ritter and Rosen (2010b) and Bliss and Gruber (2011a, b), I assume that the possessive prefixes are in Spec, *n*P. (See also Chapter 5). As such, the person prefixes do not map onto parallel syntactic positions in the nominal and verbal domains. This lack of parallelism is also observed with the plural morphology, which I argue maps to different positions in the nominal and verbal domains (ϕ and C, respectively.)

(45)

The demonstratives parallel the person prefixes both in terms of their meaning and their distribution. First regarding the semantic parallels, both the person prefixes and the demonstratives exhibit a three-way contrast that encodes a relation to the utterance participants: speaker, addressee, and other. This is shown in Table 4.5.

Table 4.5. Person Prefixes and Demonstrative Roots Compared

Person Prefixes	**Demonstrative Roots**	**Meaning**
nit-	*am-*	(proximity/familiarity to) speaker
kit-	*ann-*	(proximity/familiarity to) addressee
ot-	*om-*	(proximity/familiarity to) other

Just as the person prefixes encode person contrasts, so do the demonstratives. Furthermore, person is not the only deictic feature encoded by the prefixes in Spec, IP; temporality is also encoded here (see Chapter 5 in which I argue for the morphosyntactic complexity of the person prefixes, also Bliss and Gruber 2011a, b). A similar observation can be made for the demonstratives. The demonstrative roots encode person features (i.e., the relation to speaker, addressee, and other), as well as other deictic features, such as location and temporality are encoded by the post-inflectional suffixes (e.g., *-hka* “invisible” and *–ka* “other time”, see Table 4.3 above.). In short, the person prefixes and the demonstratives parallel each other in terms of the deictic features they encode.

They also parallel each other in terms of their distribution. Specifically, both person prefixes and demonstratives are sensitive to the distinction between subjects and indexed objects on the one hand versus unindexed objects and obliques on the other. First, regarding subjects and indexed objects, a person prefix is obligatory for marking the subject or the indexed object, as shown in (46) and (47). Similarly, a demonstrative is required with a nominal expression that functions as the subject or the indexed object, as shown in (48) and (49).

(46) a. *Niistó,* ***nit****ááhkoma'ta* *iihtáóhpommao'p*.
niisto **nit**-waahkoma'taa iihtaohpommao'p
1SG.PRN **1**-borrow.AI money
"Myself, I borrowed some money."

b. **Niistó,* *ááhkoma'ta* *iihtáóhpommao'p*.
niisto waahkoma'taa iihtaohpommao'p
1SG.PRN borrow.AI money
intended: "Myself, I borrowed some money."

(47) a. ***Kit****ááhkanomo* *amo* *si'káána*
kit-waahkan-omo-o amo si'kaan-wa
2-sew-TA.BEN-1:2 DEM blanket-PROX
"I sewed this blanket for you."

b. **Ááhkanomo* *amo* *si'káána*
waahkan-omo-o amo si'kaan-wa
sew-TA.BEN-1:2 DEM blanket-PROX
intended: "I sewed this blanket for you."

(48) a. ***Anna*** *ninááwa* *ikítsowa'pssiwa.*
ann-wa ninaa-wa ik-itso-a'pssi-wa
DEM-PROX man-PROX INTNS-handsome-be.AI-PROX
"That man is handsome."

b. **Ninááwa* *ikítsowa'pssiwa.*
ninaa-wa ik-itso-a'pssi-wa
man-PROX INTNS-handsome-be.AI-PROX
intended: "That man is handsome."

(49) a. *Nitóhtoawa* ***anna*** *issítsimaana* *otawáásai'nssi* *ko'kóyi*.
nit-yoohto-a-wa **ann-wa** issitsimaan-wa ot-a-waasai'ni-hs-yi ko'ko-yi
1-hear.TA-DIR-PROX **DEM-PROX** baby-PROX 3-IMPF-cry.AI-CONJ-OBV night-INAN
"I heard the baby crying last night."

b. **Nitóhtoawa* *issítsimaana* *otawáásai'nssi* *ko'kóyi*.
nit-yoohto-a-wa issitsimaan-wa ot-a-waasai'ni-hs-yi ko'ko-yi
1-hear.TA-DIR-PROX baby-PROX 3-IMPF-cry.AI-CONJ-OBV night-INAN
intended: "I heard the baby crying last night."

In (46), the 1st person subject is encoded with a 1st person prefix *nit-*. Even if there is an independent pronoun to signal 1st person, the prefix cannot be omitted. In (47), the 2nd person object is encoded with the 2nd person prefix *kit-*, and even when the direct/inverse morphology unambiguously signals that there is a 2nd person object, the person prefix cannot be omitted. Just as person prefixes are required with subjects and objects, so are demonstratives. In (48), the demonstrative *anna* is used with the subject, and it is ungrammatical to omit it. In (49), the demonstrative is used with the indexed object, and it is ungrammatical to omit it.

Regarding unindexed objects and obliques, person prefixes cannot be used to reference these grammatical functions, as shown in (50)-(52). Similarly, demonstratives are optional with unindexed objects of ditransitive verbs and obliques, and they are ungrammatical with AI objects, as shown in (53)-(55).

(50) a. ***Kit**sítapohkipista* *kíksissta* *kiistóyi.*
kit-itap-ohkipistaa k-iksisst-wa k-iisto-yi
2-toward-drive.a.team-AI 2-mother-PROX 2-ANIM-OBV
intended: "Your mother drove a team (of horses) to you."

b. *Íítapohkipista* *kíksissta* *kiistóyi*.
ii-itap-ohkipistaa k-iksisst-(w)a k-iisto-yi
IC-toward-drive.a.team.AI 2-mother-PROX 2-ANIM-OBV
"Your mother drove a team (of horses) to you."

(51) a. ****Nit**sipóóhsapokska'siwa.*
nit-poohsap-okska'si-wa
1-towards.SPKR-run.AI-PROX
intended: "S/he ran towards me."

b. *Iipóóhsapokska'siwa.*
ii-poohsap-okska'si-wa
IC-towards.SPKR-run.AI-PROX
"S/he ran towards me."

(52) a. **Nít**ot**sskita* *sitókihkitaan*.
nit-**ot**-ihkitaa sitokihkitaan
1-**3**-bake.AI pie
intended: "I baked a pie."

b. **Nítsskita* *sitókihkitaan*.
nit-ihkitaa sitokihkitaan
1-bake.AI pie
intended: "I baked a pie."

(53) a. *Nítohpoksisawoomawa* ***amo*** *naatoyaapíkoani* *anna* *nitána.*
nit-ohpok-oksisawoo-m-a-wa **amo** naato-naapi-koan-yi ann-wa n-itan-wa
1-ACCOMP-visit-TA-DIR-PROX **DEM** holy-man-DIM-OBV DEM-PROX 1-daughter-PROX
"I visited that priest with my daughter."

b. *Nítohpoksisawoomaw* *naatoyaapíkoani* *anna* *nitána*.

Nítohpoksisawoomaw	*naatoyaapíkoani*	*anna*	*nitána*.
nit-ohpok-oksisawoo-m-a-wa	naato-naapi-koan-yi	ann-wa	n-itan-wa
1-ACCOMP-visit-TA-DIR-PROX	holy-man-DIM-OBV	DEM-PROX	1-daughter-PROX

"I visited a priest with my daughter."

(54) a.

Nikáíto'too	***ánnoma***	*itáóyo'pi*.
n-ikaa-it-o'too	**ann-o-ma**	itaoyo'p-yi
1-PERF-LOC-arrive.AI	**DEM-RESTR-STAT**	restaurant-INAN

"I have arrived at the restaurant."

b.

Nikáíto'too	*itáóyo'pi*.
n-ikaa-it-o'too	itaoyo'p-yi
1-PERF-LOC-arrive.AI	restaurant-INAN

"I have arrived at a restaurant."

(55) a.

**Anniksi*	*ninááks*	*ikskimááyaawa*	***omiksi***	*aááttsistaiks*.
ann-iksi	ninaa-iksi	ikskimaa-yi-aawa	**om-iksi**	aaattsistaa-iksi
DEM-PL	man-PL	hunt.AI-PL-3PL.PRN	**DEM-PL**	rabbit-PL

intended: "The men hunted (those) rabbits."

b.

Anniksi	*ninááks*	*ikskimááyaawa*	*aááttsistaiks*.
ann-iksi	ninaa-iksi	ikskimaa-yi-aawa	aaattsistaa-iksi
DEM-PL	man-PL	hunt.AI-PL-3PL.PRN	rabbit-PL

"The men hunted rabbits."

In (50), the unindexed object of the ditransitive verb is 2nd person, but a person prefix *kit-* cannot appear on the verb, and in (51), the oblique is 1st person, but a person prefix *nit-* cannot appear on the verb. In (52), the AI object is 3rd person, but a person prefix *ot-* cannot appear on the verb. A similar (but not quite parallel) distribution is observed with the demonstratives. In (53), the demonstrative is optional with the unindexed object *naatoyaapíkoani* "priest," and it is also optional with the locative oblique *itáóyo'pi* "restaurant" in (54). In (55) the demonstrative is ungrammatical with the AI object *aááttsistaiks* "rabbits." In short, both person prefixes and the demonstratives are sensitive to the distinction between subjects and indexed objects versus unindexed objects and obliques. This is summarized in Table 4.6 below.

Table 4.6. Distribution of Person Prefixes and Demonstratives across Grammatical Functions

	Person prefixes	**Demonstratives**
Subject	✓	✓
Indexed Object	✓	✓
Unindexed Object (Ditransitive)	✗	optional
Oblique	✗	optional
AI object	✗	✗

This section has demonstrated the parallels between demonstratives and person prefixes, both in terms of the deictic features they encode and their distribution. These parallels suggest that the two also have a parallel syntactic function: they are both anchoring arguments. For the demonstratives, this means that their function is to connect the individual denoted by nominal expression to the utterance situation; they specify whether the individual is near/familiar to the speaker, the addressee, or neither.

4.4. Conclusion

In summary, I have shown that Blackfoot demonstratives are not D heads; they are phrasal and they form a constituent that excludes the noun. This is supported by comparative and historical facts. I proposed instead that the demonstratives are external arguments of D; they map onto Spec, DP and they raise to Spec, KP to derive the obligatory demonstrative-noun word order. I demonstrated the parallels between the person prefixes in the verbal domain and the demonstratives in the nominal domain, and I suggested that these parallels reflect that the two have equivalent syntactic positions and functions: they are both anchoring arguments that function to connect the phrase (i.e., the clause or the nominal expression) to the utterance situation.

A yet unanswered question is in regards to the contexts of use for the various demonstrative forms. As mentioned in §4.2.1, if all possible combinations of demonstrative morphemes were attested, there would be 900 unique demonstrative forms. Moreover, as discussed in §4.2.1.2, demonstratives can combine with nouns in various ways, i.e., showing concordial agreement or exhibiting number and/or animacy mismatches. What discourse conditions license the various demonstrative forms, as well as the patterns of concord and lack thereof, are questions I leave for future research.

CHAPTER 5

MAPPING PERSON PREFIXES ONTO THE SYNTACTIC SPINE

5.1 Introduction

This chapter continues with the task of developing an analysis of Blackfoot's argument-typing system. The previous two chapters focused on linguistic objects that map onto the nominal spine; this chapter and the following one focus on linguistic objects that map onto the verbal spine. In particular, in this chapter, I focus on the left edge position of the verbal complex, and I argue that it maps onto the Spec, IP position in the syntactic spine. The morphological template for the verbal complex was first presented in Chapter 2, and is given again in Figure 5.1 below.

Figure 5.1. Morphological Template for Verbal Complex

$$\textbf{Person}\text{–(Prefixe(s))–}\underbrace{\text{Root–(Noun)–Final}}_{\text{Stem}}\text{–}\underbrace{\text{Direct/Inverse–Clause Type-Person/Number–Number}}_{\text{Suffixes}}\text{–Clitic(s)}$$

As evidenced by the template in Figure 5.1, the left edge position hosts the person prefixes. These are listed in Table 5.1 below.

Table 5.1 Person Prefixes

kit-	2nd person
nit-	1st person
ot-	3rd person

There is only one position for the person prefixes in the morphological template. In a transitive clause, the choice of which person prefix appears in the left edge position is determined by the following conditions:

- If there is a 2nd person argument (subject or object) in the clause, *kit-* appears at the left edge, regardless of the person specification of the other argument.
- If there is a 1st person argument and no 2nd person, then *nit-* appears at the left edge.

- If there are no 1st or 2nd person arguments, then *ot*- appears (but only under certain conditions).[82]

Examples are given below.

(1) a. ***Kit****sikáákomimmo*.
kit-ik-waakomimm-o
2-INTNS-love.TA-1:2
"I love you."

b. ***Kit****sikáákomimmoki*.
kit-ik-waakomimm-oki
2-INTNS-love.TA-2:1
"You love me."

c.

Kit*sikáákomimmawa*	*anna*	*Leo.*
kit-ik-waakomimm-a-wa	ann-wa	Leo
2-INTNS-love.TA-DIR-PROX	DEM-PROX	L

"You love Leo."

d.

Kit*sikáákomimmoka*	*anna*	*Leo*.
kit-ik-waakomimm-ok-wa	ann-wa	L
2-INTNS love.TA-INV-PROX	DEM-PROX	L

"Leo loves you."

(2) a.

Nit*sikáákomimmawa*	*anna*	*Leo.*
nit-ik-waakomimm-a-wa	ann-wa	Leo
1-INTNS-love.TA-DIR-PROX	DEM-PROX	L

"I love Leo."

b.

Nit*sikáákomimmoka*	*anna*	*Leo*.
nit-ik-waakomimm-ok-wa	ann-wa	L
1-INTNS love.TA-INV-PROX	DEM-PROX	L

"Leo loves me."

(3) a.

Ikáákomimmiiwa	*anna*	*Leo*.
Ø-ik-waakomimm-yii-wa	ann-wa	L
3-INTNS-love.TA-3:4-PROX	DEM-PROX	L

"S/he loves Leo."

b.

Ot*sikáákomimmoka*	*anna*	*Leo.*
ot-ik-waakomimm-ok-wa	ann-wa	L
3-INTNS-love.TA-INV-PROX	DEM-PROX	L

"Leo loves him/her."

[82] For reasons that are yet unclear, *ot*- is not always overtly realized. In independent clauses, *ot*- is restricted to TA inverse clauses only; it is not found in TA direct, TI, AI, or II clauses. In conjunct clauses, *ot*- is found in all of these contexts. I assume that when *ot*- is not spelled out, a null 3rd person prefix appears in its place.

In (1), the prefix *kit*- indexes 2nd person, regardless of whether the clause is direct or inverse, and regardless of whether the other argument is 1st or 2nd person. In (2), the prefix *nit*- indexes 1st person in the presence of a 3rd person argument. In (3), the prefix *ot*- (or a null variant of *ot*-, see footnote 82) indexes 3rd person. The main observation to be noted here is that the left edge position in the verbal complex is sensitive to distinctions between speech act participants. It indexes all three persons, and privileges speech act participants (1st and 2nd persons) over non-speech act participants (3rd persons).

Following Déchaine and Wiltschko (2010), I argue that the Blackfoot person prefixes are realized in the Specifier of IP. As outlined in Chapter 1, I assume that the IP domain is the domain of anchoring. In this context, anchoring refers to the relationship between the clause and the utterance situation (a composite of the speech act participants, the speech time, and speech location). I further assume that INFL introduces an argument in its Specifier with which it agrees in ϕ features. I refer to this argument as the ANCHORING ARGUMENT. In Chapter 4, we saw that demonstratives function as anchoring arguments in the nominal domain, and here I demonstrate that the person prefixes function as anchoring arguments in the verbal domain.

This chapter proceeds as follows. In §5.2, I introduce the proposal that the person prefixes are anchoring arguments, and I establish a set of predictions for the distribution and semantic content of anchoring arguments. In §5.3 - §5.5, I show that these predictions are borne out. Specifically, in §5.3, I demonstrate that the person prefixes are restricted to realis contexts, in §5.4, I argue that they have temporal content, and in §5.5, I demonstrate anchoring arguments are not restricted to event participants but they necessarily have deictic content.

5.2. Spec, IP in Blackfoot: Proposal and Predictions

Following Ritter and Wiltschko (2005, 2009, to appear) I assume that the semantic content associated with the functional items that associate with INFL can vary cross-linguistically, and the content of INFL restricts the distribution and interpretation of arguments in Spec, IP. In this section, I summarize Ritter and Wiltschko's proposal that the content of INFL in Blackfoot is person-based and I introduce the proposal that the person prefixes are anchoring arguments in Spec, IP. Then I introduce a formal model for the organization of features of INFL, namely Cowper's (2005) feature geometry. The geometry gives us a framework for situating Blackfoot's person-based INFL in a typology of INFL features. Moreover, it allows us to formulate a set of predictions for the distribution and semantic content for Blackfoot's anchoring arguments in Spec, IP.

5.2.1. Blackfoot INFL is Person-Based

Before turning to the properties of Blackfoot INFL, a discussion of anchoring across languages is necessary. Traditionally, anchoring has been thought to be mediated through Tense; the time of the eventuality can precede (past tense), or overlap with (present tense) the utterance time (e.g., Enç 1987). However, anchoring need not be strictly temporal; Ritter and Wiltschko (2005, 2009, to appear) argue that anchoring can be dissociated from Tense, while still being associated with the syntactic category of INFL In other words, they argue for a generalized INFL category, which has a universal and dedicated core function of anchoring the eventuality to the utterance. In some languages (e.g., English), INFL is associated with temporal anchoring, but in other languages, INFL is associated with other deictic categories, namely location and person. In other words, anchoring can be mediated via location (the location of the eventuality can either coincide with the utterance location (here) or not (there)), or person (the event(uality) participants can be identified with the speech act participants ($1^{st}/2^{nd}$ person) or not (3^{rd} person)).[83] By dissociating the function of INFL from its substantive content, Ritter and Wiltschko are able to account for a range of otherwise disparate phenomena across languages.

Regarding Blackfoot, Ritter and Wiltschko (to appear) claim that the substantive content of INFL in Blackfoot is Person, and the relevant contrast is the local/non-local contrast between $1^{st}/2^{nd}$ versus 3^{rd}

[83] This analysis predicts that, just as there are sequence of tense (SOT) effects in tense-based languages, there should be sequence-of-location and sequence-of-person effects in languages with location-based and tense-based INFL. I refer the reader to Ritter and Wiltschko (to appear) for discussion of this issue.

(animate) persons. They argue that local and non-local INFL are associated with the morphemes –*hp* and –*m*, respectively.[84] Examples are given below.

(4) a. *Nitáyiitsittsimaa***hp***innaan.*
nit-a-yiitsittsimaa-**hp**-innaan
1-IMPF-slice.meat.AI-**LOCAL**-1PL
"We (excl) are thinly slicing meat (for dried meat)."

b. *Kitáyiitsittsimaa***hp***oaawa.*
kit-a-yiitsittsimaa-**hp**-oaawa
2-IMPF-slice.meat.AI-**LOCAL**-2PL
"You (pl) are thinly slicing meat."

c. *Áyiitsittsimaayaawa.*
a-yiitsittsimaa-∅-yi-aawa
IMPF-slice.meat.AI-**NONLOC**-3PL-3PL.PRN
"They are thinly slicing meat."

(5) a. *Nitáí'pohtoo***hp***innaan* *miistsííks*.
nit-wai'poht-o-o-**hp**-innaan miistsis-iksi
1-haul-TA-1:2-**LOCAL**-1PL tree-PL
"We (excl) hauled wood for you."

b. *Anna* *Mai'stóó* *nitáí'pohtowannaana* *miistsííks*.
ann-wa M nit-wai'poht-o-a-∅-innaan-wa miistsis-iksi
DEM-PROX M 1-haul-TA-DIR-**NONLOC**-1PL-PROX tree-PL
"We (excl) hauled wood for Mai'stoo."

c. *Kitáí'pohtooki***hp***oaawa* *miistsííks*.
kit-wai'poht-o-oki-**hp**-oaawa miistsis-iksi
2-haul-TA-2:1-**LOCAL**-2PL tree-PL
"You (pl) hauled wood for me."

d. *Anna* *Mai'stóó* *kitáí'pohtowawaawa* *miistsííks*.
ann-wa M kit-wai'poht-o-a-∅-oaawa-wa miistsis-iksi
DEM-PROX M 2-haul-TA-DIR-**NONLOC**-2PL-PROX tree-PL
"You (pl) hauled wood for Mai'stoo."

(6) a. *Ksisskanáótonni* *nitsítooyo'satoo***hp***a* *anni* *akóópskaani.*
ksisskanaotonni nit-it-ooyo's-atoo-**hp**-wa ann-yi akoopskaan-yi
morning 1-LOC-cook-TI-**LOCAL**-PROX DEM-INAN soup-INAN
"This morning I cooked the soup."

[84] Regarding their positions in the morphological template, Frantz 1991, 2009) analyses -*hp* as part of the 1st and 2nd person plural suffixes, as well as the TI direct marker for local persons; -*m* is analysed as the TI direct marker for non-local persons. See also Déchaine (1999), who analyses –*hp* as a morpheme bearing the feature [LOCAL].

b. *Ksisskanáótonni* *kitsítooyo'satoo***hp***a* *anni* *akóópskaani.*
ksisskanaotonni kit-it-ooyo's-atoo-**hp**-wa ann-yi akoopskaan-yi
morning 2-LOC-cook-TI-**LOCAL**-PROX DEM-INAN soup-INAN
"This morning you cooked the soup."

c. *Ksisskanáótonni* *itooyo'satoo***m***a* *anni* *akóópskaani.*
ksisskanaotonni it-ooyo's-atoo-**m**-wa ann-yi akoopskaan-yi
morning LOC-cook-TI-**NONLOC**-PROX DEM-INAN soup-INAN
"This morning s/he cooked the soup."

In (4), –*hp* precedes the 1st and 2nd person plural suffix on the intransitive (AI) verb, and this contrasts with the 3rd person plural forms, which are not formed with -*hp*. Ritter and Wiltschko propose a null morpheme (∅) that contrasts with –*hp* to encode non-local (animate) person. In (5), the same –*hp* form precedes the 1st and 2nd person plural suffixes, but only when both arguments of the TA verb are local, as in (a) and (c). When one of the arguments is non-local, as in (b) and (d), a zero morpheme alternates with –*hp*. Finally, in (6), the morpheme -*hp* contrasts with –*m* to encode the local versus non-local subject in TI clauses. In sum, across AI, TA, and TI verbs, we see that –*hp* appears in contexts in which both of the animate event participants are local, and this contrasts with either a zero morpheme or –*m* for encoding non-local (animate) event participants. Notably, whenever –*hp* is in INFL, either *nit*- or *kit*- is used, and whenever –*m* is in INFL, there is no person prefix.

I propose that the local/non-local contrast is uninterpretable on INFL. In other words, INFL bears an uninterpretable ϕ feature that is valued as either [LOC] or [NONLOC]. These uninterpretable features are checked via agreement with a person prefix in Spec, IP, as shown in (7).[85]

[85] The formalization here differs from that of Ritter and Wiltschko, who appeal to Hale's (1986) notion of COINCIDENCE. Specifically, in the spirit of Demirdache and Uribe-Etxebarria's (1997) treatment of tense and aspect, Ritter and Wiltschko analyse INFL as a predicate of coincidence, which relates the utterance situation to the event situation. Under this model, INFL can be valued as either [+COIN(cidence)] or [-COIN]; the former indicates that the utterance situation coincides with the event situation, and the latter indicates a lack of such coincidence. I abstract away from these details here, and instead refer to [LOC] and [NONLOC] values for the uninterpretable ϕ features in INFL.

(7) a. IP

{*nit-/kit-*}
[ϕ:LOC] I
-hp
[*u*ϕ:LOC]

b. IP

Ø
[ϕ:NONLOC] I
-m
[*u*ϕ:NONLOC]

In (7a), the uninterpretable [ϕ:LOC] feature on *–hp* is checked by either *nit-* or *kit-*, which both refer to local persons. In (7b), the uninterpretable [ϕ:NONLOC] on *–m* is checked by a null prefix, which alternates with 3rd person *ot-*, and is used only with non-local persons.

The local/non-local contrast is not always morphologically visible in INFL. In matrix clauses with only singular animate event participants, INFL is null, as shown in (8) and (9) below. Additionally, in subordinate conjunct clauses[86], a morpheme *–hs* invariably appears in place of *–hp* or *–m*; it is insensitive to the local/non-local contrast, as shown in (10) through (12). In these cases, the person prefixes signal whether INFL is local or non-local; *nit-* and *kit-* are local and *ot-* (or the absence of a prefix) is non-local.[87]

(8) a. *Nitáyiitsittsimaa.*
nit-a-yiitsittsimaa-∅
1-IMPF-slice.meat.AI-**LOCAL**
"I am thinly slicing meat (for dried meat)."

b. *Kitáyiitsittsimaa.*
kit-a-yiitsittsimaa-∅
2-IMPF-slice.meat.AI-**LOCAL**
"You are thinly slicing meat."

c. *Áyiitsittsimaawa.*
a-yiitsittsimaa-∅-wa
aIMPF-slice.meat.AI-**NONLOC**-PROX
"S/he is thinly slicing meat."

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[86] The conjunct is the elsewhere clause type for subordinate clauses. See Chapter 2 and §5.3 for a discussion of the distribution of clause types.

[87] This is a simplification of Ritter and Wiltschko's analysis. For them, conjunct INFL is valued by the matrix predicate, and matrix INFL is not always overtly spelled out as *–hp* or *–m*. In all of these cases, however, the person prefixes provide an overt morphological signal as to whether INFL is local or non-local.

(9) a.

Nitáí'pohtoo	*miistsííks.*
nit-wai'poht-o-o-∅	miistsis-iksi
1-haul-TA-1:2-**LOCAL**	tree-PL

"I hauled wood for you."

b.

Anna	*Mai'stóó*	*nitáí'pohtowawa*	*miistsííks.*
ann-wa	M	nit-wai'poht-o-a-∅-wa	miistsis-iksi
DEM-PROX	M	2-haul-TA-DIR-**NONLOC**-PROX	tree-PL

"I hauled wood for Mai'stoo."

c.

Kitáí'pohtooki	*miistsííks.*
kit-wai'poht-o-oki-∅	miistsis-iksi
2-haul-TA-2:1-**LOCAL**	tree-PL

"You hauled wood for me."

d.

Anna	*Mai'stóó*	*kitáí'pohtowawa*	*miistsííks.*
ann-wa	M	kit-wai'poht-o-a-∅-wa	miistsis-iksi
DEM-PROX	M	2-haul-TA-DIR-**NONLOC**-PROX	tree-PL

"You hauled wood for Mai'stoo."

(10) a.

Íkssoka'piiwa	*nitáyiitsittsimaa**hs**innaani.*
ik-sok-a'pii-wa	nit-a-yiitsittsimaa-**hs**-innaan-yi
INTNS-good-be.AI-PROX	1-IMPF-slice.meat.AI-**CONJ**-1PL-OBV

"It's good that we (excl) are thinly slicing meat."

b.

Íkssoka'piiwa	*kitáyiitsittsimaa**hs**oaayi.*
ik-sok-a'pii-wa	kit-a-yiitsittsimaa-**hs-**oaawa-yi
INTNS-good-be.AI-PROX	2-IMPF-slice.meat.AI-**CONJ**-2PL-OBV

"It's good that you (pl) are thinly slicing meat."

b.

Íkssoka'piiwa	*otáyiitsittsimaa**hs**aawa.*
ik-sok-a'pii-wa	ot-a-yiitsittsimaa-**hs**-yi-aawa
INTNS-good-be.AI-PROX	3-IMPF-slice.meat.AI-**CONJ**-OBV-3PL.PRN

"It's good that they are thinly slicing meat."

(11) a.

Íkssoka'piiwa	*kitáí'pohtoo**hs**innaani*	*miistsííks.*
ik-sok-a'pii-wa	kit-wai'poht-o-o-**hs**-innaan-yi	miistsis-iksi
INTNS-good-be.AI-PROX	2-haul-TA-1:2-**CONJ**-1PL-OBV	tree-PL

"It's good that we (excl) are hauling wood for you."

b.

Íkssoka'piiwa	*anna*	*Mai'stóó*	*nitáí'pohtowa**hs**innaani*	*miistsííks.*
ik-sok-a'pii-wa	ann-wa	M	nit-wai'poht-o-a-**hs**-innaan-yi	miistsis-iksi
INTNS-good-be.AI-PROX	DEM-PROX	M	1-haul-TA-DIR-**CONJ**-1PL-OBV	tree-PL

"It's good that we (excl) are hauling wood for Mai'stoo."

c.

Íkssoka'piiwa	*kitáí'pohtook**ss**oaayi*	*miistsííks.*
ik-sok-a'pii-wa	kit-wai'poht-o-oki-**hs**-oaawa-yi	miistsis-iksi
INTNS-good-be.AI-PROX	2-haul-TA-2:1-**CONJ**-2PL-OBV	tree-PL

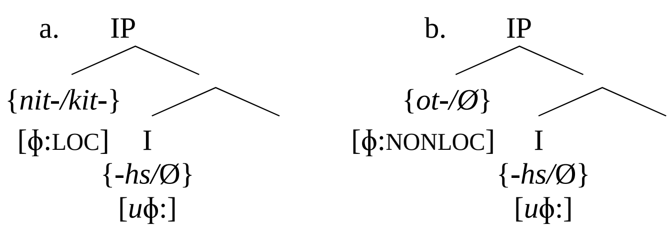
"It's good that you (pl) are hauling wood for me."

d.	*Íkssoka'piiwa*	*anna*	*Mai'stóó*	*kitáí'pohtowa**hs**oaayi*	*miistsííks.*
	ik-sok-a'pii-wa	ann-wa	M	kit-wai'poht-o-a-**hs**-oaawa-yi	miistsis-iksi
	INTNS-good-be.AI-PROX	DEM-PROX	M	2-haul-TA-DIR-**CONJ**-2PL-OBV	tree-PL
	"It's good that you (pl) are hauling wood for Mai'stoo."				

(12)	a.	*Íkssoka'piiwa*	*ksisskanáótonni*	*nitsítooyo'satoo**hs**i*	*anni*	*akóópskaani.*
		ik-sok-a'pii-wa	ksisskanaotonni	nit-it-ooyo's-atoo-**hs**-yi	anni	akoopskaan-yi
		INTNS-good-be.AI-PROX	morning	1-LOC-cook-TI-**CONJ**-OBV	DEM	soup-INAN
		"This morning I cooked the soup."				
	b.	*Íkssoka'piiwa*	*ksisskanáótonni*	*kitsítooyo'satoo**hs**i*	*anni*	*akóópskaani.*
		ik-sok-a'pii-wa	ksisskanaotonni	kit-it-ooyo's-atoo-**hs**-yi	anni	akoopskaan-yi
		INTNS-good-be.AI-PROX	morning	2-LOC-cook-TI-**CONJ**-OBV	DEM	soup-INAN
		"This morning you cooked the soup."				
	c.	*Íkssoka'piiwa*	*ksisskanáótonni*	*otsitooyo'satoo**hs**i*	*anni*	*akóópskaani.*
		ik-sok-a'pii-wa	ksisskanaotonni	ot-it-ooyo's-atoo-**hs**-yi	anni	akoopskaan-yi
		INTNS-good-be.AI-PROX	morning	3-LOC-cook-TI-**CONJ**-OBV	DEM	soup-INAN
		"This morning s/he cooked the soup."				

In (8) and (9), there is no suffix that signals the local/non-local contrast in matrix clauses in which the event participants are all singular and animate, and in (10)-(12), we see that a single suffix *–hs* is invariably used for both local and non-local conjunct clauses. In these cases, the uninterpretable [ϕ] feature on INFL is unvalued, and is both checked and valued by the person prefixes, as schematized in (13) below.

(13)



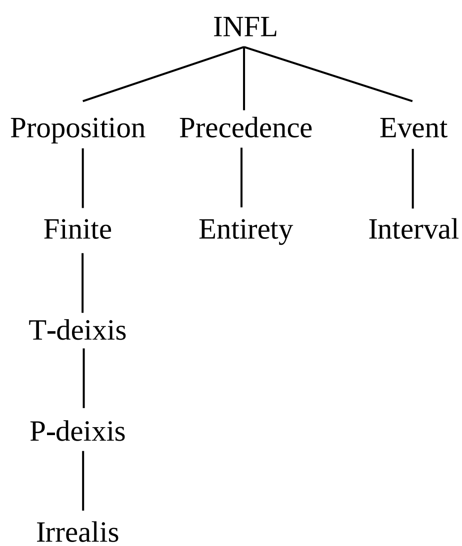
In (13a), INFL has an uninterpretable and unvalued [ϕ] feature which is checked and valued as [LOC] by the person prefix *nit-* or *kit-*. In (13b), INFL is checked and valued as [NONLOC] by the person prefix *ot-* or Ø.

5.2.2. A Feature-Geometric Model for Person-Based INFL

In the preceding section, I outlined the proposal that INFL in Blackfoot is person-based and has uninterpretable person ([ϕ]) features that are checked by an argument in Spec, IP. In this section, I outline the predictions that this proposal makes regarding the distribution of arguments in Spec, IP, as well as their semantic content.

In order to situate Blackfoot's INFL in a crosslinguistic context, I adopt Cowper's (2005) model of INFL features, as given in Figure 5.2.

Figure 5.2. Cowper's (2005) Feature Geometric Representation of INFL



Although described by Cowper as a representation of the features of INFL itself, I suggest the geometry in Figure 5.2 can be conceived of more broadly as a representation of the features that are found in the IP domain (i.e., on the head as well its arguments and/or modifiers). As will be observed, in Blackfoot these features are not necessarily located on INFL, but may be located on the person prefixes in Spec, IP (or on prefixal modifiers, in the case of the [Irrealis] feature). This suggests that the features in Figure 5.2 can be distributed across the IP layer. What constrains this distribution, and what determines whether it is the head, the argument(s), or the modifier(s) that bear these features is yet unclear. However, it is clear that the geometry constrains the distribution and interpretation of the linguistic objects in the IP layer, and in particular the distribution and interpretation of the person prefixes in Spec, IP.

The features I make reference to are subsumed under the Proposition node in Figure 5.2. As such, the other two nodes, Event and Precedence, are only briefly defined here. The Event node distinguishes between events and states, and the Precedence node establishes a relation between the clause and its temporal anchor. Regarding the Proposition node, this distinguishes between clauses that can be assigned a truth value, and those that cannot. All matrix clauses and non-infinitival subordinate clauses project a Proposition node. Under the Proposition node is the Finite node, which allows INFL to license a Specifier (in Cowper's terms the Finite node licenses subject case and agreement). The two deixis features: T-deixis (temporal deixis) and P-deixis (person deixis) are responsible for setting the anchor to the DEICTIC CENTER of the utterance. The deictic center is a composite of temporal, locational, and personal properties that establish a time, location, and perspective for the clause. (Cowper does not explicitly state how location is encoded in the geometry.) Finally, under the P-deixis node is the Irrealis node, which encodes the distinction between realis clauses (i.e., those that refer to eventualities that hold in the real world) versus irrealis clauses.

Figure 5.2, like other feature geometries, can be interpreted as a set of entailment relations; for any given linguistic object associated with INFL, the specification of a feature in the geometry entails the feature in the node dominating that feature. For example, if the feature [Interval] is specified, then this entails the feature *Event*; i.e., all linguistic objects associated with INFL that make reference to intervals are necessarily eventive. In Cowper's model, the absence of a feature triggers a default interpretation of the node dominating that feature. For example, only if the feature [Irrealis] is specified is INFL irrealis; its absence yields a realis interpretation.

Cowper argues languages can vary with respect to which features in the geometry they make use of, but predicts that the organization of INFL features in all languages will conform to the geometry. I assume that the ϕ feature values [LOC] and [NONLOC] represent a particular formulation of Cowper's P-deixis feature. Thus, Blackfoot INFL can be characterized as making use of the feature P-deixis (Personal deixis). This yields two predictions.

First, observe that the feature [Irrealis] is dependent on P-deixis, and its absence implies a realis interpretation. The general idea behind this dependency relation is that deictic features are responsible for anchoring the clause to the utterance situation, and anchored clauses are by default realis. Irrealis clauses, on the other hand, need to be overtly specified as such. The prediction that this dependency relation yields is that there should be an interaction between person features and the realis/irrealis contrast. In §5.3, I show that this prediction is borne out: the person prefixes are not permitted in Spec, IP when the clause is coded as irrealis.[88]

The second prediction is based on the entailment relation between personal deixis (P-deixis) and temporal deixis (T-deixis). Cowper's feature-geometric model treats P-deixis as a dependent of T-deixis to capture the fact that, for a personal coordinate to anchor the clause to the deictic center, it must refer "…not to an individual, but to the stage of an individual at the moment of speech" (p. 17). I return to this notion of *stage* in §5.4, but for now, the point I want to make is that this predicts that an expression of P-deixis cannot anchor to the deictic center unless it also encodes T-deixis.[89] More concretely, the prediction is that, if INFL in Blackfoot is person-based (i.e., specified for P-deixis), then T-deixis must also be encoded in the IP domain. In §5.5, I show that this prediction is borne out. Specifically, I argue that, although INFL itself does not have any temporal content, the person prefixes in Spec, IP do.

The third prediction is not derived from Cowper's geometry but from a general observation about the grammatical function of arguments in Spec, IP. In a language with a tense-based INFL (such as English), the argument in Spec, IP is the subject and it can either be an event participant or not. In the

[88] In fact, the geometry states that irrealis entails P-deixis, and the empirical observation for Blackfoot is that P-deixis entails realis. If and how Cowper's geometry could be modified to accommodate Blackfoot remains to be seen. However the more general observation that there is an interaction between ir/realis and P-deixis is predicted by the geometry.

[89] Note that the converse is not true; T-deixis does not entail P-deixis. Thus in languages in which INFL is tense-based, there is no requirement that it also be specified for Person features. In the absence of Person specification, the default interpretation of a marker of T-deixis is assumed to be one in which the perspective on the eventuality is speaker-oriented.

former case, the argument is an agent in the unmarked case, thought to be moved from *v*P, and in the latter case, it is an expletive, base-generated in Spec, IP to satisfy a requirement that there be an overt subject. The prediction is that the same is true for Blackfoot: arguments in Spec, IP may be event participants or not. In §5.5, I show that this prediction is borne out. I argue that, when the person prefixes are not in Spec, IP, the Spec, IP position can be occupied by an evidential prefix *na*-.

To summarize, the proposal that INFL in Blackfoot is person-based yields the following predictions about arguments in Spec, IP:

- They are sensitive to the ir/realis contrast (§5.3)
- They have temporal content (§5.4)
- They do not need to be refer to event participants (§5.5)

5.3. Person Prefixes in Spec, IP are Sensitive to the Ir/realis Contrast

In this section, I demonstrate that the person prefixes are sensitive to the contrast between realis and irrealis clauses, and more specifically that the person prefixes that appear in Spec, IP are restricted to realis contexts only. The discussion builds on Déchaine and Wiltschko's (2010) observation that Blackfoot's clause typing morphology is sensitive to the ir/realis contrast.

The person prefixes are restricted to certain clause types. In Blackfoot, there are five different clause types, summarized in Table 5.2.

Table 5.2. Clause Types

	Clause Type[90]	**Context of Use**
Matrix	Imperative	Commands
	Independent	Elsewhere
Subordinate	Subjunctive	present time conditional clauses OR future-oriented hypothetical situations
	Unreal	past time counterfactual or hypothetical contexts
	Conjunct	Elsewhere

[90] Aside from the conjunct clause type (which Frantz refers to the "conjunctive"), the terminology for the different clause types are from Frantz (1991, 2009). As will be explained below, what is referred to as the "unreal" clause type is in fact realis.

In matrix clauses, the person prefixes are restricted to the independent clause type. Examples of the person prefixes in the independent clause type were given above; additional examples are in (14) below.

(14) a.

***Nit**sita’páíssi**hp**innaan*	*Mohkínsstsis*	*matónni*.
nit-it-a’p-a-issi-**hp**-innaan	mohkinsstsis	matonni
1-LOC-around-IMPF-be.AI-**LOCAL**-1PL	Calgary	yesterday

“We (excl) were in Calgary yesterday.”

b.

***Kit**sita’páíssi**hp**oaa*	*Mohkínsstsis*	*matónni*.
kit-it-a’p-a-issi-**hp**-oaawa	mohkinsstsis	matonni
2-LOC-around-IMPF-be.AI-**LOCAL**-2PL	Calgary	yesterday

“You (pl) were in Calgary yesterday.”

c.

Ita’páíssiyi	*Mohkínsstsis*	*matónni*.
it-a’p-a-issi-**Ø**-yi	mohkinsstsis	matonni
LOC-around-IMPF-be.AI-**NONLOC**-PL	Calgary	yesterday

“They were in Calgary yesterday.”

In the examples above, INFL alternates between *–hp* in (14a) and (14b) and Ø in (14c), and encodes a contrast between local and non-local persons. There is specification of a feature [Irrealis], and as predicted by Cowper’s geometry, independent clauses are restricted to realis contexts.

In contrast with independent clauses, person prefixes are not permitted in imperative clauses, as shown below.

(15) a.

Ammiyá’pisto’takit!
ammi-a’pisto’t-aki-t
hayrack?-build-AI-IMP
“Hook the hay into the hay rack!”

b.

Kiistó	*ammiyá’pisto’takit!*
kiisto	ammi-a’pisto’t-aki-t
2SG.PRN	hayrack?-build-AI-IMP

“Hook the hay into the hay rack!”

c.

*(*Kiistó*)	***kit**ammiyá’pisto’takit!*
kiisto	**kit**-ammi-a’pisto’t-aki-t
2SG.PRN	**2**-hayrack?-build-AI-IMP

intended: “Hook the hay into the hay rack!”

(16) a. *Matóóhpommookit míínists!*
mato-ohpomm-o-oki-t miin-istsi
go-buy-TA-2:1-IMP berry-PL
"Go buy me some berries!"

b. *Niistówa matóóhpommookit míínists!*
niistowa mato-ohpomm-o-oki-t miin-istsi
1SG.PRN go-buy-TA-2:1-IMP berry-PL
"Go buy me some berries!"

c. *****Nit****otóóhpommookit míínists!*
nit-oto-ohpomm-o-oki-t miin-istsi
1-go-buy-TA-2:1-IMP berry-PL
"Go buy me some berries!"

(15a) is an imperative clause, and (15b) demonstrates that the 2nd person independent pronoun can be used with imperatives, indicating that imperatives do indeed have a 2nd person subject. However, as shown in (15c), regardless of whether the independent pronoun is used or not, the 2nd person prefix is not permitted on the imperative verb complex. Similarly in (16), a 1st person object can be referenced in an imperative, and as shown in (16b), an independent pronoun can reference the 1st person object. However, as shown in (16c), the 1st person prefix *nit-* cannot appear on the imperative verb complex. In short, person prefixes cannot appear in imperative clauses. Moreover, the imperative operator (which I assume is associated with the imperative morpheme *–t* in Blackfoot) is specified as [Irrealis], (cf. Han 2000). As such, the fact that person prefixes are not found in imperative clauses is consistent with the prediction that the person prefixes are restricted to realis contexts.

In subordinate clauses, person prefixes are found only with conjunct and unreal clause types. Examples of the person prefixes in conjunct clauses were given in §5.2 above; additional examples are given below.

(17) a. *Anna Rosie íissksinima* ***nit****áäksspommowahsi anni Leo.*
ann-wa R ii-ssksin-i-m-wa **nit**-aak-sspomm-o-a-hs-yi anni L
DEM-PROX R IC-know-TI-3:INAN-PROX **1**-FUT-help-TA-DIR-CONJ-OBV DEM L
"Rosie knows that I'm going to help Leo."

b.	*Anna*	*Rosie*	*íissksinima*	***kit**áákssspommowahsi*	*anni*	*Leo.*
	ann-wa	R	ii-ssksin-i-m-wa	**kit**-aak-sspomm-o-a-hs-yi	anni	L
	DEM-PROX	R	IC-know-TI-3:INAN-PROX	**2**-FUT-help-TA-DIR-CONJ-OBV	DEM	L
	"Rosie knows that you're going to help Leo."					
c.	*Anna*	*Rosie*	*íissksinima*	***ot**áákssspommowahsi*	*anni*	*Leo.*
	ann-wa	R	ii-ssksin-i-m-wa	**ot**-aak-sspomm-o-a-hs-yi	anni	L
	DEM-PROX	R	IC-know-TI-3:INAN-PROX	**3**-FUT-help-TA-DIR-CONJ-OBV	DEM	L
	"Rosie$_i$ knows that she$_i$ is going to help Leo."					

The data in (17) show that all three person prefixes, *nit-*, *kit-*, and *ot-* can be used in conjunct clauses. In this example, the conjunct clause is a complement to an epistemic predicate ("know"), and accordingly can be characterized as realis. However, conjunct clauses can also be used in irrealis contexts, i.e., as complements of desiderative predicates, as well as other future-oriented complement clauses. These clauses require the modal prefix *ááhk-* (glossed as "non-factive" by Frantz 2009), which, in these contexts functions as a dedicated irrealis marker (Ritter and Wiltschko, to appear), specified for the feature [Irrealis].[91] In precisely these contexts, the person prefixes *nit-*, *kit-*, and *ot-* do not appear. Instead, the short form prefixes *n-* and *k-* are used for 1st and 2nd person respectively, and the prefix *m-* is used for 3rd person, as shown below.

(18)	a.	*Nítsskitta*	*sitókihkitaan*	***n**ááhkitapipohtoohsi*	*omi*	*itawáátsimoyihkahpi.*
		nit-ihkitaa	sitokihkitaan	**n**-aahk-itap-ipohtoo-hs-yi	omi	itawaatsimoyihkahp-yi
		1-bake.AI	pie	**1**-MOD-toward-bring.TI-CONJ-OBV	DEM	church-INAN
		"I baked a pie to take to the church."				
	b.	**Nítsskitta*	*sitókihkitaan*	***nit**ááhkitapipohtoohsi*	*omi*	*itawáátsimoyihkahpi.*
		nit-ihkitaa	sitokihkitaan	**nit**-aahk-itap-ipohtoo-hs-yi	omi	itawaatsimoyihkahp-yi
		1-bake.AI	pie	**1**-MOD-toward-bring.TI-CONJ-OBV	DEM	church-INAN
		"I baked a pie to take to the church."				

(19)	a.	*Kitsíkstaato*	***k**ááhkanahsi*	*amo*	*sí'kaana.*
		kit-ikstaa-t-o	**k**-waahkani-a-hs-yi	amo	si'kaan-wa
		2-want-TA-1:2	**2**-sew.TA-DIR-CONJ-OBV	DEM	blanket-PROX
		"I want you to sew this blanket."			

[91] Under the assumptions that (i) [Irrealis] is feature associated with the IP domain (see above), (ii) prefixes in Blackfoot are not heads but modifiers (see Chapter 1), this suggests that *ááhk-* is an IP-level modifier. Further work is needed to determine whether *ááhk -* is indeed associated with the IP domain.

b.	**Kitsíkstaato*	***kit**ááhkanahsi*	*amo*	*sí'kaana.*
	kit-ikstaa-t-o	**kit**-waahkani-a-hs-yi	amo	si'kaan-wa
	2-want-TA-1:2	**2**-sew.TA-DIR-CONJ-OBV	DEM	blanket-PROX
	"I want you to sew this blanket."			

(20) a.	*Nítsstatawa*	*na*	*Jaan*	***m**ááhksstsimááhkatahsi*	*amo*	*nínaayi.*
	nit-sstat-a-wa	ann-wa	J	**m**-aahk-sstsimaahkat-a-hs-yi	amo	ninaa-yi
	1-want.TA-DIR-PROX	DEM-PROX	J	**3**-MOD-hire.TA-DIR-CONJ-OBV	DEM	man-OBV
	"I want John to hire this man."					

b.	**Nítsstatawa*	*na*	*Jaan*	***ot**ááhksstsimááhkatahsi*	*amo*	*nínaayi.*
	nit-sstat-a-wa	ann-wa	J	**ot**-aahk-sstsimaahkat-a-hs-yi	amo	ninaa-yi
	1-want.TA-DIR-PROX	DEM-PROX	J	**3**-MOD-hire.TA-DIR-CONJ-OBV	DEM	man-OBV
	"I want John to hire this man."					

In (18) and (19), a short form version of the person prefixes *nit-* and *kit-* appears on the conjunct clause, and the long form is ungrammatical. Similarly in (20) a 3rd person form *m-* appears on the conjunct clause, and the long form prefix *ot-* is ungrammatical.[92] I revisit the distribution and interpretation of the long and short form prefixes in §5.4, but for now, it will suffice to say that the long form person prefixes are not employed with conjunct clauses in precisely the contexts in which the conjunct clause does not denote a realis context. As such, the distribution of the long form person prefixes indeed corresponds with a realis/irrealis partition between clause types, with long form person prefixes appearing only in realis clauses. This is summarized in Table 5.3 below.

Table 5.3. Distribution of Person Prefixes in Conjunct Clauses

	Conjunct – realis	**Conjunct – irrealis**
Distribution	Epistemic and factive predicates	Desiderative predicates and other future-oriented complement clauses
Long form person prefixes	✓	✗

[92] In fact, as noted by Frantz (2009: 109, fn3) there is some variation across speakers in the form of the person prefixes in irrealis conjunct clauses, and the ungrammatical (18b), (19b) and (20b) reflect the judgments of only one of my consultants (Rachel Ermineskin). My other consultant (Beatrice Bullshields) regularly uses what the forms *nin-* and *kik* for 1st and 2nd person respectively, and the form *om-*, rather than *m-* for 3rd person. It is possible that these forms may be analysed as compositional, consisting of the long form prefixes plus either the short forms or m-, as follows: /nit- + n-/ → [nin-], /kit- + k-/ → [kik-], /ot- + m-/ → [om-]. If this analysis is correct, then it seems that this speaker has generalized the use of the long form prefixes across the entire conjunct paradigm. However, because she has also maintained the use of the short forms and *m-* in irrealis contexts, we still see an ir/realis contrast.

In addition to appearing in realis conjunct clauses, the person prefixes are found in clauses marked with the unreal clause-typing morphology, which appears in counterfactual and/or hypothetical contexts (Frantz 2009: 112) with a past time orientation (Louie 2012). Examples are given below.

(21)	*Nitááhksipaiska*	***nit**sai'táákahsstopiwa*	*nohkátsi*.
	nit-aahk-ipaiskaa	**nit**-sa-it-waakahsi-htopi-wa	n-ohkat-yi
	1-MOD-dance.AI	**1**-NEG-LOC-hurt?.TI-UNREAL-PROX	1-leg-INAN
	"I would dance if I hadn't hurt my leg."		

(22)	*Na*	*Leo*	*áániiwa*	***kit**sííksisawaatoopiyihk*	*matóóni.*
	ann-wa	Leo	waanii-wa	**kit**-ii-oksisawaat-o-opi-yihk	matooni
	DEM-PROX	Leo	say.AI-PROX	**2**-IC-visit.TA-1:2-UNREAL-REP	yesterday
	"Leo (incorrectly) said I visited you yesterday."				

(23)	***Ot**siksisawáákkohtopiwa*	*anna*	*Leo*	*annisk*	*otáni*	*ááksiiksi'taamssiiwa*.
	ot-iksisaw-aat-ok-ohtopi-wa	anna	L	annisk	w-itan-yi	yaak-iik-i'taamssi-wa
	3-visit-TA-INV-UNREAL-PROX	DEM	L	DEM	3-daughter-OBV	FUT-INTNS-happy.AI-PROX
	"If Leo's daughter had visited him, he would have been very happy."					

In (21), the 1st person prefix *nit-* appears on the counterfactual conditional clause with an unreal clause-typing suffix. In (22), the 2nd person prefix *kit-* appears on the unreal clause that refers to a hypothetical situation. Finally, in (23) the 3rd person prefix *ot-* appears on conditional clause with an unreal suffix. Following Déchaine and Wiltschko (2010), I assume that, despite the "unreal" label, unreal clauses are in fact realis. The unreal clause type is derived from the independent clause type via the addition of *–htopi*, and it is used in past-time contexts in which the speaker is certain of the outcome.

In contrast with conjunct and unreal clauses, subjunctive clauses do not permit person prefixes. The subjunctive clause type is used for conditional clauses with a present time orientation (Louie 2012), or future-oriented hypothetical situations. Examples illustrating that person prefixes are ungrammatical in the subjunctive are given below.

(24)	a.	*Aiksistsiksikká'potakíniki*	*áákitaawaahkao'pa*.
		a-iksist-iksikk-a'po't-aki-iniki	yaak-it-waawaahkaa-o'pa
		IMPF-finish-clean-work-AI-SBJN	FUT-LOC-play.AI-INCL
		"When I finish cleaning, then we'll play."	

b. *Nit*aiksistsiksikká’potakíniki* *áákitaawaahkao’pa*.
nit-a-iksist-iksikk-a’po’t-aki-iniki yaak-it-waawaahkaa-o’pa
1-IMPF-finish-clean-work-AI-SBJN FUT-LOC-play.AI-INCL
intended: “When I finish cleaning, then we’ll play.”

(25) a. *Kamínsspopiniki* *kitáákitsitsinikoo*.
kam-inssp-opii-iniki kit-yaak-it-itsinik-o-o
if-quiet-sit.AI-SBJN 2-FUT-LOC-relate.story-TA-1:2
“If you sit quietly, then I’ll tell you a story.”

b. *Kit*sikamínsspopiniki* *kitáákitsitsinikoo*.
kit-ikkam-inssp-opii-iniki kit-yaak-it-itsinik-o-o
2-if-quiet-sit.AI-SBJN 2-FUT-LOC-relate.story-TA-1:2
intended: “If you sit quietly, then I’ll tell you a story.”

(26) a. *Annahk Leo annisk oppitáám kamíiyo’sisi aaksikíítaampsiiwa.*
annahk L annisk w-ippitaam kam-ii-ooyo’si-si yaak-ik-itaam-a’psii-wa
DEM L DEM 3-wife if-IC-cook.AI-SBJN FUT-INTNS-happy-be.AI-PROX
“If Leo’s wife cooks, he will be happy.”

b. **Annahk Leo annisk oppitáám* ***ot**sikamíiyo’sisi* *aaksikíítaampsiiwa.*
annahk L annisk w-ippitaam **ot**-ikkam-ii-ooyo’si-si yaak-ik-itaam-a’psii-wa
DEM L DEM 3-wife **3**-if-IC-cook.AI-SBJN FUT-INTNS-happy-be.AI-PROX
intended: “If Leo’s wife cooks, he will be happy.”

The data in (24)-(26) demonstrate that the person prefixes are not permitted in subjunctive clauses. Unlike unreal clauses in the unreal, these are characterized as irrealis. They are restricted to conditional or hypothetical situations with a future orientation; they do refer to events that hold in the real world.

To summarize, the person prefixes are found in independent clauses, conjunct clauses that are not marked as irrealis, and unreal clauses. They are not found with imperative clauses, conjunct clauses marked as irrealis, or subjunctive clauses. This partition can be characterized in terms of a realis/irrealis distinction, with the former clause types being used is realis contexts, and the latter being used in irrealis contexts.

Table 5.4. Distribution of Person Prefixes across Clause Types

	Clause types	**(Long form) Person prefixes**
Realis contexts	Independent clauses Realis conjunct clauses Unreal clauses	✓
Irrealis contexts	Imperative clauses Irrealis conjunct clauses Subjunctive clauses	×

In short, as demonstrated in Table 5.4, the prediction outlined in §5.2 is borne out: if INFL in Blackfoot is person-based (i.e., specified for P-deixis features), then arguments in Spec, IP should be sensitive to the ir/realis contrast.

5.4. Person Prefixes in Spec, IP have Temporal Content

In this section, I demonstrate that the second prediction of §5.2 is borne out: person prefixes in Spec, IP have temporal content. The argument is based on a comparison between the long and short form person prefixes; I argue that only the long forms appear in Spec, IP and only the long forms have temporal content. The section proceeds as follows. In §5.4.1, I summarize Bliss and Gruber's (2011a,b) proposal that the long form person prefixes are morphosyntactically complex, consisting of the short form prefix plus a temporal element *it-*, and in §5.4.2, I build on this proposal to suggest that only the long forms, which are temporally restricted, appear in Spec, IP.

5.4.1. Only the Long Form Prefixes are Temporally Restricted

As noted in Chapter 1, the person prefixes at the left edge of the verbal complex have two different morphological realizations, long and short, as exemplified below.

(27)	a.	***Nit**á'po'taki.* **nit**-a'po'taki **1**-work.AI "I worked."	b.	***Kit**á'po'taki.* **kit**-a'po'taki **2**-work.AI "You worked."	c.	*…**ot**á'po'takssi.* **ot**-a'po'taki-hs-yi **3**-work.AI-CONJ-OBV "…(when) s/he worked."
(28)	a.	***N**ikáá'po'taki.* **n**-ikaa-a'po'taki **1**-PERF-work.AI "I have worked."	b.	***K**ikáá'po'taki.* **k**-ikaa-a'po'taki **2**-PERF-work.AI "You have worked."	c.	*…**o**káá'po'takssi.* **w**-ikaa-a'po'taki-hs-yi **3**-work.AI-CONJ-OBV "…(when) s/he had worked."

In this section, I summarize the findings of Bliss and Gruber (2011a, b)[93], who argue that the long and short form prefixes differ in their syntactic and semantic properties, and that the long forms are

[93] In the remainder of this section, I present the arguments from Bliss and Gruber (2011a,b) without citation, but acknowledgement also goes to my co-author in the original work; see also Gruber (in prep).

morphosyntactically complex, consisting of the short form prefixes, plus a D head that provides a temporal restriction.

5.4.1.1. Long and Short Form Prefixes Differ in their Categorical Status

The alternation between long and short form prefixes is neither lexically nor phonologically conditioned.[94] If the alternation were lexically conditioned, then we could not account for the observation that the same base forms can select either the long or short forms, as shown in (29)-(30). Furthermore, if the alternation were phonologically conditioned, we could not account for the existence of near-minimal pairs that differ only in the form of the prefix, as shown in (31)-(33).

(29)	a.	***N**ááhksipaisska.* **n**-aahk-ipaisskaa **1**-MOD-dance "I might dance."	b.	***Nit**ááhksipaisska.* **nit**-aahk-ipaisskaa **1**-MOD-dance "I would dance."
(30)	a.	*Amo **k**o'tokáána.* amo **k**-o'tokaan-wa DEM **2**-hair-PROX "This is your (own) hair."	b.	*Amo **kit**o'tokáána.* amo **kit**-o'tokaan-wa DEM **2**-hair-PROX "This is your (clipping of his/her) hair."
(31)	a.	***N**ikáítsiniki*. **n**-ikaa-itsiniki **1**-PERF-relate.story "I have told a story."	b.	***Nit**sikáítsiniki*. **nit**-ika-a-itsiniki **1**-old-IMPF-relate.story "I am telling an ancient story."
(32)	a.	***K**ikáípaisska*. **k**-ikaa-ipaisska **2**-PERF-dance "You have danced."	b.	***Kit**sikáápaisska*. **kit**-ikaap-ipaisskaa **2**-frequently-dance "You often danced."
(33)	a.	*Ááhkoyimmiiyinaiksi*.[95] **w**-aahk-oyimm-yii-yini-aiksi **3**-MOD-mourn-DIR-OBV-3PL.PRN "S/he might have mourned them."	b.	***ot**ááhkóyinnimaanistsi* **ot**-aahkoyinnimaan-istsi **3**-pipe-PL "his/her pipes" (Frantz and Russell 1995:1)

[94] Historically, the long and short form series can be traced to Proto-Algonquian, which also had both forms (Proulx 1989). However, whereas in the proto-language the short forms were restricted to the context of inalienable possession, in Blackfoot the short forms have a wider distribution.

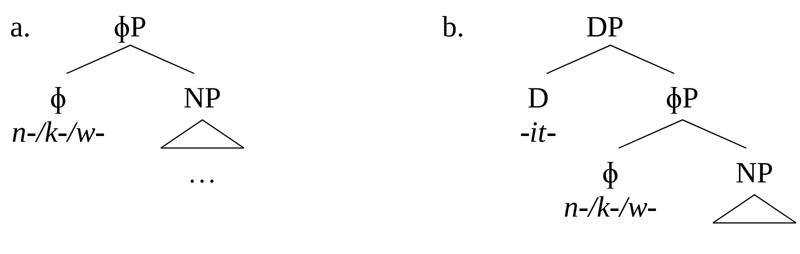
[95] The postverbal (obviative) subject has been omitted from this sentence for sake of comparison with (33b).

The data in (29)-(33) rule out the possibility that the alternation between the long and short forms is either lexically or phonologically conditioned. The alternative is that the long and short forms differ in their morphosyntactic composition, as shown in in Table 5.5.

Table 5.5. Long and Short Form Prefixes

	1st person	2nd person	3rd person
long form	*n-it-*	*k-it-*	*w-it- (=ot-)*[96]
short form	*n-*	*k-*	*w-*

Following Déchaine and Wiltschko (2002) I assume that, crosslinguistically, nominal proforms can be internally complex and vary in their categorical status. Specifically, in increasing order of syntactic complexity, proforms may be pro-NPs, pro-ϕPs, or pro-DPs. With respect to the Blackfoot person prefixes, I propose that the short forms are pro-ϕPs and the long forms are pro-DPs. The structures are given in (34) below.

(34)


As shown in (34), in both the short and long forms, the person marker *n-/k-/w-* associates with the ϕ head, which projects a ϕP. In the long forms, *it-* associates with D and the person marker *n-/k-/w-* undergoes head movement to D, whereby it precedes *it-*. Empirical support for these structures comes from looking at the diagnostic properties developed by Déchaine and Wiltschko (2002). Specifically, this proposal correctly predicts that the short and long form prefixes differ with respect to their morphosyntactic properties and binding theoretic status.

With respect to their morphosyntactic properties, the proposed structures in (34) predict the long forms to be bimorphemic. This prediction is borne out; the ϕ head *n-/k-/w-* is independently attested in the

[96] A regular phonological rule in Blackfoot results in /w-i/ sequences surfacing as [o], cf. Frantz (2009).

short forms, and the D head *it-* is independently attested as a spatiotemporal adposition, as shown in (35) and (36) below.

(35) a. *Ááksipsstsooyiwa.*
yaak-ipsst-ooyi-wa
FUT-inside-eat-PROX
"S/he will eat inside."

b.

*Ááks**it**sipsstsooyiwa*	*omi*	*ksikóókooyiss.*
aak-**it**-ipsst-ooyi-wa	om-yi	ksikookooyiss-yi
FUT-**LOC**-inside-eat-PROX	DEM-INAN	tent-INAN

"S/he will eat inside that tent."

(36) a.

Anna	*Leo*	*áíkskima.*
ann-wa	L	a-ikskimaa
DEM-PROX	L	IMPF-hunt.AI

"Leo hunts."

b.

Anna	*Leo*	***it**áíkskima*	*omi*	*itáó'tsstoyi.*
ann-wa	L	**it**-a-ikskimaa	om-yi	itao'tsstoyi
DEM-PROX	L	**LOC**-IMPF-hunt.AI	DEM-INAN	November

"Leo hunts in November."

In (35), the adposition *it-* introduces the spatial expression *omi ksikóókooyiss* "that tent," and in (36), *it-* introduces the temporal expression *omi itáó'tsstoyi* "November." As such, *it-* places a spatiotemporal restriction on the eventuality denoted by the predicate; it introduces an oblique nominal expression that restricts the place or time of eventuality. As will be explained below, the semantic contribution of *it-* in the person prefixes is parallel to this: it restricts the temporal interpretation of the individual.

With respect to their binding theoretic status, I assume, following Déchaine and Wiltschko, that whereas pro-ϕPs can function as bound variables, pro-DPs cannot. This yields the following prediction: if the short form prefixes are pro-ϕPs and the long forms are pro-DPs, then the former but not the latter should be able to function as bound variables.[97] This prediction is borne out. As shown below, bound

[97] E-type readings of full DPs (i.e., donkey anaphora) may appear to pose a challenge to the claim that DPs cannot function as bound variables, given that in these contexts the DP appears to be bound. However, following Evans (1980), I treat E-type pronoun as hidden definite descriptions that by definition are not bound variables. As such, E-type readings of full DPs are similarly not bound. See Wiltschko (1998) for evidence from German that E-type readings are not bound variables.

variable readings are possible for the short form prefix possessors, but not for the long form prefix possessors.

(37)

Nitsikáákomimma	***n**iksíssta*	*ki*	*anna*	*Apánii*	*ni'tóyi.*
nit-ik-waakomimm-a-wa	**n-**iksisst-wa	ki	ann-wa	A	ni'toyi
1-INTNS-love.TA-DIR-PROX	**1**-mother-PROX	and	DEM-PROX	A	be.same

"I love my mother and Apanii does too."

✓ STRICT → Apanii loves **my** mother.
✓ SLOPPY → Apanii loves **her own** mother.

(38)

Nitsikááhsi'tsi'p	***nit**sipisátsskitaani*	*ki*	*anna*	*Apánii*	*ni'tóyi.*
nit-ik-yaahsi'tsi-'p	**nit**-pisatsskitaan-yi	ki	ann-wa	A	ni'toyi
1-INTNS-like.TI-1:INAN	**1**-cake-INAN	and	DEM-PROX	A	be.same

"I like my cake and Apanii does too."

✓ STRICT → Apanii likes **my** cake.
* SLOPPY → cannot mean: Apanii likes **her own** cake.[98]

The primary morphological distinction between the sentences in (37) and (38) is the possessor prefix. In (37), the short form *n-* appears on the possessed noun *iksísst* "mother," and in (38), the long form *nit-* appears on the possessed noun *pisátsskitaan*. This distinction correlates with a difference in binding theoretic status. In (37) the short form prefix permits the sloppy reading under ellipsis, indicating that the possessor prefix is bound by the subject pronoun, but in (38), the sloppy reading of the long form prefix is not available, indicating that the long form prefix cannot function as a bound variable.

Consistent with the observation that short forms can yield sloppy readings, Déchaine et al. (2011) report that the 1st and 2nd person independent personal pronouns, which are formed using the short form prefixes, can function as bound variable reflexives. An example is given below.

[98] To yield a sloppy-type construal ("I like my cake and Apanii likes her cake"), the second conjunct could not involve elision:

… *ki*	*anna*	*Apánii*	*nohkáttsikaahsi'tsima*	*otsipisatsskitaani.*
ki	ann-wa	Apanii	nohkatt-ik-yaahsi'tsi-m-wa	ot-pisatsskitaan-yi.
and	DEM-PROX	A	also-INTNS-like.TI-3:INAN-PROX	3-cake-INAN

"…and Apanii likes her cake too."

(39) *Nitoo'ohtsipoyi niisto kiisto ni'toyi.*
nit-oht-ipoyi niisto kiisto ni'toyi
1-CONT-speak.AI 1SG.PRN 2SG.PRN be.same.AI
"I talked about myself and you did too."
✓ SLOPPY "I talked about me and you also (talked about you)"
* STRICT "I talked about me and you also (talked about me)"
(adapted from Déchaine et al. 2011: 4)

In sum, the long and short prefixes differ in their morphological and binding theoretic properties, and I take this as evidence that they also differ in their syntactic composition. The short forms, as noted, are proposed to be monomorphemic pro-ϕPs, and I propose that *n*-, *k*-, and *w*- are the formal instantiation of the ϕ-features 1st, 2nd, and 3rd person respectively. The long forms, on the other hand, are bimorphemic pro-DPs, composed of the ϕPs of the short forms, plus a D head *it*-.

5.4.1.2. Long Form Prefixes Refer to a Stage of an Individual

I propose that *it*- encodes the core semantic property of D, which I take to be domain restriction, following Gillon (2006, 2009).[99] According to Gillon, the syntactic category of D is universally associated with domain restriction; D heads function to restrict the set of entities introduced by an NP to a contextually salient subset.[100] The idea that D restricts NP denotations to a particular semantic domain accounts for the observation that DPs do not (typically) refer to all of the individuals in the world that match their NP's description, but rather to a contextually salient subset. For example, the English sentence *The dogs were barking* typically does not refer to all dogs in the world, but a set of dogs that is established as salient or relevant in a discourse context. Seen in this way, the primary contribution of the D head *the* in this sentence is to restrict the domain of individuals denoted by the NP to a contextually salient set.

[99] Regarding the relation between domain restriction and anchoring (which I take to be the syntactic function associated with D), I assume that domain restriction can fulfill the anchoring function (discussed in Chapter 1); it anchors the set of entities denoted by NP to to the discourse context.

[100] Gillon's claims about domain restriction builds on e.g., von Fintel (1994). It should be noted that not all researchers associate domain restriction with the syntactic category of D; e.g., Stanley and Szabó (2000) associate it with N. See Gillon (2006, 2009) for discussion.

Turning now to Blackfoot *it*-, if *it*- is a D head, then it should have the semantic properties of a D. In other words, *it*- should restrict the domain of the persons ($1^{st}/2^{nd}/3^{rd}$) in ϕP to a contextually salient subset. However, this is clearly different from restricting the domain of an NP, because personal pronouns, especially 1^{st} and 2^{nd} persons, refer to contextually salient individuals by their very nature. In other words, the speaker (1^{st} person) and addressee (2^{nd} person) are always present and salient in the discourse context (see Erteschik-Shir (2007), who claims that the speaker and addressee are stage topics, permanently available in the information structure of a sentence.) The question we can ask is how a D can restrict the domain of a domain that is already contextually restricted. The answer lies in the characterization of the domain, and for this I adopt Musan's (1995, 1999) claim that the domain of individuals contains both individuals and STAGES of individuals, whereby *stage* is defined as follows:

(40) STAGE = temporal slice of an individual, an individual at a given time (to be distinguished from an individual in its maximal temporal extendedness) (Musan 1995; cf. also Carlson 1980)

According to Musan (1995: 94): "Determiner quantification is not quantification over individuals in their whole temporal extendedness but quantification over stages of individuals." Extending this idea to the person prefixes, the proposal is that *it*- is a D head that restricts the domain of the individual in ϕP to the contextually salient stage(s) of that individual. The consequence of this is a difference in the referential properties of the short and long form prefixes. Whereas a short form prefix, or pro-ϕP, is temporally unrestricted, and refers to an individual in the abstract, a long form prefix, or pro-DP, refers to a stage of the individual, or the individual at a contextually salient point in time.

If the long forms are temporally restricted and refer to a stage of an individual, the prediction is that they should be ungrammatical in morphosyntactic environments in which the relation between the prefix and the predicate is atemporal.[101] In what follows, I discuss two such environments: inalienable possession and the perfect.

[101] This also seems to (incorrectly) predict that individual-level predicates (e.g., "I am a woman") should require the short form prefixes. How these environments fit into the current model is a matter I leave for future research.

First regarding inalienable possession, the descriptive generalization is that the long forms are used with alienably possessed nouns and the short forms with inalienably possessed nouns[102], as shown below.

(41)	a. *__nit__áákiikoama*[103] **nit**-aakiikoan-m-wa **1**-girl-POSS-PROX "my girlfriend"	b. *__kit__áákiikoama* **kit**-aakiikoan-m-wa **2**-girl-POSS-PROX "your girlfriend"	c. *__ot__áákiikoami* **ot**-aakiikoan-m-yi **3**-girl-POSS-OBV "his/her girlfriend"
(42)	a. *__nit__ááhkioohsa'tsima* **nit**-aahkioohsa'tsis-m-wa **1**-boat-POSS-PROX "my boat"	b. *__kit__ááhkioohsa'tsima* **kit**-aahkioohsa'tsis-m-wa **2**-boat-POSS-PROX "your boat"	c. *__ot__ááhkioohsa'tsima* **ot**-aahkioohsa'tsis-m-wa **3**-boat-POSS-PROX "his/her boat"
(43)	a. *__n__ímssa* **n**-imss-wa **1**-daughter.in.law-PROX "my daughter-in-law"	b. *__k__ímssa* **k**-imss-wa **2**-daughter.in.law-PROX "your daughter-in-law"	c. *__ó__mssi* **w**-imss-yi **3**-daughter.in.law-OBV "his/her daughter-in-law"
(44)	b. *__n__o'ksísa*[104] **n**-mo'ksis-wa **1**-armpit-PROX "my armpit"	b. *__k__o'ksísa* **k**-mo'ksis-wa **2**-armpit-PROX "your armpit"	c. *__o__'ksísa* **w**-mo'ksis-wa **3**-armpit-PROX "his/her armpit"

As observed in (41) and (42), alienably possessed nouns such as *aakiikoan* "girl(friend)" and *aahkioohsa'tsis* "boat" take the long form prefixes, and as observed in (43) and (44), inalienably possessed nouns such as *imss* "daughter-in-law" and *mo'ksis* "armpit" take the short forms.[105] This difference reflects a semantic difference between alienable and inalienable possession. Whereas alienable possession can be viewed as a transitory relation that holds between two entities, inalienable possession

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[102] Frantz (2009: 70-71) refers to these as "optionally possessed nouns" and "obligatorily possessed nouns," respectively.

[103] Frantz (2009: 72) describes *the –(i)m* suffix as a derivational suffix that renders nouns "relational," i.e., able to be possessed. I discuss this suffix in more detail in §5.3.2.

[104] As noted by Frantz (2009: 73), almost all body part nouns have an initial *m-* that is only present when the noun does not appear with a possessive prefix. Whether this *m-* is related to the 3rd person *m-* that is appears in conjunct complements of desiderative predicates (see §5.2) remain to be seen.

[105] Mühlbauer (2007) distinguishes relational (i.e., kinship) nouns from other inalienable (e.g., body part) nouns in Plains Cree. There is evidence for this distinction in Blackfoot as well; whereas body part nouns take a prefix *m-* when their possessor is not specified, kinship terms do not. I abstract away from these differences here, as relational and other inalienable nouns pattern the same with respect to the person prefixes.

holds at all times irrespective of a specific event context, and can be viewed as a non-transitory relation. The D head *it-* of the long forms picks out the salient stage of the individual at which the possessor relation holds. This temporal restriction on the long form prefixes reflects the transitory nature of alienability, whereas the short forms, being temporally unrestricted, have a non-transitory and atemporal relation with the inalienably possessed noun.

The class of inalienably possessed nouns includes relational (i.e., kinship) nouns (43) and body part nouns (44). In contrast, alienably possessed nouns can be considered the elsewhere category. However, in at least some cases, the in/alienable distinction seems to be lexically specified. In the grammar, there are (near) synonyms that differ in terms of which form of the prefix they select. In at least some of these cases, the difference correlates with a difference in alienability as well. Consider the following example.

(45)	a.	*Oma*	***n**ó'tasa*	*áyaaksikiikiwa.*
		om-wa	**n**-o'tas-wa	a-yaak-ikiiki-wa
		DEM-PROX	**1**-horse-PROX	IMPF-FUT-win.AI-PROX
		"My horse is going to win."		
		CONTEXT: My own horse is in a race		

	b	*Oma*	***nit**siponokáómitaama*	*áyaaksikiikiwa.*
		om-wa	**nit**-ponokaomitaa-m-wa	a-yaak-ikiiki-wa
		DEM-PROX	**1**-horse-PROX	IMPF-FUT-win.AI-PROX
		"My horse is going to win."		
		CONTEXT: I am at the racetrack and I've bet on a horse (that I do not own)		

In (45), we see that there are two lexical items meaning "horse," one that selects the short form and one that selects the long form. This distinction correlates with a distinction in alienability; only the form in (45a) can refer to a horse one owns; it could not be used in a context in which the speaker has bet on a horse (that they don't own) at the racetrack. The sentence in (45b), however, can be used in such a context[106], and would not be felicitous to refer to a horse that one owns.

The fact that the (a) and (b) examples in (48) differ in their contexts of use suggests that it isn't the selection of long and short form prefixes that is lexically specified, but rather, in/alienability is, and the restrictions on the prefixes reflect this. This predicts that we should be able to find cases of coercion, whereby the long forms are used to yield an alienable possession interpretation for something otherwise considered inalienable. Indeed, this prediction is borne out, as shown in (46).

(46) a. *Amo* ***n****o'tokáán.*
amo **n-**o'tokaan-wa
DEM **1-**hair-PROX
"This is my (own) hair."

b. *Amo* ***nit****o'tokáán.*
amo **nit-**o'tokaan-wa
DEM **1-**hair-PROX
"This is is my (clipping of his/her) hair."

In (46a), the body part noun *(m)o'tokaan* "hair" appears with the short form prefix to indicate its typical inalienable interpretation. However, in (46b), the long form prefix is used instead, and this yields an alienable interpretation of the otherwise inalienably possessed noun. The fact that the long form prefixes can be used to coerce alienable interpretations suggests that they encode the necessary semantic features to yield alienability, namely the temporal restriction required for a transitory relation between the possessor and the noun. The short forms, on the other hand, lack this temporal restriction, and as such can only be used to express inalienability, a relation that holds at all times and doesn't make reference to a stage of an individual.

A second morphosyntactic environment that requires the short form prefixes is with the perfect. Examples are given below.

---

[106] Not all speakers accept (45b) as grammatical. One of my consultants (Rachel Ermineskin) does not permit the noun *ponokaomitaa* to be used with a possessive prefix, and uses a nominalization construction instead:

Oma	*nitsitá'psskahpa*	*ponokáómitaawa*	*áyaaksikiikiwa.*
om-wa	nit-it-wa'psskaa-hp-wa	ponokaomitaa-wa	a-yaak-ikiiki-wa
DEM-PROX	1-LOC-bet.AI-CN-PROX	horse-PROX	IMPF-FUT-win.AI-PROX

"The horse that I bet on is going to win."

This type of variation between speakers is consistent with Vergnaud and Zubizarreta's (1992) observation that inalienability can be inherent (e.g., with body part nouns), or can be achieved via extension, in which case it is expected to exhibit variation across speakers.

(47) a. ***N****ikááyo'kaa*.
n-ikaa-yo'kaa
1-PERF-sleep.AI
"I have slept."

b. ****Nit****sikaayo'kaa.*
nit-ikaa-yo'kaa
1-PERF-sleep-AI
intended: "I have slept."

(48) a. ***K****ikáíkkahsani*.
k-ikaa-ikkahsanii
2-PERF-tell.jokes.AI
"You have told jokes."

b. ****Kit****sikáíkkahsani*.
kit-ikaa-ikkahsanii
2-PERF-tell.jokes.AI
intended: "You have told jokes."

(49) a. *…**o**káíksistsskitahsi*.
w-ikaa-iksist-ihkitaa-hs-yi
3-PERF-finish-bake.AI-CONJ-OBV
"…(when) s/he had finished baking."

b. *… ***ot****sikáíksistsskitahsi*.
ot-ikaa-iksist-ihkitaa-hs-yi
3-PERF-finish-bake.AI-CONJ-OBV
intended: "…(when) s/he had finished baking."

As observed in (47)-(49), verbs that are prefixed with the perfect morpheme *ikaa*-[107] necessarily select the short form prefixes. The long forms are ungrammatical in this context because a perfect predicate denotes a property that is permanently attributed to the individual. Being property-denoting, the perfect delineates the temporal boundaries of an eventuality and ascribes the whole of that eventuality to the individual (von Stechow 1999; Iatridou et al. 2002). In the Extended Now theory of the perfect (McCoard 1978), the property denoted by a perfect predicate has current relevance to the individual's experience over their lifetime or an extended period. As such, a predicate predicate is not ascribed to a stage of an individual, but the individual in their temporal entirety. Just as the relation between a possessor and an inalienably possessed noun is non-transitory and cannot make reference to the stage of an individual, so is the relation between an external argument and a perfect predicate. To draw a simple analogy, just as my arm is always a property of me, regardless of the discourse context, my having danced is also always a property of me. Thus, just as inalienable possession requires the short form prefixes because it cannot make reference to a stage of an individual, so does the perfect.

A related generalization that supports the analysis comes from the distribution of the person prefixes with the modal *ááhk*-. The long form prefixes are selected when *ááhk*- is used to form

[107] Frantz (2009: 34) identifies this morpheme as a perfective marker, but I analyse it as a perfect marker. (See Chapter 1 for discussion.)

counterfactual statements of the unreal clause type, but the short forms are selected when *áähk-* is used as an epistemic modal with independent clauses. This is shown below.

(50) ***Nit****ááhksikkamihpiyihtopi* *nitsáíssiksinaasihtopi.*
nit-aahk-ikkam-ihpiyi-ihtopi nit-sa-ssiksinaasi-htopi
1-MOD-if-dance.AI-UNREAL 1-NEG-break.leg.AI-UNREAL
"I would dance if I hadn't broken my leg."

(51) ***N****ááhksikkamihpiyi.*
n-aahk-ikkam-ihpiyi
1-MOD-if-dance.AI
"I might dance."

Izvorski (1997) draws parallels between the semantics of past tense and counterfactuality on the one hand, and the present perfect and epistemic modality on the other (see also Portner 2003). For Izvorski, the latter but not the former encode a notion of consequence and/or current relevance, which as noted above, does not make reference to the stage of an individual. As such, the distribution of the short form proclitics in modal environments is predicted by this analysis.

In sum, in this section I have argued that the long form prefixes (but not the short form prefixes) have temporal content; they have a D head that restricts the interpretation of the individual to a contextually salient stage of that individual. Because the short form prefixes do not have temporal content, they are restricted to contexts which do make reference to the stage of an individual.

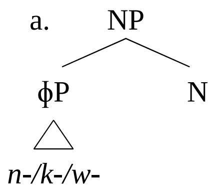
5.4.2. Only the Long Form Prefixes are in Spec, IP

In the preceding section, I demonstrated that only the long form prefixes have temporal content, and in this section I demonstrate that only the long form prefixes appear in Spec, IP. This supports the prediction laid out in §5.2 that arguments in Spec, IP have temporal content.

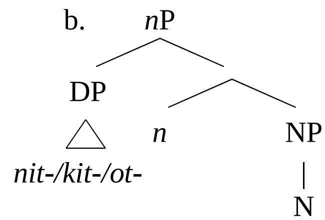
I begin by mapping out the relative positions of the person prefixes in the nominal domain, i.e., when they function as possessors. Under the assumption that we can draw parallels between the nominal and verbal spines, I then extend the analysis of the person prefixes within the nominal spine to the verbal spine, and provide some supporting evidence for the position of the prefixes in the verbal spine.

Inalienable possession is expressed by a two-place predicate (cf. Barker 1995; Partee 1983/1997) and inalienably possessed nouns (N) require a possessor in Spec, NP, as shown in (52a) below. Alienably possessed nouns, on the other hand, are one-place predicates that don't have a Specifier position for the possessor (Barker 1995). The possessor associates with the Specifier of a higher functional head, assumed here to be an external-argument introducing little *n* (analogous to little *v*, cf. Ritter and Rosen 2010b).[108] This is shown in (52b) below.

(52) a.



b.



There are two pieces of Blackfoot-specific evidence in support of the claim that the alienable (DP) possessors are introduced higher than the inalienable (ϕP) possessors. The first, as discussed by Ritter and Rosen (2010b) is the observation that alienable possession is often marked not only with the DP possessor, but also with a possessive suffix *–(i)m*.[109] Examples are given below.

(53) a. *kaaáhsa*
k-aaahs-wa
2-grandparent-PROX
"your grandparent"

b. **kaaáhs**im**a*
k-aaahs-**im**-wa
2-grandparent-**POSS**-PROX
intended: "your grandparent"

---

[108] Ritter and Rosen propose two *n* heads, a lower one that is categorizing and a higher one that is external argument-introducing. I refer to the former as N and the latter as *n*. See also Alexiadou (2003), who argues for a functional layer PossP for introducing the possessor of an alienably possessed noun. Following Alexiadou, Bliss and Gruber (2011a, b) refer to the functional head that introduces the possessor as Poss.

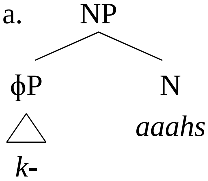
[109] With certain alienably possessed nouns, the *–(i)m* suffix is absent. Following Ritter and Rosen (2010b), I assume that these nouns select a null allomorph of *–(i)m*.

(54) a. *_kitááattsistaawa_
kit-aaattsistaa-wa
2-rabbit-PROX
intended: "your rabbit"

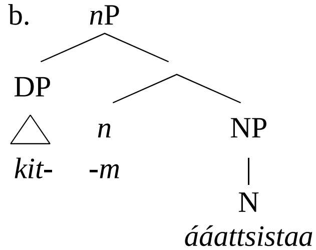
b. _kitááattsistaa**m**a_
kit-aaattsistaa-**m**-wa
2-rabbit-**POSS**-PROX
"your rabbit"

In (53), we see that the –_(i)m_ suffix cannot appear on inalienably possessed nouns but in (54), we see that it is obligatory on alienably possessed nouns. Following Ritter and Rosen, I assume that –_m_ maps onto the _n_ head, and functions to introduce an external argument, namely the DP possessor. The structures for (53) and (54) are given below.[110]

(55) a.



b.



The second piece of evidence in support of the claim that the DP possessors are introduced higher than the ϕP possessors comes from the observation that the two can co-occur. Examples are given below.

(56) a. _**nit**sikáóksissta_
nit-ika-**w**-iksisst-wa
1-PAST-**3**-mother-PROX
"my former mother"

b. *_**nit**sika**ot**siksst__a_
nit-ika-**ot**-iksisst-wa
1-PAST-**3**-mother-PROX
intended: "my former mother"

c. *_**n**ika**o**ksissta_
n-ika-**w**-iksisst-wa
1-PAST-**3**-mother-PROX
intended: "my former mother"

[110] For simplicity, I do not include the number suffixes (here –_wa_) in these trees. See Chapter 3 for a detailed discussion of the syntax of these suffixes.

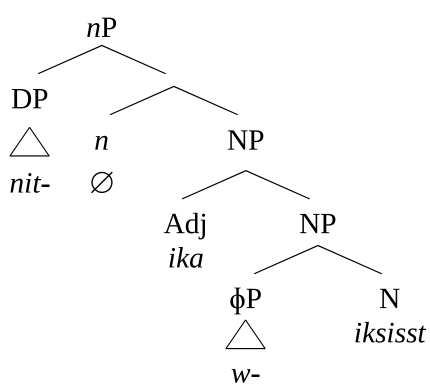
d. *_**n**ika**ot**siksissta_
n-ika-**ot**-iksisst-wa
1-PAST-**3**-mother-PROX
intended: “my former mother”

(57) a. _**nít**omahk**o**nssta_
nit-omahk-**w**-insst-wa
1-big-**3**-sister-PROX
“my big sister” (derogatory connotation, i.e., obese)

b. *_**nit**-omahk-**ot**-insst-wa_
c. *_**n**-omahk-**w**-insst-wa_
d. *_**n**-omahk-**ot**-insst-wa_

In (56a) is an example of possessor stacking, in which both a long form and a short form prefix appear on the noun, separated by the adjectival prefix *ika-* “past/old.” While the long form denotes the actual possessor (1st person), the short form is the 3rd person *w-* which appears to function as a default, prefixed to the verb in order to fulfill the syntactic requirement that the relational noun take a possessor in its Specifier.[111] Note that only the short form prefix can appear in immediately prenominal position; (b) and (d) in which a long form appears adjacent to the noun are ungrammatical. Similarly, only the long form can precede the adjectival prefix; (c) and (d) in which the short form appears before *ika-* are ungrammatical. In short, the long form is structurally higher than the short form. This pattern is robust with relational nouns; another example of possessor stacking is given in (57).

Possessor-stacking is predicted by the analysis developed here, under which the long and short prefixes associate with different syntactic positions. The structure for (56) (and (57)) is given below.

(58)


[111] Possessor stacking with a default 3rd person is found in other Algnoquan languages as well (cf. Déchaine 1999, p. 45 for examples from Plains Cree, Menominee, and Ojibwe)

In sum, in the nominal spine, the short and long form person prefixes are introduced in different positions. Whereas the short form prefixes are introduced by a lexical head (N), the long forms are introduced by a higher functional head (*n*). By analogy, I propose that the person prefixes in the verbal spine are also introduced in two different positions. First regarding the long form prefixes, they are also introduced in a higher layer, namely IP. As for the short form prefixes, they are introduced in a parallel position to where they are introduced in the nominal domain, i.e., that they are introduced as an external argument to the lexical head V. Both of these are schematized below

(59)	a.	[CP	[IP *{nit-/kit-/ot-}*	[AspP	[*v*P	[VP	]]]]]
	b.	[CP	[IP	[AspP	[*v*P	[VP *{n-/k-/w-}*	]]]]]

Although associated with Spec, VP, the short form prefixes can move to higher argument positions to check uninterpretable features on functional heads such as *v* and Asp. (See Chapter 2 for a discussion of argument positions in Blackfoot.) Crucially, however the short form prefixes cannot move to Spec, IP; their lack of temporal content blocks them from functioning as anchoring arguments.

5.5. Spec, IP has Deictic Content

In this section, I demonstrate that the third prediction of §5.2 is borne out: Spec, IP is not restricted to event participants. Specifically, I show that, in addition to the long form person prefixes, the other morpheme that can occupy Spec, IP is *na-*, an evidential prefix that encodes speaker certainty and past time reference. The prefix *na-* is attested in the Siksiká dialect only and is described by Frantz (2009: 37) as an optional past tense marker. An example of *na-* is given below.

(60)	a.	*Anná*	*íóyiwa*	*akóópis.*
		ann-wa	ii-ooyi-wa	akoopis
		DEM-PROX	IC-eat.AI-PROX	soup
		"S/he ate soup."		

b. *Anná* ***ná****óoyiwa* *akóópis.*
ann-wa **na**-ooyi-wa akoopis
DEM-PROX **EVID**-eat.AI-PROX soup
"S/he ate soup."

In (60a), the verb is prefixed with *ii*-, which is a reflex of INITIAL CHANGE (cf. Taylor 1967; Proulx 2005, see also Chapter 8) that appears on verb stems that do not have any other tense/aspect prefixes. In (60b), the verb is prefixed with *na*-.

This section proceeds as follows. In §5.5.1, I show that *na*- occupies the same position as the long form person prefixes (namely Spec, IP) and in §5.5.2, I argue that *na*- is an evidential that encodes both speaker certainty and past time reference. In §5.5.3, I situate *na*- in my analysis of anchoring arguments, and I argue that *na*- checks the uninterpretable ϕ features on INFL.

5.5.1. *na*- Occupies the Same Syntactic Position as the Person Prefixes

The *na*- prefix is in complementary distribution with the long form person prefixes, as shown in (61) and (62).

(61) a. *Nitókska'si.*
nit-okska'si
1-run.AI
"I ran"

b. ****Na****nitókska'si.*
na-nit-okska'si
EVID -1-run.AI
intended: "I ran."

(62) a. *Kitókska'si.*
kit-okska'si
2-run.AI
"You ran."

b. **Kit****ná****ókska'si.*
kit-**na**-okska'si
2- **EVID** -run.AI
intended: "You ran."

Because *na*- is in complementary distribution with the person prefixes, it cannot be used in clauses that have a 1st or 2nd person subject or object.[112] However, it is not restricted to clauses with 3rd persons only; it can be used in clauses with arguments that are inclusive persons, as shown below.[113]

[112] We might predict that *na*- should be possible with the short form prefixes, given that they appear in a lower position in the clause. I have yet to test whether this prediction is borne out.

[113] In Blackfoot, the same form is used to an inclusive subject and an unspecified subject. As such, (63) could also be interpreted as "someone ate the bread" (cf. Frantz 2009, p. 53).

(63)	***Ná**óówato'pa*	*anni*	*napáyini.*
	na-oowato-’p-wa	ann-yi	napayin-yi
	EVID -eat.TI-1:INAN-PROX	DEM-INAN	bread-OBV
	“We (incl) ate the bread.”		

Furthermore, *na-* cannot be used in clauses in which the 3rd person prefix *ot-* is used. For example, although *na-* is possible with conjunct clauses that don’t have a person prefix (as shown in (64)), it cannot be used in conjunct clauses with *ot-* (as shown in (65)).

(64)	*Na*	*Rosie*	*iyóóhtookiwa*	***ná**ínihkssi*	*ko’kóyi.*
	ann-wa	Rosie	i-yooht-o-oki-wa	**na**-a-inihki-hs-yi	ko’ko-yi
	DEM-PROX	Rosie	IC-hear-TA-3:INCL-PROX	**EVID** -IMPF-sing.AI-CONJ-OBV	night-INAN
	“Rosie heard us (incl) singing last night.”				

(65)	a.	*Nitóóhtoawa*	*anna*	*issítsimaan*	***ot**awáásai’nissi.*
		nit-yooht-o-a-wa	ann-wa	issitsimaan-wa	**ot**-a-waasai’ni-hs-yi
		1-hear-TA-DIR-PROX	DEM-PROX	baby-PROX	**3**-IMPF-cry.AI-CONJ-OBV
		“I heard the baby crying.”			
	b.	******Nitóóhtoawa*	*anna*	*issítsimaan*	***ná**áwaasai’nissi.*
		nit-yooht-o-a-wa	ann-wa	issitsimaan-wa	**na**-a-waasai’ni-hs-yi
		1-hear-TA-DIR-PROX	DEM-PROX	baby-PROX	**EVID**-IMPF-cry.AI-CONJ-OBV
		intended: “I heard the baby crying.”			

These data show that *na-* only appears in morphosyntactic environments in which the (overt)[114] person prefixes do not appear. This is summarized in Table 5.6.

Table 5.6. Complementarity of *na-* and Person Prefixes

Person	Prefixes	*na-* is possible?
1st person	*nit-*	×
2nd person	*kit-*	×
3rd person	*ot-*	×
	Ø	✓
Inclusive/unspecified	(no prefix)	✓

The complementarity between *na-* and the person prefixes suggests that they occupy the same position in the syntax. Further support for this comes from the fact that they show the same restrictions with respect

[114] In §5.1, I stipulated that a null (Ø) 3rd person prefix can check and value as [NONLOC] the uninterpretable [ϕ] feature on INFL. As shown in (60b), the prefix *na-* can appear in contexts in which the Ø prefix would appear (e.g., clauses with only non-local arguments and no *ot-* prefix). Why *na-* can be used in contexts which require the Ø prefix but not *ot-* is yet unexplained.

to the realis/irrealis distinction. Just as the person prefixes are restricted to realis clauses, as I now show, so is *na*-.

Recall from §5.3 that independent clauses are realis; *na*- patterns with the person prefixes in being able to appear in independent clauses, as exemplified in (60b) and (63) above. Conjunct clauses like those in (64) and (65) are realis, unless marked with the irrealis marker *aahk*-. In §5.3, I demonstrated that the long form person prefixes cannot appear on irrealis conjunct clauses. The same is true of *na*-, as shown in below.

(66) a.

Nitsíksstaataw	*na*	*Jaan*	*m**ááhk**sikkossi*	*amo atsinayíí.*
nit-ik-sstaat-a-wa	ann-wa	J	m-**aahk**-sikkohsi-hs-yi	amo atsinayi-yi
1-INTNS-want.TA-DIR-PROX	DEM-PROX	J	3-**MOD**-melt.TI-CONJ-OBV	DEM fat-INAN

"I want John to melt this fat."

b.

**Nitsíksstaataw*	*na*	*Jaan*	***nááhk**sikkossi*	*amo*	*atsinayíí.*
nit-ik-sstaat-a-wa	anna	J	**na-aahk**-sikkohsi-hs-yi	amo	atsinayi-yi
1-INTNS-want.TA-DIR-PROX	DEM	J	**EVID-MOD**-melt.TI-CONJ-OBV	DEM	fat-INAN

intended: "I want John to melt this fat."

Despite their label, unreal clauses are realis; they refer to counterfactual or hypothetical situations with past time reference, i.e., those in which the speaker is certain of the outcome. Like the person prefixes, *na*- is permitted in unreal clauses, as shown below.

(67)

***Ná**waistoohtopiwa*	*na*	*Jaani*	*matónni*	...
na-waist-oo-ohtopi-wa	anna	J	matonni	
EVID-by.SPKR-go.AI-UNREAL-PROX	DEM	J	yesterday	

… *áákstai'tsinoowawahtopi*.
yaak-sta'-it-in-oo-a-htopi
FUT-NONAFF-LOC-see-TA-DIR-UNREAL

"Had John come last night, we would have seen him."

In comparison, subjunctive and imperative clauses are irrealis. The person prefixes are not permitted with these clause types, and neither is *na*-. Examples are given below.

(68) a. *Ikkámaistoosi* *na* *Jaani* *yáákohtsopowahtsi'satawa …*
ikkam-waist-oo-si ann-wa J yaak-oht-sopowahtsi's-at-a-wa
if-by.SPKR-go.AI-SBJN DEM-PROX J FUT-CONT-ask-TA-DIR-PROX

… *annisk* *ihtáóhpommao'pi*.
ann-yi-hk ihtaohpommao'p-yi
DEM-INAN-INVIS money-INAN

"If John comes, we will ask him about the money."

b. ****Na****ikkámaistoosi* *na* *Jaani* *yáákohtsopowahtsi'satawa …*
na-ikkam-waist-oo-si ann-wa J yaak-oht-sopowahtsi's-at-a-wa
na-if- by.SPKR-go.AI-SBJN DEM-PROX J FUT-CONT-ask-TA-DIR-PROX

… *annisk* *ihtáóhpommao'pi*.
ann-yi-hk ihtaohpommao'p-yi
DEM-INAN-INVIS money-INAN

"If John comes, we will ask him about the money."

(69) a. *Kippóóhkááhkanomookit* *amo* *sí'kaana.*
kipp-noohk-waahkan-omo-oki-t amo si'kaan-wa
please-please-sew-TA-2:1-IMP DEM blanket-PROX
"Please sew this blanket for me."

b. ****Na****kippóóhkááhkanomookit* *amo* *sí'kaana.*
na-kipp-noohk-waahkan-omo-oki-t amo si'kaan-wa
EVID-please-please-sew-TA-2:1-IMP DEM blanket-PROX
intended: "Please sew this blanket for me."

In sum, *na-* shows the same restrictions as the person prefixes with respect to clause type; they are restricted to realis clauses only. This is summarized in Table 5.7 below.

Table 5.7. Distribution of Person Prefixes and *na-* across Clause Types

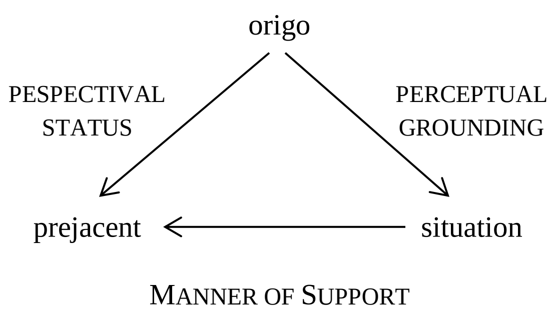
Clause Type	**Person prefixes**	***na-***
Independent	✓	✓
Conjunct – Realis	✓	✓
Conjunct – Irrealis	×	×
Unreal	✓	✓
Imperative	×	×
Subjunctive	×	×

5.5.2. *na-* is an Evidential Marker

Frantz' (1991, 2009) past tense analysis of *na-* cannot account for its restricted distribution; past tense markers are not typically restricted according to person or clause type. I propose that *na-* is not a past tense marker (see also Bliss and Ritter 2007, 2009) but an evidential marker that encodes speaker certainty regarding a past time eventuality.

I adopt Waldie's (2013) model of evidentiality. Waldie proposes that evidentiality is concerned with the relations between three factors: an ORIGO (i.e., the knowedge holder), a proposition (the PREJACENT), and a perceived situation. These relations are schematized as in Figure 5.3 below.

Figure 5.3. Waldie's (2013) Evidential Relations



The PERSPECTIVAL STATUS relation encodes whether the origo believes the prejacent to be true or not. The PERCEPTUAL GROUNDING relation encodes how the origo perceives the situation (e.g., by visual or auditory evidence, etc.), and the MANNER OF SUPPORT relation encodes how the situation supports the prejacent (e.g., via inference, report, etc.). Waldie uses these three relations to diagnose morphemes as evidentials; if a particular morpheme encodes one or more of these relations, it is an evidential. Under Waldie's model, evidentials may also be lexically specified for other types of meaning as well, such as temporality.

Regarding *na-*, I propose that it encodes the perspectival status relation, and specifically it signals that the origo is certain about the truth of the prejacent. Examples illustrating that *na-* encodes certainty are given below.

(70) a. *Nítssksíni'pa* *anna* *imitááwa* ***ná****ísiksipiiwáyi* *ni* *John.*
nit-ssksini-'p-wa ann-wa imitaa-wa **na**-siksip-yii-wa-ayi ann-yi J
1-know.TI-1:INAN-PROX DEM-PROX dog-PROX **EVID**-bite.TA-3:4-PROX-3PRN DEM-OBV J
"I know the dog ***na-*** bit John."

b.	*Nitsikáánistsi'takiwa*	*anna*	*imitááwa*	***(*ná)**áhksiksipiiwáyi*	*ni* *John.*
	nit-ik-aanistsi'taki-wa	anna	imitaa-wa	aahk-siksip-yii-wa-ayi	anni J
	1-INTNS-think.AI-PROX	DEM	dog-PROX	MOD-bite.TA-3:4-PROX-3PRN	DEM J

"I think the dog **(*na-)** bit John."

c.	*Nimáátssksini'pa*	*(***ná**)íkkamsiksipotsiiniki*	*anni*	*imitááyi.*
	ni-maat-sskini-'p-wa	ikkam-siksip-otsiiniki	ann-yi	imitaa-yi
	1-NEG-know.TI-1:INAN-PROX	if-bite.TA-SBJN.INV	DEM-OBV	dog-OBV

"I don't know if the dog (***na-**) bit him."

In (70), we see that *na-* can appear in the clausal complement of 'know' but not of 'think' or 'don't know.' Given that the clausal complement in (70c) is subjunctive, this is ruled out on independent grounds (see (68) above). However, as shown in (71), the complement of "don't believe" is not subjunctive and also does not permit *na-*.

(71)	*Nimaatsíímai'taki*	*matónni*	***(*na)**iksóksinihkssi.*
	nit-maat-ii-omai'taki	matonni	ik-sok-inihki-hs-yi
	1-NEG-IC-believe.AI	yesterday	INTNS-good-sing.AI-CONJ-OBV

"I don't believe that we (***na-**) sang well yesterday."

This distribution of *na-* is unexpected if *na-* is primarily a tense morpheme (as claimed by Frantz 1991, 2009), but follows from the characterization of *na-* as an evidential that encodes perspectival status.

The characterization of *na-* as encoding certainty is consistent with our consultant's comments regarding the felicity conditions on sentences with *na-*; only in contexts in which the speaker is certain that the event took place can *na-* be used. Examples are given below.

(72)	***Ná**ísiksipiiwayi*	*anni*	*Jaani.*
	na-siksip-yii-wa-ayi	ann-yi	J
	EVID-bite.TA-DIR-PROX-3SG.PRN	DEM-OBV	J

"It (the dog) bit John."

→ Comment: 'You cannot say this if you don't know for sure; you have to know it.'

(73) ***Ná**ísootaawa.*
na-i-sootaa-wa
EVID -rain.II-PROX
"It rained."

→ Comment: 'Like right now, I'm looking outside, and I know that it rained … I see that the ground is wet, it rained.'

Furthermore, *na-* is incompatible with the epistemic modal *ááhkam-* "might," which expresses a lack of certainty. This is shown in (74).[115]

(74) a. *Na* *Rosie* *ááhkamihpiyiwa.*
ann-wa R aahkam-ihpiyi-wa
DEM-PROX R MOD-dance.AI-PROX
"Rosie might have danced."

b. *Na* *Rosie* ***ná****íhpiyiwa.*
ann-wa R **na**-ihpiyi-wa
DEM-PROX R **EVID** -dance.AI-PROX
"Rosie danced."

c. **Na* *Rosie* ***ná****áhkamihpiyiwa.*
ann-wa R **na**-aahkam-ihpiyi-wa
DEM-PROX R **EVID** -MOD-dance.AI-PROX
intended: "Rosie might have danced."

Additionally, *na-* occurs only in VERIDICAL contexts, i.e., contexts in which there is an entailment of truth about the proposition (cf., Zwarts 1995; Giannakidou 1998). For example, *na-* cannot appear in yes/no questions such as (75), which is requesting information about the truth of a proposition. However, *na-* can be used in echo questions such as (76), which express the speaker's reaction to the established truth of a proposition.

(75) *Na* *Leo* *(****na)****ikatáí'sstsimaahkatsiiwaatsiksi* *ni* *Rosie?*
ann-wa L kata'-sstsimaahkat-yii-wa-atsiksi ann-yi R
DEM-PROX L INTERR-hire.TA-3:4-PROX-NONAFF DEM-OBV R
"Did Leo ***(*na-)*** hire Rosie?"
CONTEXT: You want to know if Leo hired someone for the stables.

(76) ***Ná****ókska'siwaatsiksi?*
na-okska'si-waatsiksi
EVID-run.AI-3SG.NONAFF
"He ran?"
CONTEXT: You are surprised to hear that Leo ran, in spite of his injuries.

The yes/no question is (75) is non-veridical; there is no truth entailment. The echo question in (76), on the other hand, is veridical; the speaker knows the event to be true but is registering surprise.[116] This is

[115] In (74) the demonstrative *anna* is realized as *na*. To be clear, this is not the evidential prefix *na-*.

compatible with the claim that *na-* encodes certainty. Similarly, *na-* is not permitted in sentences with clausal negation but it is permitted in sentences with predicate negation. Examples are given below.

(77) *(****Na)****máátsiksipiiwaatsiks.*
maat-siksip-yii-wa-atsiksi
NEG-bite.TA-3:4-PROX-NONAFF
'S/he didn't ***(*na-)*** bite him/her.'

(78) ***Náísa****yinakowa.*
na-sa-inako-wa
***na*-NEG-**visible.II-PROX
'It was invisible.'

In (77), we see that *na-* cannot be used with the negative prefix *maat-*, which scopes over the clause, but in (78), we see that *na-* can be used with *sa-*, which scopes over the predicate. A more detailed discussion of these prefixes is in Chapter 6. For now, it suffices to say that *na-* cannot appear in the scope of negation (i.e., a non-veridical environment), but it can scope over negation. This is consistent with the characterization of *na-* as encoding the perspectival status relation; *na-* cannot express the relation between the origo and the prejacent if the prejacent scopes over *na-*.

In sum, *na-* is restricted to contexts in which the speaker is certain about the truth of the prejacent. In Waldie's terms, it encodes the perspectival status relation.

Regarding the other two evidential relations, perceptual grounding and manner of support, *na-* is unspecified with respect to these relations. For example, it can be used in contexts in which there is visual evidence (79) or auditory evidence (80), and it can be used when the speaker has obtained evidence via a report (81) or an inference (82).[117]

[116] I assume that echo questions pattern like rhetorical questions insofar as they are not a request for information; rather they express surprise, amazement, or a lack of clarity (cf. Adger 2003). Moreover, following Han (2002), I assume that rhetorical questions (and likewise echo questions) have assertive rather than interrogative force.

[117] Bliss and Ritter (2007, 2009) argue against the characterization of *na-* as an evidential. However, this was based on a model of evidentiality that is narrower than that assumed here, i.e., under which evidentials necessarily encode evidence type (cf. Weber 1986; de Haan 2001; James et al. 2001). Under Waldie's model, "evidence type" corresponds to perceptual grounding and/or manner of support, which are not necessarily encoded.

(79) *Anná* ***ná**óoyiwa* *akóópis.*
ann-wa **na**-ooyi-wa akoopis
DEM-PROX **EVID** -eat.AI-PROX soup
"S/he ate soup."
→ Comment: 'Right now I am telling you 'she ate soup,' I saw her, she ate it.'

(80) *Nitóóhtsimaa* *nahk* *Rachel* ***ná**íkiikiyihk* *ni* *bingo.*[118]
nit-yoohtsim-a-wa ann-wa-hk R **na**-ikiiki-yihk ann-yi bingo
1-hear.TI-DIR-PROX DEM-P-PROX-INVIS R **EVID** -win.AI-REP DEM-OBV bingo
'I hear that Rachel won at bingo.'

(81) *Nitohkáániikkoo* *náhk* *Rosie* ***ná**íhpiyihka.*
nit-ohk-waaniist-ok-oo ann-wa-hk R **na**-ihpiyi-hk-wa
1-CONT-say.TA-INV-UNSPEC DEM-PROX-INVIS R **EVID** -dance.AI-REP-PROX
'Someone told me Rosie danced.'

(82) *Na* *Leo* ***ná**ísapipoommaatooma* *omístsi* *pisátssaisskistsi.*
na L **na**-sapipoommaatoo-m-wa om-istsi pisatssaissk-istsi
DEM L **EVID** -plant.TI-3:INAN-PROX DEM-PL flower-PL
'Leo planted those flowers.'
→ RE: 'After the fact you say, 'Look, he planted these. There they are; they've grown.''

The data in (79)-(82) demonstrate that *na-* is unspecified with respect to the perceptual grounding and manner of support relations. In terms of its evidential content, it only encodes the perspectival status relation.

In addition to its evidential content, *na-* also encodes past time reference, as shown below.

(83) *Na* *Leo* ***ná**ókska'siwa.*
ann-wa L **na**-okska'si-wa
DEM-PROX L **EVID** -run.AI-PROX
"Leo ran." / *"Leo is running." / *"Leo will run."

(84) *Na* *Rosie* *iyóóhtookiwa* ***ná**ínihkssi.*
ann-wa R ii-yooht-o-oki-wa **na**-a-inihki-hs-yi
DEM-PROX R IC-hear-TA-INV.LOCAL-PROX **EVID** -IMPF-sing.AI-CONJ *-yi*
'Rosie heard that we were singing." / *"…we are singing." / *"…we will be singing."

In (83) and (84) we see that both matrix and subordinate clauses that are marked with *na-* cannot refer to events with present or future time reference.

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[118] This example is interesting beause has two evidentials: *na-* and a reportative marker –(*yi)hk*. The syntax and semantics of –(*yi)hk* has yet to be explored. However, under Waldie's model, it is possible for multiple evidentials to co-occur in the same clause.

Like Waldie (2013), I assume Blain and Déchaine's (2006, 2007) Evidential Domain Hypothesis, which states that evidentials can be introduced in various syntactic domains, including the CP, IP, AspP, and *v*P layers of the clause. One of Blain and Dechaine's diagnostics for an IP-level evidential is that it will have temporal force. In §5.5.1, I presented evidence that *na*- is in Spec, IP: it is in complementary distribution with the person prefixes in Spec, IP. The fact that it has temporal force gives further support for its position. As an IP-level evidential, *na*- is predicted to encode temporality.

An outstanding question is in regards to how *na*- interacts with INFL. In §5.2.1, I claimed that INFL bears an uninterpretable ϕ feature that is valued as [LOC] or [NONLOC], and it is checked by an argument in Spec, IP with a matching interpretable ϕ feature. The uninterpretable feature may be inherently valued, or valued via Agree. Under this proposal, if *na*- occupies Spec, IP, then it must have an interpretable [ϕ] feature. I propose that, unlike the person prefixes, *na*- has a [ϕ] feature that is not valued as either [LOC] or [NONLOC]. As such, it fulfills the formal requirement for checking [*u*ϕ] on INFL, but it is not restricted to either local or non-local person reference. This is consistent with the observation that *na*- can be used with non-local event partipants, or inclusive/unspecified event participants.

5.6. Conclusion

In this chapter, I have discussed the syntax of arguments in Spec, IP. Following Ritter and Wiltschko (to appear), I claimed that INFL in Blackfoot is person-based, and I formalized this in terms of an uninterpretable person feature [*u*ϕ] that is checked (and in some cases valued as [LOC] or [NONLOC]) by an argument in Spec, IP with an interpretable feature. The inventory of arguments that I argued are in Spec, IP are the long form person prefixes *nit*- (1st person), *kit*- (2nd person), and *ot*- (3rd person), as well as the evidential prefix *na*-.

I adopted Cowper's feature-geometric model of INFL features. Using this model, I made the following predictions regarding the properties of arguments in Spec, IP:

- They are sensitive to the ir/realis contrast

- They have temporal content
- They do not need to be refer to event participants

More specifically, I predicted that that if INFL is cued to P-deixis features, then it should be sensitive to the ir/realis contrast, and I showed that this prediction is borne out: the person prefixes in Spec, IP are restricted to realis contexts. I also predicted that person features entail temporal features in the IP domain, and therefore, if INFL itself does not have temporal content, the arguments in Spec, IP should. I showed that this prediction is also borne out for Blackfoot: only the long form prefixes, which have temporal content, can appear in Spec, IP. Finally, I predicted that, just as the subject position in English can be occupied by something other than an event participant (e.g., an expletive), Spec, IP in Blackfoot should not be restricted to event participants. I showed that this prediction is borne out; the evidential prefix *na*-can occupy Spec, IP. Notably, just as the person prefixes have temporal content, so does *na*-. In effect, the temporal content of the arguments in Spec, IP can be seen as "compensating" for the lack of temporal content in INFL.

CHAPTER 6

MAPPING NUMBER SUFFIXES ONTO THE SYNTACTIC SPINE

6.1. Introduction

In this chapter, I focus on the syntax of the number suffixes that appear at the right edge of the verb complex (immediately before the enclitics). There are three such suffixes, as detailed in Table 6.1.

Table 6.1. Number Suffixes

-*wa*	3rd person proximate singular
-*yini*	3rd person obviative singular
-*yi*	3rd person plural

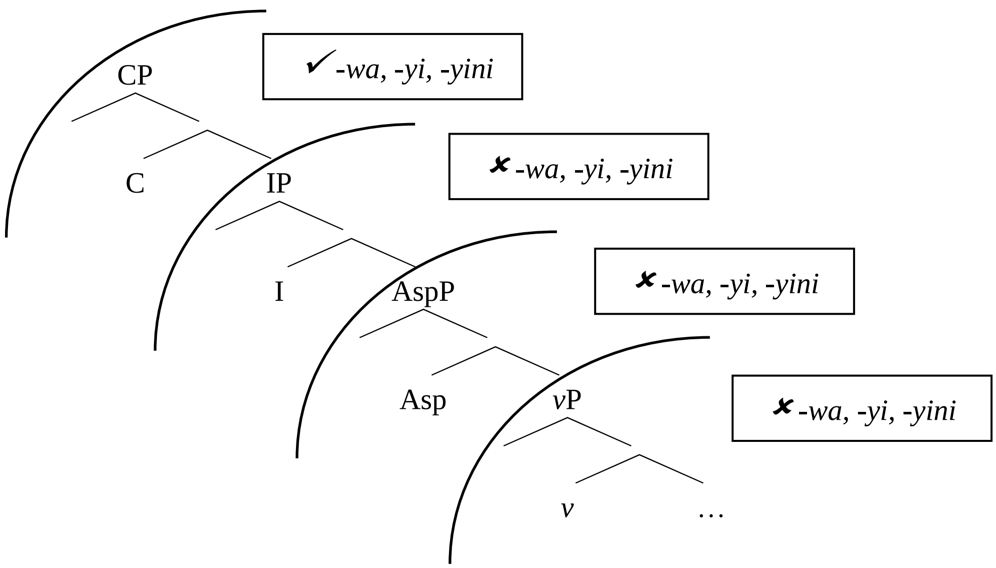
As shown in Table 6.1., the number suffixes are restricted to 3rd person reference. Although the proximate singular suffix –*wa* also appears on nominal expressions (see Chapter 3), in this chapter I focus exclusively on the number suffixes as they appear on the verbal complex.

This chapter proceeds as follows. In §6.2, I discuss the syntactic position of the number suffixes, and I demonstrate that the number suffixes associate with the highest functional layer in the clause, CP. Furthermore, I argue that the proximate suffix –*wa* is the elsewhere suffix, appearing in clauses in which –*yini* and –*yi* are not licensed. In §6.3, I discuss the syntactic function of the number suffixes, and I argue that whereas proximate –*wa* marks the clause as independent, obviative –*yini* and plural –*yi* are number agreement in C. In §6.4 I conclude.

6.2. The Syntactic Position of Number Suffixes

In this section, I consider the syntactic position of the number suffixes. By process of elimination, I determine that the locus of the number suffixes is the CP domain, the highest functional layer in the clause.[119] I begin with an overview of their distribution in matrix declarative AI and TA clauses. Then, starting at the bottom of the tree in (1), I present negative evidence to demonstrate that the number suffixes are not located in the *v*P domain, nor in the AspP domain, and nor in the IP domain. Finally, I give positive evidence to demonstrate that they are located in the CP domain.

(1)



6.2.1. Number Suffixes in Matrix Declarative AI and TA Clauses

In this section, I show that the number suffixes are required with 3rd person arguments. In matrix declarative clauses formed from an intransitive verb, the number suffixes are required when the subject is 3rd person.

(2) a. *Áyo'kaa*(**wa**)* *oma* *imitááw*.
a-yo'kaa-**wa** om-wa imitaa-wa
IMPF-sleep.AI-**PROX** DEM-PROX dog-PROX
"That dog is sleeping."

b. *Áyo'kaa*(**yini**)* *anni* *otómitaami*.
a-yo'kaa-**yini** ann-yi ot-imitaa-m-yi
IMPF-sleep-**OBV** DEM-OBV 3-dog-POSS-OBV
"Her dog is sleeping."

[119] As discussed in Chapter 3, the proximate number suffix –*wa* is indiscriminate as to whether it appears in a nominal or verbal spine. Because this chapter focuses exclusively on the number suffixes in the verbal spine, I use terminology that is specific to the verbal spine, e.g., the linking layer is referred to as the CP domain.

c.	*Áyo'kaa*(**yi)***	*omiksi*	*imitáíks.*
	a-yo'kaa-**yi**	om-iksi	imitaa-iksi
	IMPF-sleep.AI-**PL**	DEM-PL	dog-PL
	"Those dogs are sleeping."		

In (2a), the suffix –*wa* is required to index the 3^{rd} person proximate singular subject *oma imitááw*. In (2b), the suffix –*yini* is required to index the 3^{rd} person obviative singular subject *anni otómitaami* (recall that nouns possessed by a 3^{rd} person possessor are obligatorily obviative). In (2c), the suffix –*yi* is required to index the 3^{rd} person plural subject *omiksi imitáíks*. (Herein, in all of the examples that have a number suffix, the number suffix is obligatory. Although not explicitly marked as such, it cannot be omitted.)

In transitive clauses from the mixed series (i.e., with one local and one non-local person argument), there is only one 3^{rd} person, and the number suffixes index that 3^{rd} person. If the verb is marked with a direct suffix (indicating that a local person is acting on a non-local one), number marking indexes the object. This is shown in (3). If the verb is marked as inverse, then number marking indexes the subject, as in (4).

(3)	a.	*Nitsíínoa**wa***	*oma*	*imitáá.*
		nit-iin-o-a-**wa**	om-wa	imitaa-wa
		1-see-TA-DIR-**PROX**	DEM-PROX	dog-PROX
		"I saw that dog."		
	b.	*Nitsíínoa**yini***	*anni*	*otómitaami.*
		nit-iin-o-a-**yini**	ann-yi	ot-imitaa-m-yi
		1-see-TA-DIR-**OBV**	DEM-OBV	3-dog-POSS-OBV
		"I saw his/her dog."		
	c.	*Nitsíínoa**yi***	*omiksi*	*imitáíks.*
		nit-iin-o-a-**yi**	om-iksi	imitaa-iksi
		1-see-TA-DIR-**PL**	DEM-PL	dog-PL
		"I saw those dogs."		
(4)	a.	*Nitsskí'tsook**a***	*oma*	*imitáá.*
		nit-sski't-i-ok-**wa**	om-wa	imitaa-wa
		1-frighten-TA-INV-**PROX**	DEM-PROX	dog-PROX
		"That dog frightened me."		
	b.	*Nitsskí'tsok**ini***	*anni*	*otómitaami.*
		nit-sski't-i-ok-**yini**	ann-yi	ot-imitaa-m-yi
		1-frighten-TA-INV-**OBV**	DEM-OBV	3-dog-POSS-OBV
		"His/her dog frightened me."		

c. *Nitsski'tsok***i** *omiksi* *imitáíks.*
nit-sski't-i-ok-**yi** om-iksi imitaa-iksi
1-frighten-TA-INV-**PL** DEM-PL dog-PL
"Those dogs frightened me."

The data in (3) and (4) show that, in the mixed series, the number suffixes index a 3rd person argument in the clause, regardless of whether it is the subject or the object.

In the mixed series, there is no competition for which argument is indexed via the number agreement suffixes, as there is only one 3rd person argument in the clause. However, in the non-local series, only one 3rd person is indexed via the number agreement suffixes. The choice regarding which argument is indexed is subject to the following conditions:

(5) **Conditions on the Choice of Number Suffix** (to be revised)
a. If there is a proximate singular argument, then mark the clause with –*wa*.
b. If there is a plural argument and no proximate singular argument, then mark the clause with –*yi*.
c. If there is an obviative singular argument and no plural or proximate singular arguments, then mark the clause with –*yini*.

Regarding condition (5a), if there is a 3rd person proximate singular argument in the clause, then –*wa* appears in the number agreement suffix position, regardless of whether the proximate argument is the subject or the object, and regardless of the number/obviation of the other argument in the clause.

(6) a. *Náínoyii***wa** *anni* *otómitaami.*
na-iin-o-yii-**wa** ann-yi ot-imitaa-m-yi
EVID-see-TA-3:4-**PROX** DEM-OBV 3-dog-POSS-OBV
"She$_i$ saw her$_i$ dog."

b. *Náínoyii***wa** *anniksi* *otómitaamiks.*
na-iin-o-yii-**wa** ann-iksi ot-imitaa-m-iksi
EVID -see-TA-3:4-**PROX** DEM-PL 3-dog-POSS-PL
"She$_i$ saw her$_i$ dogs."

(7) a. *Otsski'tsok***a** *anni* *otómitaami.*
ot-sski't-i-ok-**wa** ann-yi ot-imitaa-m-yi
3-frighten-TA-INV-**PROX** DEM-OBV 3-dog-POSS-OBV
"Her$_i$ dog frightened her$_i$."

b.	*Otsski'tsok**a***	*anniksi*	*otómitaamiks.*
	ot-sski't-i-ok-**wa**	ann-yi	ot-imitaa-m-iksi
	3-frighten-TA-INV-**PROX**	DEM-OBV	3-dog-POSS-PL
	"Her$_i$ dogs frightened her$_i$."		

The data in (6) and (7) show that, if there are two 3rd person arguments in the clause and one is proximate singular, then the –*wa* suffix appears in the number agreement slot on the verb complex.

Regarding condition (5b), if there is no proximate singular argument but there is a 3rd person plural argument, then the suffix –*yi* appears on the verb, as shown below.

(8)	a.	*Náínoyii**yi***	*omiksi*	*sááhkomapiks*	*anni*	*otómitaami.*
		na-iin-o-yii-**yi**	om-iksi	saahkomapi-iksi	ann-yi	ot-imitaa-m-yi
		EVID -see-TA-3:4-**PL**	DEM-PL	boy-PL	DEM-OBV	3-dog-POSS-OBV
		"The boys saw her dog."				
	b.	*Náínoyii**yi***	*omiksi*	*sááhkomapiks*	*anniksi*	*otómitaamiksi.*
		na-iin-o-yii-**yi**	om-iksi	saahkomapi-iksi	ann-iksi	ot-imitaa-m-iksi
		EVID -see-TA-3:4-**PL**	DEM-PL	boy-PL	DEM-PL	3-dog-POSS-PL
		"The boys saw her dogs."				
(9)	a.	*Otsski'tsok**i***	*omiksi*	*sááhkomapiks*	*anni*	*otómitaami.*
		ot-sski't-i-ok-**yi**	om-iksi	saahkomapi-iksi	ann-yi	ot-imitaa-m-yi
		3-frighten-TA-INV-**PL**	DEM-PL	boy-PL	DEM-OBV	3-dog-POSS-OBV
		"Her dog frightened the boys."				
	b.	*Otsski'tsok**i***	*omiksi*	*sááhkomapiks*	*anniksi*	*otómitaamiks.*
		ot-sski't-i-ok-**yi**	om-iksi	saahkomapi-iksi	ann-yi	ot-imitaa-m-iksi
		3-frighten-TA-INV-**PL**	DEM-PL	boy-PL	DEM-OBV	3-dog-POSS-PL
		"Her dogs frightened the boys."				

Finally, regarding condition (5c), if there are no 3rd person proximate or 3rd person plural arguments in the clause, then –*yini* appears on the verb.

(10)	*Náínoyii**yini***	*anni*	*oksíssts*	*anni*	*otómitaami.*
	na-iin-o-yii-**yini**	ann-yi	w-iksisst-yi	ann-yi	ot-imitaa-m-yi
	EVID -see-TA-3:4-**OBV**	DEM-OBV	3-mother-OBV	DEM-OBV	3-dog-POSS-OBV
	"Her$_i$ mother saw her$_i$ dog."				
(11)	*Otsski'tsok**ini***	*anni*	*oksíssts*	*anni*	*otómitaami.*
	ot-sski't-i-ok-**yini**	ann-yi	w-iksisst-yi	ann-yi	ot-imitaa-m-yi
	3-frighten-TA-INV-**OBV**	DEM-OBV	3-mother-OBV	DEM-OBV	3-dog-POSS-OBV
	"Her$_i$ dog frightened her$_i$ mother."				

To summarize, there are three number suffixes in matrix declarative clauses; -*wa* indexes proximate singular 3rd persons, -*yi* indexes plural 3rd persons, and –*yini* indexes obviative singular 3rd persons.

In all of the examples thus far, the number suffixes index either the subject or the object. Number suffixes cannot index unindexed objects or obliques. First, as shown in (12) below, objects of morphologically intransitive verbs (AI objects) cannot be indexed by a number suffix.

(12) a. *Nitsiyáápi píítaa*.
nit-ii-yaapi piitaa
1-IC-see.AI eagle
"I saw an eagle/eagles."

b. ******Nitsiyáápi***wa** *píítaa*.
nit-ii-yaapi-**wa** piitaa
1-IC-see.AI-**PROX** eagle
intended: "I saw an eagle."

c. ******Nitsiyáápi***yini** *píítaa*.
nit-ii-yaapi-**yini** piitaa
1-IC-see.AI-**OBV** eagle
intended: "I saw an eagle."

d. ******Nitsiyáápi***yi** *píítaiks*.
nit-ii-yaapi-**yi** piitaa-iksi
1-IC-see.AI-**PL** eagle-PL
intended: "I saw some eagles."

In (12), a morphologically intransitive verb takes an object, and it is ungrammatical for a number suffix to index this object.

Number suffixes cannot index unindexed objects of ditransitive verbs either, as shown below.

(13) a. *Kitsskiitató amó pisátsskiitaan.*
kit-ihkiit-at-o amo pisatsskiitaan
2-bake-TA-1:2 DEM cake
"I baked this cake for you."

b. **Kitsskiitató***wa** *amó pisátsskiitaan.*
kit-ihkiit-at-o-**wa** amo pisatsskiitaan
2-bake-TA-1:2-**PROX** DEM cake
intended: "I baked this cake for you."

	c.	**Kitsskiitatóyini* (bold: *yini*)	*amó*	*pisátsskiitaan.*
		kit-ihkiit-at-o-**yini**	amo	pisatsskiitaan
		2-bake-TA-1:2-**OBV**	DEM	cake
		intended: “I baked this cake for you.”		
(14)	a.	*Kitsskiitató*	*amóstsi*	*pisátsskiitaanists.*
		kit-ihkiit-at-o	amo-istsi	pisatsskiitaan-istsi
		2-bake-TA-1:2	DEM-PL	cake-PL
		“I baked these cakes for you.”		
	b.	**Kitsskiitató**yi***	*amóstsi*	*pisátsskiitaanists.*
		kit-ihkiit-at-o-**yi**	amo-istsi	pisatsskiitaan-istsi
		2-bake-TA-1:2-**PL**	DEM-PL	cake-PL
		intended: “I baked these cakes for you.”		

In (13) and (14), the subject and object are local persons, and as such, they are not indexed by the number suffixes, which are restricted to 3rd person reference. This leaves open the number suffix slot to index a non-local unindexed object. However, regardless of whether the unindexed object is singular (13) or plural (14), a number suffix cannot appear on the verb

Likewise, a number suffix cannot index an oblique. This is shown below.

(15)	a.	*Nitsíhtsooyi*	*oma*	*iihtáóoyo'pa.*
		nit-iht-ioyi	om-wa	iihtaooyo’p-wa
		1-INSTR-eat.AI	DEM-PROX	fork-PROX
		“I ate with that fork.”		
	b.	**Nitsíhtsooyi**wa***	*oma*	*iihtáóoyo'pa.*
		nit-iht-ioyi-**wa**	om-wa	iihtaooyo’p-wa
		1-INSTR-eat.AI-**PROX**	DEM-PROX	fork-PROX
		intended: “I ate with that fork.”		
(16)	a.	*Nitóhtohkanaoyi*	*amoksi*	*iihtáóoyo'piks.*
		nit-oht-ohkana-ooyi	amo-iksi	iihtaooyo’p-iksi
		1-INSTR-all-eat.AI	DEM-PL	fork-PL
		“I ate with all those forks.”		
	b.	**Nitóhtohkanaoyi**yi***	*amoksi*	*iihtáóoyo'piks.*
		nit-oht-ohkana-ooyi-**yi**	amo-iksi	iihtaooyo’p-iksi
		1-INSTR-all-eat.AI-**PL**	DEM-PL	fork-PL
		intended: “I ate with all those forks.”		

In (15) and (16), the intransitive verb is used with an oblique argument, introduced by the adposition *iht-* on the verb. Whether singular (15), or plural (16), the oblique cannot be indexed by a number suffix on the verb.

In sum, neither unindexed objects nor obliques can be indexed on the verb with number suffixes. Number suffixes are restricted to index only the subject and object arguments. A summary of the distribution of the number suffixes in matrix declarative clauses is given in Table 6.2.

Table 6.2. Number Suffixes in Matrix Declarative Clauses

	Person/Number	**Role**	**Verb**
-wa	3rd proximate singular	Subject Subject or Object Subject or Object	intransitive (AI) mixed transitive (TA) non-local transitive (TA)
-yi	3rd plural	Subject Subject or Object Subject or Object (if no proximate singular 3rd persons)	intransitive (AI) mixed transitive (TA) non-local transitive (TA)
-yini	3rd obviative singular	Subject Subject or Object Subject or Object (if no proximate singular or plural 3rd persons)	Intransitive (AI) mixed transitive (TA) non-local transitive (TA)

6.2.2. Number Suffixes are not in *v*P

In this section, I consider the question of whether the number suffixes are located in the *v*P domain. As discussed in Chapter 1, *v*P corresponds to the classification layer in the clausal spine, and in Chapter 2, I argued that classification in Blackfoot's *v*P is via animacy distinctions. In this section, I review the arguments that *v*P is the domain of grammatical animacy, and I show that the number suffixes are not cued to animacy distinctions. On this basis, I conclude that the number suffixes are not in *v*P.

Following Ritter and Rosen 2010a, I assume that *v* in Blackfoot is associated with verb class finals (see also Bruening and Rackowski 2001 for Passamaquoddy; Hirose 2003 for Plains Cree; Brittain 2003 for Western Naskapi; Quinn 2006 for Penobscot; Mathieu 2006 for Ojibwe). The verb finals are classified according to transitivity and the animacy of the absolutive argument, as shown in Table 6.3.

Table 6.3. Verb Finals

II	Inanimate Intransitive	Subject = Inanimate
AI	Animate Intransitive	Subject = Animate
TI	Transitive Inanimate	Object = Inanimate
TA	Transitive Animate	Object = Animate

In Chapter 2, I argued that the verb finals are specified with the uninterpretable animacy features [*u*ANIM] or [*u*INAN], and these features are checked by an argument with a matching interpretable feature in Spec, *v*P. Under this analysis, the intransitive (AI/II) finals introduce the subject and the transitive (TA/TI) finals introduce the object. The relevant point about this analysis for the current discussion is that the *v*P is organized on the basis of animacy; the *v* heads agree in animacy with their arguments. If the number suffixes were located in the *v*P domain, we would predict that they would be sensitive to animacy distinctions. In what follows, I show that this prediction is not borne out.[120]

To this point, all of the verbs considered have been from either the AI (Animate Intransitive) or TA (Transitive Animate) paradigms, which only index animate arguments. However, number suffixes can also index inanimate arguments from the II (Inanimate Intransitive) and TI (Transitive Inanimate) paradigms.

Consider first II verbs. Just as the 3rd person animate subject of an AI verb is indexed with a number suffix, so is the 3rd person inanimate subject of an II verb. Singular inanimate subjects are indexed on the verb with suffix *–wa*, and plural inanimate subjects are indexed with the suffix *–yi*. (The obviative suffix *–yini* is not used to index inanimate arguments.) Examples are given below.

(17) a. *Iikíítsiksista'pii**wa*** *amoyi* *pásskaani*.
iik-iitsiksist-a'pii-**wa** amo-yi passkaan-yi
INTNS-slow-be.II-**PROX** DEM-INAN dance-INAN
"This dance is very slow." (Frantz and Russell 1995, p. 24)

b. *Iikíítsiksista'pii**yi*** *amoistsi* *pásskaanists*.
iik-iitsiksist-a'pii-**yi** amo-istsi passkaan-istsi
INTNS-slow-be.II-**PL** DEM-PL dance-PL
"These dances are very slow."

[120] This distinguishes the number suffixes that appear in the verbal complex from the nominal plural suffixes, which are cued to animacy distinctions (i.e., *-istsi* appears on inanimate nouns and *–iksi* on animate nouns, see Chapter 3).

Turning to TI (Transitive Inanimate) verbs, if the subject is a local person, then the number suffix indexes the inanimate object, as in (18). If the subject is a non-local person, then the number suffix indexes the subject, and the inanimate object is not indexed on the verb. This is shown in (19).

(18) a.

*Nitáísookoowatoohp**a***	*omi*	*káyiis*.
nit-a-yook-oowat-oo-hp-**wa**	om-yi	kayiis-yi
1-IMPF-typical-eat-TI-1:INAN-**PROX**	DEM-INAN	dried.meat-INAN

"I used to eat dried meat."

b.

*Nitáísookoowatoohp**i***	*omistsi*	*káyiists*.
nit-a-yook-oowat-oo-hp-**yi**	om-istsi	kayiis-istsi
1-IMPF-typical-eat-TI-1:INAN-**PL**	DEM-PL	dried.meat-PL

"I used to eat dried meats."

(19) a.

*Ookóówatoom**a***	*naaáhsa*	*omi*	*káyiis.*
yook-oowat-oo-m-**wa**	n-aaahs-wa	om-yi	kayiis
typical-eat-TI-3:INAN-**PROX**	1-grandparent-PROX	DEM-INAN	dried.meat-INAN

"My grandmother used to eat dried meat."

b.

*Ookóówatoom**i***	*naaáhsiks*	*omi*	*káyiis.*
yook-oowat-oo-m-**yi**	n-aaahs-iksi	om-yi	kayiis-yi
typical-eat-TI-3:INAN-**PL**	1-grandparent-PL	DEM-INAN	dried.meat-INAN

"My grandparents used to eat dried meat."

c.

*Ookóówatoom**a***	*naaáhsa*	*omistsi*	*káyiists*.
yook-oowat-oo-m-**wa**	n-aaahs-wa	om-istsi	kayiis-istsi
typical-eat-TI-3:INAN-**PROX**	1-grandparent-PROX	DEM-PL	dried.meat-PL

"My grandmother used to eat dried meats."

d.

*Ookóówatoom**i***	*naaáhsiks*	*omistsi*	*káyiists*.
yook-oowat-oo-m-**yi**	n-aaahs-iksi	om-istsi	kayiis-istsi
typical-eat-TI-3:INAN-**PL**	1-grandparent-PL	DEM-PL	dried.meat-PL

"My grandparents used to eat dried meats."

In (18), the number suffix varies according to whether the inanimate object is singular or plural. In (19), the number suffix varies according to whether the animate subject is singular or plural, and not according to the number of the inanimate object.

Given this distribution, it is clear that the number suffixes aren't cued to agree with one particular argument position in *v*P; in (18) agreement is with the inanimate object, but in (19) it is with animate subject. The fact that number marking is insensitive to the distinction between TA and TI objects suggests that the same forms are used in both paradigms. As such, there seems to be a single -*wa* morpheme that has the distribution in Table 6.4.

Table 6.4. Distribution of –*wa* in Matrix Declarative Clauses

Singular			Plural
Proximate	Obviative	Inanimate	
✓	*	✓	*

Table 6.4 indicates that the distribution of –*wa* is broader than predicted by the conditions in (5). Specifically, -*wa* indexes both proximate singular and inanimate singular arguments, which are difficult to conceive of as together forming a natural class. As such, -*wa* has the hallmark distribution of an elsewhere marker. (Further evidence for its status as the elsewhere suffix is given in §6.2.5.1 and §6.3.1). A revised set of conditions on the choice of the number suffix is given below.

(20) **<u>Conditions on the Choice of Number Suffix (Revised)</u>**

a. If there is a plural argument and no proximate singular arguments, then mark the clause with –*yi*.

b. If there is an obviative singular argument and no plural or proximate singular arguments, then mark the clause with–*yini*.

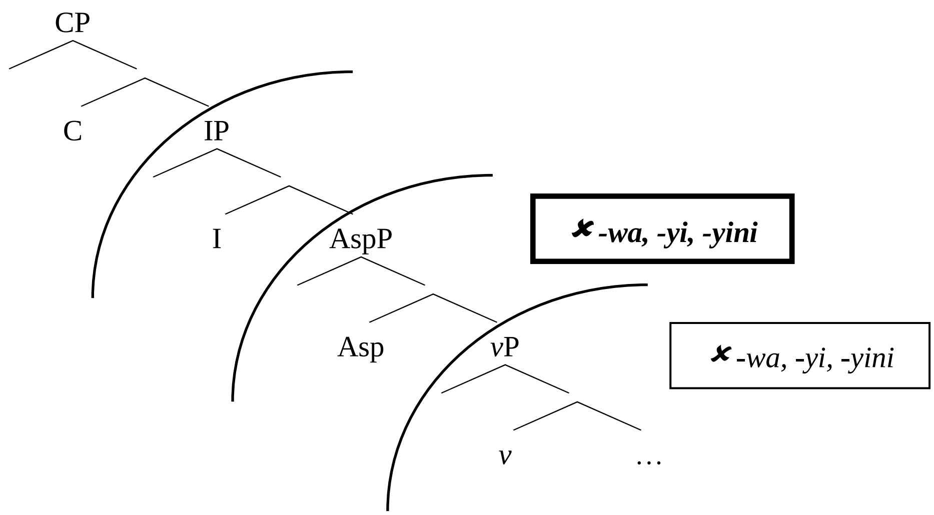
c. Elsewhere mark the clause with –*wa*.

These conditions account for the distribution of number suffixes across all four verb classes (AI, TA, II, and TI). In sum, aside from obviative –*yini*, the number suffixes are insensitive to animacy distinctions; the same suffixes (-*wa* and –*yi*) are used with animate and inanimate arguments. Given that the *v*P domain is where animacy distinctions are encoded, this suggests that the locus of the number suffixes is not within the *v*P.

6.2.3. Number Suffixes are not in AspP

In this section, I argue that the number suffixes are not located in the AspP domain.

(21)



As discussed in Chapter 1, I assume that the AspP domain is the viewpoint domain; it grammaticizes the relation between the event and a point-of-view. Following Bliss (2005a) and Bliss et al. (2010a,b), I argued in Chapter 2 that Asp in Blackfoot is associated with the direct and inverse suffixes. Just as Outer Aspect provides a temporal perspective on events (e.g., Smith 1997), Blackfoot's direct/inverse provides a participant's perspective on events. Examples of the direct and inverse suffixes are given below.

(22) a. *Nitsikámotsiipi**a**wa.*
nit-ikamotsiip-i-**a**-wa
1-rescue-TA-**DIR**-PROX
"I rescued him/her."

b. *Nitsikámotsiipi**ok**a.*
nit-ikamotsiip-i-**ok**-wa
1-rescue-TA-**INV**-PROX
"S/he rescued me."

In Chapter 2, I analysed Asp as bearing uninterpretable ϕ features ([uSent(ient)]) that require a sentient argument – the Point-of-View (PoV) holder – to appear in Spec, AspP. Under this analysis, we predict that if the number suffixes were located in the AspP domain, they would be restricted to sentient participants. This prediction is not borne out. As shown above and repeated in (23) below, the number suffixes can index inanimate 3rd persons, which do not qualify as point-of-view holders.

(23) a. *Iikíítsiksista'pii**wa*** *amoyi* *pásskaani*.
iik-iitsiksist-a'pii-**wa** amo-yi passkaan-yi
INTNS-slow-be.II-**PROX** DEM-INAN dance-INAN
"This dance is very slow." (Frantz and Russell 1995, p. 24)

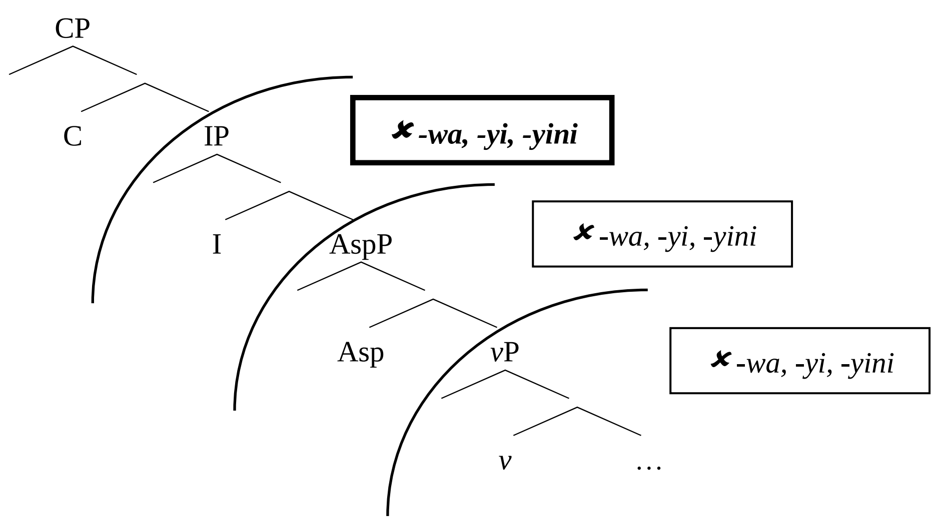
b. *Iikíítsiksista'pii**yi*** *amoistsi* *pásskaanists*.
iik-iitsiksist-a'pii-**yi** amo-istsi passkaan-istsi
INTNS-slow-be.II-**PL** DEM-PL dance-PL
"These dances are very slow."

The fact that the number suffixes index non-sentient (i.e., inanimate) arguments indicates that are not located in AspP.

6.2.4. Number Suffixes are not in IP

To this point, I have ruled out the possibility that the number suffixes are located in *v*P or AspP. Here, I also rule out the possibility that they are located in IP.

(24)



As discussed in Chapters 1 and 5, IP is the domain of anchoring; it connects the event participants to the utterance situation participants. Following Ritter and Wiltschko (to appear), I argued that anchoring in Blackfoot is person-based: INFL bears uninterpretable person features (formalized here as [ϕ:LOC] and [ϕ:NONLOC) that attract a person prefix to Spec, IP. This is schematized in (25) below.

(25) a. IP

{*nit-*/*kit-*} [ϕ:LOC] I *-hp* [*u*ϕ:LOC]

b. IP

Ø [ϕ:NONLOC] I *-m* [*u*ϕ:NONLOC]

In terms of ϕ features, the prefixes in (25) are specified only for person. Number marking is suffixal, and as discussed in Chapter 2, there are two different positions for number marking: one for local persons (referred to as "person/number suffixes") and one for non-local persons (referred to as "number suffixes"). Examples are given below.

(26) a. *Nitsiinoá**nnaani*** *omiksi* *píítaiks*.
nit-iin-o-a-**innaan-yi** om-iksi piitaa-iksi
1-see-TA-DIR-**1PL-PL** DEM-PL eagle-PL
"We (excl) saw those eagles."

b. *Nitsiinóók**innaani*** *omiksi* *píítaiks*.
nit-iin-o-ok-**innaan-yi** om-iksi piitaa-iksi
1-see-TA-INV-**1PL-PL** DEM-PL eagle-PL
"Those eagles saw us (excl)."

(27) a. *Kitsiinoá**áwaayi*** *omiksi* *píítaiks*.
kit-iin-o-a-**oawaa-yi** om-iksi piitaa-iksi
2-see-TA-DIR-**2PL-PL** DEM-PL eagle-PL
"You (pl) saw those eagles."

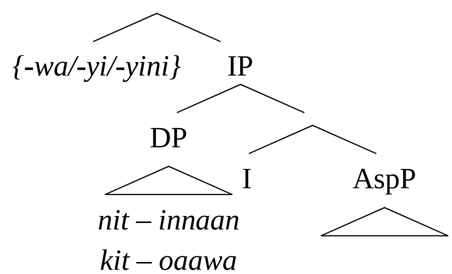
b. *Kitsiinóók**oaawayi*** *omiksi* *píítaiks*.
kit-iin-o-ok-**oaawa-yi** om-iksi piitaa-iksi
2-see-TA-INV-**2PL-PL** DEM-PL eagle-PL
"Those eagles saw you (pl)."

In (26) and (27), we see that the person/number suffixes occupy a different morphological slot, closer to the root, than the number suffixes. Under the assumption that the linear positions of the suffixes is inversely correlated with their relative syntactic positions (see Chapter 1), this suggests that the person/number suffixes are lower in the structure than the number suffixes. Moreover, by this same logic, the person/number suffixes are higher in the structure than the morpheme *–hp* (see (28)), which, following Ritter and Wiltschko (to appear), I argued in Chapter 5 to be associated with INFL.

(28)	*Nitsitáópihpinnaan*	*ama*	*Teddy*	*ookóówayi*.
	nit-it-a-opii-hp-innaan	am-wa	T	w-ookoowa-yi
	1-LOC-IMPF-stay.AI-LOCAL-1PL	DEM-PROX	T	3-home-INAN
	"We stayed at Teddy's home."			

The data in (26)-(28) suggests that the person/number suffixes are higher than INFL, but lower than the number suffixes. Following Déchaine (1999), I assume that the person/number suffixes form a circumfixal phrase with the person prefixes in Spec, IP, as shown below.[121] The implication is that the number suffixes are higher in the syntactic structure, outside of the IP layer, as schematized below.

(29)



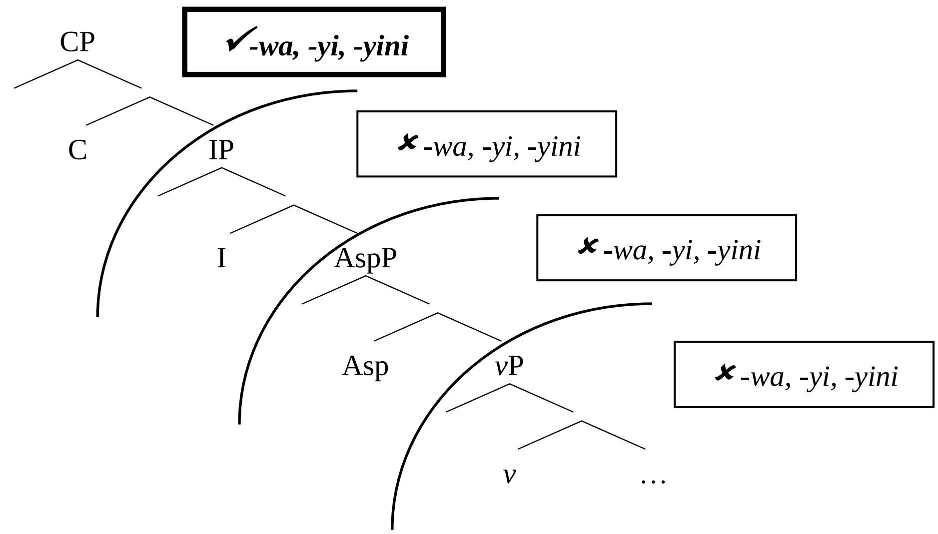
In sum, because the person/number suffixes *–innaan* and *–oaawa* are closer to the root than number suffixes, I assume the latter are not in the IP domain.

6.2.5. Number Suffixes are in CP

Having argued that the number suffixes are not in *v*P, AspP, or IP, I now turn to CP. In this section, I give evidence in support of the claim that the number suffixes occupy the CP layer. In particular, I show that they are sensitive to CP-level properties, such as illocutionary force and the matrix/subordinate distinction.

[121] The claim that the person/number suffixes are in Spec, IP goes against the generalization that suffixes in Blackfoot are heads (see Chapter 1 and §6.2.6). Why this would be the case is a matter I leave for future research.

(30)



6.2.5.1. Number Suffixes are Sensitive to Illocutionary Force

In this section, I demonstrate that the number suffixes are sensitive to ILLOCUTIONARY FORCE, which I take to be a property of the CP domain (cf. Cheng 1991, Rizzi 1997). In particular, I show that the distribution of number suffixes varies according to whether the clause is ASSERTIVE or not; assertive clauses permit the full range of number agreement, but in non-assertive clauses, number marking is NEUTRALIZED (i.e., the relevant contrasts are not morphologically encoded). In what follows, I introduce my assumptions about illocutionary force, and assertive force in particular, and then I present the Blackfoot number agreement facts.

The term "illocutionary force" goes back to Austin (1962), and refers to the speaker's intention when performing a speech act. Semantic/pragmatic models of speech acts assert that the speech act is compositional, consisting of the illocutionary force plus the propositional content of the sentence (e.g., Sadock and Zwicky 1985; Searle and Vanderveken 2005). This corresponds with syntactic models that treat illocutionary force as a syntactic head in the CP domain that combines with the proposition in IP (e.g., Rizzi 1997). Following in this tradition, I assume that illocutionary force is encoded in C.[122]

Regarding the assertive / non-assertive distinction, a traditional view of illocutionary force distinguishes declarative, interrogative, and directive forces, corresponding to statement, question, and

[122] I set aside the question of whether the CP domain is articulated, consisting of multiple heads, or not.

imperative sentence types. In addition, following Searle and Vanderveken (2005), I assume that clauses that are negated at the clausal level (i.e., those in which negation is in CP and scopes over the whole clause) can be considered as having a unique and complex illocutionary force referred to as DENEGATION.[123] I adopt the term ASSERTIVE to refer to sentences with declarative force that aren't "denegated." In terms of sentence types, this corresponds to declarative statements that aren't negated at the clausal level. Questions, imperatives, and clausally negated sentences I refer to as NON-ASSERTIVE.[124]

The distribution of the number suffixes in Blackfoot is sensitive to the assertive / non-assertive distinction. In the preceding sections, it was observed that in matrix declarative (non-negated) clauses there are three number suffixes; *-yini* indexes obviative singular arguments,*–yi* indexes plural arguments, and *–wa* can be considered the elsewhere suffix, indexing both proximate and inanimate singular arguments. In matrix questions, imperatives, and declaratives that are negated at the clausal level, the distinction between proximate, obviative, and plural arguments is neutralized.

First consider questions,[125] in which all 3rd person arguments are indexed with the suffix *–wa*. This is shown in the data set below.

(31)	*Kataa'wápsspíínao'si**wa***	*anna*	*Pitaaki?*
	kata'-aawapsspiinao'si-**wa**	ann-wa	P
	INTERR-wear.glasses.AI-**PROX**	DEM-PROX	P
	"Does Pitaaki wear eyeglasses?"		

(32)	a.	*Kataa'wápsspiinao'si**wa***	*annisk*	*óómi*?
		kata'-aawapsspiinao'si-**wa**	ann-yi-hk	w-oom-yi
		INTERR-wear.glasses.AI-**PROX**	DEM-OBV-INVIS	3-husband-OBV
		"Does her husband wear eyeglasses?"		

[123] Searle and Vanderveken (2005) distinguish between clauses in which the illocutionary force (F) is itself negated (¬F(P)) and clauses in which the propositional content of the clause is negated (F(¬P)). I do not make reference to this distinction here, and I assume that, if both force and negation are in CP, they can combine to constitute a complex illocutionary force.

[124] The assertive / non-assertive distinction corresponds with the veridical / non-veridical distinction (cf. Zwarts 1995, Giannakidou 1998, also Chapter 5). Cook (2008) observes that this distinction also plays a role in clause-typing in Plains Cree, a related Algonquian language.

[125] I restrict the discussion here to yes/no questions, as it is unclear whether matrix *wh*-questions are clausal (they are formed from nominalizations (cf. Frantz 2009: 133)).

b. **Kataa'wápsspiinao'si***yini** *annisk* *óómi*?
kata'-aawapsspiinao'si-**yini** ann-yi-hk w-oom-yi
INTERR-wear.glasses.AI-**OBV** DEM-OBV-INVIS 3-husband-OBV
intended: "Does her husband wear eyeglasses?"

(33) a. *Kataa'wápsspiinao'si***wa** *annisk* *oksíssts* *ki* *annisk* *ónni?*
kata'-aawapsspiinao'si-**wa** annisk w-iksisst-yi ki annisk w-inn-yi
INTERR-wear.glasses.AI-**PROX** DEM 3-mother-OBV and DEM 3-father-OBV
"Do her mother and father wear glasses?"

b. **Kataa'wápsspiinao'si***yi** *annisk* *oksíssts* *ki* *annisk* *ónni?*
kata'-aawapsspiinao'si-**yi** annisk w-iksisst-yi ki annisk w-inn-yi
INTERR-wear.glasses.AI-**PL** DEM 3-mother-OBV and DEM 3-father-OBV
intended: "Do her mother and father wear glasses?"

In (31), the proximate subject is indexed on the verb with the suffix –*wa*. In (32), the subject is obviative, and yet it is indexed on the verb with the suffix –*wa*; -*yini* is ungrammatical in this context. Similarly, in (33), the subject is plural, yet it is indexed with –*wa* and not –*yi*. In short, regardless of obviation or number, the 3rd person is indexed with –*wa* in interrogative clauses.

The –*wa* suffix also indexes inanimate arguments in interrogative clauses, as shown in (34).

(34) a. *Katáí'ssoko***wa** *amo* *óhkotoki?*
kata'-ssoko-**wa** amo ohkotok-yi
INTERR-be.heavy.II-**PROX** DEM rock-INAN
"Is this rock heavy?"

b. *Katáí'ssoko***wa** *amostsi* *óhkotokists?*
kata'-ssoko-**wa** amo-istsi ohkotok-istsi
INTERR-be.heavy.II-**PROX** DEM-PL rock-PL
"Are these rocks heavy?"

The preceding examples are all with intransitive verbs, in which there is only one 3rd person argument, but the generalization that –*wa* extends to all 3rd persons in questions is observed with transitive verbs as well. This is shown below.

(35) a. *Kikatao'kímma***wa** *annahk* *Beth*?
kit-kata'-okimm-a-**wa** ann-wa-hk B
2-INTERR-scold.TA-DIR-**PROX** DEM-PROX-INVIS B
"Did you scold Beth?"

b. *Kikatao'kímma**wa*** *annisk* *otákkaay*?
kit-kata'-okimm-a-**wa** ann-yi-hk w-itakkaa-yi
2-INTERR-scold.TA-DIR-**PROX** DEM-OBV-INVIS 3-friend-OBV
"Did you scold her friend?"

c. *Kikatao'kímma**wa*** *om-iksi pookáíks?*
kit-kata'-okimm-a-**wa** om-iksi pookaa-iksi
2-INTERR-scold.TA-DIR-**PROX** DEM-PL child-PL
"Did you scold those kids?"

(36) a. *Kikatáyo'powammok**a*** *oma* *pookáá*?
kit-kata'-opowamm-ok-**wa** om-wa pookaa
2-INTERR-bully.TA-INV-**PROX** DEM-PROX child
"Is that kid picking on you?"

b. *Kikatáyo'powammok**a*** *annisk* *o'si?*
kit-kata'-opowamm-ok-**wa** ann-yi-hk w-i's-yi
2-INTERR-bully.TA-INV-**PROX** DEM-OBV-INVIS 3-brother-OBV
"Does his brother pick on you?"

c. *Kikatáyo'powammok**a*** *omiksi* *pookáíks*?
kit-kata'-opowamm-ok-**wa** om-iksi pookaa-iksi
2-INTERR-bully.TA-INV-**PROX** DEM-PL child-PL
"Were those kids picking on you?"

(37) *Annahk* *Rosie* *katáó'hpokinihkatsii**wa*** *annisk maaáhs?*
ann-wa-hk R kata'-ohpok-inihkat-yii-**wa** annisk m-aaahs-yi
DEM-PROX-INVIS R INTERR-with-name.TA-3:4-**PROX** DEM 3-grandparent-OBV
"Was Rosie named after her grandmother?"

(38) *Katáí'sokaanistsii**wa*** *anna* *Leo* *omiksi* *pookáíks*?
kata'-sok-waanist-yii-**wa** ann-wa L om-iksi pookaa-iksi
INTERR-good-tell.TA-3:4-**PROX** DEM-PROX L DEM-PL child-PL
"Did Leo give the children advice?

In (35) and (36) are questions formed from the transitive mixed series. Regardless of whether the 3rd person is the object (35) or the subject (36), and regardless of whether the 3rd person is proximate (a), obviative (b), or plural (c), it is indexed on the verb with the –*wa* suffix. In (37)-(38) are questions formed from the transitive non-local series. These have two 3rd person arguments, and invariantly the number suffix is –*wa.*

Importantly, although number/obviation is neutralized in questions, person is not. The –*wa* suffix does not index local persons, as shown below.

(39) a. *Nikataah'ksímimmihpa?*
nit-kata'-pahk-imimm-hpa
1-INTERR-bad-smell.AI-NONAFF
"Do I stink?"

b. **Nikataah'ksímimmi(hpa)**wa**?*
nit-kata'-pahk-imimm-hpa-**wa**
1-INTERR-bad-smell.AI-NONAFF**-PROX**
intended: "Do I stink?"

(40) a. *Kikatáó'maisstsíksspa?*
kit-kata'-oma-ihtsikssi-hpa
2-INTERR-yet-be.sleepy.AI-2.NONAFF
"Are you sleepy?"

b. **Kikatáó'maisstsíkss(pa)**wa**?*
kit-kata'-oma-ihtsikssi-hpa-**wa**
2-INTERR-yet-be.sleepy.AI-NONAFF**-PROX**
intended: "Are you sleepy?"

(41) a. *Kikatáá'kanohpa*?
kit-kata'-waakan-o-hpa
2-INTERR-hurt.TA-1:2-NONAFF
"Did I hurt you?"

b. **Kikatáá'kano*(*hpa)**wa***?
kit-kata'-waakan-o-hpa-**wa**
2-INTERR-hurt.TA-1:2-NONAFF**-PROX**
intended: "Did I hurt you?"

d. *Kikatáó'toi'mokihpa*?
kit-kata'-otóí'm-oki-hpa
2-INTERR-blame.TA-2:1-NONAFF
"Do you blame me?"

d. **Kikatáó'toi'moki(hpa)**wa***?
kit-kata'-otóí'm-oki-hpa-**wa**
2-INTERR-blame.TA-2:1-NONAFF**-PROX**
intended: "Do you blame me?"

in (39) through (41) are questions with exclusively local person arguments, and in these contexts –*wa* is ungrammatical. This confirms that the –*wa* suffix in questions with 3rd person reference is indeed the number suffix.[126]

[126] Frantz (2009: 132) draws a distinction between the –*wa* in declarative clauses and that in interrogative and negated clauses, an glosses the latter as "3:nonaffirm."

To summarize, number and obviation contrasts are neutralized in questions, and the –*wa* suffix indexes all 3rd persons. The same generalization extends to declarative sentences that are negated at the clausal level, as shown in the examples below.

(42)	*Mááataoyiwa*	*anna*	*Leo.*	
	maat-a-ooyi-wa	ann-wa	L	
	NEG-IMPF-eat.AI-PROX	DEM-PROX	L	
	"Leo wasn't eating."			

(43)	a.	*Mááataoyiwa*	*anna*	*Leo*	*ó'si.*
		maat-a-ooyi-wa	ann-wa	L	w-i's-yi
		NEG-IMPF-eat.AI-PROX	DEM-PROX	L	3-brother-OBV
		"Leo's brother wasn't eating."			
	b.	**Mááataoyiini*	*anna*	*Leo*	*ó'si.*
		maat-a-ooyi-yini	ann-wa	L	w-i's-yi
		NEG-IMPF-eat.AI-OBV	DEM-PROX	L	3-brother-OBV
		intended: "Leo's brother wasn't eating."			

(44)	a.	*Mááataoyiwa*	*anna*	*Leo*	*ó'siks.*
		maat-a-ooyi-wa	ann-wa	L	w-i's-iksi
		NEG-IMPF-eat.AI-PROX	DEM-PROX	L	3-brother-PL
		"Leo's brothers weren't eating."			
	b.	**Mááataoyii*	*anna*	*Leo*	*ó'siksi.*
		maat-a-ooyi-yi	ann-wa	L	w-i's-iksi
		NEG-IMPF-eat.AI-PL	DEM-PROX	L	3-brother-PL
		intended "Leo's brothers weren't eating."			

(42)-(44) are negated intransitive clauses, and regardless of whether the subject is proximate (42), obviative (43), or plural (44) the number suffix is invariably –*wa*. Regarding the proposal that these sentences are negated at the clausal level, I adopt Louie's (2008) claim that the negative prefix *máát-* in the examples above takes scope over the entire proposition. This contrasts with a second negative prefix *sa-*, which takes scope only over the predicate. Notably, clauses negated with *sa-* do not show the same neutralization pattern with respect to number agreement. This is exemplified below.

(45)	*Sayínakoyiim**a***	*oma*	*nitaááttsistaama.*
	sa-inakoyiim-**wa**	om-wa	nit-aaattsistaa-m-wa
	NEG-appear.AI-**PROX**	DEM-PROX	1-rabbit-POSS-PROX
	"My rabbit disappeared." (lit: "My rabbit did not appear.")		

(46) a. ***Sayínakoyiima*** *omi* *otaááttsistaami.*
sa-inakoyiim-**wa** om-yi ot-aaattsistaa-m-yi
NEG-appear.AI-**PROX** DEM-OBV 3-rabbit-POSS-OBV
intended: "His rabbit disappeared".

b. *Sayínakoyiim**ini*** *omi* *otaááttsistaami.*
sa-inakoyiim-**yini** om-yi ot-aaattsistaa-m-yi
NEG-appear.AI-**OBV** DEM-OBV 3-rabbit-POSS-OBV
"His rabbit disappeared".

(47) a. ***Sayínakoyiima*** *omiksi* *otaááttsistaamiks.*
sa-inakoyiim-**wa** om-iksi ot-aaattsistaa-m-iksi
NEG-appear.AI-**PROX** DEM-PL 3-rabbit-POSS-PL
intended: "His rabbits disappeared".

b. *Sayínakoyiim**i*** *omiksi* *otaááttsistaamiks.*
sa-inakoyiim-**yi** om-iksi ot-aaattsistaa-m-iksi
NEG-appear.AI-**PL** DEM-PL 3-rabbit-POSS-PL
"His rabbits disappeared".

In (45)-(47), the predicate is negated with *sa-*, which according to Louie (2008) scopes lower (and sits lower in the syntax) than the clausal negator *máát-*. As such, these sentences are not "denegated" (in Searle and Vanderveken's (2005) terms) and qualify as having assertive force. They pattern with other sentences with assertive force (i.e., non-negated declarative statements) in showing number agreement with the 3rd person argument. In (45), the subject is proximate, and the number suffix is *–wa*, in (46) the subject is obviative, and the number suffix is *–yini*, and finally in (47), the subject is plural, and the number suffix is *–yi*.

The generalization that sentences negated with the clausal negator *máát-* do not show number agreement extends to the transitive paradigm as well. Regardless of whether the 3rd person argument is proximate, obviative, or plural, the number suffix is invariably *–wa*. This is shown below.

(48) a. *Nimáátotoksisawaata**wa*** *naaáhsa* *matónni.*
nit-maat-oto-oksisaw-aat-a-**wa** n-aaahs-wa matonni
1-NEG-go-visit-TA-DIR-**PROX** 1-grandparent-PROX yesterday
"I didn't go visit my grandmother yesterday."

b. *Nimáátotoksisawaata**wa*** *anni* *maaáhsi* *matónni.*
nit-maat-oto-oksisaw-aat-a-**wa** ann-yi m-aaahs-yi matonni
1-NEG-go-visit-TA-DIR-**PROX** DEM-OBV 3-grandparent-OBV yesterday
"I didn't go visit his grandmother yesterday."

c.

*Nimáátotoksisawaata**wa***	*níkso'kowaiks*	*matónni*.
nit-maat-oto-oksisaw-aat-a-**wa**	n-ikso’kowa-iksi	matonni
1-NEG-go-visit-TA-DIR-**PROX**	1-relative-PL	yesterday

“I didn’t go visit my relatives yesterday.”

(49) a.

*Nimáátsikakomsstomok**a***	*oma*	*nitómitaama*.
nit-maat-ikak-omsst-omo-ok-**wa**	om-wa	nit-imitaa-m-wa
1-NEG-even-steal.share-TA-INV-**PROX**	DEM-PROX	1-dog-POSS-PROX

“My dog didn’t even steal food from me.”

b.

*Nimáátsikakomsstomok**a***	*omi*	*otómitaami*.
nit-maat-ikak-omsst-omo-ok-**wa**	om-yi	ot-imitaa-m-yi
1-NEG-even-steal.share-TA-INV-**PROX**	DEM-OBV	3-dog-POSS-OBV

“Her dog didn’t even steal food from me.”

c.

*Nimáátsikakomsstomok**a***	*omiksi*	*otomitáámiksi.*
nit-maat-ikak-omsst-omo-ok-**wa**	om-iksi	ot-imitaa-m-iksi
1-NEG-even-steal.share-TA-INV-**PROX**	DEM-PL	3-dog-POSS-PL

“Her dogs didn’t even steal food from me.”

(50) a.

Anna	*Carmelle*	*máátsikakohkottsinooyii**wa***	*anniskayi*	*píítaay.*
ann-wa	C	maat-ikak-ohkott-inoo-yii-**wa**	ann-yi-hk-ayi	piitaa-yi
DEM-PROX	C	NEG-even-ABL-see.TA-3:4-**PROX**	DEM-OBV-INVIS-*ayi*	eagle-OBV

“Carmelle can’t even see that eagle.”

b.

Anna	*Carmelle*	*máátsikakohkottsinooyii**wa***	*anniksskayi*	*píítaiks.*
ann-wa	C	maat-ikak-ohkott-inoo-yii-**wa**	ann-iksi-hk-ayi	piitaa-iksi
DEM-PROX	C	NEG-even-ABL-see.TA-3:4-**PROX**	DEM-OBV-INVIS-*ayi*	eagle-PL

“Carmelle can’t even see those eagles.”

c.

Anni	*oksísts*	*máátsikakohkottsinooyii**wa***	*anniksskayi*	*píítaiks.*
ann-yi	w-iksist-yi	maat-ikak-ohkott-inoo-yii-**wa**	ann-iksi-hk-ayi	piitaa-iksi
DEM-OBV	3-mother-OBV	NEG-even-ABL-see.TA-3:4-**PROX**	DEM-OBV-INVIS-*ayi*	eagle-PL

“Her mother can’t even see those eagles.”

(51) a.

*Omáátakohkottohkoonook**a***	*nahk*	*Rosie*	*anni*	*otáni.*
ot-maat-ohkott-ohkoon-o-ok-**wa**	ann-wa-hk	R	ann-yi	w-itan-yi
3-NEG-ABL-find-TA-INV-**PROX**	DEM-PROX-INVIS	R	DEM-OBV	3-daughter-OBV

“Rosie’s daughter can’t find her.”

b.

*Omáátakohkottohkoonook**a***	*nahk*	*Rosie*	*anniksi*	*otániks.*
ot-maat-ohkott-ohkoon-o-ok-**wa**	ann-wa	R	ann-iksi	w-itan-iksi
3-NEG-ABL-find-TA-INV-**PROX**	DEM-PROX-INVIS	R	DEM-PL	3-daughter-PL

“Rosie’s daughters can’t find her.”

c.

*Omáátakohkottohkoonook**a***	*anniksi*	*otániks*	*otomitaamoaawayi.*
ot-maat-ohkott-ohkoon-o-ok-**wa**	ann-iksi	w-itan-iksi	ot-imitaa-m-oaawa-yi
3-NEG-ABL-find-TA-INV-**PROX**	DEM-PL	3-daughter-PL	3-dog-POSS-3PL-OBV

“Rosie’s daughters can’t find their dog.”

In (48) and (49) are sentences in the transitive mixed series. In the direct (48), the 3rd person object is invariably indexed with *–wa*, and in the inverse (49), the 3rd person subject is invariably indexed with *–wa*. In (50) and (51) are sentences in the transitive non-local series. Again, regardless of the number and obviation of the 3rd persons in the clause, the number suffix is invariably *–wa*.

To this point, we have seen that, unlike in sentences with assertive force, number agreement is neutralized in questions and negated statements. The third sentence type with non-assertive force is imperatives, and number agreement is neutralized in these forms. In fact, it is absent altogether. Examples are given below.

(52) a. *Kippó'tos* *oma* *si'káána.*
kipp-o'to-is om-wa sí'kaan-wa
please-take.TA-IMP.2:3 DEM-PROX blanket-PROX
"Please take this blanket."

b. *******Kippó'tos**a*** *oma* *si'káána.*
kipp-o'to-is-**wa** om-wa sí'kaan-wa
please-take.TA-IMP.2:3-**PROX** DEM-PROX blanket-PROX
intended: "Please take this blanket."

(53) a. *Kippó'tos* *oma* *niksíssta* *otsi'kááni.*
kipp-o'to-is om-wa n-iksisst-wa ot-sí'kaan-yi
please-take.TA-IMP.2:3 DEM-PROX 1-mother-PROX 3-blanket-OBV
"Please take my mother's blanket."

b. *******Kippó'tos**a*** *oma* *niksíssta* *otsi'kááni.*
kipp-o'to-is-**wa** om-wa n-iksisst-wa ot-sí'kaan-yi
please-take.TA-IMP.2:3-**PROX** DEM-PROX 1-mother-PROX 3-blanket-OBV
intended: "Please take my mother's blanket."

c. *******Kippó'tos**ini*** *oma* *niksíssta* *otsi'kááni.*
kipp-o'to-is-**yini** om-wa n-iksisst-wa ot-sí'kaan-yi
please-take.TA-IMP.2:3-**OBV** DEM-PROX 1-mother-PROX 3-blanket-OBV
intended: "Please take my mother's blanket."

(54) a. *Kippó'tos* *omiksi* *si'káániks.*
kipp-o'to-is om-iksi sí'kaan-iksi
please-take.TA-IMP.2:3 DEM-PL blanket-PL
"Please take these blankets."

b. *******Kippó'tos**a*** *omiksi* *si'káániks.*
kipp-o'to-is-**wa** om-iksi sí'kaan-iksi
please-take.TA-IMP.2:3-**PROX** DEM-PL blanket-PL
intended: "Please take these blankets."

c. ***Kippó'tosi** *omiksi si'káániks.*
kipp-o'to-is-**yi** om-iksi sí'kaan-iksi
please-take.TA-IMP.2:3-**PL** DEM-PL blanket-PL
intended: "Please take these blankets."

In (52)-(54) we see that imperatives are not marked with the number suffixes. Regardless of whether the 3rd person argument is proximate (52), obviative (53), or plural (54), number agreement is ungrammatical.

In summary, the number suffixes are sensitive to the distinction between assertive and non-assertive illocutionary force. In assertive clauses, the number suffixes show agreement with the highest 3rd person argument (proximate, obviative, or plural). In non-assertive clauses, number agreement is neutralized; it is either invariably realized as –*wa*, or it is absent. These generalizations, which to the best of my knowledge have not been previously documented, are summarized in Table 6.5 below.

Table 6.5. Distribution of Number Suffixes According to Illocutionary Force

Illocutionary Force	Sentence Type	Singular			Plural
		Proximate	Obviative	Inanimate	
Assertive	Statement	*-wa*	*-yini*	*-wa*	*-yi*
Non-Assertive	Question	*-wa*	*-wa*	*-wa*	*-wa*
	Denegated Statement	*-wa*	*-wa*	*-wa*	*-wa*
	Imperative	*	*	*	*

6.2.5.2. Number Suffixes are Restricted to Matrix Clauses

In this section, I present a second piece of evidence in support of the claim that the number suffixes are located in the CP domain, namely that they are sensitive to the distinction between matrix and subordinate clauses. That this distinction is encoded in the CP domain is evidenced by the number of languages (including English) that have overt complementizers (C heads) in subordinate clauses but not matrix clauses. I argue that Blackfoot is similarly sensitive to the matrix/subordinate distinction, but that, unlike languages like English, the number suffixes that map onto C are restricted to matrix, not subordinate clauses.

Although obligatory in matrix clauses, number suffixes are not permitted in subordinate clauses, either of the conjunct or subjunctive clause type.[127] Consider first conjunct clauses; these obligatorily take a *–yi* suffix, glossed as OBV(iative) and indicating that the clause is dependent (see chapter 3), but they cannot be used with the number suffixes from the verbal paradigm (i.e., *-wa*, plural *–yi*, or *–yini*). This is shown below.

(55)	a.	*Nitsíkssta*	*anna*	*ninááwa*	*mááhkiistapoohsi.*
		nit-ik-sst-aa	ann-wa	ninaa-wa	m-aahk-miistap-oo-hs-yi
		1-INTNS-want-AI	DEM-PROX	man-PROX	3-MOD-away-go.AI-CONJ-OBV
		"I want that man to leave."			
	b.	**Nitsíkssta*	*anna*	*ninááwa*	*mááhkiistapoohsi**wa**.*
		nit-ik-sst-aa	ann-wa	ninaa-wa	m-aahk-miistap-oo-hs-yi-**wa**
		1-INTNS-want-AI	DEM-PROX	man-PROX	3-MOD-away-go.AI-CONJ-OBV**-PROX**
		intended: "I want that man to leave."			

(56)	a.	*Na*	*Mary*	*íkssta*	*ohkóyi*	*mááhkiistapoohsi.*
		ann-wa	M	ik-sst-aa	w-ohko-yi	m-aahk-miistap-oo-hs-yi
		DEM-PROX	M	INTNS-want-AI	3-son-OBV	3-MOD-away-go.AI-CONJ-OBV
		"Mary wants her son to leave."				
	b.	**Na*	*Mary*	*íkssta*	*ohkóyi*	*mááhkiistapoohs**ini**.*
		ann-wa	M	ik-sst-aa	w-ohko-yi	m-aahk-miistap-oo-hs-yi-**yini**
		DEM-PROX	M	INTNS-want-AI	3-son-OBV	3-MOD-away-go.AI-CONJ-OBV**-OBV**
		intended: "Mary wants her son to leave."				
	c.	**Na*	*Mary*	*íkssta*	*ohkóyi*	*mááhkiistapoohsi**wa**.*
		ann-wa	M	ik-sst-aa	w-ohko-yi	m-aahk-miistap-oo-hs-yi-**wa**
		DEM-PROX	M	INTNS-want-AI	3-son-OBV	3-MOD-away-go.AI-CONJ-OBV**-PROX**
		intended: "Mary wants her son to leave."				

(57)	a.	*Kikatáí'sstaahpa*	*omiksi*	*nináíks*	*mááhkiistapoohsi?*
		kit-kata'-isst-aa-hpa	om-iksi	ninaa-iksi	m-aahk-miistap-oo-hs-yi
		2-INTERR-want-TA-NONAFF	DEM-PL	man-PL	3-MOD-away-go.AI-CONJ-OBV
		"Do you want those men to leave?"			
	b.	**Kikatáí'sstaahpa*	*omiksi*	*nináíks*	*mááhkiistapoohsi**yi**?*
		kit-kata'-isst-aa-hpa	om-iksi	ninaa-iksi	m-aahk-miistap-oo-hs-yi-**yi**
		2-INTERR-want-TA-NONAFF	DEM-PL	man-PL	3-MOD-away-go.AI-CONJ-OBV**-PL**
		intended: "Do you want those men to leave?"			

[127] The distinction between matrix and subordinate clauses is not one of finiteness. Rather, subordinate clauses cannot be characterized in terms of a finite/non-finite distinction. For example, as discussed in Chapter 5, conjunct clauses may be used as complements of epistemic predicates such as "know" (finite) or of desiderative predicates such as "want" (non-finite).

c.	**Kikatáí'sstaahpa*	*omiksi*	*ninaíks*	*mááhkiistapoohsi**wa**?*
	kit-kata'-isst-aa-hpa	om-iksi	ninaa-iksi	m-aahk-miistap-oo-hs-yi-wa
	2-INTERR-want-TA-NONAFF	DEM-PL	man-PL	3-MOD-away-go.AI-CONJ-OBV**-PROX**
	intended: "Do you want those men to leave?"			

In (55), the embedded clause has a 3rd person proximate subject, and it is ungrammatical to suffix *–wa* to the conjunct verb. In (56), the embedded subject is obviative, and neither *–yini* nor *–wa* can be suffixed to the conjunct verb. Finally, in (57) the embedded subject is plural, and neither *–yi* nor *–wa* can be suffixed to the verb.

Now consider subjunctive clauses. Like conjunct clauses, these do not permit the number suffixes. Examples are given below.

(58)	a.	*Nitááksspiyi*	*ikkamsttókimaasi*	*nahk*	*Leo.*			
		nit-yaak-ihpiyi	ikkam-isttokimaa-si	ann-wa-hk	L			
		1-FUT-dance.AI	if-drum.AI-SBJN	DEM-PROX-INVIS	L			
		"I will dance if Leo drums."						
	b.	*****_Nitááksspiyi_	*ikkamsttókimaasi**wa***	*nahk*	*Leo.*			
		nit-yaak-ihpiyi	ikkam-isttokimaa-si-**wa**	ann-wa-hk	L			
		1-FUT-dance.AI	if-drum.AI-SBJN-**PROX**	DEM-PROX-INVIS	L			
		intended: "I will dance if Leo drums."						
(59)	a.	*Nitááksspiyi*	*ikkamsttókimaasi*	*nahk*	*Leo*	*ó'si.*		
		nit-yaak-ihpiyi	ikkam-isttokimaa-si	ann-wa-hk	L	w-i's-yi		
		1-FUT-dance.AI	if-drum.AI-SBJN	DEM-PROX-INVIS	L	3-brother-OBV		
		"I will dance if Leo's brother drums."						
	b.	**Nitááksspiyi*	*ikkamsttókimaasi**wa***	*nahk*	*Leo*	*ó'si.*		
		nit-yaak-ihpiyi	ikkam-isttokimaa-si-**wa**	ann-wa-hk	L	w-i's-yi		
		1-FUT-dance.AI	if-drum.AI-SBJN-**PROX**	DEM-PROX-INVIS	L	3-brother-OBV		
		intended: "I will dance if Leo's brother drums."						
	c.	**Nitááksspiyi*	*ikkamsttókimaasi**yini***	*nahk*	*Leo*	*ó'si.*		
		nit-yaak-ihpiyi	ikkam-isttokimaa-si-**yini**	ann-wa-hk	L	w-i's-yi		
		1-FUT-dance.AI	if-drum.AI-SBJN-**OBV**	DEM-PROX-INVIS	L	3-brother-OBV		
		intended: "I will dance if Leo's brother drums."						
(60)	a.	*Nitááksspiyi*	*ikkamsttókimaasi*	*nahk*	*Leo*	*ki*	*annihk*	*ó'si.*
		nit-yaak-ihpiyi	ikkam-isttokimaa-si	ann-wa-hk	L	ki	annihk	w-i's-yi
		1-FUT-dance.AI	if-drum.AI-SBJN	DEM-PROX-INVIS	L	and	DEM	3-brother-OBV
		"I will dance if Leo and his brother drum."						

b. ***Nitááksspiyi** *ikkamsttókimaasi**wa*** *nahk Leo ki annihk ó'si.*
nit-yaak-ihpiyi ikkam-isttokimaa-si-**wa** nahk L ki annihk w-i's-yi
1-FUT-dance.AI if-drum.AI-SBJN-**PROX** DEM L and DEM 3-brother-OBV
intended: "I will dance if Leo and his brother drum."

c. ***Nitááksspiyi** *ikkamsttókimaasi**yi*** *nahk Leo ki annihk ó'si.*
nit-yaak-ihpiyi ikkam-isttokimaa-si-**yi** nahk L ki annihk w-i's-yi
1-FUT-dance.AI if-drum.AI-SBJN-**PL** DEM L and DEM 3-brother-OBV
intended: "I will dance if Leo and his brother drum."

In (58) through (60) are subjunctive clauses with 3rd person subjects. Regardless of whether the subject is proximate (58), obviative (59) or plural (60), the number suffixes are not permitted on the subjunctive clause.

To summarize, number suffixes are restricted to matrix clauses, and are not found in subordinate conjunct or subjunctive clauses. This sensitivity to the matrix/subordinate clause distinction is a property of the CP domain, and hence suggests that the number suffixes are in C.

6.2.6. Summary: Number Suffixes are in CP

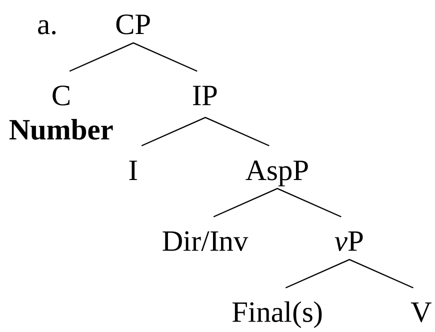
In sum, I have argued in this section that the number suffixes are not located in *v*P, AspP, or IP, but that they are located in CP. Evidence in favour of this analysis comes from the observation that the number suffixes are sensitive to illocutionary force and the matrix/subordinate clause distinction. Furthermore, I have demonstrated that the proximate suffix –*wa* functions as the elsewhere suffix. A summary of the distribution of number suffixes is given in Table 6.6 below.

Table 6.6. Distribution of Number Suffixes According to Clause Type and Illocutionary Force

Clause Type	Illocutionary Force	Singular			Plural
		Proximate	Obviative	Inanimate	
Matrix	Assertive	*-wa*	*-yini*	*-wa*	*-yi*
	Non-Assertive	*-wa/**	*-wa/**	*-wa/**	*-wa/**
Subordinate		*	*	*	*

An outstanding question is in regards to the linearization of the suffixes that I proposed were associated with the various functional heads (*v*, Asp, INFL, and C).[128] The linearization follows from the algorithm outlined in Chapter 1; the suffixes are syntactic heads that undergo cyclic head movement, resulting in an inverse ordering relative to the syntactic positions in the spine. This shown in (61) below; the highest head position in the tree maps onto the morphological right edge, and each step down the tree corresponds with the morpheme to the left, as shown below.

(61) a.



[$_{CP}$ Number [$_{IP}$ INFL [$_{AspP}$ Dir/Inv [$_{vP}$ Final(s) [V]]]]]

b. V – Final – Dir/Inv – INFL – Number
iin -o -yii -∅ -wa
iin -i -m -wa

c. *Íínoyiiwa oma imitááwa.*
iin-o-yii-wa om-wa imitaa-wa
see-TA-3:4-PROX DEM-PROX dog-PROX
"S/he saw that dog."

d. *Íínimwa omi imitáóyisi.*
iin-i-m-wa om-yi imitaa-ooyis-yi
see-TI-3:INAN-PROX DEM-INAN dog-house-INAN
"S/he saw that doghouse."

In (61a) is a summary of the proposed syntactic positions for morphemes in the Blackfoot verb complex, and in (61b) is a template with their morphological positions. Examples illustrating the template are given in (61c) and (61d). Note that the positions in the syntactic tree are the mirror image of the positions in the morphological template (as per Baker's 1985 Mirror Principle).

[128] As noted in §6.2.4, the person/number suffixes are exceptional, in that they are not syntactic heads.

6.3. The Syntactic Function of Number Suffixes

In the preceding section, I discussed the syntactic position of the number suffixes, and in this section, I consider their syntactic function. In §6.3.1, I demonstrate that the number suffixes are the head of the clause, and in §6.3.2, I show that *–wa* is categorically different from *–yini* and *–yi*. As first discussed in Chapter 3, *–wa* maps onto a head LINK which signals that the clause is syntactically independent. As for *–yini* and *–yi*, I propose that these are number agreement suffixes in C, and they require that an argument appear in Spec, CP.

6.3.1. Number Suffixes are Heads

In §6.2, I demonstrated that the number suffixes are located in the CP domain, but I did not address the question of where in the CP domain they are located. In this section, I argue that the number suffixes map onto the head of the CP layer. Following Wiltschko (2008), I assume that heads (but not modifiers) are obligatory.[129] The number suffixes are indeed obligatory in matrix clauses; they cannot be omitted as shown below.

(62) a.

*Áyaatsskinaa***(wa)***	*oma*	*kiááyowa*.
a-yaatsskinaa-**wa**	om-wa	kiaayo-wa
IMPF-growl.AI-**PROX**	DEM-PROX	bear-PROX

"That bear (PROX) was growling."

b.

*Áyaatsskinaa***(yini)***	*omi*	*kiááyoyi*.
a-yaatsskinaa-**yini**	om-yi	kiaayo-yi
IMPF-growl.AI-**OBV**	DEM-OBV	bear-OBV

"That bear (OBV) was growling."

c.

*Áyaatsskinaa***(yi)***	*omiksi*	*kiááyoiks*.
a-yaatsskinaa-**yi**	om-iksi	kiaayo-iksi
IMPF-growl.AI-**PL**	DEM-PL	bear-PL

"Those bears were growling."

[129] The obligatoriness test does not distinguish between heads and specifiers; specifiers are also often obligatory. As detailed in §6.3.2.2, I analyse the specifier position as being filled by the argument with which the number suffix agrees.

Moreover, because heads are obligatory, they may in certain contexts be semantically vacuous; they appear simply to satisfy syntactic requirements. This is also true of the number suffixes, which are required with weather predicates even though these do not have a semantically interpreted 3rd person argument. In these cases, the elsewhere suffix –*wa* obligatorily appears; -*yini* and –*yi* are not possible with weather predicates, as shown below.

(63) a. *Áísootaa**wa***.
a-isootaa-**wa**
IMPF-rain.II-**PROX**
"It is raining."

b. **Áísootaa**yini***
a-isootaa-**yini**
IMPF-rain.II-**OBV**
intended: "It is raining."

c. **Áísootaa**yi***
a-isootaa-**yi**
IMPF-rain.II-**PL**
intended: "It is raining."

(64) a. *Ááksohpotaa**wa***.
yaak-ohpotaa-**wa**
FUT-snow.II-**PROX**
"It's going to snow." (Frantz 2009: 24)

b. **Ááksohpotaa**yini***.
yaak-ohpotaa-**yini**
FUT-snow.II-**OBV**
intended: "It's going to snow."

c. **Ááksohpotaa**yi***.
yaak-ohpotaa-**yi**
FUT-snow.II-**PL**
intended: "It's going to snow."

The data in (63) and (64) show that it is obligatory to have a number suffix, even in contexts where it is semantically vacuous. In such cases, the elsewhere suffix –*wa* appears. Because the number suffixes are obligatory, they are heads and not modifiers in CP.

6.3.2. Proximate versus Obviative and Plural

Until this point in this chapter, I have treated the three number suffixes, proximate *–wa*, obviative *–yini*, and plural *–yi*, as a homogeneous class. In this section, I demonstrate that proximate *–wa* is categorically different from obviative *–yini* and plural *–yi*.

The first difference is distributional. In §6.2, we saw that *–wa* functions as the elsewhere suffix. It indexes proximate arguments, but in assertive clauses it is also used to index inanimate arguments, and in non-assertive clauses, it is also used to index obviative and plural arguments. Furthermore, the examples in (63) and (64) show that, with weather predicates, *-wa* does not index anything at all; it appears on the verb simply to fulfill a syntactic requirement. The same cannot be said for *–yini* and *–yi*; these suffixes are never neutralized or semantically vacuous. The suffix *–yini* always indexes a 3rd person singular animate argument, and *–yi* always indexes a 3rd person plural argument. As such, these suffixes can be characterized in terms of ϕ features: *-yini* has both [Animate] and [Singular] features; *-yi* has a [Plural] feature. In comparison, *-wa* need not be characterized in terms of ϕ features; it appears when *–yi* and *–yini* do not.

The second difference is that, whereas clauses formed with *–wa* do not require an argument, those formed with *–yini* and *–yi* do. More specifically, clauses formed with *–yini* and *–yi* need to appear with an overt argument expression or an enclitic. This is shown below.

(65) a. *Nitsskonákata**wa*** *oma* *ááattsistaawa*.
nit-sskonak-at-a-**wa** om-wa aaattsistaa-wa
1-shoot.at-TA-DIR-**PROX** DEM-PROX rabbit-PROX
"I shot at that rabbit."

b. *Nitsskonákata**wa***.
nit-sskonak-at-a-**wa**
1-shoot.at-TA-DIR-**PROX**
"I shot at it."

c. **Nitsskonákata**wáyi***.
nit-sskonak-at-a-**wa-ayi**
1-shoot.at-TA-DIR-**PROX-3PRN**
intended: "I shot at it."

(66) a. *Nitsskonákata**yini*** *omi* *áάattsistaayi*.
nit-sskonak-at-a-**yini** om-yi aaattsistaa-yi
1-shoot.at-TA-DIR-**OBV** DEM-OBV rabbit-OBV
"I shot at that (obviative) rabbit."

b. **Nitsskonákata**yini***.
nit-sskonak-at-a-**yini**
1-shoot.at-TA-DIR-**OBV**
intended: "I shot at it."

c. *Nitsskonákata**yináyi***.
nit-sskonak-at-a-**yini-ayi**
1-shoot.at-TA-DIR-**OBV-3PRN**
"I shot at it."

(67) a. *Nitsskonákata**yi*** *omiksi* *áάattsistaiks*.
nit-sskonak-at-a-**yi** om-iksi aaattsistaa-iksi
1-shoot.at-TA-DIR-**PL** DEM-PL rabbit-PL
"I shot at those rabbits."

b. **Nitsskonákata**yi***.
nit-sskonak-at-a-**yi**
1-shoot.at-TA-DIR-**PL**
intended: "I shot at them."

c. *Nitsskonákata**yaaw.***
nit-sskonak-at-a-**yi-aawa**
1-shoot.at-TA-DIR-**PL-3PL.PRN**
"I shot at them."

In (65) we see that clauses marked with –*wa* can appear with or without an argument expression, and it is ungrammatical for an enclitic pronoun to index the proximate argument. In (66) and (67), however, we see that clauses marked with –*yini* and –*yi* require an argument; if the argument expression is omitted, an enclitic pronoun is obligatory. These generalizations are schematized in (68); argument expressions are optional and enclitics ungrammatical with –*wa*, whereas one or the other is required with –*yini* and –*yi*.

(68) a. V… -*wa* {(argument expression) / *enclitic}
b. V…-*yini* {*(argument expression / enclitic)}
c. V…-*yini* {*(argument expression / enclitic)}

The third difference between *–wa* and the other two suffixes is that, whereas *–yini* and *–yi* are restricted to clauses, *-wa* also appears on argument expressions. This was discussed in Chapter 3 and additional examples are given below.

(69) a. *Om**a*** *aakíí**wa*** *náísapiipommaa**wa*** *pisátssaisskists*.
om-**wa** aakii-**wa** na-sapiipoomaa-**wa** pisatssaisski-istsi
DEM-**PROX** woman-**PROX** EVID-plant.AI-**PROX** flower-PL
"That woman planted flowers."

b. *Om**i*** *ónn**i*** *náísapiipommaayináyi* *pisátssaisskists*.
om-**yi** w-inn-**yi** na-sapiipoomaa-yini-ayi pisatssaisski-istsi
DEM-**OBV** 3-father-**OBV** EVID -plant.AI-OBV-3SG.PRN flower-PL
"Her father planted flowers."

c. *Om**iksi*** *aakíí**ksi*** *náísapiipommaayaawa* *pisátssaisskists*.
om-**iksi** aakii-**iksi** na-sapiipoomaa-yi-aawa pisatssaisski-istsi
DEM-**PL** woman-**PL** EVID -plant.AI-3PL-3PL.PRN flower-PL
"Those women planted flowers."

In (69a), the same suffix, *–wa*, appears on the demonstrative, the noun, and the verb. In (69b) and (69c), however, the noun and the demonstrative are marked with suffixes from the nominal paradigm, and the verb is marked with *–yini* and *–yi*, respectively. In other words, *-yini* and *–yi* are restricted to clauses, but *–wa* is not.

The three differences between *–wa* versus *–yini* and *–yi* are summarized in Table 6.7 below. In the subsections that follow, I discuss the syntactic functions of these suffixes, beginning first with *–yini* and *–yi*.

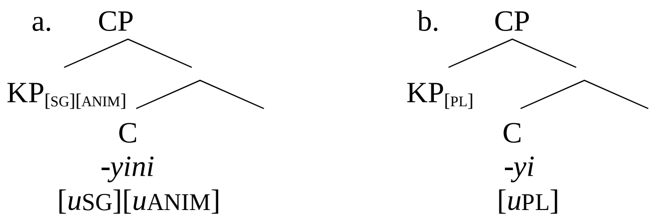
Table 6.7. Differences between *–wa* versus *–yini* and *-yi*

	-wa	***-yini***	***-yi***
ϕ feature specification	×	✓	✓
requires an argument	×	✓	✓
restricted to clauses	×	✓	✓

6.3.2.1. Obviative and Plural Clauses have Number Agreement in C

As shown in Table 6.7, *–yini* and *-yi* have ϕ featural content and they require an argument. Based on these two observations, I propose that these two suffixes are agreement suffixes in C; their ϕ features are uninterpretable and are checked by an argument with matching interpretable features, as schematized below.[130]

(70)



In (70a), the suffix *–yini* bears uninterpretable [ANIM] and [SG] features, and as such, requires an animate singular argument in Spec, CP to agree with. In (70b), the suffix *–yi* bears an uninterpretable [PL] feature, and as such, requires a plural argument in Spec, CP to agree with. Examples illustrating these agreement relations are given below.

(71) a. *Áyissksimmaa**yini*** *om**i*** *imitáá**yi***.
a-yissksimaa-**yini** om-**yi** imitaa-**yi**
IMPF-carry.load.AI-**OBV** DEM-**OBV** dog-**OBV**
"That dog (OBV) is a pack animal." (lit: it carries loads)

b. *Áyissksimmaa**yináyi.***
a-yissksimaa-**yini-ayi**
IMPF-carry.load.AI-**OBV-3SG.PRN**
"It is a pack animal." (lit: it carries loads)

(72) a. *Áwaahkaniaakiyi* *omiksi* *aakííks.*
a-waahkani-aaki-yi om-iksi aakii-iksi
IMPF-sew-AI-PL DEM-PL woman-PL
"Those women are sewing."

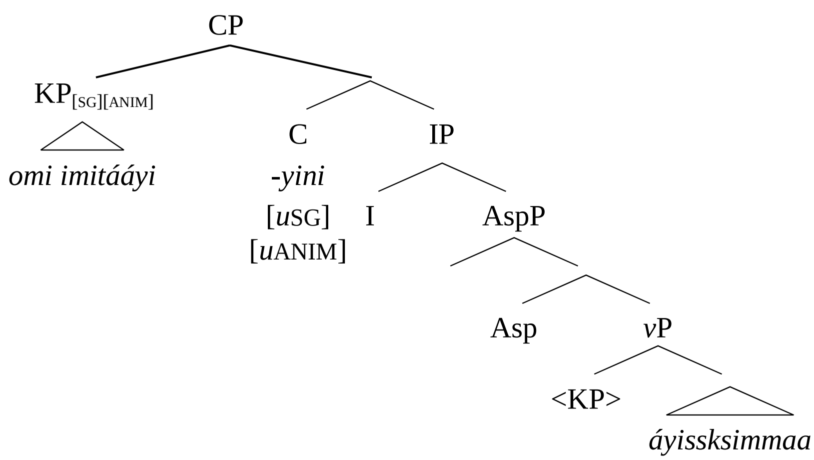
e. *Áwaahkaniaakiy**aawa**.*
a-waahkani-aaki-yi-**aawa**
IMPF-sew-AI-PL-**3PL.PRN**
"They are sewing."

In (71), the suffix *–yini* agrees with the animate singular argument *omi imitááyi* "that dog," or with a singular pronominal clitic *–áyi*. In (72), the suffix *–yi* agrees with the plural argument *omiksi aakííks* "those women" or with a plural pronominal clitic *–aawa*.

[130] This suggests that Spec, CP is an A-position, and not an A'-position. See Chapter 2, §2.6.3 for discussion.

How do the arguments that agree with *–yini* and *–yi* end up in Spec, CP? As discussed in Chapters 2 and 3, KPs map onto (*v*P-internal) argument positions inside the clause. One of these KPs (the structurally highest one with matching features) may undergo raising to Spec, AspP to satisfy an Agree relation with the direct/inverse suffix in Asp. The same mechanism is at work here: the structurally highest KP whose ϕ feature specification matches that of the number suffix in C raises to Spec, CP to satisfy the Agree relation. If the suffix is *–yini*, then the highest animate singular KP moves, and if the suffix is *–yi*, the highest plural KP moves. This is schematized for (71a) in (73) below.

(73)



In (73), the obviative KP maps onto Spec, *v*P and raises to Spec, CP to check the uninterpretable ϕ features on the obviative suffix *–yini* in C.

Importantly, although proximate *–wa* also appears on animate singular argument expressions, because proximate argument expressions are adjoined outside the clause (see Chapter 3), they cannot raise to Spec, CP check the uninterpretable features of *–yini*.

6.3.2.2. Proximate Clauses are LINKPs

In §6.3.2, I outlined the differences between proximate *–wa* versus obviative *–yini* and plural *–yi*. These were summarized in Table 6.7, repeated below.

Table 6.7. Differences between –*wa* versus –*yini* and -*yi*

	-wa	***-yini***	***-yi***
ϕ feature specification	✗	✓	✓
requires an argument	✗	✓	✓
restricted to clauses	✗	✓	✓

In the preceding section, I argued on the basis of the first two rows in Table 6.7 that –*yini* and –*yi* are agreement markers; they have uninterpretable ϕ features that require that an argument with matching ϕ features appear in Spec, CP. The same is not true of proximate –*wa*; its neutralization patterns suggests that it does not have ϕ feature content, and it does not require an argument to agree with. In short, -*wa* is not an agreement marker.

What, then, is the syntactic function of proximate –*wa* in the clause? In Chapter 3, I proposed that –*wa* maps onto a functional head LINK: the highest head in the spine, but one that is neutral with respect to which spine it heads (nominal or verbal). Furthermore, I argued that expressions marked with –*wa* are syntactically independent; they are ***not*** linked to a superordinate structure. As such, argument expressions marked with –*wa* cannot appear in argument positions inside the clause. The empirical consequence of this for proximate clauses is that they are necessarily matrix clauses; they are not linked to a higher clause. Moreover, whereas obviative and plural clauses cannot exist independently, i.e., without an argument expression, proximate clauses do not require an argument. In short, proximate clauses are syntactically independent.

Note that, under this analysis, "proximate" and "obviative" are not syntactic features. Rather, "proximate" is a label assigned to a linguistic object that does not have any syntactic dependencies; it is independent. And what is referred to as the "obviative" suffix on clauses is simply an agreement suffix for animate singular arguments. We can see this by comparing the two tables below.

Table 6.8. Two Ways of Organizing the Number Suffixes

<table>
<tr><th></th><th>Singular</th><th>Plural</th></tr>
<tr><td>Proximate</td><td>-wa</td><td rowspan="2">-yi</td></tr>
<tr><td>Obviative</td><td>-yini</td></tr>
</table>

<table>
<tr><th></th><th>Singular</th><th>Plural</th></tr>
<tr><td>Proximate</td><td colspan="2">-wa</td></tr>
<tr><td>Not Proximate</td><td>-yini</td><td>-yi</td></tr>
</table>

The left hand table shows an organization that makes reference to both proximate and obviative; the two contrast with the plural. This captures the distribution of number suffixes in matrix declarative animate clauses (see §6.2.1), but it fails to recognize that *–wa* is the elsewhere suffix, used in contexts of neutralization, e.g., in non-assertive clauses and with weather predicates. The right hand table, on the other hand, distinguishes *–wa* from the other two suffixes. This organization better reflects the fact that *–wa* patterns distinctly from *–yini* and *–yi*.

6.3.3. Summary

In summary, in this section I have demonstrated that the number suffixes map onto the highest functional head in the spine. I have argued that, for proximate *–wa*, this is the head LINK, a functional head that is neutral with respect to the nominal/verbal distinction. Proximate *–wa* functions to mark the clause as syntactically independent. As for the other number suffixes, *-yini* and *–yi*, I have argued that these are categorized as C, and they bear uninterpretable ϕ features that are checked in an Agree relation with an argument in Spec, CP. Under this analysis, obviative marking does not correspond with a syntactic category or feature; clauses that marked as "obviative" are simply those that are not "proximate" (i.e., independent), and take a singular animate argument in Spec, CP. In Chapter 8, I consider the discourse functions of the proximate/obviative contrast, and I argue that in addition to signalling syntactic independence, *-wa* also signals discourse topicality (cf. Genee 2009).

6.4. Conclusion

This chapter can be seen as the final piece of the puzzle of mapping Blackfoot's argument-typing morphology onto the syntactic spine. In Chapter 3 and 4, I discussed the nominal inflection, and in Chapters 5 and 6, I discussed the verbal inflection. The picture that emerges is summarized in Table 6.9.

Table 6.9. Argument-Indexing Morphology

Category	**Nominal inflection**	**Verbal inflection**		**Description**
		Suffixes	**Prefixes**	
LINK	*-wa*		--	proximate marking
K / C	*-yi*	*-yini*	--	obviative marking
	--	*-yi*	--	plural marking
D	--	--	*nit- / kit- / ot-*	long form person prefixes
ϕ	--	--	*n- / k- / w-*	short form person prefixes
	-iksi / -istsi	--	--	plural marking

Table 6.9 allows us to make certain observations about Blackfoot's argument-typing system. First, proximate and obviative morphology maps onto high structural positions in both the nominal and verbal domains. This contrasts with the plural morphology, which is high in the verbal domain but relatively low in the nominal domain. This may relate to the observation that proximate and obviative morphology also has discourse uses (see Chapter 8), but plural morphology does not. It may be the case that linguistic objects that associate with higher structural positions are more likely to take on discourse functions. However, this leaves to be explained why verbal plural morphology is also high in the structure, but does not have clear discourse functions. Second, there are no 3rd person forms that associate with D. As discussed in Chapter 4, D in Blackfoot is null, but licenses a Specifier occupied by the demonstratives. The paucity of (overt) D forms is a striking feature of Blackfoot's argument-typing system, and one that I don't yet have an explanation for. Third, it is tempting to consider whether the verbal obviative suffix –*yini* can be decomposed into two morphemes, *-yi* + *-ni,* particularly since the nominal obviative suffix and the verbal plural suffix are also both –*yi*. This would perhaps suggest that obviation and number features need not be "bundled" onto a single morpheme, but can be distributed across two morphemes and/or two positions on the spine (for example, with –*yi* coding number and –*ni* coding obviation, or vice versa). Alternatively, if -*yini* were decomposable into –*yi* + -*ni*, then it may be possible to treat –*yi* as category-neutral in the same way as –*wa* (i.e., it may code obviative singular in both nominal and verbal paradigms). At this point, I do not have evidence to support the decomposition of –*yini*, and as such, whether such analyses are tenable is a question I leave for future research.

Setting aside these open questions, Table 6.9 presents a configurational syntax for Blackfoot's argument expressions and clauses; the various pieces of nominal and verbal morphology map onto hierarchically organized structures. However, as discussed in Chapter 1, Blackfoot fits the profile of a non-configurational language. In the following chapter, I address this discrepancy, and I argue that the hierarchical relations evidenced in Blackfoot's argument-typing system are obscured by the proximate/obviative contrast.

As a final remark, although in Blackfoot the CP domain is associated with argument-typing morphology, this is not the case in other Algonquian languages. For example, in Plains Cree the CP domain is associated with clause-typing morphology (cf. Cook 2008) and in Ojibwe, the verbal complex corresponds to an IP rather than a CP (cf. Lochbihler and Mathieu 2010). I revisit this issue in Chapter 8.

CHAPTER 7

IMPLICATIONS FOR (NON-)CONFIGURATIONALITY

7.1. Introduction

The preceding chapters explored Blackfoot's argument-typing system by looking in detail at the internal and external syntax of nominal expressions (Chapter 3), demonstratives (Chapter 4), person prefixes (Chapter 5) and number suffixes (Chapter 6). One of the main observations that emerged was that proximate marking has different syntactic properties than obviative and plural marking. The proximate, obviative, and plural morphology is given in Table 7.1.

Table 7.1. 3rd Person Argument-Indexing Morphology

<table>
<tr><th>Description</th><th>Nominal inflection</th><th>Verbal inflection</th><th>Category</th><th>XP Position</th></tr>
<tr><td>proximate</td><td colspan="2">-wa</td><td>LINK</td><td>Adjunct</td></tr>
<tr><td>obviative</td><td>-yi</td><td>-yini</td><td rowspan="2">K / C</td><td rowspan="3">Argument</td></tr>
<tr><td rowspan="2">plural</td><td>--</td><td>-yi</td></tr>
<tr><td>-iksi / -istsi</td><td>--</td><td>ϕ</td></tr>
</table>

Table 7.1 shows that, whereas obviative and plural morphology have different forms in the nominal and verbal paradigms, there is only one proximate morpheme, -*wa*. In chapters 3 and 6, I developed an analysis of proximate –*wa* as associating with the syntactic category LINK, the highest functional head in the spine but neutral with respect to the nominal/verbal distinction. Moreover, I argued that, whereas obviative and plural nominal expressions are generated in argument positions inside the clause, proximate nominal expressions are generated as clause-external adjuncts.

In this chapter, I explore the implications of this proposal for Blackfoot's (non-)configurational profile. More specifically, I demonstrate that Blackfoot can be considered a PARTIAL NON-CONFIGURATIONAL LANGUAGE: proximate argument expressions have non-configurational properties, but obviative and plural argument expressions have configurational properties. To be clear, I use the term "non-configurational" as a cover term to refer to grammatical properties that obscure the appearance of hierarchical relations between constituents; it is not meant in the literal sense of lacking hierarchical structure altogether. In what follows, I consider three different conceptualizations of non-configurationality, and I show that, in each case, proximate argument expressions behave differently than obviative and plural ones.

The chapter proceeds as follows. In §7.2, I look at Blackfoot in the context of Hale's (1983) diagnostics for non-configurationality: null anaphora, flexible word order, and discontinuous expressions. I demonstrate that Blackfoot exhibits these properties, but only to a limited extent. In particular, proximate singular arguments are non-configurational in ways that obviative singular and plural arguments are not. In §7.3, I look at Blackfoot in the context of the Pronominal Argument Hypothesis (PAH, cf. Jelinek 1984, Baker 1991, 1996), an often assumed model for understanding non-configurationality, particularly in Algonquian languages (cf. LeSourd 2006). Again, I show that whereas proximate singular argument expressions exhibit non-configurational properties, other types of argument expressions (e.g., obviative singular and plural) do not. In §7.4, I provide additional evidence for the hierarchical organization of the arguments in the clause, based on c-command tests. One generalization that emerges is that proximate arguments asymmetrically c-command obviative ones. This is consistent with the claim that proximate argument expressions are clause-external adjuncts. In §7.5, I conclude.

7.2. *Non-Configurationality,* Take 1: Hale's (1983) Diagnostics

Hale (1983) identifies three diagnostics for non-configurationality, namely: (i) extensive null anaphora, (ii) free word order, and (iii) discontinuous expressions. In this section I demonstrate that Blackfoot exhibits all three of these properties, but with restrictions. The overarching generalization that emerges is a partition between proximate singular versus obviative singular and plural argument expressions; proximate but not obviative or plural argument expressions pattern as non-configurational in permitting null anaphora and free word order. As for the third diagnostic, discontinuous expressions, these are permitted with proximate singular, obviative singular, and plural argument expressions. In this section, I present some empirical generalizations about discontinuous expressions, but I do not develop an analysis.

7.2.1. Null Anaphora

In this section, I show that Blackfoot partially meets the first criterion for non-configurationality: the extensive use of null anaphora. The term NULL ANAPHORA refers to clauses in which the argument(s) are not represented by phonologically overt nominal expression(s), (cf. Hale 1983). Blackfoot has a rich system of verbal morphology, and a sentence can consist simply of a verbal complex; overt nominal expressions outside the verbal complex are not obligatory. However, null anaphora is not always permitted. Whereas proximate singular (3rd person) argument expressions can be freely omitted, obviative singular and/or plural (3rd person) argument expressions are obligatorily expressed by an enclitic pronoun at the right edge of the verbal complex. I also present the data on null anaphora with local (1st and 2nd) persons. These permit null anaphora only if the local person is indexed on the verb.

In the subsections that follow, I first discuss null anaphora with local persons, then proximate singular 3rd persons, and then obviative singular and plural 3rd persons. For each of these, I discuss the possibilities for null anaphora across the different grammatical functions (subject, object, unindexed object, and oblique).

7.2.1.1. Null Anaphora with Local Persons

7.2.1.1.1. Local Subject and Object

When local persons (1st/2nd) function as the subject or indexed object, the norm is null anaphora. In these contexts, independent personal pronouns are optional and rarely used[131], and the local persons are marked by person prefixes on the verb. This is shown with intransitive verbs (1), transitive direct verbs with a local person subject (2), and transitive inverse verbs with a local person object (3).[132]

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[131] Although the precise discourse conditions for licensing independent pronouns as subjects or objects are yet unclear, they seem to be used with some sort of emphatic flavour. Déchaine et al. (2011) note that they can be used for topics and contrastive foci.

[132] In (1)-(5), only one word order is presented for each example; other word orders are possible, as discussed in §7.2.2.

(1) a.

(Niistówa)[133]	***nít****sspiyi.*
n-iisto-wa	**nit**-ihpiyi
1-ANIM-PROX	**1**-dance.AI

"I danced."

b.

(Kiistówa)	***kít****sspiyi.*
k-iisto-wa	**kit**-ihpiyi
2-ANIM-PROX	**2**-dance.AI

"You danced."

(2) a.

(*Niistówa)*	***nit****sikáákomimmaa*	*anna*	*niksíssta.*
n-iisto-wa	**nit**-ik-waakomimm-a-wa	ann-wa	n-iksisst-wa
1-ANIM-PROX	**1**-INTNS-love.TA-DIR-PROX	DEM-PROX	1-mother-PROX

"I love my mother."

b.

(*Kiistówa)*	***kit****sikáákomimmaa*	*anna*	*niksíssta.*
k-iisto-wa	**kit**-ik-waakomimm-a-wa	ann-wa	n-iksisst-wa
2-ANIM-PROX	**2**-INTNS-love.TA-DIR-PROX	DEM-PROX	1-mother-PROX

"You love my mother."

(3) a.

Na	*Rosie*	***nit****sikkahsimmoka*	*(niistóyi).*
ann-wa	R	**nit**-ikkahsi-mm-ok-wa	n-iisto-yi
DEM-PROX	R	**1**-laugh-TA-INV-PROX	1-ANIM-OBV

"Rosie laughed at me."

b.

Na	*Rosie*	***kit****sikkahsimmoka*	*(kiistóyi).*
ann-wa	R	**kit**-ikkahsi-mm-ok-wa	k-iisto-yi
DEM-PROX	R	**2**-laugh-TA-INV-PROX	2-ANIM-OBV

"Rosie laughed at you."

Only one person prefix is permitted per verb. If there are two local persons in a clause, the 2nd person prefix appears on the verb, and the 1st person (along with 2nd) is indexed via the direct/inverse marking.[134]

(4) a.

(Niistówa)	***kit****sikáákomimm****o****.*
n-iisto-wa	**kit**-ik-waakomimm-**o**
1-ANIM-PROX	**2**-INTNS-love.TA-**1:2**

"I love you."

---

[133] Morphologically, independent pronouns in Blackfoot are possessed nominals, formed of an animate gender noun stem (Frantz 2009: 75). Blackfoot is unique amongst the Algonquian languages in that the local person pronouns can be inflected as either proximate or obviative. It is yet unclear what determines whether a local independent pronoun is marked as proximate or obviative; for some preliminary observations, see Bliss (2006).

[134] In the examples in (4) and (5), either the 1st or 2nd person independent pronoun can optionally be used. Examples in which both independent pronouns are used are judged as unnatural by consultants. It is yet unclear whether there are contexts that permit two independent pronouns in a single clause.

b. (*Kiistówa*) ***kit****sikáákomimm****o***.
k-iisto-wa **kit**-ik-waakomimm-**o**
2-ANIM-PROX **2**-INTNS-love.TA-**1:2**
"I love you."

(5) a. *(Niistówa)* ***kit****sikáákomimm****oki***.
n-iisto-wa **kit**-ik-waakomimm-**oki**
1-ANIM-PROX **2**-INTNS-love.TA-**2:1**
"You love me."

b. *(Kiistówa)* ***kit****sikáákomimm****oki***.
k-iisto-wa **kit**-ik-waakomimm-**oki**
2-ANIM-PROX **2**-INTNS-love.TA-**2:1**
"You love me."

7.2.1.1.2. Local Unindexed Object

For an unindexed object to be interpreted as 1st or 2nd person, an independent pronoun is required.[135] In the absence of the pronoun, the unindexed object can be interpreted as an unspecified 3rd person. Put differently, null anaphora for local person unindexed objects is not possible.[136]

(6) a. *Anniksi nóhpapííyihpiksi kómohpskitaayaaw* ***niistóyi.***
ann-iksi n-ohpapiiyihp-iksi k-omohp-skit-a-yi-aawa **n-iisto-yi**
DEM-PL 1-relative-PL 2-ASSOC-leave.TA-DIR-3PL-3PL.PRN **1-ANIM-OBV**
"You left **me** with my relatives."

b. *Anniksi nóhpapííyihpiksi kómohpskitaayaaw.*
ann-iksi n-ohpapiiyihp-iksi k-omohp-skit-a-yi-aawa
DEM-PL 1-relative-PL 2-ASSOC-leave.TA-DIR-3PL-3PL.PRN
"You left **someone** with my relatives."

(7) a. *Nitáísookohpopaatomowaa anna kiksíssta* ***kiistóyi***.
nit-a-yook-ohpopaat-omo-a-wa ann-wa k-iksisst-wa **k-iisto-yi**
1-IMPF-typical-babysit-TA.BEN-DIR-PROX DEM-PROX 2-mother-PROX **2-ANIM-OBV**
"I used to babysit **you** for your mother."

b. *Nitáísookohpopaatomowaa anna kiksíssta.*
nit-a-yook-ohpopaat-omo-a-wa ann-wa k-iksisst-wa
1-IMPF-typical-babysit-TA.BEN-DIR-PROX DEM-PROX 2-mother-PROX
"I used to babysit **someone** for your mother."

---

135 The same pattern is attested in Fox, although in this language, there are two different sets of independent pronouns: one used for emphatic purposes in co-occurrence with person agreement on the verb, and the other used for unindexed arguments (cf. Dahlstrom 1988).

136 It is unclear at this point whether this is ruled out on syntactic or pragmatic grounds, i.e., whether null anaphora with local unindexed objects is possible if the context is rich enough to allow it.

7.2.1.1.3. Local Oblique

When a local person functions as an oblique, it is indexed on the verb via an adpositional prefix. With most adpositional prefixes, null anaphora is not permitted; local person obliques must be expressed with an independent pronoun, as shown below.

(8) a.

Anna	*Rosie*	*áákohtahtsaowaihkitaa*	***niistó***.
ann-wa	R	yaak-ohtahtsaowa-ihkitaa-wa	**n-iisto**
DEM-PROX	R	FUT-instead.of-cook.AI-PROX	**1-ANIM**

"Rosie will cook instead of **me**."

b.

**Anna*	*Rosie*	*áákohtahtsaowaihkitaa*.
ann-wa	R	yaak-ohtahtsaowa-ihkitaa-wa
DEM-PROX	R	FUT-instead.of-cook.AI-PROX

intended: "Rosie will cook instead of **me/someone**."

(9) a.

Oma	*nitákkaawa*	*nómohtsistsinikooka*	***kiistóyi***.
om-wa	n-itakkaa-wa	n-omoht-itsiniko-ok-wa	**k-iisto-yi**
DEM-PROX	1-friend-PROX	1-CONT-relate.TA-INV-PROX	**2-ANIM-OBV**

"My friend told me about **you**." (Frantz 2009: 76, v)

b.

**Oma*	*nitákkaawa*	*nómohtsistsinikooka.*
om-wa	n-itakkaa-wa	n-omoht-itsiniko-ok-wa
DEM-PROX	1-friend-PROX	1-CONT-relate.TA-INV-PROX

intended: "My friend told me about **you/someone**."

However, there are some adpositions that are speaker-oriented, i.e., that specifically introduce a 1st person oblique[137], and in these cases null anaphora is permitted. The first is the adposition *ipoohsap-* "toward the location of the speaker." An oblique introduced by this adposition necessarily refers to the speaker (1st person), and the 1st person can but need not be referenced by an independent pronoun.

(10) a.

Annahkayi	*kiááyo*	*ipóóhsapawaawahkaa.*
ann-wa-hk-ayi	kiaayo-wa	ipoohsap-a-waawahkaa-wa
DEM-PROX-INVIS-*ayi*	bear-PROX	towards.SPKR-IMPF-walk.AI-PROX

"This one bear came walking towards **me**."

b.

Annahkayi	*kiááyo*	*ipóóhsapawaawahkaa*	***niistó***.
ann-wa-hk-ayi	kiaayo-wa	ipoohsap-a-waawahkaa-wa	**n-iisto**
DEM-PROX-INVIS-*ayi*	bear-PROX	towards.SPKR-IMPF-walk.AI-PROX	**1-ANIM**

"This one bear came walking towards **me**."

[137] I am not aware of any addressee-oriented adpositions (i.e., adpositions that specifically introduce a 2nd person oblique).

c.	**Annahkayi*	*kiááyo*	*ipóóhsapawaawahkaa*	***annisk Steve*.**	
	ann-wa-hk-ayi	kiaayo-wa	ipoohsap-a-waawahkaa-wa	**annisk**	**S**
	DEM-PROX-INVIS-*ayi*	bear-PROX	towards.SPKR-IMPF-walk.AI-PROX	**DEM**	**S**
	intended: "This one bear came walking towards **Steve**."				

The second adposition that introduces a local person oblique is *sstaan-* "in place of the speaker." Like *ipoohsap-*, the oblique introduced by *sstaan-* is necessarily 1st person, and can be optionally referenced by an independent 1st person pronoun.

(11)	a.	*Anna*	*Rosie*	*áaksstaanihkitaa*.		
		ann-wa	R	yaak-sstaan-ihkitaa-wa		
		DEM-PROX	R	FUT-in.place.of.SPKR-cook.AI-PROX		
		"Rosie will take **my** place in cooking."				
	b.	*Anna*	*Rosie*	*áaksstaanihkitaa*	***niistó*.**	
		ann-wa	R	yaak-sstaan-ihkitaa-wa	**n-iisto**	
		DEM-PROX	R	FUT-in.place.of.SPKR-cook.AI-PROX	**1-ANIM**	
		"Rosie will take **my** place in cooking."				
	c.	**Anna*	*Rosie*	*áaksstaanihkitaa*	***annisk***	***Heather*.**
		ann-wa	R	yaak-sstaan-ihkitaa-wa	**ann-yi-hk**	**H**
		DEM-PROX	R	FUT-in.place.of.SPKR-cook.AI-PROX	**DEM-OBV-INVIS**	**H**
		intended: "Rosie will take **Heather's** place in cooking."				

These examples demonstrate that null anaphora is possible with local person obliques, so long as the adposition introduces a local person oblique. To summarize, null anaphora for local persons is possible only if the local person is indexed on the verb, i.e., if it functions as the subject, the indexed object, or an oblique introduced by a speaker-oriented adposition. Null anaphora for local persons is not possible with unindexed objects or obliques not introduced by a speaker-oriented adposition; in these cases, an independent pronoun is required. This is summarized in Table 7.2.

Table 7.2. Null Anaphora with Local Persons

Grammatical Function	**Indexed on Verb**	**Null Anaphora**
Subject	✓	✓
Indexed object	✓	✓
Oblique: speaker-oriented adposition	✓	✓
Unindexed object	✗	✗ (independent pronoun required)
Oblique: not speaker-oriented adposition	✗	✗ (independent pronoun required)

7.2.1.2. Null Anaphora with Proximate Singular 3rd Persons[138]

In the context of null anaphora, the proximate argument is the argument that is indexed on the verb with the proximate suffix –*wa*, or in cases in which the argument is not indexed (i.e., with unindexed objects and obliques), the argument is proximate if there is no other singular 3rd person in the clause. In what follows, I demonstrate that proximate singular arguments can always be null.

7.2.1.2.1. Proximate Singular Subject and Object

When a proximate singular 3rd person functions as the subject in an intransitive clause, it is indexed on the verb via the proximate suffix -*wa*, and the proximate singular nominal expression can be omitted. This is shown below.

(12) a. *A'páwaawahkaa**wa*** *anna* *Piohkomiaaki.*
a'p-a-waawahkaa-**wa** ann-wa ipi-ohkomi-aakii
around-IMPF-walk.AI-**PROX** DEM-PROX far-sound-woman
"Far Sounding Woman is walking around."

b. *A'páwaawahkaa**wa.***
"**S/he** is walking around."

Similarly, in transitive clauses, the proximate argument is indexed on the verb with –*wa*, regardless of whether the argument is the subject or the object. In either case, the proximate argument expression can be omitted, as shown below.

(13) a. *Nitáákksspomoa**wa*** *annahk* *Myááni.*
nit-yaak-sspomo-a-**wa** ann-wa-hk Myaani
1-FUT-help.TA-DIR-**PROX** DEM-PROX-INVIS Mary
"I will help Mary."

b. *Nitáákksspomoa**wa.***
nit-yaak-sspomo-a-**wa**
1-FUT-help.TA-DIR-**PROX**
"I will help **him/her**."

[138] Whereas in §7.2.1.1 I considered the distribution of (local) independent pronouns, in this section and §7.2.1.3, I consider the distribution of (non-pronominal) nominal expressions. The reason for this is that, unlike 1st and 2nd person independent pronouns, 3rd person independent pronouns are never required and are consequently very rare. The distribution of 3rd person independent pronouns is a topic I leave for future research.

(14) a.	*Annahk*	*Myááni*	*kitáákotoisspomook**a**.*
	ann-wa-hk	Myaani	kit-yaak-oto-sspomo-ok-**wa**
	DEM-PROX-INVIS	Mary	2-FUT-go.to.do-help.TA-INV-**PROX**
	"Mary will go help you."		

b. *Kitáákotoisspomook**a**.*
kit-yaak-oto-sspomo-ok-**wa**
2-FUT-go.to.do-help.TA-INV-**PROX**
"**S/he** will help you."

The proximate suffix –*wa* can index an inanimate object as well as an animate one, when it is the only 3rd person argument in the clause. In such cases, the argument expression can be null, as shown below.

(15) a.	*Nitsííkamo'satoo'p**a***	*omi*	*iihtáóhpommao'pi.*
	nit-ii-ikamo's-atoo-'p **-wa**	om-yi	iihtaohpomao'p-yi
	1-IC-steal-TI-1:INAN-**PROX**	DEM-INAN	money-INAN
	"I stole that money."		

b. *Nitiíkamo'satoo'p**a**.*
nit-ii-ikamo's-atoo-'p-**wa**.
1-IC-steal-TI-1:INAN-**PROX**
"I stole it."

7.2.1.2.2. Proximate Singular Unindexed Object

Null anaphora with proximate unindexed objects is possible, as shown below.

(16) a.	*Kitáhkoma'takki*	*oma*	*ihtáípiksao'pa*.
	kit-wahkoma'tat-oki	om-wa	ihtaipiksao'p-wa
	2-borrow.TA-2:1	DEM-PROX	hammer-PROX
	"You borrowed that hammer from me."		

b. *Kitáhkoma'takki.*
kit-wahkoma'tat-oki
2-borrow.TA-2:1
"You borrowed it from me."

7.2.1.2.3. Proximate Singular Oblique

Obliques are indexed on the verb via adpositional prefixes. Null anaphora is permitted with 3rd person proximate obliques, as shown below.

(17) a. *Omi* *itáóyo'pi* *íiksoka'piiwa* *níísto* *nikáítooyi.*
om-yi itaoyo'p-yi iik-sok-a'pii-wa niisto n-ikaa-it-ooyi
DEM-INAN restaurant-INAN INTNS-good-be.AI-PROX 1SG.PRN 1-PERF-LOC-eat.AI
"That restaurant is good, I've eaten there."

b. *Nníísto* *nikáítooyi.*
niisto n-ikaa-it-ooyi
1SG.PRN 1-PERF-eat.AI
"I've eaten there."

In summary, null anaphora is permitted with proximate arguments, regardless of their grammatical function (subject, indexed object, unindexed object, or oblique), and regardless of whether the argument is indexed on the verb or not. This is summarized in Table 7.3 below.

Table 7.3. Null Anaphora with Proximate Singular 3rd Persons

Grammatical Function	**Indexed on Verb**	**Null Anaphora is Possible**
Subject	✓	✓
Indexed object	✓	✓
Unindexed object	✗	✓
Oblique	✗	✓

7.2.1.3. Null Anaphora with Obviative Singular and Plural 3rd Persons

In the preceding section, I demonstrated that null anaphora is always permitted with proximate singular arguments. In this section, I show that other 3rd person arguments behave differently: obviative singular and plural arguments need to be expressed by an enclitic pronoun.[139] In other words, null anaphora is not permitted with obviative singular and plural 3rd persons. This section presents data showing that nominal expressions alternate with enclitics, and in §7.3, I present data showing that nominal expressions can co-occur with enclitics, but only if they are preverbal.

[139] For a discussion of the distinction between affixal agreement and enclitic pronouns, see Chapter 2. Briefly, enclitic pronouns can be distinguished from affixes according to the following criteria: (i) they are sensitive to the distribution of argument expressions, (ii) they are stackable, (iii) if they carry pitch accent, it is additive.

7.2.1.3.1. Obviative Singular and Plural Subject and Object

In an intransitive clause with a 3rd person obviative or plural subject, the number suffix indexes the subject. Nevertheless, the argument expression referring to the subject can be omitted only if an enclitic also appears on the verb, as shown below.

(18) a. *Áókatakiyini* *anni* *ónssts*.
a-okataki-yini ann-yi w-insst-yi
IMPF-bead.AI-OBV DEM-OBV 3-sister-OBV
"His sister does beadwork." (lit: "His sister beads.")

b. *Áókatakiyin**áyi***.
a-okataki-yini-**ayi**
IMPF-bead.AI-OBV-**3SG.PRN**
"S/he does beadwork."

c. **Áókatakiyini*.
a-okataki-yini
IMPF-bead.AI-OBV
intended: "S/he does beadwork."

(19) a. *Áókatakiyi* *anniksi* *ónsstsiks*.
a-okataki-yi ann-iksi w-insst-iksi
IMPF-bead.AI-PL DEM-PL 3-sister-PL
"His sisters do beadwork."

b. *Áókatakiy**aawa***.
a-okataki-yi-aawa
IMPF-bead.AI-PL-**3PL.PRN**
"They do beadwork."

c. **Áókatakiyi*.
a-okataki-yi
IMPF-bead.AI-PL
intended: "They do beadwork."

In (18), the obviative singular subject is indexed on the verb via the obviative suffix *–yini*. When the argument expression is omitted, the 3rd person singular clitic *–áyi* appears on the verb, as shown in (18b). It is ungrammatical to omit it, as shown in (18c). Similarly in (19), the plural subject is indexed on the verb with the suffix *–yi*, and an enclitic *–aawa* is required to refer to the subject if the argument expression is null. (For all data with an enclitic presented herein, it is ungrammatical to omit the enclitic.)

The requirement that an enclitic express a null obviative singular or null plural argument expression extends to transitive clauses as well. This is shown for obviative singular argument expressions in (20) and (21), and plural argument expressions in (22) and (23).

(20)	a.	*Íísinaomoyiiwa*	*annisk*	*Náápi*	*matónni.*
		ii-sina-omo-yii-wa	ann-yi-hk	N	matonni
		IC-write-TA.BEN-3:4-PROX	DEM-OBV-INVIS	N	yesterday
		"S/he wrote to Santa Claus (lit: Naapi, the trickster) yesterday."			

b.	*Íísinaomoyiiw**áyi***	*matónni.*
	ii-sina-omo-yii-wa-**ayi**	matonni
	IC-write-TA.BEN-3:4-PROX-**3SG.PRN**	yesterday
	"S/he wrote to him yesterday."	

c.	**Íísinaomoyiiwa*	*matónni.*
	ii-sina-omo-yii-wa	matonni
	IC-write-TA.BEN-3:4-PROX	yesterday
	intended: "S/he wrote to him yesterday."	

(21)	a.	*Anna*	*Sam*	*otsíksisawaaka*	*ami*	*oskááni.*
		ann-wa	S	ot-ii-oksisawaat-ok-wa	am-yi	w-iskaan-yi
		DEM-PROX	S	3-IC-visit.TA-INV-PROX	DEM-OBV	3-sister-OBV
		"Sam's sister went to visit him."				

b.	*Anna*	*Sam*	*ami*	*oskááni*	*otsíksisawaak**áyi**.*
	ann-wa	S	am-yi	w-iskaan-yi	ot-ii-oksisawaat-ok-wa-**ayi**
	DEM-PROX	S	DEM-OBV	3-sister-OBV	3-IC-visit.TA-INV-PROX **-3SG.PRN**
	"Sam's sister went to visit him."				

c.	**Anna*	*Sam*	*ami*	*oskááni*	*otsíksisawaaka.*
	ann-wa	S	am-yi	w-iskaan-yi	ot-ii-oksisawaat-ok-wa
	DEM-PROX	S	DEM-OBV	3-sister-OBV	3-IC-visit.TA-INV-PROX
	intended: "Sam's sister went to visit him."				

(22)	a.	*Nitáwaahkanii'pi*	*amostsi*	*asoká'sistsi.*
		nit-a-waahkan-ii-'p-yi	amo-stsi	asoka'sim-istsi
		1-IMPF-sew-TI-1:INAN-PL	DEM-PL	dress-PL
		"I sewed these dresses."		

b.	*Na*	*Rosie*	*áwaahkanii'p**aawa**.*
	ann-wa	R	a-waahkan-ii-'p-yi-**aawa**
	DEM-PROX	R	IMPF-sew-TI-1:INAN-PL-**3PL.PRN**
	"I sewed them."		

c.	**Na*	*Rosie*	*áwaahkanii'pi.*
	ann-wa	R	a-waahkan-ii-'p-yi
	DEM-PROX	R	IMPF-sew-TI-1:INAN-PL
	intended: "I sewed them."		

(23) a.

Na	*Leo*	*ota'páisskooka*	*anníksi*	*pookáíksi.*
ann-wa	L	ot-a'p-a-issko-ok-wa	ann-iksi	pookaa-iksi
DEM-PROX	L	3-around-IMPF-chase.TA-INV-PROX	DEM-PL	child-PL

"The children chased Leo around."

b.

Na	*Leo*	*ota'páisskook**aiks**.*
ann-wa	L	ot-a'p-a-issko-ok-wa-**aiksi**
DEM-PROX	L	3-around-IMPF-chase.TA-INV-PROX-**3PL.PRN**

"They chased Leo around."

c.

**Na*	*Leo*	*ota'páisskooka.*
ann-wa	L	ot-a'p-a-issko-ok-wa
DEM-PROX	L	3-around-IMPF-chase.TA-INV-PROX

intended: "They chased Leo around."

In (20), the object is obviative singular and when it is omitted, the clitic *–áyi* obligatorily appears on the verb. In (21), the subject is obviative singular and when it is omitted the clitic *áyi* obligatorily appears on the verb. Similarly in (22) and (23), the object and subject respectively are plural and when omitted, a clitic obligatorily appears on the verb.

7.2.1.3.2. Obviative Singular and Plural Unindexed Object

An enclitic is required with null 3rd person obviative singular (24) or plural (25) unindexed objects.

(24) a.

Niksíssta	*nitóhkotawa*	*anni*	*issitsímaani.*
n-iksisst-wa	nit-ohkot-a-wa	ann-yi	issitsimaan-yi
1-mother-PROX	1-give.TA-DIR-PROX	DEM-OBV	baby-OBV

"I gave the baby to my mother."

b.

Niksíssta	*nitóhkotaw**áyi**.*
n-iksisst-wa	nit-ohkot-a-wa-**ayi**
1-mother-PROX	1-give.TA-DIR-PROX-**3SG.PRN**

"I gave him/her/it to my mother."

c.

**Niksíssta*	*nitóhkotawa.*
n-iksisst-wa	nit-ohkot-a-wa
1-mother-PROX	1-give.TA-DIR-PROX

intended: "I gave him/her/it to my mother."

(25) a.

Anna	*Joel*	*nitáí'pohtooka*	*omiksi*	*miistsííks.*
ann-wa	J	nit-wai'poht-o-ok-wa	om-iksi	miistsis-iksi
DEM-PROX	J	1-haul-TA-INV-PROX	DEM-PL	tree-PL

"Joel hauled those trees for me."

b.	*Anna*	*Joel*	*nitáí'pohtook***aiks.**
	ann-wa	J	nit-wai'poht-o-ok-wa-**aiksi**
	DEM-PROX	J	1-haul-TA-INV-PROX-**3PL.PRN**
	"Joel hauled them for me."		

c.	**Anna*	*Joel*	*nitáí'pohtooka.*
	ann-wa	J	nit-wai'poht-o-ok-wa
	DEM-PROX	J	1-haul-TA-INV-PROX
	intended: "Joel hauled them for me."		

7.2.1.3.3. Obviative Singular and Plural Oblique

An overt nominal expression or enclitic pronoun is required with obviative singular and plural obliques. An example of an obviative singular oblique is given in (26), and an example of a plural oblique is given in (27).

(26)	a.	*Oma*	*piitááwa*	*itohkitsí'staaw*	*anni*	*o'tokááni.*
		om-wa	piitaa-wa	it-ohkit-i'staa-wa	ann-yi	w-o'tokáán-yi
		DEM-PROX	eagle-PROX	LOC-upon-defecate.AI-PROX	DEM-OBV	3-head-OBV
		"The eagle pooped on his head."				

b.	*Oma*	*piitááwa*	*itohkitsí'staaw***áyi***.*
	om-wa	piitaa-wa	it-ohkit-i'staa-wa-**ayi**
	DEM-PROX	eagle-PROX	LOC-upon-defecate.AI-PROX-**3SG.PRN**
	"The eagle pooped on it."		

c.	**Oma*	*piitááwa*	*itohkitsí'staawa.*
	om-wa	piitaa-wa	it-ohkit-i'staa-wa
	DEM-PROX	eagle-PROX	LOC-upon-defecate.AI-PROX
	intended: "The eagle pooped on it."		

(27)	a.	*Nitsitapáápiksistaw*	*amo*	*pokóna*	*omiksi*	*sááhkomaapiksi.*
		nit-itap-aapiksist-a-wa	amo	pokon-wa	om-iksi	saahkomaapi-iksi
		1-toward-throw.TA-DIR-PROX	DEM	ball-PROX	DEM-PL	boy-PL
		"I threw the ball towards those boys."				

b.	*Nitsitapáápiksist***aiksi**	*amo*	*pokóna.*
	nit-itap-aapiksist-a-wa-**aiksi**	amo	pokon-wa
	1-toward-throw.TA-DIR-PROX-**3PL.PRN**	DEM	ball-PROX
	"I threw the ball towards them."		

c.	**Nitsitapáápiksista*	*amo*	*pokóna.*
	nit-itap-aapiksist-a-wa	amo	pokon-wa
	1-toward-throw.TA-DIR-PROX	DEM	ball-PROX
	intended: "I threw the ball towards them."		

To summarize, null anaphora is not permitted with obviative singular or plural 3rd person arguments; regardless of whether they are indexed on the verb with agreement morphology or not, they are expressed by an enclitic if there is no overt argument expression. This is summarized in Table 7.4.

Table 7.4. Null Anaphora with Obviative Singular or Plural 3rd Persons

Grammatical Function	**Indexed on Verb**	**Null Anaphora is Possible**
Subject	✓	✗
Indexed object	✓	✗
Unindexed object	✗	✗
Oblique	✗	✗

7.2.1.4. Summary

In sum, in this section I have discussed the conditions under which null anaphora is permitted in Blackfoot. I have shown that there are three patterns of null anaphora:

- Local (1st and 2nd) persons support null anaphora only if the argument is indexed on the verb
- Proximate singular 3rd persons always support null anaphora
- Obviative singular and plural 3rd persons never support null anaphora.

These findings are summarized in Table 7.5 below.

Table 7.5. Null Anaphora with all Persons

		Subject	**Object**		**Oblique**	
			Indexed	Not Indexed	Indexed	Not Indexed
1st and 2nd		✓	✓	✗	✓	✗
3rd	**Proximate Singular**	✓	✓	✓	✓	✓
	Obviative Singular	✗	✗	✗	✗	✗
	Plural	✗	✗	✗	✗	✗

7.2.2. Word Order

The second of Hale's (1983) diagnostics for non-configurationality is free word order. If FREE WORD ORDER is defined narrowly as the possibility for all logically possible linearizations of the subject (S), verb, and object (O), then Blackfoot can indeed be described as having free word order. This is shown in (28) with a direct verb, and in (29) with an inverse verb.

(28)	a.	*Annahk*	*Leo*	*náínoyiiwa*	*omi*	*ponokáyi.*	
		ann-wa-hk	L	na-in-o-yii-wa	om-yi	ponoka-yi	
		DEM-PROX-INVIS	L	EVID-see-TA-3:4-PROX	DEM-OBV	elk-OBV	
		"Leo saw that elk."					(S-V-O)

b. *Annahk Leo omi ponokáyi náínoyiiwáyi.* (S-O-V)
c. *Náínoyiiwa annahk Leo omi ponokáyi.* (V-S-O)
d. *Náínoyiiwa omi ponokáyi annahk Leo.* (V-O-S)
e. *Omi ponokáyi náínoyiiwáyi annahk Leo.* (O-V-S)
f. *Omi ponokáyi annahk Leo náínoyiiwáyi.* (O-S-V)

(29)	a.	*Annahk*	*Leo*	*otsínooka*	*omi*	*ponokáyi.*	
		ann-wa-hk	L	ot-in-o-ok-wa	om-yi	ponoka-yi	
		DEM-PROX-INVIS	L	3-see-TA-INV-PROX	DEM-OBV	elk-OBV	
		"That elk saw Leo."					(S-V-O)

b. *Annahk Leo omi ponokáyi otsínookáyi.* (S-O-V)
c. *Otsínooka annahk Leo omi ponokáyi.* (V-S-O)
d. *Otsínooka omi ponokáyi annahk Leo.* (V-O-S)
e. *Omi ponokáyi otsínookáyi annahk Leo.* (O-V-S)
f. *Omi ponokáyi annahk Leo otsínookáyi.* (O-S-V)

The data in (28) and (29) indicate that word order possibilities are not constrained by grammatical functions. Nevertheless, word order in Blackfoot cannot truly be described as "free." In what follows, I discuss two ways in which word order is constrained in Blackfoot. First, in §7.2.2.1, I show that, whereas proximate singular 3rd persons can appear in any linear order without grammatical consequence, obviative singular and plural 3rd persons must appear post-verbally or be expressed on the verb via an enclitic. Second, in §7.2.2.2, I demonstrate that word order in Blackfoot is focus-sensitive; focused constituents are necessarily preverbal.

7.2.2.1. Word Order and the Proximate/Obviative Contrast

At least some other Algonquian languages exhibit word order patterns that are sensitive to the proximate/obviative contrast. For example, Junker (2004) reports that, while word order is largely unrestricted in East Cree, in a sentence with two preverbal NPs, the proximate one must precede the obviative one. Junker attributes this ordering restriction to focus, an issue I return to in §7.2.2.2. Blackfoot differs from East Cree in that word order does not appear to be conditioned by obviation. As shown in (28) and (29), all logically possible orderings of a sentence containing a proximate and an obviative nominal expression are grammatical.[140]

The sentences in (28) and (29) are from elicitation contexts, which lack the nuances that come from a discourse context. Nevertheless, the generalization that word order is flexible is robust. In addition to elicitation data, data from texts similarly show that word order is not conditioned by obviation. An investigation of four texts (Glenbow 2012) reveals a range of word orders.[141] The examples in (30) and (31) illustrate cases in which the proximate expression is preverbal and the obviative is postverbal, respectively, and (32) is an example with both a preverbal proximate and a postverbal obviative expression.

(30)	*Annahkao'k*	*Naapiowa*	*omattaipotahsai.*
	ann-wa-hka-o'k	N-wa	ot-matt-a-ipot-a-hs-yi-ayi
	DEM-PROX-INVIS-*o'k*	N-PROX	3-again-beat.TA-DIR-CONJ-OBV-3SG.PRN
	"Napi was then beating it."		(Naapi ki Siikokiinis, Line 12)

(31)	*Iitsinoyiihkiawa*	*mi*	*pokayi.*
	ii-it-ino-yii-hk-yi-aawa	om-yi	pokaa-yi
	IC-LOC-see.TA-3:4-REP-3PL.3PL.PRN	DEM-OBV	child-OBV
	"They saw a child there."		(Katoyissa, Line 9)

(32)	*Otaipanissi,*	*Naapiowa*	*iitsinisaatsiih*	*mi*	*siikokiinis*
	ot-a-ipani-hs-yi	N-wa	ii-it-inn-isaat-yii	om-yi	siikokiinis-yi
	3-IMPF-die.down.II-CONJ-OBV	N-PROX	IC-LOC-down-climb-3:4	DEM-INAN	birch-OBV
	"When (the storm) died down, Naapi climbed down from the birch."				
					(Naapi ki Siikokiinis, Line 8)

The opposite word order pattern (preverbal obviative; postverbal proximate) is also attested in texts. The example in (33) shows a postverbal proximate expression and (34) shows a preverbal obviative

[140] This contradicts my (2005) MA thesis, where I reported preliminary findings from elicitation suggesting that proximate nominal expressions necessarily precede obviative ones. Additional fieldwork with the same consultant as well as others suggest that, although there may be a tendency for proximate expressions to precede obviative ones , at least in unmarked elicitation contexts, the word order is more flexible than originally believed.

[141] Missing from these texts are sentences with either two preverbal or two postverbal expressions. I have yet to analyse other texts for these types of word orders.

expression. (35) is an example of a sentence with both preverbal obviative and postverbal proximate expressions.

(33) *Aisawattohta'pohpapokayihk* *Naapiowa.*
a-saw-att-oht-a'p-ohpapokai'-yiihk N-wa
IMPF-NEG-again-*oht*-around-be.blown.AI N-PROX
"Naapi was no longer blown around." (Naapi ki Siikokiinis, Line 7)

(34) *Mi* *omahkinay* *otaawa'komookihkai* *iinii…*
om-yi omahk-ninaa-yi ot-waawa'k(imaa)-omo-ok-ihk-ayi iinii
DEM-OBV old-man-OBV 3-hunt-BEN.TA-INV-REP-3SG.PRN buffalo
"The old man hunted buffalo for him." (Katoyissa, Line 4)

(35) *Mi* *oissowaway* *ki* *naato'kammiksi* *miiksi* *otanowawaiksi.*
om-yi w-oiss(im)-oaawa-yi ki naato'kamm-iksi om-iksi w-itan-oaawa-iksi
DEM-OBV 3-sil-3PL-OBV and two-PL DEM-PL DEM-PL 3-daughter-3PL-PL

… iitsi'nitsiihkaiksi *ma* *Katoyisa*
ii-it-i'nit-yii-hk-aiksi om-wa K
IC-LOC-kill.TA-3:4-REP-3PRN-3PL.PRN DEM-PROX K

"(The old couple's) son-in-law and two of their daughters were killed by Katoyissa."
(Katoyissa, Line 14)

In summary, in neither elicitation nor texts is word order conditioned by proximate and obviative assignment.

However, there is a correlation between word order and obviation. Just as obviative singular and plural 3rd persons cannot be null, they also cannot appear preverbally unless an enclitic appears on the verb. This can be observed this in the examples in (28) and (29) above; in the orders in which the obviative nominal expression preceded the verb, an enclitic *–áyi* appeared at the verb's right edge. Notably, no enclitic traces the linearization of the proximate argument; it can appear preverbally or postverbally without grammatical consequence. An additional example showing this asymmetry between proximate and obviative nominal expressions is given below.

(36) a. *Oma* *imitááwa* *nitsíímmsstomoka**(*áyi).*** *ninápayini* (PROX-V-OBV)
om-wa imitaa-wa nit-ii-ommst-omo-ok-wa nit-napayin-yi
DEM-PROX dog-PROX 1-IC-steal.food-TA.BEN-INV-PROX 1-bread-OBV
"The dog stole my bread from me."

b. *Nitsíímmsstomoka**(*áyi)** oma imitááwa ninápayini.* (V-PROX-OBV)[142]

c. *Nitsíímmsstomoka**(*áyi)** ninápayini oma imitááwa.* (V-OBV-PROX)

d. *Ninápayini nitsíímmsstomok**áyi** oma imitááwa.* (**OBV-V**-PROX)

e. *Oma imitááwa ninápayini nitsíímmsstomok**áyi**.* (PROX-**OBV-V**)

f. *Ninápayini oma imitááwa nitsíímmsstomok**áyi**.* (**OBV**-PROX-**V**)

In (36a-c), the obviative expression *ninápayini* "my bread" is postverbal, and it is ungrammatical for an enclitic to appear on the verb. In (36d-f), the obviative expression is preverbal, and an enclitic *–áyi* appears on the verb. The proximate expression *oma imitááwa* "the dog" can appear either pre- or post-verbally without a clitic.

The same pattern that we see with obviative argument expressions is found with plural argument expressions; if the plural argument expression is preverbal, an enclitic is required, as shown below.

(37) a. *Áákihkitaa**yi*** *napayín* *anniksi* *aakííks.*
yaak-ihkitaa-**yi** napayin ann-iksi aakii-iksi
FUT-bake.AI-**3PL** bread DEM-PL woman-PL
"The women are going to bake bannock"

b. *Anniksi* *aakííks* *áákihkitaay**aa*** *napayín.*
ann-iksi aakii-iksi yaak-ihkitaa-yi-**aawa** napayin
DEM-PL woman-PL FUT-bake.AI-3PL-**3PL.PRN** bread
"The women are going to bake bannock."

In short, although word order is not restricted by the proximate/obviative contrast the way it is in languages such as East Cree, it is nevertheless sensitive to the proximate/obviative contrast. Obviative and plural nominal expressions must appear post-verbally; if they are not postverbal, an enclitic pronoun appears on the verb. This is summarized in Table 7.6 below.

[142] This particular word order (V-PROX-OBV) is not predicted by the analysis developed in Chapter 3, in which proximate argument expressions are adjoined outside the clause and obviative argument expressions appear in argument positions. There are (at least) two possible accounts for this word order: (i) right dislocation of the obviative argument expression, or (ii) movement of the verb complex to a position where it precedes the proximate argument expression. Determining which of these better accounts for the data depends on a more in-depth analysis of the discourse properties of Blackfoot clauses than is presented here.

Table 7.6. Word Order Patterns

	Preverbal	**Postverbal**
Proximate	✓	✓
Obviative	× (enclitic required)	✓
Plural	× (enclitic required)	✓

The requirement that a preverbal XP be expressed by an enclitic is reminiscent of CLLD (Clitic Left Dislocation) constructions found, for example, in Modern Greek and various Romance languages (e.g., Cinque 1990; Anagnostopoulou et al, 1997), a point to which I return in §7.3.2 below. [143]

7.2.2.2. Word Order is Focus-Sensitive

In this section, I present some preliminary findings in support of the view that word order in Blackfoot is conditioned by discourse roles. Many researchers have made the claim that word order in Algonquian is tied to discourse structure. In particular, Algonquian languages have been claimed to have dedicated positions on the left edge of the clause for Topic (i.e., old information and/or what the sentence is about) and Focus (i.e., new/contrastive information), (e.g., Dahlstrom 1995 for Meskwaki; Kathol and Rhodes 1999 for Ojibwe; Reinholtz 1999 for Swampy Cree; Mühlbauer 2003 for Plains Cree; Junker 2004 for East Cree).[144] In this section, I show that in Blackfoot Focused constituents also appear at the left edge of the clause. In particular, I present data from question/answer congruences to show that the Focus appears at the left edge of the clause. Question/answer congruence has been long recognized as a reliable diagnostic for Focus (e.g., Jackendoff 1972, Rooth 1992). The way the diagnostic works is that the phrase that supplies the answer to a wh-question is focused. When we apply this diagnostic to Blackfoot, the result is a generalization that the Focus is at the left edge.

[143] One difference between Blackfoot and, e.g., Italian, is that whereas in Italian, the dislocated XP in CLLD constructions is a Topic (and not a Focus), in Blackfoot, the Focus is preverbal, and if obviative or plural, it is expressed by a clitic (see §7.2.2.2. for discussion and examples.) Other similarities and/or differences between Blackfoot clitic constructions and CLLD in other languages are yet unknown.

[144] There is some debate as to whether these positions are ordered hierarchically or linearly. I abstract away from this issue, as well as terminological differences between "topic-like" and "focus-like" elements (e.g., ground, Kontrast, etc.)

In question/answer pairs in Blackfoot, the only felicitous answer to the question is one in which the constituent that corresponds to the wh-phrase is preverbal. In other words, assuming that the constituent that corresponds to the wh-phrase is the Focus, the Focus in Blackfoot is preverbal. This generalization is true regardless of grammatical function. In (38), the subject supplies the answer to the question and is necessarily preverbal, and in (39) the object supplies the answer and is also preverbal. Similarly, in (40) the answer is a temporal ("when") expressions and in (41) it is a locative ("where") expression, and in both cases, the answer to the question is necessarily preverbal.

(38)	Q:	*Takáá*	*ihkitatóómaa*	*omistsi*	*pisátsskitaanists*?
		takaa	ihkit-atoo-m-wa	om-istsi	pisatsskitaan-istsi
		who	bake-TI-3:INAN-PROX	DEM-PL	cake-PL
		Who baked those cakes?			

	A:	*Anna*	*Rosie ihkitaatóómaists.*
		ann-wa	R ihkit-atoo-m-wa-aistsi
		DEM-PROX	R bake-TI-3:INAN-PROX-3PL.PRN
		"Rosie baked them."	

#A: *Ihkitaatóómaists anna Rosie*.

(39)	Q:	*Tsa*	*anistsapíí*	*ihkítaawa*	*anna*	*Rosie?*
		tsa	anistapii	ihkitaa-wa	ann-wa	R
		what	be.II	bake.AI-PROX	DEM-PROX	R
		"What did Rosie make?"				

	A:	*Omistsi*	*pisátsskitaanists*	*ihkanáíhkitatóómaists.*
		om-istsi	pisatsskitaan-istsi	ii-ohkana-ihkit-atoo-m-wa-aistsi
		DEM-PL	pie-PL	IC-all-bake-TI-3:INAN-PROX-3PL.PRN
		"She made all those pies."		

#A: *Ihkanáíhkitaatóóma omistsi pisátsskitaanists.*

(40)	Q:	*Tsá*	*anistsíí*	*kitsítsoyo'satohpa*	*anni*	*akóópskaani?*
		tsa	anistsii	kit-it-ooyo's-atoo-hpa	ann-yi	akoopskaan-yi
		what	be.time.II	2-LOC-cook-TI-NONAFF	DEM-INAN	soup-INAN
		"When did you cook this soup?"				

	A:	*Ksiskanaotónni*	*nitsítsooyo'satoohpa*	*anni*	*akóópskaani.*
		ksiskanaotonni	nit-it-ooyo's-atoo-'p-wa	ann-yi	akoopskaan-yi
		morning	1-LOC-cook-TI-1:INAN-PROX	DEM-OBV	soup-INAN
		"This morning I cooked this soup."			

#A: *Nitsítsooyo'satoohp anni akóópskaan ksiskanaotónni.*

(41) Q: *Nannáhka* *kíssa?*[145]
ann-wa ann-wa-hka k-iss-wa
DEM-PROX DEM-PROX-INVIS 2-sil-PROX
Where is your son-in-law?

A: *Sáóóhtsi amik ponokáómitaoyis itsipsssá'paissiwa.*
saoohtsi am-yi-ka ponoka-omitaa-oyis it-ipsst-a'paissi-wa
outside DEM-INAN-OT elk-dog-house LOC-inside-stay.AI-PROX
"Outside in the barn that's where he's spending time."

#A *Itsipssá'paissiwa sáóóhtsi amik ponokáómitaoyis.*

In each of the examples in (38)-(41), the felicitous answer to the question is the one in which the constituent that corresponds to the wh-phrase is sentence-initial; the verb-initial variant (which is otherwise grammatical) is infelicitous in this context. This is true regardless of grammatical function; the subject, the object, and oblique expressions all appear preverbally when they function in the discourse as the response to a wh-question.

A related piece of evidence for a preverbal Focus position comes from looking at question/answer pairs formed with ditransitive verbs that have overt nominal expressions for both the indexed object (IO) and unindexed object (UO). With these, we can construct minimal pairs, differing only with respect to which object is questioned. As shown below, only the nominal expression that provides the answer to the question (i.e., the Focus) can appear preverbally.

(42) Q: *Anna Rosie tsikáá íího̱kotsiiwa anni issítsimaani?*
ann-wa R tsikaa ii-ohkot-yii-wa ann-yi issitsimaan-yi
DEM R who IC-give.TA-3:4-PROXDEM-OBV baby-OBV
"Who did Rosie give the baby to?"

A: *Anni niksíssts ííhkotsiiwa anni issítsimaani.*
ann-yi n-iksisst-yi ii-ohkot-yii-wa ann-yi issistsimaan-yi
DEM-OBV 1-mother-OBV IC-give.TA-3:4-PROX DEM-OBV baby-OBV
"To my mother, she gave the baby." (IO-V-UO)

A': *#Anni issítsimaani ííhkotsiiwa anni niksíssts.* (#UO-V-IO)

[145] This example, in which a "where" question is formed using two adjacent demonstratives, is rare in my data set, but see Frantz (2009: 136) for a similar example.

(43) Q:

Tsiskáá	*anna*	*Rosie*	*anni*	*niksíssts*	*annisk*	*pookááyi*	*íihkotsiiwa?*
tsiskaa	ann-wa	R	ann-yi	n-iksisst-yi	annisk	pookaa-yi	ii-ohkot-yii-wa
which	DEM-PROX	R	DEM-OBV	1-mother-OBV	DEM	child-OBV	IC-give.TA-3:4-PROX

"Which child did Rosie give to her mother?"

A:

Anni	*issítsimaani*	*íihkotsiiwa*	*anni*	*niksíssts.*
ann-yi	issitsimaan-yi	ii-ohkot-yii-wa	ann-yi	n-iksisst-yi
DEM-OBV	baby-OBV	IC-give-3:4-3S	DEM-OBV	1-mother-OBV

"The baby, she gave to her mother." (UO-V-IO)

A': *#Anni niksíssts íihkotsiiwa anni issítsimaani.* (#IO-V-UO)

The answers in (42) and (43) are identical, but differ in their felicity conditions. In (42), the indexed object supplies the answer to the question. In other words, the indexed object is the Focus, and it appears in the preverbal position. In (43), on the other hand, the unindexed object functions as the Focus and it appears in the preverbal position.

7.2.2.3. Summary

In summary, although word order in Blackfoot is flexible, in the sense that all logically possible orderings of a verb and its argument expressions are attested, there are nevertheless word order restrictions. First, obviative and plural argument expressions are required to be appear post-verbally, or be expressed on the verb via an enclitic pronoun. Second, word order is conditioned by discourse relations, with focused constituents appearing preverbally.

7.2.3. Discontinuous Expressions

In this section, I demonstrate that Blackfoot meets the third criterion for non-configurationality: it has discontinuous nominal expressions. The only nominal modifiers that are not affixed to the noun in Blackfoot are demonstratives and numerals, and both can be discontinuous from the noun. However, whereas the first two criteria for non-configurationality – null anaphora and word order – showed a partition between proximate versus obviative and plural nominal expressions, this criterion does not show a partition. Proximate, obviative (/inanimate), and plural nominal expressions all permit discontinuity, as shown below.

(44)	a.	*Áóhkiwa*	*oma*	*imitááw.*	V – Dem - N_{PROX}
		a-ohki-wa	om-wa	imitaa-wa	
		IMPF-bark.AI-PROX	DEM-PROX	dog-PROX	
		"That dog is barking."			
	b.	*Óóma áóhkiwa imitááw.*			Dem – V - N_{PROX}

(45)	a.	*Nitohkanáówatoo'pa*	*annihkayi*	*kóópis.*	V – Dem - N_{OBV}
		nit-ohkana-ow-atoo-'p-wa	ann-yi-hk-ayi	koopis-yi	
		1-all-eat-TI-1:INAN	DEM-INAN-INVIS-*ayi*	soup-INAN	
		"I ate all of that soup."			
	b.	*Annihkayi nitohkanáówatoo'p kóópis.*			Dem – V - N_{OBV}

(46)	a.	*Nitsíínowayi*	*nióókskami*	*póósiks.*	V – Num - N_{PL}
		nit-ii-ino-a-yi	niookskami	poos-iksi	
		1-IC-see-DIR-PL	three	cat-PL	
		"I saw three cats."			
	b.	*Nióókskami nitsíínowayi póósiks.*			Num – V - N_{PL}

In (44a), the proximate demonstrative and noun are string-adjacent, both appearing post-verbally. In (44b), the nominal expression is discontinuous, with the demonstrative appearing preverbally and the noun postverbally. Similarly in (45), the obviative demonstrative and noun may be either string-adjacent (a) or not (b). Finally in (46), the numeral and plural noun are string-adjacent in (a) and discontinuous in (b).

Frantz (2009: 67-68) claims that demonstratives immediately precede the noun they modify, with rare exception. The exceptions he lists involve either a possessor or a nominalized verb[146] intervening between the demonstrative and the noun, as shown in (47) and (48).

(47)	*áámoyihka*	*nínaawa*	*ookówayihka*	
	amo-yi-hka	ninaa-wa	ookoowa-yi-hka	
	DEM-INAN-INVIS	man-PROX	house-INAN-INVIS	
	"that man's house"			(Frantz 2009: 67, ftn9)

[146] Like any proximate-marked expression, the verb form in (48) is ambiguous, and can be interpreted as either the clause or as an argument. This is discussed in detail in Chapters 3 and 6; see also Frantz (2009: 114-115); Bliss et al. (2012); Bliss (to appear); Wiltschko (to appear a) for details.

(48) *oma* *áyo'kaawa* *nínaawa.*
om-wa a-yo'kaa-wa ninaa-wa
DEM-PROX IMPF-sleep.AI-PROX man-PROX
"that sleeping man" (Frantz 2009: 68, p)

Contra Frantz, I have found that demonstratives may also be separated from the noun by an intervening verb. For example, (47) can be interpreted as a nominal expression (with a nominalized verb intervening between the demonstrative and the noun) but both consultants I have worked with also accept the reading in which the verb is not nominalized, and instead functions as the main predicate of a clause:

(49) *Oma* *áyo'kaawa* *nínaawa.*
om-wa a-yo'kaa-wa ninaa-wa
DEM-PROX IMPF-sleep.AI-PROX man-PROX
"That man is sleeping."

Examples like these are disambiguated in the plural, as the nominal and verbal plural marking are not homophonous. Consultants readily accept plural discontinuous expressions of both varieties. (50a) is a clause, in which the demonstrative and noun are separated by an intervening verb, and (50b) contains a nominal expression, in which the demonstrative and noun are separated by an intervening nominalized verb.

(50) a. *Omiksi* *aótoikskimaa***yi** *ninááíks.*
om-iksi a-oto-ikskimaa-**yi** ninaa-iksi
DEM-PL IMPF-go.to.do-hunt.AI-**3PL** man-PL
"The men are going hunting."

b. [*Omiksi* *aótoikskimaa***iksi** *ninááíks*] *iyísta'pooyaaw.*
om-iksi a-oto-ikskimaa-**iksi** ninaa-iksi ii-yista'poo-yi-aawa
DEM-PL IMPF-go.to.do-hunt.AI-**PL** man-PL IC-go.away.AI-3PL-3PL.PRN
"The hunting men left."

In addition to elicitation data, I have found examples of discontinuous expressions in texts (Glenbow 2012). In (51), the demonstrative and the noun are separated by a verb, and it is clear that the verb isn't nominalized because it bears verbal plural morphology.

(51) … *Niiksiskayi* *onohkattayinnokiaawa* *maka'pato'siiksi.*
ann-iksi-hk-ayi onnohkat-a-yinn-ok-yi-aawa maka'pato'si-iksi
DEM-PL-*hk*-POST.INF difficult-IMPF-hold.TA-INV-PL-3PL.PRN evil.spirit-PL
"…They were held captive by the evil beings." (Katoyissa, Line 16)

In short, there is ample evidence to suggest that demonstratives and nouns can be discontinuous, separated from each other by an intervening verb.

Although I have found that discontinuity is less constrained than as claimed by Frantz (2009), it is not without restrictions. For instance, the only licit word orders are ones in which the noun follows the demonstrative or numeral; it cannot precede it, as shown below.

(52) a. *Áyo'kaa* ***oma*** ***nínaaw.*** V – Dem - N
a-yo'kaa-wa om-wa ninaa-wa
IMPF-sleep.AI-PROX DEM-PROX man-PROX
"That man is sleeping."

b. **Áyo'kaa* ***nínaaw oma***. *V – N - Dem

c. ***Oma nínaaw*** *áyo'kaa*. Dem – N - V

d. ****Nínaaw oma*** *áyo'kaa*. *N – Dem - V

e. ***Óóma*** *áyo'kaa* ***nínaaw***. Dem – V – N

f. ****Nínaaw*** *áyo'kaa* ***oma***. *N – V - Dem

In (52a), the demonstrative and the noun are both preverbal, and the demonstrative precedes the noun. The reverse order in (52b), in which the noun precedes the demonstrative, is ungrammatical. In (52c&d), both the noun and the demonstrative are preverbal, and again, the demonstrative must precede the noun. Finally, in (52e&f), the demonstrative and the noun are discontinuous, and the only possible word order is that in (52e), in which the demonstrative is preverbal and the noun is postverbal.

A second restriction on discontinuity is that it must be clause-bound; the demonstrative (or numeral) and the noun that are discontinuous cannot span clause boundaries. An example is given below.

(53)	a.	*Nitsíkssta*	*omááhksaowaatóhksaa*	***omiksi***	***imitááíks*.**
		nit-iksstaa	om-aahk-saw-at-ohki-saa	om-iksi	imitaa-iksi
		1-want.AI	3-MOD-NEG-again-bark.AI-NONAFF	DEM-PL	dog-PL
		"I want those dogs to stop barking."			

b. *Nitsíkssta [**omiksi** omááhksaowaatóhksaa **imitááíks.]***

c. *Nitsíkssta [**omiksi imitááíks** omááhksaowaatóhksaa].*

d. ***Omiksi imitááíks** nitsíkssta omááhksaowaatóhksaa.*

e. ****Omiksi*** *nitsíkssta* omááhksaowaatóhksaa ***imitaaiks.***

In (53a-c), the demonstrative and the noun are both in the subordinate clause, and they can appear postverbally (a), preverbally (b), or discontinuous (c). In (53d), both the demonstrative and noun appear in the matrix clause, possibly fronted to a focus position (see §7.2.2.2.). Finally, in (53e), only the demonstrative appears in the matrix clause, and this is ungrammatical.

In sum, Blackfoot has discontinuous expressions, in which a demonstrative or numeral can appear in a position that is not string-adjacent to the noun it modifies. However, discontinuity is subject to certain restrictions: the noun cannot precede the demonstrative or numeral, and discontinuity cannot span clause boundaries.

7.2.4. Summary

To summarize, in this section I have considered Blackfoot in the context of Hale's (1983) diagnostics for non-configurationality: extensive null anaphora, free word order, and discontinuous expressions. I have shown that Blackfoot does indeed meet these criteria, but with restrictions. I showed that null anaphora is freely permitted with proximate 3rd persons, but it is permitted with local persons only if they are indexed on the verb, and never with obviative or plural 3rd persons. Moreover, word order is focus-sensitive; proximate 3rd persons can appear pre- or post-verbally, but obviative and plural 3rd persons can appear preverbally only if expressed by an enclitic. Finally, proximate, obviative, and plural nominal expressions can be discontinuous, but only if the demonstrative (or numeral) precedes the noun, and only within clause boundaries.

Stepping back, we can see that the asymmetry between proximate versus obviative and plural argument expressions plays a role in determining non-configurational properties: proximate argument expressions consistently meet Hale's (1983) diagnostics for non-configurationality, but obviative and plural ones do not. In short, according to Hale's diagnostics, Blackfoot is a partial non-configurational language. This is summarized in Table 7.7 below.

Table 7.7. Partial Non-Configurationality: Hale's Diagnostics

	Proximate	**Obviative**	**Plural**
Null anaphora	✓	✗	✗
Free word order	✓	✗	✗
Discontinuous expressions	✓	✓	✓

7.3. *Non-Configurationality,* Take 2: Pronominal Argument Hypothesis

In this section, I consider the question of whether Blackfoot can be considered a Pronominal Argument language, in the sense of Jelinek (1984) or Baker (1991, 1996). The Pronominal Argument Hypothesis (or PAH) is a widely adopted analysis for languages that meet Hale's (1983) diagnostics for non-configurationality (i.e., null anaphora, free word order, and discontinuous expressions). In particular, the PAH is often assumed for Algonquian languages (e.g., Reinholtz and Russell 1995, Reinholtz 1999 for Swampy Cree; Brittain 2001 for Western Naskapi; Junker 1994, 2004 for East Cree). LeSourd (2006) notes:

> "…It has become routine to assume one or another version of the PAH in analyses of highly inflected languages that exhibit the properties (of free word order, discontinuous expressions, and null anaphora). In particular, several studies of Algonquian languages published during the last decade or so have taken Jelinek's proposal as their point of departure." (p. 487)

However, despite the trend in Algonquianist research to assume the PAH, a number of recent studies have argued that the PAH does not accurately characterize (at least some) Algonquian languages (e.g., Bruening 2001, LeSourd 2006 for Passamaquoddy; Christianson 2002 for Odawa). In this section, I demonstrate that Blackfoot exhibits properties characteristic of PA languages, but only with proximate argument expressions. Obviative and plural argument expressions do not satisfy the predictions of the PAH. This finding is consistent with that observed in §7.2: Blackfoot is partially non-configurational.

This section proceeds as follows. In §7.3.1, I give an overview of the PAH. In §7.3.2, I show that one of its predictions, the complementarity of agreement affixes and pronominal clitics, is not borne out for obviative and plural argument expressions. In §7.3.3, I discuss a second prediction of the PAH: the correlation between indexing morphology and syntactic freedom of argument expressions, and I demonstrate that this prediction is also only borne out for proximate arguments. In §7.3.4 I conclude.

7.3.1. Overview of the PAH

The main insight of the PAH is the idea that the hierarchical structure of a clause (i.e., the dependency relations between a predicate and its arguments) may not be reflected in the syntactic positions of the overt nominal expressions. The original version of the PAH is attributed to Jelinek (1984), who proposed that, in some non-configurational languages (e.g., Warlpiri, as well as the Coast Salish languages Lummi and Klallam), argument expressions are not in argument positions, but are rather adjoined to the clause, and are coreferential with verbal affixes that function as pronominal arguments in argument positions. This proposal offers an account for Hale's three criterial properties of non-configurationality. If argument expressions are adjoined, they should have the properties of adjuncts, i.e., they should be freely ordered and optional. Thus, the PAH predicts that languages of this type should have free word order and null anaphora. Regarding discontinuous expressions, Jelinek claims that, the pieces of discontinuous expressions form individual constituents, each adjoined to the clause and coreferential with a pronominal argument. In sum, by divorcing argument expressions from argument positions, Jelinek can maintain a view of syntax that is structured and hierarchical, while accounting for the seemingly non-configurational properties of certain languages.

Baker (1991, 1996) proposed a revised version of the PAH, under which argument-indexing verbal affixes are treated as agreement rather than pronominal arguments, and argument positions are instead occupied by null *pro*s. Although for Baker verbal affixes are not themselves in argument positions, they absorb case. As in Jelinek's model, argument expressions are generated as adjuncts, precisely because they would otherwise violate the Case Filter (i.e., because agreement affixes absorb case; argument expressions cannot).

To account for the relative ubiquity of null *pro*s in argument positions in Mohawk-type languages, Baker (1996) proposes the Morphological Visibility Criterion (MVC), which states that a phrase can be assigned a theta role by a given head only if the word containing the head (e.g., a polysynthetic verb complex) also contains a morpheme that agrees with the phrase (or indexes movement of the phrase, in the case of *wh*-questions). In short, languages like Mohawk have null *pro*s in argument positions because they have rich verbal agreement morphology. Although, contra Jelinek, Baker does not analyse verbal affixes as occupying argument positions, affixes are nevertheless in some sense argument-like because they are assigned case.

In the following two sections I discuss two predictions of the PAH, and I demonstrate that they are only partially borne out for Blackfoot.

7.3.2. Clitics and Agreement

Baker (1996) draws a comparison between his analysis of non-configurational languages (specifically Mohawk) and CLLD constructions in Romance (cf. Cinque 1990, Anagnostopoulou et al, 1997). In Italian, for instance, dislocated DPs are obligatorily coindexed with a pronominal clitic, as shown below.

(54) *Gianni, *(lo) ho visto.*
"Gianni I saw him" (Cinque 1990, p.14, (40b))

In (54), the clitic *lo* indexes the left dislocated DP *Gianni*. There are numerous accounts of CLLD in the literature, and broadly speaking, the accounts can be divided into two categories: those that argue that the dislocated DP has moved to its preverbal position from a position inside the clause (e.g., Cecchetto 2000), and those that argue that the dislocated DP is base-generated preverbally (e.g., Cinque 1990).

Baker adopts the base-generation account, under which the clitic pronoun in CLLD constructions absorbs case, forcing dislocation of the DP in order to avoid a violation of the Case Filter.[147] Under Baker's analysis, Mohawk operates the same way, the differences being that, instead of phonologically overt clitics, Mohawk has null *pro*s (which are licensed by case-absorbing agreement affixes), and instead of being optional, dislocation of argument expressions is obligatory. These two options are schematized in (55) below.

(55) a. <u>Italian CLLD</u>
[DP_i … [clitic_i … V ….]]

b. <u>Mohawk PA</u>
[DP_i … [$\textit{pro}_i$ … V-AGR_i …]]

Under Baker's analysis, clitics in a CLLD language are the functional equivalent to agreement affixes in a PA language: both absorb case. This yields the prediction that clitics and agreement should be in complementary distribution. As was demonstrated in §7.2, this prediction is only partially borne out in Blackfoot. Proximate argument expressions exhibit this complementarity (precisely because there are no clitics that index proximate arguments), but if the argument is obviative or plural, agreement affixes and enclitics co-occur.[148] Examples are given below.

(56) a.

*Áísoksstа**yini***	*anni*	*otssítsimaani.*
a-sok-sstaa-**yini**	ann-yi	ot-issitsimaan-yi
IMPF-well-nurse.AI-**OBV**	DEM-OBV	3-baby-OBV

"Her baby is nursing well."

b.

Anni	*otssítsimaani*	*áísoksstа**yináyi**.*
ann-yi	ot-issitsimaan-yi	a-sok-sstaa-**yini-ayi**
DEM-OBV	3-baby-OBV	IMPF-well-nurse.AI-**OBV-3SG.PRN**

"Her baby is nursing well."

---

[147] The claim that the clitic is assigned case is compatible with (at least some versions of) the movement account as well. For example, Cecchetto (2000) claims that the clitic and dislocated DP form a constituent ("big DP") from which the DP moves to a preverbal position, stranding the clitic in situ. Under this account, case is assigned to the big DP, of which the clitic is part.

[148] See Chapter 2 (also footnote 139) for Blackfoot-specific diagnostics for distinguishing between agreement affixes and enclitics.

c. *Áísoksstа**yináyi**.*
a-sok-sstaa-**yini-ayi**
IMPF-well-nurse.AI-**OBV-3SG.PRN**
"S/he is nursing well."

(57) a. *Mááno'too**yi*** *nóhpapiiyihpiksi.*
maan-o'too-**yi** n-ohpapiiyihp-iksi
just-arrive.AI-**3PL** 1-relative-PL
"My relatives just arrived."

b. *Nóhpapiiyihpiksi mááno'too**yaaw**.*
n-ohpapiiyihp-iksi maan-o'too-**yi-aawa**
1-relative-PL just-arrive.AI-**3PL-3PL.PRN**
"My relatives just arrived."

c. *Mááno'too**yaaw.***
maan-o'too-**yi-aawa**
just-arrive.AI-**3PL-3PL.PRN**
"They just arrived."

In (56), the obviative subject *anni otssítsimaani* "her baby" is indexed on the verb with the obviative agreement suffix *–yini*. When it appears preverbally in (56b) or is null in (56c), an enclitic *–áyi* also appears, in addition to agreement. Similarly in (57), the plural subject *nóhpapiiyihpiksi* "my relatives" is indexed on the verb with the agreement suffix *–yi*, as well as the enclitic- *aawa* if it is preverbal or null.

The fact that agreement affixes and enclitics co-occur suggests that the affixes themselves do not absorb case.[149] Moreover, there is no reason to posit a null *pro* that occupies the argument position associated with the obviative or plural argument expression; by analogy CLLD constructions in Romance, the clitic presumably occupies the argument position when the nominal expression does not. (As for the linearization of the enclitic, as discussed in Chapter 1 I assume that its status as a bound morpheme requires that it appear at the right edge of the verbal complex, regardless of its syntactic position.)

However, the same cannot be said for proximate argument expressions, which are indexed with a verbal affix *–wa*, but not expressed by a clitic. An example is given below.

[149] Markman (2009) argues, contra Baker, that agreement affixes do not ever absorb case, whereas clitics can and do. Under this analysis, proximate arguments (which are not expressed by a clitic and do not appear in argument positions) are not assigned case at all. This is consistent with the proposal laid out in Chapter 3 that proximate argument expressions are not arguments but "LINKPs," phrases that must be syntactically independent and can function as matrix clauses.

(58) a. *Náípottaa**wa*** *amo* *píítaawa.*
na-ipottaa-**wa** amo piitaa-wa
EVID-fly.AI-**PROX** DEM eagle-PROX
"The eagle flew."

b. *Amo* *píítaawa* *náípottaa**wa**.*
amo piitaa-wa na-ipottaa-**wa**
DEM eagle-PROX EVID-fly.AI-**PROX**
"The eagle flew."

c. *Náípottaa**wa**.*
na-ipottaa-**wa**
EVID-fly.AI-**PROX**
"It flew."

The prediction of the PAH – that agreement and clitics should not co-occur – is borne out with proximate but not obviative or plural arguments.

7.3.3. Agreement and Syntactic Restrictions

Under the PAH, verbal agreement affixes play a critical role in mediating the relation between argument expressions and argument positions. For Jelinek, agreement affixes occupy argument positions, and for Baker, agreement affixes license null *pro*s in argument positions and absorb case. We might predict that all arguments in a PA language are necessarily indexed via verbal affixes. However, it seems this prediction is too strong. Baker (2003) discusses a class of languages that are partially (non-) configurational; some arguments are realized as pronominal arguments, and can be coindexed with dislocated argument expressions, whereas others can be realized by full DPs in argument positions. As noted by LeSourd (2006), these two types of arguments should show systematic syntactic differences. In particular, whereas dislocated argument expressions are predicted to exhibit non-configurational properties such as free word order and null anaphora, argument expressions that aren't expressed via pronominal arguments should show evidence of occupying argument positions. To put it another way, we predict that unindexed arguments should show syntactic restrictions not observed with indexed arguments.

In this section, I discuss the (non-)configurational properties of Blackfoot's unindexed objects, i.e., arguments that are not indexed by agreement affixes on the verb. There are two types of unindexed objects in Blackfoot: objects of morphologically intransitive (AI) verbs (henceforth AI OBJECTS), and unindexed objects of ditransitive (TA) verbs. I demonstrate that, whereas AI objects show strict syntactic restrictions, unindexed objects of ditransitive verbs partition according to whether the argument is proximate or not.

First regarding AI objects, these show a strict linear order; they can only appear immediately post-verbally, as shown below. (The AI object is bolded.)

(59)	a.	*Anna*	*Leo*	*a'pístotakiwa*	***sóópa'tsis***.
		ann-wa	L	a'pistot-aki-wa	soopa'tsis
		DEM-PROX	L	fix-AI-PROX	chair
		"Leo fixed a chair."			

b. **Anna Leo **sóópa'tsis** a'pístotakiwa.*

c. *****Sóópa'tsis*** *anna Leo a'pístotakiwa.*

d. *****Sóópa'tsis*** *a'pístotakiwa anna Leo.*

e. **A'pístotakiwa anna Leo **sóópa'tsis**.*

f. *A'pístotakiwa **sóópa'tsis** anna Leo.*

In (59), the only grammatical word orders are (a) and (f), in which the AI object immediately follows the verb. Objects of AI verbs show other restrictions as well. In particular, as discussed at length in Chapter 3, they can consist maximally of a noun, an optional adjectival prefix, and optional plural marking. An example illustrating this is given in (60). AI objects cannot be marked with proximate *–wa* or obviative –*yi*, and they cannot be used with demonstratives, as shown in (61) and (62).

(60)	*Na*	*Leo*	*íísapiipommaawa*	***pisát****ssaissk****ists.***
	ann-wa	Leo	ii-sapiipommaa-wa	**pisat**-saisski-**istsi**
	DEM-PROX	Leo	IC-plant.AI-PROX	**fancy**-plant-**PL**
	"Leo planted flowers."			

(61)	a.	*Kitsííksisaisskaki*	*aapí'si.*
		kit-ii-oksisaissk-aki	aapi'si.

2-IC-chase-AI coyote
"You chased a coyote."

b. *_Kitsííksisaisskaki_ _aapí'si**wa**._
kit-ii-oksisaissk-aki aapi'si-**wa**
2-IC-chase-AI coyote-**PROX**
intended: "You chased a coyote."

c. *_Kitsííksisaisskaki_ ***oma*** _aapí'si**wa.**_
kit-ii-oksisaissk-aki **om-wa** aapi'si-**wa**
2-IC-chase-AI **DEM-PROX** coyote-**PROX**
intended "You chased that coyote."

(62) a. _Ííksisaisskakiwa_ _aapí'si._
ii-oksisaissk-aki-wa aapi'si.
IC-chase-AI-PROX coyote
"S/he chased a coyote."

b. *_Ííksisaisskakiwa_ _aapí'si**i**._
ii-oksisaissk-aki-wa aapi'si-**yi**
IC-chase-AI-PROX coyote-**OBV**
intended: "S/he chased a coyote."

c. *_Ííksisaisskakiwa_ ***omi*** _aapí'si**i**._
ii-oksisaissk-aki-wa **om-yi** aapi'si-**yi**
IC-chase-AI-PROX **DEM-OBV** coyote-**OBV**
intended "S/he chased that coyote."

In (60) is an example of an AI object that consists of a noun, an adjectival prefix and a plural suffix. In (61), the AI object is a bare noun; if it is modified by the proximate suffix –*wa* as in (61b) or a demonstrative as in (61c), this is ungrammatical. Similarly in (62), the AI object cannot be modified by an obviative suffix (62b) or a demonstrative (62c). These data show that AI objects exhibit syntactic restrictions not found with subjects and indexed objects. In Chapter 3, I developed an analysis of AI objects as pseudo-incorporated, in the sense of Massam (2001). For our purposes here, the main observation is that AI objects are not indexed with verbal agreement affixes and they show syntactic restrictions. This is consistent with a (partial) PAH, which predicts a negative correlation between agreement affixes and syntactic restrictions.

The other type of argument that is not indexed with verbal affixes in Blackfoot is an unindexed object of a ditransitive verb. Unlike AI objects, unindexed objects of ditransitive verbs can appear pre- or post-verbally, and can be used with demonstratives and obviation morphology. Examples are given below.

(63) a.

Kítohkoto	*na*	*ponokáómitaawa.*
kit-ohkot-o	ann-wa	ponokaomitaa-wa
2-give.TA-1:2	DEM-PROX	horse-PROX

"I gave you the horse."

b. *Na ponokáómitaawa kítohkoto.*

In (63a&b), the unindexed object *na ponokáómitaawa* "the horse" is not indexed on the verb with an agreement affix, but nevertheless it can appear pre- or post-verbally. Unlike AI objects, the unindexed object in (63) does not show the syntactic restrictions expected of unindexed objects.

Notably, the unindexed object in (63) is proximate; when the unindexed object is obviative or plural, it shows the same restrictions as obviative or plural expressions fulfilling other grammatical functions: it must appear post-verbally or be expressed by a clitic. An example is given below.

(64) a.

Na	*Rosie*	*nita'pihkahtoomoka*	*otsinaka'simiksi.*
an-wa	R	nit-a'pihk-ahto-omo-ok-wa	ot-inaka'simiks-yi
DEM-PROX	R	1-sell-TI-TA.BEN-INV-PROX	3-car-OBV

"Rosie sold me her car."

b.

Na	*Rosie*	*otsinaka'simiksi*	*nita'pihkahtoomok**áyi**.*
an-wa	R	ot-inaka'simiks-yi	nit-a'pihk-ahto-omo-ok-wa-**ayi**
DEM-PROX	R	3-car-OBV	1-sell-TI-TA.BEN-INV-PROX-**3SG.PRN**

"Rosie sold me her car."

In (64b), the unindexed object *otsinaka'simiksi* "her car" is expressed by the clitic *–áyi*. As above, the examples in (62) and (63) together give further evidence for the asymmetry between proximate versus obviative and plural arguments. Whereas proximate argument expressions can be freely ordered, obviative and plural arguments need to be expressed by a clitic when they are preverbal.

7.3.4. Summary

In sum, in this section I discussed two predictions of the Pronominal Argument Hypothesis (or PAH), as follows:

- Agreement affixes and clitics should be in complementary distribution
- Unindexed arguments should show syntactic restrictions

I demonstrated that both of the predictions yield an asymmetry between proximate versus obviative and plural argument expressions but in opposite ways: the first prediction is borne out only for proximate argument expressions, and the second prediction is borne out for all but proximate argument expressions. This is shown in Table 7.8 below.

Table 7.8. Predictions of the PAH

	Proximate	Obviative	Plural
Complementarity between agreement and clitics	✓	✗	✗
Syntactic restrictions on unindexed arguments	✗	✓	✓

What are the implications of this for the status of the PAH in Blackfoot? Beginning with obviative and plural argument expressions, the fact that the first prediction is not borne out supports the analysis developed in Chapter 3, wherein I argued that these argument expressions are generated inside the clause. In not conforming to the PAH, they are not clause-external adjuncts, binding pronominal arguments. Moreover, the fact that the second prediction is borne out for obviative and plural argument expressions also supports this analysis. Under the partial PAH, unindexed arguments are thought to be appear in argument positions.

Regarding proximate argument expressions, the fact that the first prediction is borne out for proximate argument expressions is consistent with my Chapter 3 analysis of proximate argument expressions as being in a PA configuration, i.e., adjoined outside the clause and binding a null *pro* in argument position. However, the fact that the second prediction is not borne out suggests that agreement is not an essential ingredient for a PA configuration: proximate argument expressions in Blackfoot are not always indexed via agreement, yet they exhibit non-configurational properties consistent with that of a PA analysis.

In short, the asymmetry between proximate versus obviative and plural argument expressions is consistent with that observed in §7.2: Blackfoot is a partial non-configurational language.

7.4. *Non-Configurationality*, Take 3: Lack of Structural Asymmetries

This chapter began with a brief summary of the findings of Chapters 3 and 6, namely the asymmetry between proximate versus obviative and plural argument expressions. In particular, I argued that proximate argument expressions are generated as clause-external adjuncts, but obviative and plural ones are generated in argument positions inside the clause. The preceding two sections of this chapter provided support for this asymmetry: proximate (but not obviative or plural) argument expressions consistently pattern as non-configurational according to Hale's (1983) diagnostics, and proximate (but not obviative or plural) argument expressions satisfy the PAH.

In this section, I give additional evidence for this asymmetry, based on tests of c-command. In particular, I demonstrate that, in transitive clauses with two 3rd person arguments, structural relations are sensitive to the direct/inverse system: When the verb is direct, the subject asymmetrically c-commands the object, and when the verb is inverse, the object asymmetrically c-commands the subject. As will be explained in §7.4.1, the consequence of this is that proximate argument expressions always c-command obviative and/or plural ones. This supports the analysis of only proximate (but not obviative and plural) argument expressions being clause-external adjuncts; from this position, they c-command arguments inside the clause.

This section proceeds as follows. In §7.4.1, I present data on variable binding to illustrate the asymmetric c-command relations. In §7.4.2, I discuss a number of other tests for asymmetric c-command, and I show that, while some of these give evidence for cross-clausal asymmetries (i.e., between arguments in matrix and subordinate clauses) they do not reveal clause-internal symmetries. For each test, I suggest reasons as to why it does not show clause-internal asymmetries.

7.4.1. Variable Binding Tests

The variable binding test for asymmetric c-command is built on the assumption that, if a pronoun (null or overt) functions as a bound variable, it must be c-commanded by the operator that binds it (cf. Reinhart 1983). For example, the possessive pronoun *his* can be bound the quantifier *every boy* in (65a) but not (65b) because only in (a) does *every boy* c-commands *his*.

(65) a. *Every$_i$ boy loves his$_i$ mother.*

b. **His$_i$ mother loves every$_i$ boy.*

In this subsection, I present variable binding data from Blackfoot as evidence of clause-internal structural asymmetries. The tests reveal that clause-internal structural asymmetries in Blackfoot are conditioned by the direct/inverse system. Chapter 2 presents my analysis of the direct/inverse; a brief summary of the relevant points is given here. As a reminder, a minimal pair illustrating the direct/inverse is given below.

(66) a. *Ááwayakiiwa.*
aawayaki-**yii**-wa
hit.TA-**3:4**-PROX
'S/he$_{\text{PROX}}$ hit him/her$_{\text{OBV}}$.'

b. *Otááwayakioka.*
ot-aawayaki-**ok**-wa
3-hit.TA-**INV**-PROX
'S/he$_{\text{PROX}}$ hit him/her$_{\text{OBV}}$.'

In (66a), the verb is marked with the direct suffix *–yii*, indicating that the proximate argument is the subject, and the obviative argument is the object. The verb (66b) is identical in form, except for the inverse suffix *–ok*, which indicates that the proximate argument is the object and the obviative argument is the subject. In Chapter 2, I developed an analysis of the direct/inverse system in which the direct and inverse markers associate with the functional head Asp, attracting to its Specifier an argument referred to as the Point-of-View (PoV) holder (see also Bliss 2005a, Bliss et al. 2010a, b). The relevant point here is that, in clauses such as (66) which contain a proximate and an obviative 3rd person, the proximate 3rd person is necessarily the PoV holder.

The generalization established in this section is as follows: the PoV holder asymmetrically c-command the non-PoV holder. This means that when the verb is marked as direct, the subject asymmetrically c-commands the object, and when the verb is inverse, the object asymmetrically c-commands the subject. With respect to variable binding, this yields the pattern in Table 7.9.

Table 7.9. Variable Binding Patterns

	Subject binds object	Object binds subject
Direct	✓	✗
Inverse	✗	✓

In what follows, I present data from nominalizations and possessed nouns that illustrate these binding relations.[150]

7.4.1.1. Variable Binding with Nominalizations

Nominalizations in Blackfoot can be formed out of full clauses, as illustrated below.[151]

(67)	*Omiksi*	*itsitsipsstáyo'kaiksi*	*omi*	*ksikkokóówayi*	*annohk …*
	om-iksi	it-it-ipsst-a-yo'kaa-iksi	omi	ksikkokoowa-yi	annohk
	DEM-PL	LOC-LOC-in-IMPF-sleep.AI-PL	DEM	tent-INAN	now

…	*máánoʼtooyaa*	*matónni.*
	maan-o'too-yi-aawa	matonni
	just-arrive.AI-3PL-PL.PRN	yesterday

"Those ones sleeping in that tent right now just arrived yesterday."

The entire first line of the example in (67) is the nominalization. It contains all of the structure of a clause, but also functions as an argument for the predicate *máánoʼtooyaa* "just arrived." Clausal nominalizations

[150] Because independent 3rd person pronouns are rare in Blackfoot (see footnote 138), variable binding in sentences such as "She said that [she …]" are not considered here.

[151] In addition to clausal nominalizations, nominalizations can also be formed out of AI stems. See Chapter 2, also Bliss et al. (2012), Frantz (2009), and Ritter (to appear).

like this one can serve the same function as relative clauses in languages like English.[152] In particular, they can modify nouns, as in (68b).

(68)	a.	*Nitsikáyaahsimaa*	*oma*	*itáómiihkaa.*	
		nit-ik-a-yaahsii-m-a-wa	om-wa	it-a-omii-hkaa-wa	
		1-INTNS-IMPF-please-TA-DIR-PROX	DEM-PROX	LOC-IMPF-fish-acquire.AI-PROX	
		"I like that fishing one."			
	b.	*Nitsikáyaahsimaa*	*oma*	***ninááw***	*itáómiihkaa.*
		nit-ik-a-yaahsii-m-a-wa	oma	**ninaa-wa**	it-a-omii-hkaa-wa
		1-INTNS-IMPF-please-TA-DIR-PROX	DEM	**man-PROX**	LOC-IMPF-fish-acquire.AI-PROX
		"I like that fishing **man**."			

These properties of nominalizations allow us to test for variable binding within nominalizations. Can the pronominal arguments of the nominalized predicate function as bound variables, and if so, do they show binding restrictions consistent with the predicted structural asymmetries? For convenience, Table 7.9 is given again below.

Table 7.9.Variable Binding Patterns

	Subject binds object	Object binds subject
Direct	✓	✗
Inverse	✗	✓

First, let's consider the left hand column. When the nominalization is the object of the matrix predicate, the preverbal universal quantifier can bind the subject of the matrix predicate, as well as a pronominal argument of the nominalization when the matrix verb is direct (69)[153], but not inverse (70).

[152] Johansson (2012) argues that clausal nominalizations in Blackfoot are relative clauses; see Bliss et al. (2012), and Wiltschko (to appear a) for arguments in favour of the nominalization analysis over the relative clause analysis.

[153] In fact, the bound reading is the only possible reading for (69). Because the subject in both the matrix clause and the nominalization functions as the proximate argument, and multiple proximate arguments in a clause are not possible, it isn't possible for "every girl" and "she" to *not* co-refer. The same is true of (71), although here, the proximate argument is the object.

(69) *Amoksi* *aakííkoaiks* *ohkanáísinao'sskip**ii**yaawa …*
amo-iksi aakiikoan-iksi ohkana-sinao'sskip-**yii**-yi-aawa
DEM-PL girl-PL all-kiss.TA-**3:4**-PL-3PL-3PL.PRN

… *[omi* *sááhkomaapii* *otáákomimmayi].*
om-yi *saahkomaapi-yi* *ot-waakomi-mm-a-yi*
DEM-OBV boy-OBV 3-love.TA-DIR-OBV

"Every$_i$ girl kissed [the boy she$_i$ loved]."

(70) *[Anna* *sááhkomaapiwa* *otáákomimmoka]…*
ann-wa saahkomaapi-wa ot-waakomimm-ok-wa
DEM-PROX boy-PROX 3-love.TA-INV-PROX

… *otohkanáísinao'sskip**ok**a* *anniksi* *aakííkoaiks.*
ot-ohkana-sinao'sskip-**ok**-wa ann-iksi aakiikoan-iksi
3-all-kiss.TA-**INV**-PROX DEM-PL girl-PL

"[The boy she$_{*i/j}$ loved] was kissed by every$_i$ girl."

In these examples, it appears that word order correlates with binding; the binder precedes the bindee in (69), and in (70), the order is reversed and binding is not possible. However, I predict that this is not in fact a correlation but an accident resulting from data collection. In (73) and (74) below, word order is not a determinant for binding relations, and I assume the same is true here.

Now, let's consider the right hand column in Table 7.9. When the nominalization is the subject of the matrix predicate, the universal quantifier can bind the matrix object, as well as a pronominal argument of the nominalization when the matrix verb is inverse (71) but not direct (72).

(71) *Amoksi* *aakííkoaiks* *otohkanáísinao'sskip**ok**yaa …*
amo-iksi aakiikoan-iksi ot-ohkana-sinao'sskip-**ok**-yi-aawa
DEM-PL girl-PL 3-all-kiss.TA-**INV**-3PL-3PL.PRN

… *[omi* *sááhkomaapii* *otáákomimmayi].*
om-yi saahkoaampi-yi ot-waakomimm-a-yi
DEM-OBV boy-OBV 3-love.TA-DIR-OBV

"Every$_i$ girl was kissed by [the boy she$_i$ loved]."

(72) *[Anna* *sááhkomaapi* *otáákomimmoka]…*
ann-wa saahkomaapi ot-waakomimm-ok-wa
DEM-PROX boy 3-love.TA-INV-PROX

… *ohkanáísinao'sskip**ii**yaawa* *amoksi* *aakííkoaiks.*
ohkana-sinao'sskip-**yii**-yi-aawa amo-iksi aakiikoan-iksi
all-kiss.TA-**3:4**-3PL-3PL.PRN DEM-PL girl-PL

"[The boy she$_{*i/j}$ loved] kissed every$_i$ girl."

In sum, variable binding into nominalizations provides evidence for clause-internal structural asymmetries, in which the subject c-commands the object in the direct, and vice versa in the inverse.

7.4.1.2. Variable Binding with Possessed Nouns

The generalizations established in the previous section extend to variable binding into possessed noun phrases as well. The patterns are again given below.

Table 7.9. Variable Binding Patterns

	Subject binds object	Object binds subject
Direct	✓	✗
Inverse	✗	✓

First consider the left hand column. In the direct (73) but not the inverse (74), the subject binds into the object. This generalization holds regardless of whether the bindee follows or precedes the verb (which contains the universal quantifier functioning as the binder).

(73) a. *Ikáóhkanawáákomiimm**ii**yaa* *oksísts.*
ik-a-ohkana-waakomii-mm-**yii**-yi-aawa w-iksist-yi
INTNS-IMPF-all-love-TA-**3:4**-3PL-3PL.PRN 3-mother-OBV
"Everybody$_i$ loves his$_{i/j}$ mother."

b. *Oksísts ikáóhkanawáákomiimm**ii**yaa.*
"Everybody$_i$ loves his$_{i/j}$ mother."

(74) a. *Oksísts* *otáóhkanawaakomiimm**ok**yaa.*
w-iksist-yi ot-a-ohkana-waakomii-mm-**ok**-yi-aawa
3-mother-OBV 3-IMPF-all-love-TA-**INV**-3PL-3PL.PRN
"Everybody$_i$ loves his$_{*i/j}$ mother."

b. *Otáóhkanawaakomiimm**ok**yaa oksísts.*
"Everybody$_i$ loves his$_{*i/j}$ mother."

Now let's consider the right hand column. Because of restrictions on proximate assignment with possessed nouns, the target sentences for testing these predictions are more difficult to construct. Recall that, as in other Algonquian languages, nouns possessed by a 3rd person possessor are necessarily obviative.

Regarding the top row of Table 7.9, for this sentence to be constructed in the direct, the object (and the possessor it binds) must be "further obviative,"[154] which is formally indistinguishable from obviative in Blackfoot (Frantz 2009). Thus, the target sentence for testing the prediction that the object cannot bind into the subject in the direct must have the following format:

(75) His-OBV$_i$ mother-OBV loves-DIR everybody-OBV$_i$.

Because pronominal possessors and quantifiers aren't morphologically marked for obviation, the Blackfoot rendering of the sentence in (75) is formally identical to the sentence in (73). Indeed, (73) (repeated here as (76)) is ambiguous. Crucially, however, while the quantifier can bind the possessor when it is construed as the subject, it cannot when it is construed as the object.

(76)	a.	*Ikáóhkanawáákomiimmiiyaa*	*oksísts.*
		ik-a-ohkana-waakomii-mm-yii-yi-aawa	w-iksist-yi
		INTNS-IMPF-all-love-TA-3:4-3PL-3PL.PRN	3-mother-OBV

"Everybody$_i$ loves his$_{i/j}$ mother."
OR "His$_{*i/j}$ mother loves everybody$_i$."

b. *Oksísts ikáóhkanawáákomiimmiiyaa.*
"Everybody$_i$ loves his$_{i/j}$ mother."
OR "His$_{*i/j}$ mother loves everybody$_i$."

As predicted, the bound variable reading is possible when the 3rd person possessor prefix is interpreted as possessing the object, but not when it is interpreted as possessing the subject. In other words, the object cannot bind into the subject in the direct.

The same ambiguity is observed in the inverse**.** The sentence in (74) is repeated here as (77). While the bound variable reading is unavailable for the possessor of the subject, it is possible for the possessor of the object.

[154] In transitive clauses with two obviative 3rd persons, one is termed "obviative" and the other "further obviative." In direct clauses, the object is further obviative, and in inverse clauses, the subject is further obviative, cf. Wolfart (1978).

(77) a. *Oksísts* *otáóhkanawáákomiimokyaa.*
w-iksist-yi ot-a-ohkana-waakomii-mm-ok-yi-aawa
3-mother-OBV 3-IMPF-all-love-TA-INV-3PL-3PL.PRN
"Everybody$_i$ loves his$_{*i/j}$ mother."
OR "His$_{i/j}$ mother loves everybody$_i$."

b. *Otáóhkanawáákomiimokyaa.oksísts.*
"Everybody$_i$ loves his$_{*i/j}$ mother."
OR "His$_{i/j}$ mother loves everybody$_i$."

In summary, the variable binding data, both with nominalizations and possessed nouns, provides evidence that the subject asymmetrically c-commands the object when the verb is marked as direct, and the object asymmetrically c-commands the subject when the verb is marked as inverse. In other words, the PoV holder asymmetrically c-commands the non-PoV holder.

Notably, this asymmetry is consistent with the asymmetries observed earlier in this chapter and in chapters 3 and 6 between proximate versus obviative and plural arguments. In clauses with two 3rd person arguments, if there is a proximate argument, it is the PoV holder. Given this, the variable binding data reveals the following generalization:

(78) Proximate arguments always asymmetrically c-command obviative ones.

This generalization follows from the analysis of proximate argument expressions as clause-external adjuncts. If proximate argument expressions are adjoined outside the clause, they are predicted to c-command argument expressions inside the clause.

7.4.2. Other Tests for C-Command Relations

In this section, I survey other tests that are commonly used to establish c-command relations, and I show that, although some of them establish cross-clausal asymmetries, these tests do not give reliable results for establishing clause-internal c-command relations.

7.4.2.1. Condition A Tests

Condition A effects can be used as a test for asymmetric c-command by looking at the distribution of NP anaphors, i.e., reflexive and reciprocal pronouns. Under the assumption that anaphors must be locally bound, their distribution with respect to co-referential nominal expressions in the clause can inform us about c-command relations. For example, consider the English sentences below.

(79) a. *Beth$_i$ made herself$_i$ a sandwich.*

b. **Herself$_i$ made Beth$_i$ a sandwich.*

(80) a. *[Beth and Anna]$_i$ never tease [each other]$_i$.*

b. **[Each other]$_i$ never tease [Beth and Anna]$_i$.*

In (79), the reflexive pronoun *herself* must appear in the local c-command domain of its antecedent, *Beth*. The fact that (79a), in which the antecedent is the subject and the anaphor is the object, is grammatical tells us that the subject c-commands the object. The fact that (79b), in which the antecedent is the object and the anaphor is the subject, is ungrammatical tells us that this c-command relation is asymmetric. A similar pattern is observed in (80) with a reciprocal pronoun.

Turning to Blackfoot, this test is inapplicable for testing the kinds of hierarchical relations observed with the variable binding, i.e., asymmetries between the subject and object. The reason why is that there are no NP anaphors for these arguments.[155] Reflexive and reciprocal meanings are encoded via SECONDARY DERIVATION; an intransitive (AI) verb final is suffixed to a TA verb stem to indicate reflexivity or reciprocity. Examples are given below.

(81) *Isskonákat**ohsi**wa*
ii-sskonakat-**o:hsi**-wa
IC-shoot.TA-**REFL.AI**-PROX
"He shot himself." (Frantz 2009: 104, (t))

[155] Although there are no NP anaphors for subject and object arguments, independent 1st and 2nd person pronouns can function as NP anaphors for obliques (cf. Déchaine et al. 2011; Wiltschko, et al. 2011). An interesting and yet unexplored avenue would be to test for structural asymmetries between obliques and other arguments using Condition A tests with independent pronouns.

(82) *Omiksi ponokáómitaiksi áísiksip**otsiiyi**yaawa.*
om-iksi ponokaomitaa-iksi a-siksip-**o:tsiiyi**-yi-aawa
DEM-PL horse-PL IMPF-bite.TA-**RECPR.AI**-PL-3PL.PRN
"Those horses are biting each other." (Frantz 2009: 105, (x))

7.4.2.2. Superiority Tests

Superiority can be used as a test for structural asymmetries based on multiple wh-questions. The test rests on the assumption that, if there are multiple wh-phrases in a sentence, only the structurally higher (i.e., "superior") one will undergo wh-movement; the lower wh-phrase will remain in situ. This is shown for English in (83).

(83) a. *Who bought what?*

b. **What did who buy?*

The superiority test as it is used in English is not applicable in Blackfoot because multiple wh-phrases are not permitted within a single clause.[156] In (84) are the Blackfoot equivalents of (83); both are ungrammatical. In (85) is an alternative strategy for expressing the question "who bought what?"[157]

(84) a. **Takáá íihpommááwaiksaa tsa*?
takaa ii-ohpomm-aa-waiksaa tsa
who IC-buy-AI-NONAFF what
intended: "Who bought what?"

b. **Tsa anistápii takáá íihpommááwaiksaa?*
tsa anistapii takaa ii-ohpomm-aa-waiksaa
what be.II who IC-buy-AI-NONAFF
intended, literal: "What is it that who bought?"

(85) *Tsa anistápii iihkanáí'tohpommááwaiksaa*?
tsa anistapii ii-ohkana-i't-ohpomm-aa-waiksaa
what be.II IC-all-DIST-buy-AI-NONAFF
"What is it that each of them bought?"

[156] There is cross-Algonquian variation in whether or not multiple wh-questions are permitted. Like Blackfoot, Plains Cree does not permit multiple wh-questions (Blain 1997), but they are permitted in Naskapi (Brittain 1999) and Passamaquoddy (Bruening 2001).

[157] In (85), the wh-phrase associates with the object, and the universal quantifier associates with the subject. Whether the opposite construal (i.e., "Who bought each of them?") is also possible is yet unknown. If this is not possible, it may serve as an additional diagnostic for a structural asymmetry. The same point can be made for the example in (87).

Just as multiple wh-phrases within a clause are not permitted if both are arguments, multiple wh-phrases are not permitted if one is an argument and one is an oblique. This is shown with the ungrammatical (86); an alternative strategy for expressing "who slept where?" is given in (87).

(86) a. **Takáá ííyo'kaawaiksaa tsimá?*
takaa ii-yo'kaa-waiksaa tsima
who IC-sleep.AI-NONAFF where
intended: "Who slept where?"

b. **Tsimá anistápii takáá ííyo'kaawaiksaa*?
tsima anistapii takaa ii-yo'kaa-waiksaa
where be.II who IC-sleep.AI-NONAFF
intended, literal: "Where is it that who slept?"

(87) *Tsimá kitsitohkanayo'kaahpoaawa?*
tsima kit-it-ohkana-yo'kaa-hpoaawa
where 2-LOC-all-sleep.AI-2PL
"Where did you all sleep?"

7.4.2.3. Quantifier Scope Tests

Quantifier scope can be used as a test for structural asymmetries by looking at quantified expressions to determine c-command relations; in clauses with two quantifiers, the scope-taking one c-commands the other. However, quantifier scope data is often unreliable, due to the possibility of quantifier raising (QR), a post-syntactic operation in which a syntactically lower quantifier takes scope over a higher one (May 1977). This is illustrated for English in (88) below.

(88) *Everybody wants to kiss a linguist*.
$\forall > \exists$ (For each person, there is at least one linguist that person wants to kiss)
$\exists > \forall$ (There is a certain linguist that every person wants to kiss)

There are two possible interpretations of (88): the surface scope interpretation, in which the subject scopes over the object ($\forall > \exists$), and the inverse scope interpretation, in which the object scopes over the subject ($\exists > \forall$).

Turning to Blackfoot, the inventory of quantifiers that modify nominal expressions is limited in Blackfoot. Aside from numerals, the only quantifier that appears within the nominal domain is the prefixal quantifier *kana*- "all." This quantifier is restricted in distribution; it can only be used in generic (i.e., non-referential) contexts, as shown below.

(89)	***Kaná**issistsimaaniksi*	*áyo'kaayaa.*
	kana-issitsimaan-iksi	a-yo'kaa-yi-aawa
	all-baby-PL	IMPF-sleep.AI-3PL-3PL.PRN
	"All babies sleep."	

(90)	a.	****Kana**omitááiksi*	*ííksisaiskoyiyaa*	*omi*	*póós.*
		kana-omitaa-iksi	ii-oksisaisko-yii-yi-aawa	om-yi	poos
		all-dog-PL	IC-chase.TA-3:4-3PL-3PL.PRN	DEM-OBV	cat
		intended: "All dogs chased that cat."			
	b.	**Omiksi*	*póósiksi*	*ííksisaiskoyiyaa*	***kana**omitááiksi.*
		om-iksi	poos-iksi	ii-oksisaisko-yii-yi-aawa	**kana**-omitaa-iksi
		DEM-PL	cat-PL	chase.TA-3:4-3PL	**all**-dog-PL
		intended: "Those cats chased all dogs."			

Quantifiers that quantify over the subject and/or object of transitive clauses are verbal prefixes, which are scopally ambiguous, and as such, cannot inform us about the c-command relations of the arguments within a clause.

For example, the universal quantifier *ohkana*- allows both scope readings (subject scoping over object, and object scoping over subject), regardless of whether it is used in direct or inverse clauses, and regardless of whether the quantifier is associated with the subject or the object.

(91)	*Omiksi*	*imitááiksi*	***ííhkana**oksisaiskoyiiyaa*	*nióókskamiks*	*póósiks.*
	om-iksi	imitaa-iksi	ii-**ohkana**-oksisaisko-yii-yi-aawa	niookskam-iksi	poos-iksi
	DEM-PL	dog-PL	IC-**all**-chase.TA-3:4-PL-3PL.PRN	three-PL	cat-PL
	"All the dogs chased three cats."				
	∀ > 3 or 3 > ∀				

(92)	*Nióókskamiksi*	*póósiksi*	*ot**ohkaná**óksisaiskookiyaa*	*omiksi*	*imitááiks.*
	niookskam-iksi	poos-iksi	ot-**ohkana**-oksisaisko-ok-yi-aawa	om-iksi	imitaa-iksi
	three-PL	cat-PL	OBV-all-chase.TA-INV-PL-3PL.PRN	DEM-PL	dog-PL
	"Three cats were chased by all the dogs." OR "All three cats were chased by the dogs."				
	∀ > 3 or 3 > ∀				

(93)	*Nióókskamiks*	*imitááiksi*	***ííhkana**oksisaiskoyiiyaa*	*omiksi*	*póósiksi.*
	niookskam-iksi	imitaa-iksi	ii-**ohkana**-oksisaisko-yii-yi-aawa	om-iksi	poos-iksi
	three-PL	dog-PL	IC-**all**-chase.TA-3:4-PL.3PL.PRN	DEM-PL	cat-PL
	"Three dogs chased all the cats."				
	∀ > 3 or 3 > ∀				

(94)	*Omiksi*	*póósiksi*	*ot**ohkaná**óksisaiskookiyaa*	*nióókskamiks*	*imitááiksi.*
	om-iksi	poos-iksi	ot-**ohkana**-oksisaisko-ok-yi-aawa	niookskam-iksi	imitaa-iksi
	DEM-PL	cat-PL	OBV-**all**-chase.TA-INV-PL-3PL.PRN	three-PL	dog-PL

“All the cats were chased by three dogs.”
$\forall > 3$ or $3 > \forall$

Because quantifier scope is ambiguous[158], it doesn't provide evidence of structural asymmetries within a clause.

7.4.2.4. Condition C Tests

Condition C can be used as a test for structural asymmetries by looking at the distribution of R-expressions (i.e., full DPs) in the clause. In this section, I report on Condition C in Blackfoot, and I demonstrate that, although there is no evidence that Condition C is active clause-internally, there is evidence of Condition C across clauses. Following Davis (2009), I suggest that the lack of clause-internal Condition C effects does not reflect a lack of hierarchical structure inside the clause.

Beginning with the lack of Condition C clause-internally, let's first consider an example from English that illustrates how the test can work.

(95) a. *He$_{*i/ii}$ loves John$_i$'s mother.*

b. *John$_i$'s mother loves him$_{i/ii}$.*

The ungrammaticality of (95a) indicates that the R-expression *John* is bound (and hence c-commanded) by the pronoun *he*, and the grammaticality of (95b) indicates that this c-command relation is asymmetric.

Comparable Blackfoot examples are presented below. Regardless of whether the clause is direct (96) or inverse (97), the sentence is grammatical.

[158] In fact, the examples in (91)-(94) are multiply ambiguous. In addition to the ambiguity in scope, the sentences are ambiguous with respect to which argument the universal quantifier associates with. The examples are presented with the universal quantifier associating with a different argument than that which is modified by the numeral. However, both the universal quantifier and the numeral can associate with the same argument, e.g., (91) could be interpreted as “The dogs chased all three cats.” Moreover, the universal quantifier can associate with both arguments, e.g., (91) could also be interpreted as “All the dogs chased all three cats.”

(96) a.

Na	*Myáániwa*	*náyiisoyiiwa*	*anni*	*o'tás.*
ann-wa	Myaani-wa	na-yiiso-yii-wa	ann-yi	w-o'tas-yi
DEM-PROX	M-PROX	EVID-feed.TA-3:4-PROX	DEM-OBV	3-horse-OBV

literally: "Mary$_i$ fed her$_i$ horse."

b.

Náyiisoyiiwa	*na*	*Myáániwa*	*anni*	*o'tás.*
na-yiiso-yii-wa	ann-wa	Myaani-wa	ann-yi	w-o'tas-yi
EVID-feed.TA-3:4-PROX	DEM-PROX	M-PROX	DEM-OBV	3-horse- OBV

literally: "She$_i$ fed Mary$_i$'s horse."

(97) a.

Na	*Jáániwa*	*anni*	*o'tás*	*otsi'kakka.*
ann-wa	Jaani-wa	ann-yi	w-o'tas-yi	ot-si'kat-ok-wa
DEM-PROX	J-PROX	DEM-OBV	3-horse-OBV	3-kick.TA-INV-PROX

literally: "John$_i$'s horse kicked him$_i$."

b.

Anni	*o'tás*	*ótsi'kakka*	*na*	*Jáániwa.*
ann-yi	w-o'tas-yi	ot-si'kat-ok-wa	ann-wa	Jaani-wa
DEM-OBV	3-horse-OBV	3-kick.TA-INV-PROX	DEM-PROX	J-PROX

literally: "His$_i$ horse kicked John$_i$."

Because, as discussed in §7.2.2, Blackfoot has flexible word order, it is impossible to ascertain whether the R-expression *na Myáániwa* in (96) is functioning as the subject or as a possessor modifying the object. Similarly, in (97), it is unclear whether the R-expression *na Jáániwa* is the object, or a possessor modifying the subject. Regardless, even with varying word orders, the sentences in (96) and (97) are all grammatical. I conclude from this that there is no evidence to suggest that Condition C is active clause-internally.

Now let's turn to cross-clausal contexts, which do show Condition C effects. Again, because word order is free, it can be difficult to determine whether the R-expression in question is part of the matrix clause or the subordinate clause. An example illustrating this ambiguity is given in (98).

(98)

Áániiwa	*na*	*Leo*	*kitááksstsimaahkakkisska.*
waanii-wa	ann-wa	L	kit-aak-sstsimaahk-at-ok-yiihk-wa
say-PROX	DEM-PROX	L	2-FUT-hire-TA-INV-REP-PROX

"Leo said he was going to hire you."

The linear string for the sentence in (98) can be represented as in (99a), and this string could correspond to either the structure in (99b) or (99c). In (99b), the R-expression is the matrix clause, co-referential with a null pronominal in the subordinate clause, and in (99c), the R-expression is in the subordinate clause, co-referential with a null pronominal in the matrix clause. Only the construal in (99c) constitutes a Condition C violation, but because it is unclear whether a sentence like (98) has the structure of that in (99b) or (99c), it is impossible to deduce whether (98) obeys or violates Condition C.

(99) a. V_{matrix} … R-expression … $V_{subordinate}$

b. ? [V NP_i [V *pro*$_i$]]
c. ? [V *pro*$_i$ [NP_i V]]

Davis (2009) discusses this problem as it pertains to St’át’imcets, a Salish language spoken in the Pacific Northwest. Davis employs two strategies for ensuring an unambiguous construal of the R-expression in question.

The first strategy is the use of temporal or spatial adverbials to “lock” the R-expression into place. In (100), the temporal expression *matónni* “yesterday” appears in the matrix clause, and a second temporal expression *apinákosi* “tomorrow” appears in the subordinate clause. Because these refer to different times, it isn’t possible to interpret them as modifying the same event. As such, *apinákosi* provides an unambiguous clause-boundary. In these contexts, it is clear that Blackfoot shows cross-clausal Condition C effects; the sentence is grammatical if the R-expression is in the matrix clause, binding a null pronominal in the subordinate clause, but not if the R-expression is in the subordinate clause, being bound by a null pronominal in the matrix clause.

(100) a. *Matónni na Sally áániiwa [apinákosi áákotomiihkaa].*
matonni ann-wa S waanii-wa apinakosi yaak-oto-mii-hkaa
yesterday DEM-PROX S say.AI-PROX tomorrow FUT-go.to-do-fish-acquire.AI
“Yesterday Sally$_i$ said tomorrow she$_i$ was going to go fishing.”

b. **Matónni áániiwa [apinákosi na Sally áákotomiihkaa].*
matonni waanii-wa apinakosi ann-wa S yaak-oto-mii-hkaa
yesterday say.AI-PROX tomorrow DEM-PROX S FUT-go.to.do-fish-acquire.AI
intended: “Yesterday she$_i$ said tomorrow Sally$_i$ was going to go fishing.”

Davis’ second strategy is to employ an unambiguous word order, i.e., one in which the R-expression can only be construed as belonging to one clause or the other. This is observed in (101); the subordinate clause in these sentences is verb-initial, resolving the question of whether the R-expression *oma aakííkoana* belongs in the matrix or subordinate clause. Again the evidence is clear; when the R-expression is in the matrix clause, it can bind the null pronominal in the subordinate clause, but not the other way around.

(101) a.

<table>
<tr><td>Matónni</td><td>oma</td><td>aakííkoana</td><td>áániiwa ...</td></tr>
<tr><td>matonni</td><td>om-wa</td><td>aakiikoan-wa</td><td>waanii-wa</td></tr>
<tr><td>yesterday</td><td>DEM-PROX</td><td>girl-PROX</td><td>say.AI-PROX</td></tr>
</table>

<table>
<tr><td>… [áákotomiihkaa</td><td>annohk</td><td>ksistsikóyiihk].</td></tr>
<tr><td>yaak-oto-mii-hkaa</td><td>annohk</td><td>ksistsiko-yi-hk</td></tr>
<tr><td>FUT-go.to.do-fish-acquire.AI</td><td>now</td><td>day-INAN-REP</td></tr>
</table>

"Yesterday the girl$_i$ said she$_i$ would go fishing today."

b.

<table>
<tr><td>*Matónni</td><td>áániiwa</td><td>[áákotomiihkaa ...</td></tr>
<tr><td>matonni</td><td>waanii-wa</td><td>yaak-oto-mii-hkaa</td></tr>
<tr><td>yesterday</td><td>say.AI-PROX</td><td>FUT-go.to.do-fish-acquire.AI</td></tr>
</table>

<table>
<tr><td>... oma</td><td>aakííkoana</td><td>annohk</td><td>ksistsikóyiihk].</td></tr>
<tr><td>om-wa</td><td>aakiikoan-wa</td><td>annohk</td><td>ksistsiko-yiihk</td></tr>
<tr><td>DEM-PROX</td><td>girl-PROX</td><td>now</td><td>day-INAN-REP</td></tr>
</table>

intended: "Yesterday she$_i$ said the girl$_i$ would go fishing today."

In summary, both of Davis' strategies for eliciting Condition C effects cross-clausally give positive results for Blackfoot. Although there is no evidence for Condition C clause-internally, Condition C is active cross-clausally. (Interestingly, Davis observes the opposite pattern for St'át'imcets: Condition C is active clause-internally but not cross-clausally.)

How can these findings be reconciled with the variable binding data reported in §7.4.1? I concluded on the basis of variable binding tests that there are structurally asymmetries between the subject and the object, conditioned by the direct/inverse system. Yet the Condition C data does not appear to support these findings. I suggest, following Davis (2009), that the lack of Condition C effects can be explained by some independently motivated principle of grammar (e.g., Davis adopts a version of Safir's (2004) Independence Principle), and does not reflect a lack of structural asymmetry between arguments. Notably, Blackfoot is not the only Algonquian language in which Condition C is problematic. Whereas some Algonquian languages are reported to have robust Condition C effects (cf. Branigan and MacKenzie

1999 for Innu-aimun), others are reported to lack Condition C effects altogether (cf. Bruening 2001 for Passamaquoddy; Reinholtz and Russell 1995 for Swampy Cree). Furthermore, just as Condition C is only partially active in Blackfoot (i.e., cross-clausally only), it is also only partially active in other unrelated languages, such as St'át'imcets (which shows Condition C effects only within clauses, Davis 2009) and Nuu-chah-nulth (which shows Condition C effects only with co-arguments in the same clause, Davis et al. 2007). Like Blackfoot, these languages exhibit other properties suggesting they have a hierarchical clause structure. In short, although the precise reason as to why Condition C is not active within Blackfoot clauses remains to be seen, its absence does not reflect a lack of structural asymmetries.

7.5. Conclusion

In this chapter, I have addressed from numerous angles the question of whether Blackfoot can be considered a non-configurational language. The overarching conclusion is that Blackfoot is a partial non-configurational language: proximate arguments show non-configurational properties, but obviative and plural ones do not. This is summarized in Table 7.10 below.

Table 7.10. Partial Non-Configurationality: Summary

	Non-configurational properties	**Proximate**	**Obviative**	**Plural**
Hale's diagnostics	Null anaphora	✓	✗	✗
	Free word order	✓	✗	✗
	Discontinuous expressions	✓	✓	✓
PAH	Agreement/clitic complementarity	✓	✗	✗
Structural asymmetries	Always c-commands other 3rd persons	✓	✗	✗

These findings support the analysis of proximate, obviative, and plural argument expressions developed in Chapter 3, wherein I argued that proximate argument expressions are adjoined outside the clause, but obviative and plural ones are generated in clause-internal positions. First regarding Hale's diagnostics, the fact that proximate expressions permit null anaphora and free word order follows from their status as adjuncts, which can be omitted and/or freely ordered. Conversely, the fact that obviative and plural argument expressions do not permit null anaphora or free word order supports the claim that they are in argument positions. Regarding the agreement/clitic complementarily, the fact that this is observed with proximate argument expressions follows from the claim that proximate argument expressions bind a null *pro* in an argument position. Finally, regarding the structural asymmetries, the fact that proximate argument expressions always c-command obviative and plural ones (and not vice versa) supports the claim that proximate argument expressions are higher in the structure: they are adjoined outside the clause.

CHAPTER 8

BEYOND BLACKFOOT: CROSS-ALGONQUIAN COMPARISONS

8.1. Introduction

In this dissertation, I have mapped Blackfoot's argument-typing morphemes onto the syntactic spine, and one of my main findings was a correspondence between proximate/obviative morphology and the highest functional layer in the spine, as schematized in (1).

(1)	[LINKP	**proximate**	[DP	[ϕP	[*n*P	[NP]]]]]
	[KP	**obviative**	[DP	[ϕP	[*n*P	[NP]]]]]
	[LINKP	**proximate**	[IP	[AspP	[*v*P	[VP]]]]]
	[CP	**obviative**	[IP	[AspP	[*v*P	[VP]]]]]

In this chapter, I situate this analysis in a cross-Algonquian context. I approach the question from two angles: (i) I look at what maps onto the highest functional layer of the spine in other Algonquian languages, and (ii) I look at the proximate/obviative contrast in other Algonquian languages. The findings support one of the main tenets of the Universal Spine Hypothesis (Wiltschko to appear b, Wiltschko and Déchaine 2010), namely that that the semantic content of a given linguistic object is not a good predictor of its position in the spine, and conversely that syntactic position is not a good predictor of semantic content. This is especially significant in the context of comparative analysis of related languages; even cognate morphemes may not map onto the same syntactic position.

With respect to the first point of comparison, given the relative paucity of literature on the syntactic structure of Algonquian nominal expressions,[159] I restrict the discussion to the clausal domain. I discuss two different patterns, one in which the CP is the locus of clause-typing morphology and one in which C is not associated with morphology inside the verbal complex. With respect to the second point of

[159] Much of the literature on Algonquian nominal syntax has focused on discontinuous expressions and whether nominal modifiers (e.g., demonstratives, quantifiers, and/or numerals) form a constituent with the noun or not, cf. Dahlstrom (1987); Kathol and Rhodes (1999); Reinholtz (1999); Lochbihler (2009); Johnson and Rosen (2011); Bliss (2012b). One exception is Matthewson and Reinholtz (1996), who look at the syntactic and semantic properties of determiners in various Cree dialects.

comparison, here I focus primarily on the discourse functions of obviation across Algonquian. I argue that, although the discourse functions vary across languages, they share a common property of encoding discourse in/dependence. I suggest that the discourse functions associated with obviation in Blackfoot are not lexically encoded, but arise by virtue of the syntactic properties associated with the proximate and obviative markers. I conclude with a speculation that this may also be true of other Algonquian languages.

This chapter proceeds as follows. In §8.2, I briefly recap my claims about the proximate and obviative suffixes in Blackfoot. In §8.3, I compare the CP domain of Blackfoot with that of other Algonquian languages, and in §8.4, I compare the obviation system of Blackfoot with that of other Algonquian languages.

8.2. Obviation and In/dependence in Blackfoot: A Summary

In Chapters 3 and 6, I discussed the proximate and obviative suffixes that appear on nouns and verbs, respectively. (In this chapter, I focus exclusively on the proximate/obviative contrast; as such, I do not include examples with plural morphology.) Examples are given in (2).

(2) a. *Oma* *aakííkoan**a*** *áípapai'poyi**wa***.
om-wa aakii-koan-**wa** a-ipapa-i'poyi-**wa**
DEM-PROX woman-DIM-**PROX** IMPF-in.dream-speak.AI-**PROX**
"That girl was talking in her sleep."

b. *Na* *Otskapinááki* *anni* *otán**i*** *áípapai'poyiyináyi*.
ann-wa O ann-yi w-itan-**yi** a-ipapa-i'poyi-yini-ayi
DEM-PROX O DEM-OBV 3-daughter-**OBV** IMPF-in.dream-speak.AI-OBV-3SG.PRN
"Otskapinaaki's daughter was talking in her sleep."

In (2a), both the noun *aakííkoana* and the verb *áípapai'poyiwa* are marked as proximate via the *–wa* suffix. In (2b), the noun *otáni* is marked as obviative via the suffix *–yi*, and the verb *áípapai'poyiyináyi* is marked as obviative via the suffix *–yini*.

First regarding the nominal suffixes, in Chapter 3, I argued that the proximate and obviative suffixes both associate with the highest head in the nominal spine. I demonstrated that *–wa* is neutral with respect to whether it appears in a nominal or verbal spine, and I adopted the label LINK as its category label. The fact that –*wa* is neutral can be seen in (2a); it appears on both the noun and the verb. Moreover, regardless of whether they appear in the nominal or verbal spine, proximate expressions are ambiguous between predicate and argument interpretations, as shown in (3) and (4) below.

(3) *Oma* *mamiá'tsikimi**wa***
om-wa mamia'tsikimi-**wa**
DEM-PROX magpie-**PROX**
"That's a magpie" OR "that magpie"

(4) *Anna* *áókska'si**wa***
om-wa a-okska'si-**wa**
DEM-PROX IMPF-run.AI-**PROX**
"S/he ran" OR "that runner"

I argued that proximate argument expressions are adjoined to the clause, and bind a null *pro* in argument position. As for proximate clauses, these are necessarily matrix clauses, and unlike their obviative and plural counterparts, they do not show agreement with an argument in Spec, CP. In short, proximate phrases (LINKPs) are syntactically independent; they do not enter into dependency relations with other constituents.

As for obviative –*yi*, I argued that it associates with the functional head K. Unlike proximate expressions, obviative expressions can only be interpreted as arguments. Examples contrasting with (3) and (4) above are given below.

(5) *omi* *mamiá'tsikimi**yi***
om-yi mamia'tsikimi-**yi**
DEM-OBV magpie-**OBV**
"that magpie"
NOT: "That's a magpie."

(6) *anni* *áókska'si**yi***
ann-yi a-okska'si-**yi**
DEM-OBV IMPF-run.AI-**OBV**
"that runner"
NOT: "S/he's a runner."

I proposed that *-yi* is a case marker K that appears on every argument expression in the clause, and its syntactic function is to signal that the nominal expression appears in an argument position inside the clause. A summary of my claims regarding the syntactic properties of proximate and obviative nominal expressions is given in Table 8.1.

Table 8.1. Proximate versus Obviative Nominal Expressions

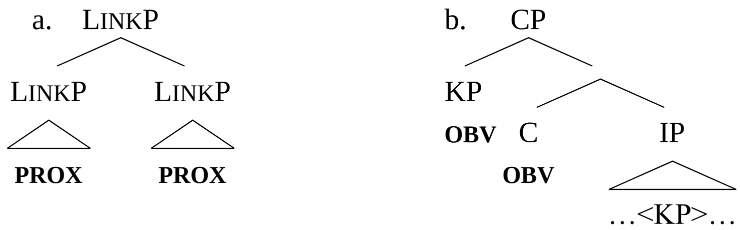
	Proximate (-*wa*)	**Obviative (-*yi*)**
Syntactic *category*	LINKP	KP
Syntactic *function*	Marks phrase as independent	Marks phrase as dependent / linked
Syntactic *position*	Adjoined to LINKP	Argument position inside the clause

In Chapter 6, I discussed the syntax of the suffixes *–wa* (proximate), and *–yini* (obviative) that appear at the right edge of the verbal complex. (Recall the examples from (2) above.) I argued that these suffixes are the head of the clause: they map onto the highest functional head in the verbal spine. As discussed above, proximate *–wa* maps onto LINK, a head that is neutral with respect to whether it appears in a verbal or nominal structure. Obviative *–yini*, however, maps onto C, and has number and animacy agreement features, requiring that an argument with matching number and animacy features appear in Spec, CP.

My evidence for claiming that these suffixes head the clause is both negative and positive. The negative evidence is that the suffixes do not exhibit properties indicating that they associate with any of the other layers in the verbal spine: they are not *v*, Asp, or INFL. The positive evidence is that the suffixes have properties characteristic of the CP domain: they are sensitive to distinctions of clause type and illocutionary force.

Across both the nominal and verbal paradigms, the generalization is that the proximate and obviative suffixes map onto the highest functional head in either the verbal or nominal spine. However, whereas proximate *–wa* signals independence, the obviative suffixes *–yi* and *–yini* signal dependency. The anti-A-position condition on proximate *–wa* ensures that LINKPS can only be matrix clauses or adjuncts. On nominal expressions, -*yi* signals that the phrase (KP) is in an argument position; it is dependent on the clause. On verbs, -*yini* signals that the head is dependent on an argument in its Specifier. This is schematized below.

(7)



8.3. The CP Layer across Algonquian

In this section, I compare Blackfoot's CP layer with that of other Algonquian languages. The comparison yields two observations, discussed in the subsections that follow. First, in §8.3.1, I show that the Blackfoot cognates of the morphemes that appear in the C position in other Algonquian languages are lower in the clausal syntax in Blackfoot. And second, in §8.3.2, I argue that, despite the fact that different material occupies the CP layer in the different languages, the independent/dependent distinction is encoded in the CP layer of other Algonquian languages as well.

8.3.1. CP in Other Algonquian Languages

In this section, I situate my analysis of the linking layer in a cross-Algonquian typology. As noted, I restrict the discussion to the linking layer in the verbal spine, i.e., the CP layer. The question I am asking is what occupies C in the other Algonquian languages, and how does this compare with Blackfoot? In what follows, I discuss two different patterns found in Algonquian, and show how Blackfoot differs from these.

8.3.1.1. Clause-Typing Morphology and Initial Change in C

The first point of comparison is with Plains Cree. Cook (2008) argues that in Plains Cree, the clause-typing morphology (i.e., the affixes that mark a clause as belonging to a particular inflectional paradigm, such as independent, conjunct, etc.) occupies C. In comparison, the clause-typing morphology in Blackfoot is located lower in the clause, in INFL (cf. Déchaine and Wiltschko 2010; Ritter and Wiltschko to appear). This is schematized below.

(8) Plains Cree: $[_{CP}$ [C=**CLAUSE-TYPE** $[_{IP}$ [I $[_{AspP}$ $[_{vP}$ $[_{VP}$]]]]]]]
Blackfoot $[_{CP}$ [C $[_{IP}$ [I=**CLAUSE-TYPE** $[_{AspP}$ $[_{vP}$ $[_{VP}$]]]]]]]

Cook presents a number of arguments to support her claim that the Plains Cree clause-typing markers are in C; here I focus on her argument from linearization. Cook shows that the clause-typing markers in Plains Cree are leftmost in the preverb domain, a morphological position that correlates with the highest position in the clause in Plains Cree. This is schematized for conjunct clauses in (9) and an illustrative example is given in (10).

(9) [**CLAUSE-TYPE**] [modality/temp.] [aspect] [STEM]
[***ê-, kâ-,*** **IC**] [*ka-*, *kî-*] [*ati-*, *mêkwâ-*, *wî-*] […] (adapted from Cook 2008, p. 20)

(10) êwakw anima pêyak kisêyiniw **ê-kî-**nakiskawak,…
êwakw anima pêyak kisêyiniw **ê-kî-**nakiskaw-ak
TOPIC DEM.INAN one old.man **C1-PREV-**meet.VTA-1>3
"I met a certain old man about that, …" (Cook 2008, p. 21)

In (9), the clause-typing markers precede all other verbal prefixes, and this is illustrated in (10); the change conjunct marker *ê-* precedes the temporal prefix *kî-*.

In comparison, Blackfoot's clause-typing markers are suffixal, and precede agreement morphology, as shown below.

(11) a. *Nitáísapihkiitaa**hp**innaan.*
nit-a-sap-ihkiitaa-**hp**-innaan.
1-IMPF-inside-cook.AI-**LOCAL**-1PL
"We are baking (lit: cooking inside an oven)."

b. *Ííksoka'piiwa* *nitáísapihkiitaa**hs**innaani.*
iik-sok-a'pii-wa nit-a-sap-ihkiitaa-**hs**-innaan-yi
INTNS-good-be.II-PROX 1-IMPF-inside-cook.AI-**CONJ**-1PL-OBV
"It's good that we are baking."

(12) a. *Kitááksikakóóyi'**hp**oaawa* *pisátskitaanists.*
kit-áak-ikak-ooyi-**hp**-oaawa pisát-ihkiitaa-n-istsi
2-FUT-only-eat.AI-**LOCAL**-2PL fancy-bake.AI-NOM-INAN.PL
"You (pl) will only eat baked goods."

b. *Íiksoka'piiwa* *kitááksikakóóyi'***hs***oaawayi* *pisátskitaanists.*
iik-sok-a'pii-wa kit-áak-ikak-ooyi-**hs**-oaawa-yi pisát-ihkiitaa-n-istsi
INTNS-good-be.II-PROX 2-FUT-only-eat.AI-**LOCAL**-2PL-*yi* fancy-bake.AI-NOM-INAN.PL
"It's good that you will only eat baked goods."

In (11a), the independent suffix *–hp*[160] precedes 1st person plural marker, and in (11b), the conjunct marker *–hs* precedes it. The same ordering is shown in (12) with the 2nd person plural marker. The 1st and 2nd person plural suffixes precede the (3rd person) number suffixes, as shown in (13).

(13) a. *Nitóhkok***innaana** *pisátssaisskiists.*
nit-ohkot-ok-**innaan-wa** pisat-saisski-istsi
1-give.TA-INV-**1PL-PROX** fancy-plant-PL
"She gave us some flowers."

b. *Kitsoká'pistotsi'p***oaaway***aaw*a.
kit-sok-a'pistotsi-'p-**oaawa-yi-**aawa
2-good-build.TI-2:INAN-**2PL-PL**-3PL.PRN
"You (pl) built them well."

The fact that the clause-typing markers in Blackfoot appear closer to the verb root than the number suffixes suggests that they are not high in the clause, unlike the clause-typing markers in Plains Cree. Based on this (and other properties of the clause-typing markers), Ritter and Wiltschko (to appear) argue that the Blackfoot clause-typing markers associate with INFL.

Consistent with this, the person prefixes in Plains Cree are argued to be in Spec, CP, but in Blackfoot they are located in Spec, IP (Cook 2008; Déchaine and Wiltschko 2010; see also Chapter 5). This is schematized below.

(14) Plains Cree: [$_{\text{CP}}$ ***ni-/ki-*** [C [$_{\text{IP}}$ [I [$_{\text{AspP}}$ [$_{v\text{P}}$ [$_{\text{VP}}$]]]]]]
Blackfoot [$_{\text{CP}}$ [C [$_{\text{IP}}$ ***nit-/kit-/ot-*** [I [$_{\text{AspP}}$ [$_{v\text{P}}$ [$_{\text{VP}}$]]]]]]

Although they are cognate forms, the person prefixes in Plains Cree and Blackfoot differ in their distribution. In Plains Cree, they are restricted to independent clauses, whereas in Blackfoot they appear

[160] Frantz (1991, 2009) does not analyse *–hp* as a morpheme but as part of the 1st and 2nd person plural morphemes. Following Ritter and Wiltschko (to appear), I assume that it associates with INFL in matrix clauses. As observed in (11)-(13), it only appears in matrix clauses when there are no 3rd person arguments. (See also Déchaine 1999 who analyses *–hp* as a morpheme that encodes the feature [LOC]).

in both independent and conjunct clauses. That the Plains Cree person prefixes are sensitive to clause-typing distinctions suggests that they are located in the CP domain. In comparison, as discussed in Chapter 5, Blackfoot's person prefixes are restricted to realis contexts, a property of the IP domain (see also Déchaine and Wiltschko 2010; Ritter and Wiltschko to appear).

Taken together, the generalizations about the clause-typing markers and the person prefixes point to the conclusion that the verbal morphology that is mapped onto the CP domain in Plains Cree is mapped onto the IP domain in Blackfoot.[161]

A second point of comparison is with Western Naskapi. Like Cook (2008), Brittain (2001) also associates clause-typing distinctions with the CP domain. However, she proposes that CP is only projected with conjunct clauses, in which case C bears a feature [CJ] ("conjunct") which facilitates the verb raising to C. For Brittain, independent clauses do not project a CP layer at all (see also Campana 1996).[162] Abstracting away from the various differences between Plains Cree and Western Naskapi, and the differences in Cook's and Brittain's analyses, the generalization is that in both languages the functional head C is associated with clause-typing morphology. Blackfoot, in comparison, locates clause-typing morphology in INFL.

Furthermore, both Plains Cree and Western Naskapi make a distinction between a "changed" and "unchanged" (or "simple") conjunct clauses; the former being characterized by a verb-initial ablaut referred to in Algonquian as INITIAL CHANGE (e.g., Costa 1996). Although initial change phenomena across Algonquian languages share a historical origin, the distribution and semantic contribution of initial change vary considerably. The common thread across languages is phonological: initial change involves verb-initial ablaut.

[161] Regarding the question how this variation is accounted for in the Universal Spine Hypothesis, the hypothesis is that, if clause-typing morphology is associated with C in Plains Cree but INFL in Blackfoot, it should fulfill different syntactic functions in each language. Specifically, in Plains Cree clause-typing morphology should fulfill a linking function and in Blackfoot it should fulfill an anchoring function. The empirical predictions that this hypothesis generates remain to be worked out.

[162] This is the opposite of what Richards (2004) claims for Wampanoag: He claims that in this language independent verbs have a CP and conjunct verbs do not. It remains to be seen how to reconcile these varying analyses.

Brittain analyses the changed and unchanged clauses as having two different complementizers: changed conjunct *a*, and a null complementizer for the unchanged conjunct. (Cook's analysis is similar; the changed conjunct is distinguished from the simple conjunct in C.) Blackfoot differs from Plains Cree and Western Naskapi in that initial change is not associated with the CP domain. Rather, it is realized on tense and aspect markers, as shown below.

(15) a.

Na	*Leo*	***íí****kska'siwa.*
ann-wa	Leo	**ii**-okska'si-wa
DEM-PROX	Leo	**IC**-run.AI-PROX

"Leo ran."

b.

Na	*Leo*	***áák****okska'siwa.*
ann-wa	Leo	**yaak**-okska'si-wa
DEM-PROX	Leo	**FUT**-run.AI-PROX

"Leo will run."

(16) a.

Na	*Piohkomiaakii*	***á****yiitsittsimaawa.*
ann-wa	P	**a**-yiitsittsimaa-wa
DEM-PROX	P	**IMPF**-slice.meat.to.dry.AI-PROX

"Piohkomiaakii is slicing the meat for drying."

b.

Kitómitaama	***á****óhkiwa*.
kit-imitaa-m-wa	**a**-ohki-wa
2-dog-POSS-PROX	**IMPF**-bark.AI-PROX

"Your dog is barking."

(17)

Ná*óhpotaawa*	*Mohkínsstsis*	*matónni.*
na-ohpotaa-wa	mohkinsstsis	matonni
EVID-snow.II-PROX	Calgary	yesterday

"It snowed in Calgary yesterday."

In (15), the initial vowel of the verb stem alternates between *o*- and *ii*-; *o*- is found in non-initial position and correlates with a non-past interpretation (i.e., it used with the future prefix *yaak*-), whereas *ii*- is found in initial position and correlates with a past time interpretation. Taylor (1967) identifies the *o~ii* alternation as a type of initial change; like initial change in other Algonquian languages, it involves ablaut at the left-edge of the verbal complex.[163] In (16), a prefix *a-* marks the verb as imperfective. Phonologically, the imperfective can also be viewed as a type of ablaut: when it combines with *y-* or *i-* initial stems, the resulting vowel is variably realized as either [eɪ] or [ɛ] and when it combines with *o-* initial stems, the resulting vowel is [ɔ]. These vowel alternations are strikingly similar to initial change alternations observed in other Algonquian languages (see Proulx 2005 for arguments that the imperfective has its roots in initial change). Finally, in (17), an evidential prefix *na-* appears at the left edge of the verbal complex to signal that the speaker is certain that the event took place. Taylor (1967) observes that initial change in some Blackfoot stems is accompanied by an *n-* prefix, and Proulx (2005: 17) comments that Blackfoot initial change is correlated with "actual as opposed to hypothetical action." Based on this, Bliss and Ritter (2009) speculate that *na-* developed from a reanalysis of *n-* and initial change as a single morpheme to indicate speaker certainty about an past time event.

The data in (15)-(17) demonstrate that, in comparison with that found in Western Naskapi and Plains Cree, Blackfoot initial change is not associated with the clause-typing markers. Moreover, it is not associated with the CP domain. Ritter (to appear) argues that past tense *ii-* and the imperfective *á-* are *v*P-level modifiers. Her evidence is based on nominalization patterns; event and result nominalizations formed from verb stems (*v*Ps) can contain these prefixes. As for *na-*, I argued in Chapter 5 that it is an evidential marker that appears in Spec, IP. Evidence for this comes from the fact that it occupies the same position as the person prefixes in Spec, IP, and that, like the person prefixes, it functions as an anchoring argument, a function I argued is associated with the Spec, IP position. In short, initial change in Blackfoot

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[163] Taylor (1967) also discusses another type of initial change, the insertion of *–ay-* following the first consonant of a restricted set of verb roots (example is from Frantz 2009, p. 37):

a. *Oma* *píítaawa* *ipóttawa*.
   om-wa piitaa-wa i-pottaa-wa
   DEM-PROX eagle-PROX IC-fly.AI-PROX
   "The eagle flew."

b. *Oma píítaawa p**ay**óttaawa*.

Taylor and Frantz both note that this process is not productive, and in fact, my consultants do not readily accept (b) with any verb roots. While Costa (1996) acknowledges that the now-archaic *–ay-* insertion is cognate with initial change in other Algonquian languages, he hesitates to draw correlations between ablaut in Blackfoot (e.g., the *ii~o* alternation) and initial change in other languages. Proulx (2005), however, argues in favour of Blackfoot ablaut as initial change.

is variably located in *v*P (on *ii*- or *a*-) or IP (on *na*-). The variation in the position of initial change in the three languages in schematized below.

(18)	Plains Cree:	$[_{CP}$ ***ê***	$[_{IP}$	$[_{AspP}$	$[_{vP}$		$[_{VP}$]]]]]
	Western Naskapi:	$[_{CP}$ ***a***	$[_{IP}$	$[_{AspP}$	$[_{vP}$		$[_{VP}$]]]]]
	Blackfoot:	$[_{CP}$	$[_{IP}$ ***na-***	$[_{AspP}$	$[_{vP}$ ***ii-/a-***		$[_{VP}$]]]]]

To summarize, whereas clause-typing morphology and initial change in Plains Cree and Western Naskapi are associated with the functional head C, in Blackfoot these morphemes are located lower in the clause.

8.3.1.2. C outside the Verbal Complex

A third language to which Blackfoot can be compared is Ojibwe. Lochbihler and Mathieu (2010) argue that in this language, the verb only raises as far as INFL (or T(ense), in their terms); it does not raise up to C. As such, if there is a C head (overt or covert), it is not located inside the verbal complex. This contrasts with Blackfoot, in which the number suffixes at the right edge of the verbal complex map onto C. The verbal complexes of these two languages are schematized below.

(19)	Ojibwe verbal complex:		$[_{IP}$	$[_{AspP}$	$[_{vP}$	$[_{VP}$]]]]]
	Blackfoot verbal complex:	$[_{\mathbf{CP}}$ *–wa/-yi/-yini*	$[_{IP}$	$[_{AspP}$	$[_{vP}$	$[_{VP}$]]]]]

Lochbihler and Mathieu's evidence for their claim that the verb does not raise to C in Ojibwe is that (non-focused) NPs and adverbs can intervene between the wh-phrase in Spec, CP and the verb, suggesting that the verb is not in C. An example is given below.

(20)	wegenesh$_i$	Mani	gaa-waabm-a-t	[t$_i$	John	gaa-giinonad t$_i$]?
	who	Mary	WH.PST-see-DIR-OBV		John	WH.PST-talk

“Who did Mary see John talking to?” (Lochbihler and Mathieu 2010, p. 22)

In (20), the NP *Mani* “Mary” intervenes between the wh-phrase *wegenesh* “who” and the verb, suggesting that the verb is not in C. Furthermore, they show that the tense prefixes on the verb show agreement with the wh-phrase in precisely the environments in which T-to-C movement is not attested crosslinguistically (i.e., relative clauses, focus constructions, and embedded wh-clauses). On this basis they conclude that the locus of wh-agreement in Ojibwe is in T, not C, and the verb raises only as far as T. Regarding the first point, Lochbihler and Mathieu point to a similar pattern in Passamaquoddy; as noted by Bruening (2001), negation and (unfocused) NPs can intervene between the wh-phrase in Spec, CP and the verb, suggesting that in this language as well, the verb does not raise to C.

Turning now to Blackfoot, like Ojibwe and Passamaquoddy, a nominal expression can intervene between the wh-phrase and the verb, as shown below.

(21)	*Tsikáá*	*na*	*Leo*	*náóksisawaatsiks?*
	tsikaa	ann-wa	L	na-oksisawoo-wa-atsiks
	who	DEM-PROX	L	EVID-visit.AI-PROX-NONAFF
	"Who did Leo visit?"			

(22)	*Tsimáá*	*na*	*Leo*	*itsapiipómmaawa*	*pisátssaisskists?*
	tsimaa	ann-wa	Leo	it-sapiipommaa-wa	pisat-saisskii-istsi
	where	DEM-PROX	Leo	LOC-plant.AI-PROX	fancy-plant-PL
	'Where did Leo plant flowers?'				

In (21), the proximate nominal expression *na Leo* intervenes between the wh-phrase *tsikáá* and the verb. Similarly in (22) *na Leo* intervenes between the wh-phrase *tsimáá* and the verb.

By analogy with Lochbihler and Mathieu's analysis of Ojibwe wh-questions, these examples should pose a problem for my analysis of the Blackfoot verbal complex as a CP. However, although a comprehensive analysis of Blackfoot wh-questions is pending, there is no evidence to suggest that the wh-phrase in Blackfoot wh-questions appears in Spec, CP. In fact, there may be evidence to the contrary. Blackfoot wh-questions do not appear to have the same structure as, for example, an English wh-question (or an Ojibwe one, for that matter). At least some wh-questions are transparently biclausal; "what" and "when" questions require that the verb be embedded under a matrix predicate formed with a verb root *anist* "be." Examples are given below.

(23)	*Tsá*	**(anistapssíwa)*	*náínima*	*na*	*Rosie?*
	tsa	anist-apssi-wa	na-ini-m-wa	ann-wa	R
	what	be-AI-PROX	EVID-see.TI-3:INAN-PROX	DEM-PROX	R
	"What did Rosie see?"				

(24)	*Tsá*	**(anistsííyi)*	*itsipóókakiwa*	*na*	*Rosie?*
	tsa	anist-sii-yi	it-ipookaki-wa	ann-wa	R
	what	be-time.II-*yi*	LOC-wake.up.AI-PROX	DEM-PROX	R
	"When did Rosie wake up?				

The "what" and "when" questions in (23) and (24) require a biclausal structure.[164] As for "why" questions, these can be formed either with a biclausal structure involving *anist* "be" (25) or with an adposition (26).

(25)	*Tsá*	*anistápiiwa(atsiksi)*	*kómohto'tóóhpa?*
	tsa	anist-apii-wa-atsiksi	k-omoht-o'too-hpa
	what	be-II-PROX-NONAFF	2-means-arrive.AI-NONAFF
	"Why did you come?"		(adapted from Frantz 2009, p. 135)

(26)	*Na*	*Sam*	*máákawaasai'niwa?*
	ann-wa	S	maak-a-waasai'ni-wa
	DEM-PROX	S	why-IMPF-cry.AI-PROX
	"Why is Sam crying?"		

The questions in (23)-(25) are biclausal, and although the questions in (21), (22), and (26) do not make use of the *anist-* verb root, it may be possible that they are (covertly) biclausal too. This situates Blackfoot amongst languages like Plains Cree, in which wh-questions are argued to be biclausal structures in which the wh-phrase appears outside the matrix CP (cf. Blain 1997). Further, it distinguishes Blackfoot from Ojibwe, which under Lochbihler and Mathieu's analysis, does not employ a biclausal structure for wh-questions.[165]

My aim here is not to advance an analysis of Blackfoot wh-questions, but simply to point out that there is no reason to assume that the wh-phrase appears in Spec, CP. As such, the fact that a nominal expression can intervene between the wh-phrase and the verb (as in (15) and (16)) does not suggest that the verb does not raise to C. In comparison, if Lochbihler and Mathieu are correct in their analysis of Ojibwe (and Passamaquoddy), then in these languages, the verb complex is an IP, and not a CP.

[164] As such, a more accurate English translation of (23) and (24) may involve a cleft construction, e.g., "What is it that Rosie saw?"

[165] However, see Johns (2008) and references cited therein for arguments in favour of a cleft-like analysis of wh-questions in various Algonquian languages, including (dialects of) Ojibwe.

Consistent with this is the observation that, in both languages, there are overt complementizers that form distinct words, separate from the verbal complex (cf. Bruening 2001; Valentine 2001).

Moreover, the fact that complementizers are distinct words in Passamaquoddy but not in Blackfoot reflects a more general comparison that can be made between Blackfoot and various other Algonquian languages. Whereas many of the other languages have function words or modifiers (often referred to as "particles") that are not integrated into the verbal complex, with little exception[166], Blackfoot does not have any independent words aside from nouns, verbs, and demonstratives. For example, Passamaquoddy has quantifier words (cf. Bruening 2001), but in Blackfoot, quantifiers are verbal prefixes, as shown in (27) below. Innu-aimun has various particles, including ones that can function as adpositions (cf. Oxford 2008), but in Blackfoot, adpositions are instantiated by the prefixes on verbs that introduce obliques, as shown in (28). Finally, like Passamaquoddy, Potawatomi also has complementizer words (Johnson 2012), whereas Blackfoot C is associated with the number suffixes.

(27)	*Omiksi*	*imitááiksi*	*íí**hkana**oksisaiskoyiiyaa*	*omiksi*	*póósiks.*
	om-iksi	imitaa-iksi	ii-**ohkana**-oksisaisko-yii-yaawa	om-iksi	poos-iksi
	DEM-PL	dog-PL	IC-**all**-chase.TA-3:4-3PL	DEM-PL	cat-PL

"All the dogs chased the cats." OR "The dogs chased all the cats."

(28)	*Nitsikssta*	*ninaahk**it**otomiihksa'si*	*omi*	*niyítahtaani.*
	nit-iksstaa	nit-aahk-**it**-oto-omiihkaa-hs-yi	om-yi	niyitahtaan-yi
	1-want.AI	1-NONFACT-**LOC**-go.to-do-go.fish.AI-CONJ-OBV	DEM-INAN	river-INAN

"I want to go fishing at that river."

The overarching generalization is that, whereas other Algonquian languages permit functional heads beyond the boundaries of the verbal complex, Blackfoot compacts its functional material inside the verbal complex.

[166] Exceptions include the conjunction *ki* "and/but", and various discourse particles such as *saa* "no" or *aa* "yes," and *ayaoo* "oops!"

8.3.1.3. Summary: CP across Algonquian

To summarize, I have discussed two different patterns found in Algonquian languages for the instantiation of C, and compared these with C in Blackfoot. First, in languages such as Plains Cree and Western Naskapi, C is the locus of clause-typing morphology and initial change. Blackfoot differs from these languages in that the locus of clause-typing morphology and initial change is lower in the clause. I hypothesize that this reflects a general distinction between Blackfoot and these languages in terms of the mapping from the morphological template to the syntactic structure: in comparison with Plains Cree and Western Naskapi, Blackfoot's clause structure is ***compressed***. This yields the prediction that cognate morphemes will be mapped to lower syntactic positions in Blackfoot than in these other languages.

The other pattern I discussed is that found in Ojibwe and Passamaquoddy. In these languages, C is not associated with verbal morphology; the verbal complex is an IP and not a CP. A salient distinction between Blackfoot and these languages (as well as Innu-aimun and Potawatomi) is that, unlike the other languages, Blackfoot does not have function words; its functional material is all contained within the verbal complex. This pattern too could be characterized in terms of a relative compression of Blackfoot's clause structure; compared to these other languages, Blackfoot's clause is compressed inside a single polysynthetic verb word.

8.3.2. Encoding the Independent/Dependent Contrast in the CP Layer

The preceding section revealed that, although obviation morphology is associated with the CP layer in Blackfoot, this is not the case in other Algonquian languages. In this section, I argue that, despite these differences, the CP layer is nevertheless associated the syntactic function of linking. Moreover, the independent/dependent contrast that is encoded in Blackfoot's CP layer has an analog in the CP layer of Western Naskapi and Plains Cree, both of which are the locus of clause-typing morphology. The fact that, in these different languages, different linguistic objects appear in the same syntactic position and fulfill the same basic syntactic function provides empirical support for the Universal Spine Hypothesis.

According to Brittain (2001), the CP layer of Western Naskapi is the locus of clause-typing distinctions. She proposes that a feature [CJ] ("conjunct") appears on the C head of conjunct verbs, whereas independent verbs are characterized by the absence of a [CJ] feature (and the absence of a CP altogether). Abstracting away from the technical details, we can observe that, just as obviation in Blackfoot clauses encodes syntactic dependency, so does Brittain's [CJ] feature. As described by Brittain, the [CJ] feature (instantiated by conjunct morphology) is present in subordinate clauses, as well as in a subset of matrix clauses. The matrix clauses that have a [CJ] feature are not syntactically independent, however; they are dependent on a CP-level operator, e.g., a wh-operator, negation operator, or focus operator.

Turning to Plains Cree, Cook (2008) argues that the primary distinction encoded in the CP domain is between indexical and anaphoric clauses. Indexical clauses, which correspond to the independent clause type, are evaluated with respect to speech situation. Anaphoric clauses, on other hand, correspond to the conjunct clause type, and these are evaluated with respect to a higher clause (in the case of subordinate conjunct clauses), or a contextually-given situation (in the case of matrix conjunct clauses).

In sum, across a number of Algonquian languages, different functional material can associate with the linking layer of the clause, i.e., the CP domain. Nevertheless, the same basic contrast between independent and dependent clauses is encoded by these different functional items in the different languages. This observation lends empirical support to the Universal Spine Hypothesis, which argues for a dedicated syntactic function at each layer of the spine. Moreover, acknowledging that cognate items across Algonquian can associate with different levels of the syntactic spine and can differ in their syntactic functions, sets the stage for developing a formal typology of Algonquian morphology.

8.4. Obviation across Algonquian

I have argued that, in Blackfoot, obviation morphology maps onto the linking layer (CP/KP) of the spine. In comparing this analysis of Blackfoot with other Algonquian languages, there are two parameters we can explore: one is to compare the linking layer across languages (as in §8.3), and the other is to compare obviation across languages. In this section, I undertake the latter comparison.

Under my analysis, the proximate/obviative contrast in Blackfoot encodes a syntactic distinction between nominal expressions. Proximate marking is used for expressions that are adjoined outside the clause, and obviative marking is used for nominal expressions that are inside the clause. This analysis differs from many accounts of obviation in other Algonquian languages, which focus on how the proximate/obviative contrast maps onto discourse functions.[167]

In this section, I situate my analysis of Blackfoot obviation in a cross-Algonquian context. I suggest that, in a broad sense, obviation in Algonquian can be characterized as coding an independent/dependent contrast. However, whereas my analysis focuses on syntactic dependency, others have focused on (various types of) discourse dependency. I suggest that these two views of obviation – the syntactic approach and discourse approach – are not incompatible, but rather reflect a process I refer to as RECRUITMENT, whereby functional items (i.e., linguistic objects that map onto the functional layers of the spine) take on discourse uses.[168]

This section proceeds as follows. In §8.4.1, I survey some of the literature on the reported discourse uses of obviation across Algonquian, and in §8.4.2, I discuss the reported discourse function(s) of obviation in Blackfoot. I argue that the syntactic properties of Blackfoot's proximate and obviative markers render them compatible with certain discourse functions. In §8.4.3, I extend this to Algonquian more generally, and I explore the idea that obviation encodes syntactic in/dependence across all Algonquian languages.

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[167] Although much of the literature on Algonquian obviation focuses on its discourse functions, I am not suggesting that my analysis is the first or only one to propose that obviation is syntactic. To give just one example, Bruening (2001) analyses the proximate/obviative contrast in Passamaquoddy as analogous to nominative/accusative case. I return to this in §8.4.3.

[168] Whether recruitment can be likened to PRAGMATICALIZATION is yet unclear. Pragmaticalization is often considered to be a subtype of grammaticalization (Brinton 1996; Diewald 2011; Traugott 2007; Traugott and König 1991), which is thought to follow a clear and predictable diachronic path (e.g., Roberts and Roussou 2003). Whether and how Algonquian obviation conforms to this path is beyond the scope of this dissertation.

8.4.1. (Some) Discourse Functions of Algonquian Obviation

There have been numerous studies on the discourse functions of Algonquian obviation systems (e.g., Dahlstrom 1991, 1996; Genee 2009; Goddard 1984, 1990; Hasler 2002; Mühlbauer 2008; Russell 1991, 1996; Thomason 2003). A bird's eye view of these studies reveals that Algonquian obviation does not have a homogeneous function across languages; its discourse properties can vary from language to language and even within languages across different discourse contexts[169]. What all Algonquian languages share, to the best of my knowledge, is a morphologically-encoded contrast between multiple 3rd persons, in which a "more salient" 3rd person is coded as proximate (which in many systems is morphologically unmarked) and all other 3rd persons are coded as obviative. Beyond this, however, the ways in which obviation contrasts are deployed for discourse purposes varies across - and possibly within - languages. Importantly, my aim here is not to reconcile the various claims about the discourse uses of Algonquian obviation, or to reduce them to a single unitary function. Rather, I survey a sample of claims about the discourse uses of obviation across Algonquian, and point to a common thread that they all share: obviation is associated with discourse dependency.

The idea that the proximate/obviative contrast reflects an independent/dependent contrast in discourse is reflected in Goddard's (1990) introduction to obviation in Fox (*aka* Meskwaki); he claims that "…if there is only one third person in a context, it can *only* be proximate. Contrasting with the proximate is the obviative, which can be thought of as a *subsidiary* third person" (p. 318, italics are mine). Thus, in Fox, an obviative third person is only licensed in the context of a proximate. This generalization is re-affirmed by Thomason (2003), who also looks at Meskwaki obviation and concludes that "…obviative inflection always implies the presence of a proximate third person" (p. 203).

In a similar vein, Mühlbauer (2008) looks at the various morphological realizations of the obviative designation in Plains Cree, and argues that they all signal some type of referential dependency on proximate third persons. Mühlbauer shows that an obviative third person may be either structurally

[169] The idea that obviation varies across different narrative genres and/or discourse contexts has been explored by, e.g., Cook and Mühlbauer (2006) and Thomason (1995).

dependent on a proximate one, or perspectivally dependent. Regarding the latter case, Mühlbauer argues that, in Plains Cree, proximate third persons are perspective-holders; they possess a perspective with which they can evaluate the truth of a given proposition. Obviative third persons, in contrast, cannot function as perspective holders. Others who have argued that the proximate/obviative contrast is cued to perspectival distinctions include Oshima 2007 (for a variety of languages) and Russell 1991 (for Swampy Cree).

In addition to (or instead of) encoding point-of-view, obviation has also been argued to encode topicality. The definition of "topic" varies; for some researchers, the topic is the constituent that is discourse-old, i.e., referring to something or someone that is already established in the discourse (e.g., Erteschik-Shir 2007). For others, "topic" is used in the "aboutness" sense; the topic is what (or who) the sentence (and/or the larger discourse) is about (e.g., Reinhart 1981). The Algonquianist tradition typically assumes this latter definition of topicality, and many have observed that the proximate designation can be used to signal the topic of the discourse. For example, Goddard (1990) tracks proximate shifts in Fox narratives, i.e., places in the discourse when a discourse referent that was not previously coded as proximate becomes proximate, and he claims that proximate shifts correspond with shifts in narrative focus. In other words, the proximate designation focuses the narrative on a particular character, or the "hero of the discourse" (cf. Goddard 1984). Russell (1996) makes a similar claim for Swampy Cree; he analogizes a narrative to a camera, and argues that the proximate designation corresponds with "what the camera is pointed at" (p. 378).

Some researchers have noted the confluence of both point-of-view and topicality in determining the proximate and obviative designations. For example, Bloomfield (1962: 38) notes that "…the proximate third person represents the topic of discourse, the person nearest the speaker's point of view, or the person earlier spoken of and already known." Dahlstrom (1991, 1996) makes similar claims for Plains Cree and Fox, arguing that the proximate designation can evoke audience empathy or focus the audience's attention on a central character. Hasler (2002) and Thomason (2003) track proximate and obviative assignment across large stretches of discourse in Innu-aimun and Meskwaki respectively, and identify a number of different discourse determinants.

Common amongst the range of discourse functions associated with obviation across and within Algonquian languages is the idea that the proximate third persons are discourse-independent, and obviative third persons are discourse-dependent. In at least some languages, obviatives are only licensed in the presence of proximates. Moreover, whereas the proximate designation is used for the perspective holder, protagonist, or main character in the discourse, the obviative designation is used for peripheral participants.

From a formal perspective, this suggests that, just as sentences have hierarchical structure, so perhaps do larger stretches of discourse. By analogy with dependency relations at the sentence level, it seems plausible to think that there are also dependency relations at the discourse level, and this would allow us to model the observation that, at least in some systems, obviative third persons are licensed in a discourse only in the presence of a proximate third person. The question of how to formally model discourse dependency relations is well beyond the scope of this dissertation[170], but the point I want to make here is that there is potentially an analog between syntactic dependency and discourse dependency.

8.4.2. Discourse Functions of Blackfoot Obviation

Throughout this dissertation, I have argued that obviation in Blackfoot has a syntactic function. In particular, I have proposed that the proximate morpheme *–wa* signals that the phrase it heads is syntactically independent, and the obviative morpheme *–yi* appears on argument expressions that are syntactically dependent on the clause. However, the proximate/obviative contrast in Blackfoot also has discourse function(s) associated with it.

For instance, Frantz (1966) describes the proximate designation in Blackfoot as encoding the "major character" in a narrative; it focuses the audience's attention on that character, and by extension the

[170] One possible model (employed by Mühlbauer 2008 in his analysis of dependencies in Plains Cree) is Discourse Representation Theory (Kamp 1981).

obviative third persons are less prominent or out of focus. Genee (2009) builds on this, claiming that the proximate designation is used for the "grammaticized topic," and the obviative designation is used for the non-topic. Genee explicitly distinguishes the Algonquianist use of topicality (e.g., aboutness) from the topic-as-old sense, and asserts that Blackfoot's proximate/obviative contrast cross-cuts the distinction between discourse-old and discourse-new referents (see also Bliss 2005b).

Genee's characterization of the discourse functions of Blackfoot obviation is consistent with what is found in other Algonquian languages: proximate third persons are discourse-independent (topics), and obviative third persons are discourse-dependent (non-topics). Moreover, it parallels my observations regarding the syntactic functions of obviation in Blackfoot: proximate third persons are syntactically independent and obviative third persons are syntactically dependent.

I suggest that that this parallelism is not a coincidence, but rather reflects compatibility between the syntactic functions and discourse functions of the proximate and obviative suffixes. How does this type of compatibility effect come about? This can be characterized as a "chicken/egg" problem: what came first, syntactic functions or discourse functions? A detailed investigation of the development of Blackfoot's obviation morphology and its associated functions is well beyond the scope of this dissertation, but in what follows, I speculate about the nature of this compatibility effect, adopting the admittedly biased standpoint that the syntactic dependency relations "came first."

In short, I venture that the compatibility effect reflects a RECRUITMENT process; the proximate and obviative suffixes encode syntactic dependency relations, but they can be recruited to signal discourse dependency relations. Recruitment of functional items for discourse uses is common cross-linguistically. It is widely discussed in the literature on discourse particles, for example in German (Abraham 1991, 2001; Bayer 2012; Bayer and Obenauer 2011; Diewald 2011; König and Requardt 1991). Many discourse particles (e.g., English *just*, German *ja*) are polyfunctional, having both syntactic functions as well as discourse uses (cf. Thoma, in prep).[171] In Blackfoot, this kind of recruitment is also attested. The

[171] There is a debate as to whether these items are in fact polyfunctional or distinct (homophonous) lexical items (e.g., Abraham 2001). I assume the polyfunctional view here.

adpositional prefix *it-* has a syntactic function (i.e., to license spatial or temporal obliques), and it also has a discourse function as an episode-boundary marker (cf. Bliss 2012a). As an episode-boundary marker, *it-* demarcates salient discourse units (i.e., episodes) in a narrative.

If recruitment were what is responsible for the discourse functions associated with Blackfoot's proximate and obviative suffixes, then there would be no need for the lexical entries of these suffixes to encode their discourse functions. Rather, the morphemes would be specified for their syntactic properties, and by virtue of the morphemes having these properties, the nominal expressions they appear on would be compatible with certain discourse functions. This would suggest that a proximate nominal expression is compatible with a topic function because of its syntactic properties, i.e., because it is syntactically independent. Conversely, an obviative nominal expression would be incompatible with a topic function because it is syntactically dependent. How exactly this can be modelled is yet unclear, but the insight is that dependency relations that operate at the sentence level may play a role in determining dependency relations at the discourse level. This view differs from that of Genee's (2009), who proposes that when the topic function is to be assigned to a referent, this triggers the appearance of the proximate morpheme *–wa*. Under the recruitment hypothesis, proximate *–wa* appears on a nominal expression (or clause) in the syntax, and by virtue of being proximate, the nominal expression (or clause) is compatible with a topic discourse function.

8.4.3. Towards a Comparative Syntax of Algonquian Obviation

In §8.4.1, I proposed that the common thread that obviation systems across Algonquian share is that they draw a distinction between discourse-independent third persons and discourse-dependent ones. Notably, in all of the languages the correspondence between proximate/obviative morphology and discourse functions is as in (29); no language has a correspondence like that in (30), in which obviative morphology is used with functions that can be characterized as discourse-independent.

(29) Proximate $\longrightarrow$ Discourse-Independent (Topic, Protagonist, Perspective-Holder)

Obviative $\longrightarrow$ Discourse-Dependent

(30) Proximate $\searrow$ Discourse-Independent (Topic, Protagonist, Perspective-Holder)

Obviative $\nearrow$ Discourse-Dependent

What can this tell us about the syntax of obviation across Algonquian? In the preceding section, I speculated that proximate and obviative suffixes in Blackfoot are not lexically encoded for discourse functions, but rather, can take on discourse functions that are compatible with their syntactic functions, i.e., syntactic in/dependence is compatible with discourse in/dependence. Extending this to Algonquian more generally, we might expect that, in at least some other Algonquian languages, discourse in/dependency should have a syntactic correlate.

Importantly, this does not mean that obviation across Algonquian should have the same syntactic properties as it does in Blackfoot. As discussed in §8.4.1, the discourse functions associated with obviation across Algonquian vary, and as such, we also expect syntactic functions to vary. For example, in some systems obviation is cued to topicality, whereas in others it is cued to perspectival notions. These two types of systems may encode different types of syntactic dependencies, and in comparing Blackfoot (which is cued to topic) and Plains Cree (which is cued to perspective), this appears to be the case. Whereas in Blackfoot, proximate marking can index referents that are clearly not perspective holders (e.g., inanimate referents, see Chapter 6), in Plains Cree proximate nominal expressions are necessarily perspective-holders (cf. Mühlbauer 2008).

Moreover, it is conceivable that a range of different syntactic functions could be compatible with a particular discourse function. In Blackfoot, the syntactic in/dependence contrast that characterizes the proximate/obviative contrast determines whether a nominal expression can appear inside a clause (KP) or not (LINKP). However, in Passamaquoddy, the proximate/obviative contrast also encodes syntactic in/dependence, but in a different way. In particular, Bruening (2001, 2009) analogizes proximate marking to nominative case and obviative to accusative case. Under a dependent case model of the nominative/accusative opposition (e.g., Marantz 1991, McFadden 2004), accusative case is licensed in the presence of nominative case; it is dependent. As such, Passamaquoddy's obviation system encodes syntactic in/dependence just as Blackfoot's does, but in a different way.

In short, I have suggested that the discourse functions associated with Algonquian obviation may arise via recruitment of functional items and that only functional items that are compatible with a particular discourse function can be recruited. While much work remains to determine the formal constraints and mechanisms behind recruitment, I suggest that this model may allow us to make certain predictions regarding the syntax of obviation in Algonquian. In particular, the prediction is not that the syntax of obviation will be invariant across Algonquian, but rather that in at least some of the other Algonquian languages, the proximate/obviative contrast will encode a syntactic in/dependence contrast of some sort. If and how this prediction is borne out across Algonquian remains to be seen.

REFERENCES

Abbott, Barbara. 1995. Some remarks on specificity. *Linguistic Inquiry* 26(2):341-347.

Abney, Steven P. 1987. *The English noun phrase in its sentential aspect*: Cambridge, MA: Dept. of Linguistics and Philosophy, Massachusetts Institute of Technology. Distributed by MIT Working Papers in Linguistics.

Abraham, Werner. 1991. The grammaticalization of German modal particles. In *Grammaticalization*, ed. Elizabeth C. Traugott and Heine Bernd, Vol. 2, 331-380. Amsterdam: John Benjamins.

Abraham, Werner. 2001. How far does semantic bleaching go?. In *Grammatical relations in change*, ed. Jan T. Faarlund, 15-64. Amsterdam: John Benjamins.

Acuña-Fariña, Juan Carlos. 1999. On apposition. *English Language and Linguistics* 3: 59-81.

Adger, David. 2003. *Core syntax: A minimalist approach*. Oxford: Oxford University Press.

Aissen, Judith. 1997. On the syntax of obviation. *Language* 73(4):705-750.

Alexiadou, Artemis. 2003. Some notes on the structure of alienable and inalienable possessors. In *From NP to DP: The expression of possession in noun phrases*, ed. Martine Coene and Yves D'hulst, Vol. 2, 167-188. Amsterdam: John Benjamins.

Alexiadou, Artemis, Liliane M. V. Haegeman and Melita Stavrou. 2007. *Noun phrase in the generative perspective*. New York: Mouton de Gruyter.

Anagnostopoulou, Elena, Henk C. v. Riemsdijk and Frans Zwarts. 1997. *Materials on left dislocation*. Amsterdam: John Benjamins.

Aoun, Joseph and Yen-hui A. Li. 1993. *Syntax of scope*. Cambridge, Mass: MIT Press.

Arad, Maya. 2005. *Roots and patterns: Hebrew morpho-syntax* Vol. 63. Dordrecht: Springer.

Armoskaite, Solveiga. 2008. Blackfoot stem initial eventive predicates: Shape shifting perfectives. In *Papers of the 39th Algonquian conference*, ed. Karl S. Hele and Regna Darnell.

Armoskaite, Solveiga. 2011. *The destiny of roots in Blackfoot and Lithuanian*: PhD dissertation, The University of British Columbia.

Austin, J. L. 1962. *How to do things with words*. Oxford: Clarendon Press.

Bach, Emmon. 1986. The algebra of events. *Linguistics and Philosophy* 9: 5-16.

Baker, Mark C. 1985. The mirror principle and morphosyntactic explanation. *Linguistic Inquiry* 16(3): 373-415.

Baker, Mark C. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.

Baker, Mark C. 1991. On some subject/object non-asymmetries in Mohawk. *Natural Language & Linguistic Theory* 9(4): 537-576.

Baker, Mark C. 1996. *The polysynthesis parameter*. New York: Oxford University Press.

Baker, Mark C. 2003. Agreement, dislocation, and partial configurationality. In *Formal approaches to function*, ed. Andrew Carnie, Heidi Harley and Mary-Ann Willie, 107-134. Amsterdam: John Benjamins.

Baker, Mark C. 2006. On zero agreement and polysynthesis. In *Arguments and agreement*, ed. Peter Ackema, Patrick Brandt, Maaike Schoorlemmer and Fred Weerman, 289-320. Oxford: Oxford University Press.

Barker, Chris. 1995. *Possessive descriptions*. Dissertations in Linguistics, Stanford: CSLI.

Barrie, Michael and Joel Dunham 2008. Noun incorporation in Blackfoot. Paper presented at the 40th Algonquian Conference. Minneapolis: University of Minnesota-Twin Cities, October 24-26, 2008.

Barrie, Michael and Éric Mathieu. 2012. Head movement and noun incorporation. *Linguistic Inquiry* 43(1): 133-142.

Bayer, Josef. 2012. From modal particle to interrogative marker: A study of German *denn*. In *Functional heads: The cartography of syntactic structures*, ed. Laura Brugé, Anna Cardinaletti, Giuliana Giusti, Nicola Munaro and Cecilia Poletto, Vol. 7, 13-28. Oxford: Oxford University Press.

Bayer, Josef and Hans-Georg Obenauer. 2011. Discourse particles, clause structure, and question types. *The Linguistic Review* 28(4):449.

Bernstein, Judy B. 1997. Demonstratives and reinforcers in Romance and Germanic languages. *Lingua* 102(2): 87-113.

Blain, Eleanor M. 1997. *Wh-constructions in Nêhiyawêwin (Plains Cree)*. Vancouver: University of British Columbia.

Blain, Eleanor M. and Rose-Marie Déchaine. 2006. The evidential domain hypothesis. In *Proceedings of WSCLA XI*, ed. Atsushi Fujimori and Maria A. Reis Silva, Vol. 19, 12-24. Vancouver: UBC Working Papers in Linguistics.

Blain, Eleanor M. and Rose-Marie Déchaine. 2007. Evidential types: Evidence from Cree Dialects. *International Journal of American Linguistics* 73(3): 257-291.

Bliss, Heather. 2003. *The semantics of the bare noun in Turkish*. Honours thesis, University of Calgary.

Bliss, Heather. 2005a. *Formalizing point-of-view: The role of sentience in Blackfoot's direct/inverse system*. MA thesis, University of Calgary.

Bliss, Heather. 2005b. Topic, focus, and point-of-view in Blackfoot. In *Proceedings of the 24th West Coast Conference on Formal Linguistics*, ed. John Alderete, Chung-hye Han and Alexei Kochetov, 61-69. Cascadilla Proceedings Project.

Bliss, Heather. 2006. Formalizing point-of-view: Sentience and obviation in Blackfoot's direct/inverse system. Paper presented at the 11th Workshop on the Structure and Constituency of the Languages of the Americas (WSCLA). Vancouver: The University of British Columbia, March 31-April 2, 2006.

Bliss, Heather. 2007. Object agreement in Blackfoot: Sentient and non-sentient controllers. In *Papers of the 38th Algonquian conference*, ed. H. C. Wolfart, 11-28. Winnipeg: University of Manitoba

Bliss, Heather. 2010a. Argument structure, applicatives, and animacy in Blackfoot. In Bliss, Heather, and Raphael Girard (eds). In *Proceedings of WSCLA 13 & 14: Workshop on the Structure and Constituency of Languages of the Americas*, ed. Heather Bliss and Raphael Girard, Vol. 26, 58-69. Vancouver, BC: UBC Working Papers in Linguistics.

Bliss, Heather. 2010b. Blackfoot *ikak-*: A case study in "only" and "even." Paper presented at the Meeting of Semanticists Active in Canada (MOSAIC) 2, McGill University, Montreal, Quebec, June 1, 2010.

Bliss, Heather. 2011. A unified analysis of Blackfoot *it-*. To appear in the *Proceedings of the 2011 Western Conference on Linguistics*. Fresno: California State University.

Bliss, Heather. 2012a. Marking the boundaries: Blackfoot preverbs in narratives and elicitation. To appear in the *Proceedings of the 17th Workshop on the Structure and Constituency of the Languages of the Americas (WSCLA 17)*. Vancouver: UBC Working Papers in Linguistics.

Bliss, Heather. 2012b. A split DP analysis of Blackfoot nominal expressions. In *Proceedings of the 2012 annual conference of the Canadian Linguistic Association* , ed. Paula Cajax. Waterloo, ON: Wilfred Laurier University.

Bliss, Heather. To appear. Assigning reference in clausal nominalizations. Paul, Ileana (ed). *Crosslinguistic investigations of nominalization patterns*. Amsterdam: John Benjamins.

Bliss, Heather, Rose-Marie Déchaine, and Tomio Hirose. 2013. Locative PPs in Blackfoot and Plains Cree. Paper presented at the annual conference of the Canadian Linguistics Association. University of Victoria, June 1-3, 2013.

Bliss, Heather and Jennifer Glougie. 2010. Speaker variation and the phonetic realization of Blackfoot obviation morphology. In *Proceedings of WSCLA 13 & 14: Workshop on the Structure and Constituency of Languages of the Americas*, ed. Heather Bliss and Raphael Girard, Vol. 26, 70-83. Vancouver, BC: UBC Working Papers in Linguistics.

Bliss, Heather, and Bettina Gruber. 2011a. Decomposing Blackfoot proclitics. Paper presented at the 34th Generative Linguistics in the Old World (GLOW) Colloquium. Vienna: University of Vienna, April 28-30, 2011.

Bliss, Heather, and Bettina Gruber. 2011b. Anchoring participants: The case of Blackfoot proclitics. Paper presented at the 21st Colloquium on Generative Grammar (CGG). Seville, Spain: University of Seville, April 7-9, 2011.

Bliss, Heather and Elizabeth Ritter. 2007. Grammaticalizing information status in Siksiká Blackfoot: A tenseless analysis. In *Proceedings of WSCLA 12: Workshop on the Structure and Constituency of*

Languages of the Americas, ed. Seok K. Chin and Hudu Fusheini, Vol. 21, 178-191. Vancouver, BC: UBC Working Papers in Linguistics.

Bliss, Heather and Elizabeth Ritter. 2009. Speaker certainty, event realization, and epistemic modality in Siksiká Blackfoot. Unpublished manuscript, The University of British Columbia and University of Calgary.

Bliss, Heather, Elizabeth Ritter and Martina Wiltschko. 2010a. A comparison of theme marking in Blackfoot and Nishnaabemwin. In *Proceedings of the 15th Workshop on the Structure and Constituency of Languages of the Americas*, ed. Beth Rogers and Anita Szakay, Vol. 29. Vancouver: UBC Working Papers in Linguistics.

Bliss, Heather, Elizabeth Ritter, and Martina Wiltschko. 2010b. A comparative analysis of theme marking in Blackfoot and Nishnaabemwin. To appear in Macaulay, Monica and Rand Valentine (eds.) *Papers of the 42nd Algonquian Conference*. Albany, NY: SUNY Press.

Bliss, Heather, Elizabeth Ritter, and Martina Wiltschko. 2012. Blackfoot nominalization patterns. To appear in Macaulay, Monica and Rand Valentine (eds.) *Papers of the 44th Algonquian Conference*. Albany, NY: SUNY Press.

Bloomfield, Leonard. 1927. Notes on the Fox language. *International Journal of American Linguistics* 4: 181-219.

Bloomfield, Leonard. 1946. Algonquian. In *Linguistic structures of native America*, ed. Harry Hoijer, 85-129. New York: Viking Fund.

Bloomfield, Leonard. 1962. *The Menomini language*. New Haven: Yale University Press.

Borer, Hagit. 2004. The grammar machine. In *The unaccusativity puzzle: Explorations of the syntax-lexicon interface*, ed. Artemis Alexiadou, Elena Anagnostopoulou and Martin Everaert, 288-331. Oxford: Oxford University Press.

Borsley, Robert D. and Jaklin Kornfilt. 2000. Mixed extended projections. *Syntax and Semantics* 32: 101-131.

Bortolin, Leah and Sean McLennan. 1995. A phonetic analysis of Blackfoot. Unpublished manuscript, University of Calgary.

Bošković, Željko. 2005. On the locality of left branch extraction and the structure of NP. *Studia Linguistica* 59(1): 1-45.

Branigan, Phil and Marguerite MacKenzie. 1999. Binding relations and the nature of *pro* in Innu-Aimun. In *Proceedings of NELS 29*, ed. Pius N. Tamanji, Masako Hirotani and Nancy Hall, 51-62. University of Massachusetts at Amherst: GLSA.

Brinton, Laurel J. 1996. *Pragmatic markers in English: Grammaticalization and discourse functions*. New York: Mouton de Gruyter.

Brittain, Julie. 1999. *The distribution of the conjunct verb form in Western Naskapi and related morpho-syntactic issues*. PhD dissertation, Memorial University, Newfoundland.

Brittain, Julie. 2001. *The morphosyntax of the Algonquian conjunct verb: A minimalist approach*. New York: Garland.

Brittain, Julie. 2003. A distributed morphology account of the syntax of the Algonquian verb. In *Proceedings of the 2003 annual conference of the Canadian Linguistics Association*, ed. Sophie Burelle and Stanca Somesfalean, 25-39. Montreal: UQAM.

Bruening, Benjamin. 2001. *Syntax at the edge: Cross-clausal phenomena and the syntax of Passamaquoddy*. PhD dissertation, MIT.

Bruening, Benjamin. 2009. Algonquian languages have A-movement and A-agreement. *Linguistic Inquiry* 40(3):427-445.

Bruening, Benjamin and Andrea Rackowski. 2000. Configurationality and object shift in Algonquian. In *Proceedings of the Workshop of the Structure and Constituency of Languages of the Americas*, ed. Susanne Gessner, S. Oh and K. Shiobara, Vol. 5, 71-84. Vancouver: UBC Working Papers in Linguistics.

Bullshields, Beatrice, Solveiga Armoskaite, Michael Barrie, Heather Bliss, Joel Dunham, Jennifer Glougie, Meagan Louie, and Martina Wiltschko. 2008. Collecting a Blackfoot creation story:

Methodological and empirical observations. Paper presented at Paper presented at WSCLA 3: The Workshop on Structure and Constituency in the Languages of the Americas. Kingston: Queens University. March 28-30, 2008.

Cabredo Hofherr, Patricia. 2010. Adjectives - an introduction. In *Adjectives: Formal analyses in syntax and semantics*, ed. Patricia Cabredo Hofherr and Ora Matushansky, 1-28. Amsterdam: John Benjamins.

Campana, Mark. 1996. The conjunct order in Algonquian. *Canadian Journal of Linguistics* 41(3): 201-234.

Campbell, Richard. 1996. Specificity operators in SpecDP. *Studia Linguistica* 50(2):161-188.

Carlson, Greg N. 1977. A unified analysis of the English bare plural. *Linguistics and Philosophy* 1(3):413-456.

Carlson, Gregory N. 1980. *Reference to kinds in English*. New York: Garland.

Cecchetto, Carlo. 2000. Doubling structures and reconstruction. *Probus* 12(1):93-126.

Cheng, Lisa L. S. 1991. *On the typology of wh-questions:* PhD dissertation, MIT.

Choi, Jaehoon. 2012. Demonstrative-reinforcer constructions. Paper presented at the Western Conference on Linguistics 2011. Vancouver: Simon Fraser University, November 18-20, 2011.

Chomsky, Noam. 1970. Remarks on nominalization. In *Readings in English transformational grammar*, ed. Roderick Jacobs and Peter Rosenbaum, 184-221. Washington: Georgetown University Press.

Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.

Chomsky, Noam. 1995. *The minimalist program* Vol. 28. Cambridge, Mass: The MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A Life in Language*, ed. Michael Kenstowicz, 1-52. Cambridge: MIT Press.

Christianson, Keil T. 2002. *Sentence processing in a "nonconfigurational" language*. PhD dissertation, Michigan State University.

Chung, Sandra and William A. Ladusaw. 2004. *Restriction and saturation*. Cambridge, Mass: MIT Press.

Cinque, Guglielmo. 1990. *Types of Ā-dependencies*. Cambridge, Mass: MIT Press.

Cinque, Guglielmo. 2002. *Functional structure in DP and IP: The cartography of syntactic structures, volume 1*. New York: Oxford University Press.

Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press.

Cook, Clare E. 2008. *The syntax and semantics of clause-typing in Plains Cree*. PhD dissertation, The University of British Columbia.

Cook, Clare E. and Jeffrey Mühlbauer. 2006. The behaviour of obviation in elicitation. In *Papers of the 37th Algonquian conference*, ed. H. C. Wolfart, 103-129. Winnipeg: University of Manitoba.

Costa, David J. 1996. Reconstructing initial change in Algonquian. *Anthropological Linguistics* 38(1): 39-72.

Cowper, Elizabeth. 2005. The geometry of interpretable features: Infl in English and Spanish. *Language* 81(1): 10-46.

Cyr, Danielle. 1993. Cross-linguistic quantification: Definite articles vs. demonstratives. *Language Sciences* 15(3): 195-229.

Dahlstrom, Amy. 1987. Discontinuous constituents in Fox. In *Native American languages and grammatical typology*, ed. Paul D. Kroeber and Robert E. Moore, 53-73. Bloomington: Indiana University Linguistics Club.

Dahlstrom, Amy. 1988. Independent pronouns in Fox. In In Honor of Mary Haas: From the Haas Festival Conference on Native American Linguistics, ed. William Shipley, 165-194. Berlin: Mouton de Gruyter.

Dahlstrom, Amy. 1991. *Plains Cree morphosyntax*. New York: Garland.

Dahlstrom, Amy. 1995. *Topic, focus, and other word order problems in Algonquian*. The Belcourt Lecture, delivered before the University of Manitoba on 25 February 1994. Winnipeg: Voices of Rupert's Land.

Dahlstrom, Amy. 1996. Narrative structure of a Fox text. In *Nikotwâsik iskwâhtêm, pâskihtêpayih! Studies in honour of H.C. Wolfart*, ed. John D. Nichols and Arden C. Ogg, Memoir 13, 113-162. University of Manitoba: Algonquian and Iroquoian Linguistics.

Davis, Henry. 2009. Cross-linguistic variation in anaphoric dependencies: Evidence from the Pacific Northwest. *Natural Language & Linguistic Theory* 27(1): 1-43.

Davis, Henry, Ryan Waldie and Rachel Wojdak. 2007. Condition C effects in Nuu-chah-nulth. *Canadian Journal of Linguistics* 52(1/2): 185-222.

Dayal, Veneeta. 2011. Hindi pseudo-incorporation. *Natural Language & Linguistic Theory* 29(1): 123-167.

Déchaine, Rose-Marie. 1999. What Algonquian morphology is really like: Hockett revisited. In *Papers from the Workshop on the Structure and Constituency of Languages of the Americas*, ed. Leora Bar-el, Rose-Marie Déchaine and Charlotte Reinholtz, Vol. 17, 25-72. Cambridge, Mass: MIT Occasional Papers in Linguistics.

Déchaine, Rose-Marie, Raphaël Girard, Calisto Mudzingwa, and Martina Wiltschko. 2013. The internal syntax of Shona noun class prefixes. To appear in *Language Sciences*.

Déchaine, Rose-Marie, David Johnson, Anne-Marie Kidd, Andrew Matheson, Audra Vincent, and Martina Wiltschko. 2011. Personal pronouns in Blackfoot and Plains Cree. To appear in the *Proceedings of the 2011 Western Conference on Linguistics*. Fresno: California State University.

Déchaine, Rose-Marie, and Charlotte Reinholtz. 1997. Direct/inverse as case-licensing. Paper presented at WSCLA 3: The Workshop on Structure and Constituency in the Languages of the Americas. Regina: Saskatchewan Federated Indian College.

Déchaine, Rose-Marie, and Charlotte Reinholtz. 2008. Case theory meets linking theory: Algonquian direct/inverse as split case. Paper presented at WSCLA 13: The Workshop on the Structure and Constituency of the Languages of the Americas. Kingston, ON: Queens University.

Déchaine, Rose-Marie and Mireille Tremblay. 2011. Deriving nominal reference. To appear in the *Proceedings of the 2011 Western Conference on Linguistics*. Fresno: California State University

Déchaine, Rose-Marie and Martina Wiltschko. 2002. Decomposing pronouns. *Linguistic Inquiry* 33(3): 409-442.

Déchaine, Rose-Marie, and Martina Wiltschko 2010. Micro-variation in agreement, clause-typing and finiteness: Comparative evidence from Blackfoot and Plains Cree. To appear in Macaulay, Monica and Rand Valentine (eds.) *Papers of the 42nd Algonquian Conference*. Albany, NY: SUNY Press.

de Haan, Ferdinand. 2001. The relation between modality and evidentiality. In *Modalität und modalverben im deutschen*, ed. Müller Reimer and Marga Reis, 201-216. Hamburg: Helmut Buske Verlag.

DeLancey, Scott. 1981. An interpretation of split ergativity and related patterns. *Language* 57(3):626-657.

Demirdache, Hamida and Myriam Uribe-Etxebarria. 1997. The syntax of temporal relations: A uniform approach to tense and aspect. In *Proceedings of the 16th West Coast Conference on Formal Linguistics*, ed. Emily Curtis, James Lyle and Gabriel Webster, 145-159. Stanford: CSLI Publications.

Derrick, Donald. 2007. Syllabification and Blackfoot 's'. *Proceedings of NWLC 22, SFU Working Papers in Linguistics* 1: 62-76.

Diewald, Gabriele. 2011. Pragmaticalization (defined) as grammaticalization of discourse functions. *Linguistics* 49(2): 365-390.

Di Sciullo, Anne-Marie.2005. Affixes at the edge. *Canadian Journal of Linguistics* 50: 83-117.

Dixon, R.M.W. 1994. *Ergativity*. Cambridge: Cambridge University Press.

Dryer, Matthew S. 1992. The Greenbergian word order correlations. *Language* 68(1): 81-138.

Dunham, Joel. 2007. The “durative” in Blackfoot: Understanding imperfectivity. In *Proceedings of SULA 4: Semantics of Under-represented Languages in the Americas*, ed. Amy R. Deal, Vol. 35, 49-60. Amherst: University of Massachusetts occasional papers in linguistics.

Dunham, Joel. 2008. A unified analysis of the habitual and in-progress readings of *á* in Blackfoot. Unpublished manuscript, The University of British Columbia.

Dunham, Joel. 2009. Noun incorporation in Blackfoot. Unpublished manuscript, The University of British Columbia.

Enç, Mürvet. 1987. Anchoring conditions for tense. *Linguistic Inquiry* 18(4): 633-657.

Enç, Mürvet. 1991. The semantics of specificity. *Linguistic Inquiry* 22(1): 1-25.

Erteschik-Shir, Nomi. 2007. *Information structure: The syntax-discourse interface*. New York: Oxford University Press, UK.

Evans, Gareth. 1980. Pronouns. *Linguistic Inquiry* 11(2): 337-362.

Farkas, Donka and Henriette de Swart. 2003. *The semantics of incorporation: From argument structure to discourse transparency*. Stanford, CSLI Publications.

Forbes, Clarissa. 2012. Blackfoot demonstratives: Exploring compositionality and variation. Unpublished manuscript, The University of British Columbia.

Fox, Jacinta and Donald G. Frantz. 1979. Blackfoot clitic pronouns. In Papers of the 10th Algonquian Conference, ed. by William Cowan, 152-166. Ottawa: Carlton University.

Frantz, Donald G. 1966. Person indexing in Blackfoot. *International Journal of American Linguistics* 32(1): 50-58.

Frantz, Donald G. 1991. *Blackfoot grammar*. Toronto: University of Toronto Press.

Frantz, Donald G. 2009. *Blackfoot grammar*. 2nd ed. Toronto: University of Toronto Press.

Frantz, Donald G. and Norma Russell. 1995. *Blackfoot dictionary of stems, roots, and affixes*. 2nd ed. Toronto: University of Toronto Press.

Genee, Inge. 2009. What's in a morpheme? Obviation morphology in Blackfoot. *Linguistics* 47(4): 913-944.

Ghomeshi, Jila. 2003. Plural marking, indefiniteness, and the noun phrase. *Studia Linguistica* 57(2): 47-74.

Giannakidou, Anastasia. 1998. *Polarity sensitivity as (non) veridical dependency*. Amsterdam: John Benjamins.

Gick, Bryan, Heather Bliss, Karin Michelson and Bosko Radanov. 2012. Articulation without acoustics: "soundless" vowels in Oneida and Blackfoot. *Journal of Phonetics* 40(1):46-53.

Gillon, Carrie. 2006. *The semantics of determiners: Domain restriction in S<u>k</u>wx<u>x</u>wú7mesh*. PhD dissertation, The University of British Columbia.

Gillon, Carrie. 2009. The semantic core of determiners: Evidence from S<u>k</u>wx<u>x</u>wú7mesh. In *Determiners: Universals and variation*, ed. Jila Ghomeshi, Ileana Paul and Martina Wiltschko, 177-214. Amsterdam: John Benjamins.

Giusti, Giuliana. 1997. The categorial status of determiners. In *The new comparative syntax*, ed. Liliane M. V. Haegeman, 95-123. London: Longman.

Glenbow Museum / Virtual Museum of Canada. 2012. *Niitsitapiisini: Our Way of Life.* http://www.glenbow.org/blackfoot/EN/html/. Accessed 2012 January 14.

Glougie, Jennifer R. S. 2001. *Topics in the syntax and semantics of Blackfoot quantifiers and nominals*. MA thesis, The University of British Columbia.

Goddard, Ives. 1974. Remarks on the Algonquian independent indicative. *International Journal of American Linguistics* 40(4): 317-327.

Goddard, Ives. 1984. The obviative in Fox narrative discourse. In *Papers of the fifteenth Algonquian conference*, ed. William Cowan, 273-286. Ottawa: Carleton University.

Goddard, Ives. 1990. Aspects of the topic structure of Fox narratives: Proximate shifts and the use of overt and inflectional NPs. *International Journal of American Linguistics* 56(1): 317-340.

Greenberg, Joseph H. 1978. How does a language acquire gender markers? In *Universals of human language*, ed. Joseph H. Greenberg, Charles Ferguson and Edith Moravcik, Vol. III, 47-82. Stanford: Stanford University Press.

Grimshaw, Jane B. 1990. *Argument structure*. Cambridge, Mass: MIT Press.

Gruber, Bettina. In prep. The spatiotemporality of person: The view from syntax. PhD dissertation, Utrecht University.

Hale, Ken. 1983. Warlpiri and the grammar of non-configurational languages. *Natural Language & Linguistic Theory* 1(1):5-47.

Hale, Ken. 1986. Notes on world view and semantic categories: Some Warlpiri examples. In *Features and projections*, ed. Pieter Muysken and Henk van Riemsdijk, 233-254. Dordrecht: Foris.

Hale, Ken and Samuel J. Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In *The view from building 20: Essays in linguistics in honour of Sylvain Bromberger*, ed. Ken Hale and Samuel J. Keyser, 53-110. Cambridge, Mass: MIT Press.

Halle, Morris and Alec Marantz. 1993. *Distributed morphology and the pieces of inflection*. In *The view from building 20: Essays in linguistics in honour of Sylvain Bromberger*, ed. Ken Hale and Samuel J. Keyser, 111-176. Cambridge, Mass: MIT Press.

Han, Chung-hye. 2000. *The structure and interpretation of imperatives: Mood and force in universal grammar*. New York: Routledge.

Han, Chung-hye. 2002. Interpreting interrogatives as rhetorical questions. *Lingua* 112: 201-229.

Hanson, Rebecca, Sara Johansson and Kim Meadows. 2010. Accompaniment in Blackfoot and Yine. Paper presented at the SSILA 2010 Annual Meeting, Baltimore, MD.

Harley, Heidi and Elizabeth Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78(3): 482-526.

Hasler, Laurel A. 2002. *Obviation in two Innu-Aimun atanukana*. MA thesis ed.: Memorial University.

Hirose, Tomio. 2003. *Origins of predicates: Evidence from Plains Cree*. New York: Routledge.

Hockett, Charles F. 1966. What Algonquian is really like. *International Journal of American Linguistics* 32(1): 59-73.

Iatridou, Sabine, Elena Anagnostopoulou and Roumyana Izvorski. 2002. Some observations about the form and meaning of the perfect. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, 189-238. Cambridge, Mass: MIT Press.

Izvorski, Roumyana. 1997. The present perfect as an epistemic modal. In *Proceedings of SALT VII*, ed. Aaron Lawson and Enn Cho, 222-239. Cornell University: eLanguage journals.

Jackendoff, Ray. 1972. *Semantic interpretation in generative grammar*. Cambridge, Mass: MIT Press.

James, Deborah, Sandra Clarke and Marguerite MacKenzie. 2001. The encoding of information source in Algonquian: Evidentials in Cree/Montagnais/Naskapi. *International Journal of American Linguistics* 67(3): 229-263.

Jelinek, Eloise. 1984. Empty categories, case, and configurationality. *Natural Language & Linguistic Theory* 2(1): 39-76.

Johansson, Sara. 2008. The status of nominal gender in Algonquian: Evidence from psych verbs. In *Proceedings of the 2008 annual conference of the Canadian Linguistics Association*, ed. Susie Jones. Vancouver, The University of British Columbia.

Johansson, Sara. 2012. Relative clauses, or clause-sized nominalizations? A consideration of Blackfoot. *Working Papers of the Linguistics Circle* 21(2): 1-15.

Johansson, Sara and Elizabeth Ritter. 2008. Determinants of split intransitivity in Blackfoot: Evidence from verbs of emission. In *Papers of the 40th Algonquian conference*, ed. Karl S. Hele and Randolph J. Valentine. Albany, NY: SUNY Press.

Johns, Alana. 2008. Some issues concerning Algonquian WH questions. In *Toronto Working Papers in Linguistics*, ed. Catherine MacDonald, Ulyana Savchenko and Tanya Slavin. Toronto: University of Toronto Press.

Johnson, Meredith. 2012. New arguments for the position of the verb in Potawatomi. Paper presented at the 44th Algonquian Conference. Chicago: University of Chicago, October 25-28, 2012.

Johnson, Meredith, and Bryan Rosen. 2011. The syntax of discontinuous noun phrases in Algonquian languages: left branch extractions and focus movement. Paper presented at the 43rd Algonquian Conference. Ann Arbour: University of Michigan, October 21-23, 2011.

Junker, Marie-Odile. 1994. La syntaxe du quantifieur universel en algonquin. *Canadian Journal of Linguistics* 39(1): 1-13.

Junker, Marie-Odile. 2004. Focus, obviation, and word order in East Cree. *Lingua* 114(3): 345-365.

Junker, Marie-Odile and Marguerite MacKenzie. 2003. Demonstratives in East Cree. In *Papers of the 34th Algonquian conference*, ed. H. C. Wolfart, 201-215. Winnipeg: University of Manitoba Press.

Kamp, Hans. 1981. A theory of truth and semantic representation. In Formal methods in the study of language, ed. Jeroen Groenendijk, Theo Janssen, and Martin Stokhof, 277-322. Amsterdam: Mathematics Centre.

Kaneko, Ikuyo. 1999. *A metrical analysis of Blackfoot nominal accent in optimality theory*. MA thesis, The University of British Columbia.

Kathol, Andreas and Richard A. Rhodes. 1999. Constituency and linearization of Ojibwe nominals. In *Proceedings of WSCLA 4 - Workshop on Structure & Constituency in Languages of the Americas*, ed. Marion G. Caldecott, Suzanne C. Gessner and Eun-Sook Kim, 75-91. Vancouver: UBC Working Papers in Linguistics.

Kayne, Richard S. 1994. *The antisymmetry of syntax*. Cambridge, Mass: MIT Press.

König, Ekkehard and Susanne Requardt. 1991. A relevance-theoretical approach to the analysis of modal particles in German. *Multilingua* 10: 63-77.

Kornfilt, Jaklin and John Whitman. 2011. Afterword: Nominalizations in syntactic theory. *Lingua* 121(7): 1297-1313.

Legate, Julie A. 2002. *Warlpiri: Theoretical implications*. PhD dissertation, MIT.

LeSourd, Philip S. 2006. Problems for the pronominal argument hypothesis in Maliseet-Passamaquoddy. *Language* 82(3): 486-514.

Leu, Thomas. 2008. *The internal syntax of determiners*. PhD dissertation, NYU.

Lewis, Paul. 2009. *Ethnologue: Languages of the world, sixteenth edition*. http://www.ethnologue.com. SIL International.

Link, Godehard. 1983. The logical analysis of plurals and mass terms. In *Meaning, use, and interpretation of language*, ed. R. Bauerle, C. Schwartze and A. von Stechow, 302-323. Berlin: Mouton de Gruyter.

Lochbihler, Bethany. 2009. Discontinuous DP constructions. In *Proceedings of the 2009 annual conference of the Canadian Linguistics Association*, ed. Frédéric Mailhot. Ottawa: Carleton University.

Lochbihler, Bethany and Éric Mathieu. 2010. Wh-agreement in Ojibwe: Consequences for feature inheritance and the categorial status of tense. In *Proceedings of WSCLA 13 & 14: Workshop on the Structure and Constituency of Languages of the Americas.*, ed. Heather Bliss and Raphael Girard, Vol. 26, 14-31. Vancouver: UBC Working Papers in Linguistics.

Longobardi, Giuseppe. 1994. Reference and proper names: A theory of N-movement in syntax and logical form. *Linguistic Inquiry* 25(4): 609-665.

Louie, Meagan. 2008. *Atemporal anchoring of individuals, events, and subevents in Blackfoot: Consequences for the syntax-semantics interface*. MA thesis, University of Toronto.

Louie, Meagan. 2009. The Blackfoot 'means' linker *iiht*-. Unpublished manuscript, The University of British Columbia.

Louie, Meagan. 2011a. Mapping opposite truth-values: A semantics for Blackfoot *noohk*-. In *Proceedings for the Workshop and the Structure and Constituency of the Languages of the Americas (WSCLA) 16*, ed. Alexis Black and Meagan Louie, Vol. 31, 105-120. Vancouver: UBC Working Papers in Linguistics.

Louie, Meagan. 2011b. Deriving full repetition in Blackfoot with additive focus. In *Proceedings of the 20th Semantics and Linguistic Theory conference*, ed. Nan Li and David Lutz, 1-18: eLanguage Journals.

Louie, Meagan. 2012. Evidence and consequences for a stative/eventive distinction in Blackfoot's modal domain. Unpublished manuscript, The University of British Columbia.

Louie, Meagan. In prep. Time, volition, and circumstance in Blackfoot conditionals. PhD dissertation, The University of British Columbia.

Lowenstamm, Jean. 2007. On little *n*, ROOT, and types of nouns. In *The sounds of silence: Empty elements in syntax and phonology*, ed. Jutta Hartmann, Veronika Hegedus and Henk van Riemsdijk, 105-140. Amsterdam: Elsevier.

Lyons, Christopher. 1999. *Definiteness*. New York: Cambridge University Press.

MacDonald, Jonathan E. 2008. *The syntactic nature of inner aspect: A minimalist perspective*. Amsterdam: John Benjamins.

Maling, Joan. 1990. *Syntax and semantics: Modern Icelandic syntax*. London: Academic Press.

Marantz, Alec. 1991. Case and licensing. In *Proceedings of ESCOL*, Columbus, OH: Ohio State University.

Marantz, Alec. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon . In *Proceedings of the 21st Penn linguistics colloquium*, ed. Alexis Dimitriadis. Philadelphia: Penn Working Papers in Linguistics.

Markman, Vita G. 2009. On the parametric variation of case and agreement. *Natural Language & Linguistic Theory* 27(2): 379-426.

Massam, Diane. 2001. Pseudo noun incorporation in Niuean. *Natural Language and Linguistic Theory* 19(1): 153-197.

Mathieu, Éric. 2006. The syntax of abstract and concrete finals in Ojibwe. In *Proceedings of 37th annual meeting of the Northeast Linguistics Society*, ed. Emily Elfner and Martin Walkow. University of Massachusetts at Amherst: GLSA.

Matthewson, Lisa and Charlotte Reinholtz. 1996. The syntax and semantics of determiners: A comparison of Salish and Cree. *Papers of the International Conference on Salish and Neighbouring Languages* 31: 211-238. Vancouver, BC.

May, Robert. 1977. *The grammar of quantification*. New York: Garland.

McCoard, Robert W. 1978. *The English perfect: Tense-choice and pragmatic inferences*. Amsterdam: North-Holland Pub.

McFadden, Thomas. 2004. *The position of morphological case in the derivation: A study on the syntax-morphology interface*. PhD dissertation, University of Pennsylvania.

McGinnis, Martha. 1999. Is there syntactic inversion in Ojibwe?. In *Papers from the Workshop on the Structure and Constituency of the Languages of the Americas*, ed. Leora Bar-el, Rose-Marie Déchaine and Charlotte Reinholtz, Vol. 17, 101-118. Cambridge, Mass: MIT occasional papers in linguistics.

Megerdoomian, Karine. 2008. Parallel nominal and verbal projections. In *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, ed. Robert Freidin, Carlos Otero and Maria L. Zubizarreta. Cambridge, Mass: MIT Press.

Mittwoch, Anita. 1993. The relationship between schon/already and noch/still: A reply to Löbner. *Natural Language Semantics* 2(1): 71-82.

Mühlbauer, Jeffrey. 2003. Word order and the interpretation of nominals in Plains Cree. Unpublished manuscript, The University of British Columbia.

Mühlbauer, Jeffrey. 2007. Evidence for three distinct nominal classes in Plains Cree. *Natural Language Semantics* 15(2): 167-186.

Mühlbauer, Jeffrey T. 2008. *kâ-yôskâtahk ôma nêhiyawêwin : The representation of intentionality in Plains Cree*. PhD dissertation, The University of British Columbia.

Musan, Renate. 1995. *On the temporal interpretation of noun phrases*. PhD dissertation, MIT.

Musan, Renate. 1999. Temporal interpretation and information-status of noun phrases. *Linguistics and Philosophy* 22(6): 621-661.

Nespor, Marina and Irene Vogel. 1986. *Prosodic phonology*. Riverton, N.J: Foris.

Ogawa, Yoshiki. 2001. *A unified theory of verbal and nominal projections*. New York: Oxford University Press.

Oshima, David Y. 2007. Syntactic direction and obviation as empathy-based phenomena: A typological approach. *Linguistics* 45(4): 727-763.

Oxford, Will. 2008. *A grammatical study of Innu-Aimun particles*. Winnipeg: Algonquian and Iroquoian Linguistics.

Oxford, Will. 2012. A theoretical perspective on Proto-Algonquian verb inflection. Paper presented at the 44th Algonquian Conference. Chicago: University of Chicago, October 25-28, 2012.

Panagiotidis, Phoevos. 2000. Demonstrative determiners and operators: The case of Greek. *Lingua* 110: 717-742.

Panagiotidis, Phoevos and Kleanthes Grohmann. 2009. Mixed projections: Categorial switches and prolific domains. *Linguistic Analysis* 35: 141-161.

Partee, Barbara. 1983/1997. Uniformity vs. versatility: The genitive, a case study. In *The handbook of logic and language*, ed. Johan van Benthem and Alice ter Meulen, 464-470. New York: Elsevier.

Paul, Ileana. 2009. On the presence versus absence of determiners in Malagasy. In *Determiners: Universals and variation*, ed. Jila Ghomeshi, Ileana Paul and Martina Wiltschko, 215-242. Amsterdam: John Benjamins.

Pensalfini, Rob. 2004. Towards a typology of configurationality. *Natural Language & Linguistic Theory* 22(2): 359-408.

Pereltsvaig, Asya. 2007. The universality of DP: A view from Russian. *Studia Linguistica* 61(1): 59-94.

Pesetsky, David and Esther Torrego. 2004. Tense, case, and the nature of syntactic categories. In The syntax of time, ed. Jacqueline Guéron and Jacqueline Lecarme, 495-538. Cambridge: Massachusetts Institute of Technology.

Pittman, Christine and Richard Compton. 2010. Word formation by phase in Inuit. *Lingua* 120(9): 2167-2192.

Pollock, Jean-Yves. 1989. Verb movement, universal grammar, and the structure of IP. *Linguistic Inquiry* 20(3): 365-424.

Portner, Paul. 2003. The (temporal) semantics and (modal) pragmatics of the perfect. *Linguistics and Philosophy* 26(4): 459-510.

Proulx, Paul. 1988. The demonstrative pronouns of Proto-Algonquian. *International Journal of American Linguistics* 54(3): 309-330.

Proulx, Paul. 1989. A sketch of Blackfoot historical phonology. *International Journal of American Linguistics* 55(1): 43-82.

Proulx, Paul. 2005. Initial change in Blackfoot. In *Calgary Papers in Linguistics*, ed. Ilana Mezhevich, Heather Bliss and Michael B. Dobrovolsky, Vol. 26, 1-26. University of Calgary: Department of Linguistics.

Quinn, Conor M. 2006. *Referential-access dependency in Penobscot*. PhD dissertation, Harvard University.

Reinhart, Tanya. 1981. Pragmatics and linguistics: An analysis of sentence topics. *Philosophica* 27: 53-94.

Reinhart, Tanya. 1983. *Anaphora and semantic interpretation*. Chicago: University of Chicago Press.

Reinholtz, Charlotte. 1999. On the characterization of discontinuous constituents: Evidence from Swampy Cree. *International Journal of American Linguistics* 65(2): 201-227.

Reinholtz, Charlotte and Kevin Russell. 1995. Quantified NPs in pronominal argument languages: Evidence from Swampy Cree. In *Proceedings of the North East Linguistic Society 25*, ed. Jill Beckman, 389-402. Amherst, Mass: GLSA.

Reis Silva, Amelia. In prep. Modality in Blackfoot. PhD dissertation: The University of British Columbia.

Rhodes, Richard A. 1990. Ojibwe secondary objects. In *Grammatical relations: A cross-theoretical perspective*, ed. K. Dziwirek, P. Farrell and E. Mejias-Bikandi, 401-414. Palo Alto: CSLI Stanford.

Rhodes, Richard A. 2010. Relative root complement: A unique grammatical relation in Algonquian syntax. In *Rara & rarissima: Documenting the fringes of linguistic diversity*, ed. Jan Wohlgemuth and Michael Cysouw, 305-324. Berlin: Mouton De Gruyter.

Rice, Keren. 2000. *Morpheme order and semantic scope: Word formation in the Athapaskan verb*. Cambridge: Cambridge University Press.

Rijkhoff, Jan N. M. 1991. Nominal aspect. *Journal of Semantics* 8(4): 291-309.

Ritter, Elizabeth. 1995. On the syntactic category of pronouns and agreement. *Natural Language & Linguistic Theory* 13(3): 405-443.

Ritter, Elizabeth. To appear. Nominalizing inner-aspect: Evidence from Blackfoot. Paul, Ileana (ed). *Crosslinguistic investigations of nominalization patterns*. Amsterdam: John Benjamins.

Ritter, Elizabeth and Sara Thomas Rosen. 2005. Agreement without A-positions: Another look at Algonquian. *Linguistic Inquiry* 36(4): 648-660.

Ritter, Elizabeth and Sara Thomas Rosen. 2010a. Animacy in Blackfoot: Implications for event structure and clause structure. In *Lexical semantics, syntax, and event structure*, ed. Malka Rappaport-Hovav, Edit Doron and Ivy Sichel, 124-152. Oxford: Oxford University Press.

Ritter, Elizabeth and Sara Thomas Rosen. 2010b. Possessors as external arguments: Evidence from Blackfoot. To appear in Macaulay, Monica and Rand Valentine (eds.) *Papers of the 42nd Algonquian Conference*. Albany, NY: SUNY Press.

Ritter, Elizabeth, and Martina Wiltschko. 2004. The lack of tense as a syntactic category: Evidence from Blackfoot and Halkomelem. Paper presented at the 39th International conference on Salish and Neighbouring Languages, North Vancouver, July 2004, and the Annual Meeting of the Canadian Linguistics Association, University of Manitoba, Winnipeg, May 2004.

Ritter, Elizabeth and Martina Wiltschko. 2005. Anchoring events to utterances without tense. In *Proceedings of the 24th West Coast Conference on Formal Linguistics*, ed. John Alderete, Chung-hye Han and Alexei Kochetov, 343-351. Somerville, MA: Cascadilla Proceedings Project.

Ritter, Elizabeth and Martina Wiltschko. 2009. Varieties of INFL: TENSE, LOCATION, and PERSON. In *Alternatives to cartography*, ed. Jeroen v. Craenenbroeck, 153-201. Berlin: Mouton de Gruyter.

Ritter, Elizabeth and Martina Wiltschko. To appear. The composition of INFL. An exploration of tense, tenseless languages and tenseless constructions. To appear in *Natural Language and Linguistic Theory.*

Rizzi, Luigi. 1997. The fine structure of the left periphery. In *Elements of grammar: A handbook of generative syntax*, ed. Liliane M. V. Haegeman, 281-338. Dordrecht: Kluwer.

Rizzi, Luigi. 2004. *The structure of CP and IP* Vol. 2. Oxford: Oxford University Press.

Roberts, Ian, and Anna Roussou. 2003. *Syntactic change: A minimalist approach to grammaticalization*. Cambridge, U.K: Cambridge University Press.

Roehrs, Dorian. 2010. Demonstrative-reinforcer constructions. *The Journal of Comparative Germanic Linguistics* 13(3): 225-268.

Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1(1): 75-116.

Rosen, Nicole. 2003. Demonstrative position in Michif. *The Canadian Journal of Linguistics / La revue canadienne de linguistique* 48(1): 39-69.

Rullmann, Hotze. 1997. Even, polarity, and scope. In *Papers in experimental and theoretical linguistics*, ed. Martha Gibson, Grace Wiebe and Gary Libben, Vol. 4, 40-64. University of Alberta: Department of Linguistics.

Rullmann, Hotze and Aili You. 2006. General number and the semantics and pragmatics of indefinite bare nouns in Mandarin Chinese. In *Where semantics meets pragmatics*, ed. Klaus von Heusinger and Ken P. Turner, 175-196. Amsterdam: Elsevier.

Russell, Kevin. 1991. Obviation as discourse structure in Swampy Cree *âcimowin*. In *Papers of the twenty-second Algonquian conference*, ed. William Cowan, 320-335. Ottawa: Carleton University.

Russell, Kevin. 1996. Does obviation mark point-of-view?. In *Nikotwâsik iskwâhtêm, pâskihtêpayih! Studies in honour of H.C. Wolfart*, ed. John D. Nichols and Arden C. Ogg, 367-382. University of Manitoba: Algonquian and Iroquoian Linguistics.

Russell, Kevin. 1999. What's with all these long words anyway?. In *Proceedings of the Workshop on the Structure and Constituency of Languages of the Americas*, ed. Leora Bar-el, Rose-Marie Déchaine and Charlotte Reinholtz, Vol. 17, 119-130. Cambridge, Mass: MIT Occasional Papers in Linguistics.

Russell, Lena Heavy Shields, and Inge Genee. 2006. The Blackfoot language: Current position and future prospects. Paper presented at the 38th Algonquian conference. Vancouver, University of British Columbia: October 2006.

Sadock, Jerrold M. and Arnold M. Zwicky. 1985. Speech act distinctions in syntax. In *Language typology and syntactic description: Clause structure*, ed. Timothy Shopen, Vol. 1, 155-196. Cambridge: Cambridge University Press.

Safir, Kenneth J. 2004. *The syntax of (in)dependence*. Cambridge, Mass: MIT Press.

Schueler, David. 2006. Extended projection, categorization, and the English morpheme *-ing*. In *Proceedings of the thirty-third Western Conference on Linguistics*, ed. Michal T. Martínez, Asier Alcázar and Roberto M. Hernández, 342-356. Fresno: California State University.

Searle, John and Daniel Vanderveken. 2005. Speech acts and illocutionary logic. In *Logic, thought, and action*, ed. Daniel Vanderveken, 109-132. Dordrecht: Springer.

Selkirk, Elisabeth. 1986. On derived domains in sentence phonology. *Phonology Yearbook* 3:371-405.

Slavin, Tanya. 2012. Phonological and syntactic evidence for stem structure in Oji-Cree. *International Journal of American Linguistics* 78(4): 497-532.

Smith, Carlota S. 1997. *Parameter of aspect*: Kluwer Academic Publishers.

Stacy, Elizabeth. 2004. *Phonological aspects of Blackfoot prominence*: MA thesis, University of Calgary.

Stanley, Jason and Zoltán Szabó. 2000. On quantifier domain restriction. *Mind and Language* 15: 219-261.

Stowell, Timothy A. 1981. Origins of phrase structure. PhD dissertation, Massachusetts Institute of Technology.

Stowell, Timothy A. 1989. Subjects, specifiers, and X'-theory. In *Alternative conceptions of phrase structure*, ed. Mark Baltin and Anthony Kroch, 232-262. Chicago: University of Chicago Press.

Sybesma, Rint and Joanna U. Sio. 2008. D is for demonstrative - Investigating the position of the demonstrative in Chinese and Zhuang. *The Linguistic Review* 25(3-4): 453-478.

Szabolcsi, Anna. 1983. The possessor that ran away from home. *The Linguistic Review* 3: 89-102.

Szpyra, Jolanta. 1992. Ghost segments in nonlinear phonology: Polish *yers*. *Language* 68(2): 277-312.

Taylor, Allan R. 1967. Initial change in Blackfoot. *National Museum of Canada Bulletin* 214: 147-156.

Taylor, Allan R. 1969. *A grammar of Blackfoot*. PhD dissertation, University of California, Berkeley.

Taylor, Allan R. 1978. Deictics in Algonkian. Paper presented at the American Anthropological Association, Los Angeles.

Thoma, Sonja. In prep. The syntax of Bavarian discourse particles. PhD dissertation, University of British Columbia.

Thomason, Lucy G. 1995. The assignment of proximate and obviative in informal Fox narrative. In *Proceedings of the twenty-sixth Algonquian conference*, ed. David H. Pentland, 462-496. Winnipeg: University of Manitoba.

Thomason, Lucy G. 2003. *The proximate and obviative contrast in Meskwaki*. PhD dissertation, The University of Texas at Austin.

Traugott, Elizabeth C. 2007. Discussion article: Discourse markers, modal particles, and contrastive analysis, synchronic and diachronic. *Catalan journal of linguistics* 6: 139-157.

Traugott, Elizabeth C. and Ekkehard König. 1991. The semantics-pragmatics of grammaticalization revisited. In *Approaches to grammaticalization*, ed. Elizabeth C. Traugott and Bernd Heine, Vol. 1, 189-218. Amsterdam: John Benjamins.

Travis, Lisa D. 1984. Parameters and effects of word order variation. PhD dissertation, Massachusetts Institute of Technology.

Travis, Lisa D. 2010. *Inner aspect*. Dordrecht: Springer.

Truckenbrodt, Hubert. 1999. On the relation between syntactic phrases and phonological phrases. *Linguistic Inquiry* 30(2): 219-255.

Uhlenbeck, C. C. 1938. *A concise Blackfoot grammar: Based on material from the southern Peigans* Vol. nieuwe reeks, d. 41. Amsterdam: Noord-Hollandsche uitgevers-maatschappij.

Valentine, J. Randolph. 2001. *Nishnaabemwin reference grammar*. Toronto: University of Toronto

Van Der Mark, Sheena C. 2003. *The phonetics of Blackfoot pitch accent*. MA thesis, University of Calgary.

Van Geenhoven, Veerle. 1998. *Semantic incorporation and indefinite descriptions: Semantic and syntactic aspects of noun incorporation in West Greenlandic*. Stanford: CSLI Publications.

Vergnaud, Jean-Roger and Maria Luisa Zubizarreta (1992) The definite determiner and the inalienable constructions in French and in English. Linguistic Inquiry 23(4): 595-652.

von Fintel, Kai. 1994. Restrictions on quantifier domains. PhD dissertation, University of Massachusetts.

von Stechow, Arnim. 1999. Eine erweiterte extended now-theorie für perfekt und futur. *Zeitschrift für Literaturwissenschaft und Linguistik* 113: 86-118.

Waldie, Ryan J. 2013. *Evidentiality in Nuu-chah-nulth*. PhD dissertation, The University of British Columbia.

Weber, David J. 1986. Information profile, perspective, and patterns in Quechua. In *Evidentiality: The linguistic coding of epistemology*, ed. Wallace Chafe and Johanna Nichols, 137-155. Norwood, NJ: Ablex Publishing.

Wilhelm, Andrea. 2008. Bare nouns and number in Dëne Sųłiné. *Natural Language Semantics* 16(1): 39-68.

Wiltschko, Martina. 1998. On the syntax and semantics of (relative) pronouns and determiners. *The Journal of Comparative Germanic Linguistics* 2(2): 143-181.

Wiltschko, Martina. 2008. The syntax of non-inflectional plural marking. *Natural Language & Linguistic Theory* 26(3): 639-694.

Wiltschko, Martina. 2009. What's in a determiner and how did it get there? In *Determiners: Universals and variation*, ed. Jila Ghomeshi, Ileana Paul and Martina Wiltschko, 25-66. Amsterdam: John Benjamins.

Wiltschko, Martina. 2011. The anatomy of universal categories: Developing discovery procedures. Invited talk at NELS 42. University of Toronto: November 2011.

Wiltschko, Martina. 2012. Decomposing the mass/count distinction: Evidence from languages that lack it. In *Count and mass across languages*, ed. Diane Massam, 146-171. Oxford: Oxford University Press.

Wiltschko, Martina. To appear a. Patterns of nominalization in Blackfoot. Paul, Ileana (ed). *Crosslinguistic investigations of nominalization patterns*. Amsterdam: John Benjamins.

Wiltschko, Martina. To appear b. *The structure of universal categories. Towards a formal typology*. Cambridge, Cambridge University Press.

Wiltschko, Martina, and Rose-Marie Déchaine. 2010. Interface syntax. Unpublished manuscript, The University of British Columbia.

Wiltschko, Martina, Valerie Marshall, Andrew Matheson, and Audra Vincent. 2011. Independent pronouns in Blackfoot. To appear in the *Proceedings of the 2011 Western Conference on Linguistics*. Fresno: California State University.

Wolfart, H. C. 1973. Plains Cree: A grammatical study. *Transactions of the American Philosophical Society* 63(5): 1-90.

Wolfart, H. C. 1978. How many obviatives: Sense and reference in a Cree verb paradigm. In *Linguistic Studies of Native Canada*, ed. Eung-Do Cook and Jonathan Kaye, 255-272. Vancouver: UBC Press.

Wurmbrand, Susanne. 2001. *Infinitives: Restructuring and clause structure*. Berlin: Mouton de Gruyter.

Zoll, Cheryl C. 1996. *Parsing below the segment in a constraint-based framework*. PhD dissertation, University of California at Berkeley.

Zwarts, Frans. 1995. Non-veridical contexts. *Linguistic Analysis* 25: 286-312.

Zwicky , Arnold.1977. *On clitics*. Bloomington: Indiana University Linguistics Club.

APPENDIX A

A SURVEY OF NOMINAL EXPRESSIONS

In this appendix, I consider the types of nominal expressions that can satisfy the various grammatical functions in the clause. There are five grammatical functions to consider: (i) subject, (ii) indexed object, (iii) unindexed object of a morphologically intransitive verb, (iv) unindexed object of ditransitive verb, and (v) oblique. (See Chapter 2 for a discussion of the syntactic positions correlating with these grammatical functions.)

A.1. Nominal Expressions that can Function as the Subject

Setting aside II verbs, which only have a single inanimate (and non-volitional) argument (cf. Johansson 2008; Johansson and Ritter 2008), in Blackfoot the subject is required to be sentient, i.e., grammatically animate and ontologically volitional. Thus, a sentence such as (1), in which the subject is grammatically animate but non-sentient, is ungrammatical; (the grammatical alternative is given in (2)).

(1)	**Oma*	*po'táá'tsisa*	*náóyo'satooma*	*anni*	*i'ksísakoyi.*
	om-wa	po'taa'tsis-wa	na-ooyo's-atoo-m-wa	ann-yi	i'ksisako-yi
	DEM-PROX	stove-PROX	EVID-cook-TI-3:INAN-PROX	DEM-INAN	meat-INAN

intended: "The stove cooked the meat."

In order to express a proposition with a non-sentient agent, the unspecified subject construction is used (cf. Frantz 2009: 45-46); the subject in this construction is an unspecified (/local) person, and the non-sentient agent is an oblique, licensed by the instrumental adposition *iiht-*. An example is given in (2).

(2)	*Oma*	*po'táá'tsisa*	*ííhtooyo'satoo'p*	*anni*	*i'ksísakoyi.*
	om-wa	po'taa'tsis-wa	iiht-ooyo's-atoo-'p	ann-yi	i'ksisako-yi
	DEM-PROX	stove-PROX	INSTR-cook-TI-LOC:INAN	DEM-INAN	meat-INAN

"Someone cooked the meat by means of the stove."

In (2), the suffix *–'p* is used, which is the suffix that is used to indicate that a local person is the subject, and an inanimate object is the object. In the absence of the person prefixes, this can refer to an unspecified subject (as in (2)), or an inclusive subject, e.g., "We (incl) cooked the meat by means of the stove." (Unspecified and inclusive persons are morphologically indistinguishable in Blackfoot.)

In addition to the constraint against non-sentient subjects, there are constraints on what types of nominal expressions can serve as the subject. In particular, a common noun (i.e., a noun that is not used as a name), regardless of whether it is singular or plural, [172] cannot function as the subject unless it is appears with a demonstrative.[173] Examples are given below.

(3) a. **Piitáá(wa) íípaawaniwa.*
piitaa(-wa) ii-ipaawani-wa
eagle(-PROX) IC-fly.AI-PROX
intended: "An eagle flew."

b. *Oma piitáá*(wa) íípaawaniwa.*
om-wa piitaa-wa ii-ipaawani-wa
DEM-PROX eagle-PROX IC-fly.AI-PROX
"That eagle flew."

(4) a. **Piitáíks íípaawaniyaawa.*
piitaa-iksi ii-ipaawani-yi-aawa
eagle-PL IC-fly.AI-PL-3PL.PRN
intended: "Eagles flew."

b. *Omiksi piitáíks íípaawaniyaawa.*
om-iksi piitaa-iksi ii-ipaawani-yi-aawa
DEM-PL eagle-PL IC-fly.AI-PL-3PL.PRN
"Those eagles flew."

In (3), the singular noun *píítaa(wa)* "eagle" cannot function as the subject of the AI predicate *íípaawaniwa* "flew" unless it appears with a demonstrative. Note that, regardless of whether the noun is marked as singular (via *–wa*) or not, it is ungrammatical as the subject without a demonstrative, and that with the demonstrative, the (proximate) singular inflection on the noun is obligatorily. Similarly in (4),

[172] There is no evidence of a grammaticized count/mass distinction in Blackfoot. All common nouns can be marked as singular or plural, regardless of whether they are ontologically countable or not (cf. Wiltschko 2012). As such, I do not control for count vs. mass nouns here.

[173] In fact, it may also be possible for a numeral to be used in place of the demonstrative. However, my consultants' judgments about data with numerals are inconsistent and unstable. For this reason, I do not discuss numerals here. See Frantz (2009, Chapter 24) for a discussion of the morphosyntactic composition of numerals.

the plural noun *píítaiks* “eagles” cannot function as the subject without a demonstrative. This pattern extends to subjects of transitive verbs as well, as shown in (5) through (8) below.

(5)	a.	**Saahkómaapii(wa)*	*kita'páísstooka*.
		saahkomaapii(-wa)	kit-a’p-a-issto-ok-wa
		boy(-PROX)	2-around-IMPF-wave.AI-INV-PROX
		intended: “A boy is waving at you.”	

	b.	*Oma*	*saahkómaapii(wa)*	*kita'páísstooka*.
		om-wa	saahkomaapii(-wa)	kit-a’p-a-issto-ok-wa
		DEM-PROX	boy(-PROX)	2-around-IMPF-wave.AI-INV-PROX
		“That boy is waving at you.”		

(6)	a.	**Saahkómaapiiks*	*kita'páísstookiaawa*.
		saahkomaapii-iksi	kit-a’p-a-issto-ok-yi-aawa
		boy-PL	2-around-IMPF-wave.AI-INV-PL-3PL.PRN
		intended: “(Some) boys are waving at you.”	

	b.	*Omiksi*	*saahkómaapiiks*	*kita'páísstookiaawa.*
		om-iksi	saahkomaapii-iksi	kit-a’p-a-issto-ok-yi-aawa
		DEM-PL	boy-PL	2-around-IMPF-wave.AI-INV-PL-3PL.PRN
		“That boy is waving at you.”		

(7)	a.	**Aakíí(wa)*	*náótsiksiiststooma*	*anni*	*iitáí'nssimao’p.*
		aakii-wa	na-otsiksiiststoo-m-wa	ann-yi	iitai’nssimao’p-yi
		woman-PROX	EVID-water.TI-3:INAN-PROX	DEM-INAN	garden-INAN
		intended: “A woman watered the garden.”			

	b.	*Oma*	*aakííwa*	*náótsiksiiststooma*	*anni*	*iitáí'nssimao’p.*
		om-wa	aakii-wa	na-otsiksiiststoo-m-wa	ann-yi	iitai’nssimao’p-yi
		DEM-PROX	woman-PROX	EVID-water.TI-3:INAN-PROX	DEM-INAN	garden-INAN
		“The woman watered the garden.”				

(8)	a.	**Aakííks*	*náótsiksiiststoomiaawa*	*anni*	*iitáí'nssimao’p.*
		aakii-iksi	na-otsiksiiststoo-m-yi-aawa	ann-yi	iitai’nssimao’p-yi
		woman-PL	EVID-water.TI-3:INAN-PL-3PL.PRN	DEM-INAN	garden-INAN
		intended: “Some women watered the garden.”			

	b.	*Omiksi*	*aakííks*	*náótsiksiiststoomiaawa*	*anni*	*iitáí'nssimao’p.*
		om-iksi	aakii-iksi	na-otsiksiiststoo-m-yi-aawa	ann-yi	iitai’nssimao’p-yi
		DEM-PL	woman-PL	EVID-water.TI-3:INAN-PL-3PL.PRN	DEM-INAN	garden-INAN
		“The women watered the garden.”				

In (5) and (6), the verb is TA, and the nominal expression that functions as the subject requires a demonstrative, regardless of whether it is singular (*saahkómaapiiwa*) or plural (*saahkómaapiiks*). In (7) and (8), the verb is TI, and the subject similarly requires a demonstrative, regardless of whether it is singular (*aakííwa*) or plural (*aakííks*).

There is one exception to the generalization that plural nouns cannot function as the subject without a demonstrative, and that is in the case of generic statements.[174] In these contexts, a plural noun can function as the subject, but only with a generic (non-referential) interpretation. Examples are given below.

(9) a. *Pisátsskitaanists* *iksstónatayaahsiyaawa.*
pisatsskitaan-istsi ik-sstonnat-a-yaahs-ii-yi-aawa
pastry-PL INTNS-extreme-IMPF-be.pleasing-II-PL-3PL.PRN
"Pastries taste really good."

b. *Pisátsskitaanists* *áákssstónatiaahsiyaawa*.
pisatsskitaan-istsi yaak-sstonat-yaahs-i-yi-aawa
pastry-PL FUT-extreme-be.pleasing-II-PL-3PL.PRN
"Pastries would taste really good"
NOT: "(Those) pastries will taste really good."

(10) a. *Imitáíks* *áómaahkaayaawa.*
imitaa-iksi a-omaahkaa-yi-aawa
dog-PL IMPF-travel.on.foot-PL-3PL.PRN
"Dogs run."

b. #*Imitaiks* *áípsstsikomaahkaayaawa*.
imitaa-iksi a-ipsstsik-omaahkaa-yi-aawa
dog-PL IMPF-slow?-travel.on.foot-PL-3PL.PRN
"Dogs run slow"
➔ comment: "No, because dogs don't always run slow."

A noun modified by an adjectival prefix also requires a demonstrative if it functions as the subject. This is shown in (11) and (12) below.

(11) a. **Omáhkaapi'siwa* *ikkítsimiwa*.
omahk-aapi'si-wa ikkitsi-mi-wa
big-coyote-PROX be.grey-AI-PROX
intended: "A big coyote is grey."

[174] It is yet unknown whether demonstratives can also receive a generic interpretation.

b.	*Ama*	*omáhkaapi'siwa*	*ikkítsimiwa*.
	am-wa	omahk-aapi'si-wa	ikkitsi-mi-wa
	DEM-PROX	big-coyote-PROX	be.grey-AI-PROX
	"That big coyote is grey."		

(12)	a.	**A'sitápiks*	*ííhkanaitapooyaawa*	*annisk*	*passkááni*.
		wa's-itapi-iksi	ii-ohkana-itap-oo-yi-aawa	ann-yi-hk	passkaan-yi
		young-person-PL	IC-all-toward-go.AI-PL-3PL.PRN	DEM-INAN-INVIS	dance-INAN
		intended: "The young people all went to the dance."			

b.	*Omiksi*	*a'sitápiks*	*ííhkanaitapooyaawa*	*annisk*	*passkááni*.
	om-iksi	wa's-itapi-iksi	ii-ohkana-itap-oo-yi-aawa	ann-yi-hk	passkaan-yi
	DEM-PL	young-person-PL	IC-all-toward-go.AI-PL-3PL.PRN	DEM-INAN-INVIS	dance-INAN
	"The young people all went to the dance."				

The data in (11) and (12) illustrate that, even if modified by an adjectival prefix, a common noun cannot function as the subject unless it is used with a demonstrative. Note also that the noun must be marked as either singular or plural.

We have seen that common nouns require a demonstrative in order to function as the subject. Although not as strict a requirement, proper nouns are most often used with a demonstrative when they function as the subject, and with my consultants, they are judged ungrammatical without one.[175] Examples illustrating this are given in (13) and (14) below.

(13)	a.	?*Pitaaki*	*áíhpiyiwa*.
		P	a-ihpiyi-wa
		P	IMPF-dance.AI-PROX
		intended: "Pitaaki is dancing."	

b.	*Anna*	*Pitaaki*	*áíhpiyiwa*.
	ann-wa	P	a-ihpiyi-wa
	ann-wa	P	IMPF-dance.AI-PROX
	"Pitaaki is dancing."		

(14)	a.	?*Martina*	*áíhpiyiwa*.
		M	a-ihpiyi-wa
		M	IMPF-dance.AI-PROX
		intended: "Martina is dancing."	

[175] Don Frantz (p.c.) reports that proper nouns can be used without demonstratives, regardless of grammatical function. In my own data, I have very few examples on proper nouns functioning as the subject (or the indexed object) without a demonstrative, and most of those are examples that I constructed and the consultant accepted. In fieldwork contexts when I have specifically tested whether I can omit the demonstrative, I have been told that "it's not good Blackfoot" without the demonstrative.

b.	*Anna*	*Martina*	*áíhpiyiwa*.
	ann-wa	M	a-ihpiyi-wa
	ann-wa	M	IMPF-dance.AI-PROX
	"Martina is dancing."		

In (13), the subject is a proper noun of Blackfoot origins, *Pitaaki* (literally: "Eagle-Woman"), and it is marginal without the demonstrative. Similarly in (14), the subject is a proper noun of Indo-European origins, *Martina*, and like *Pitaaki*, it is marginal without the demonstrative. (Henceforth, I do not distinguish between proper nouns of Indo-European versus Blackfoot origin; the generalizations presented here extend to both.)

Possessed nouns are like proper nouns in that there is a strong preference for them to appear with a demonstrative (and number marking) in order to function as the subject, as exemplified below.[176]

(15)	a.	? *Óómi*	*a'páótakináyi*.	
		w-oom-yi	a'p-a-otaki-yini-ayi	
		3-husband-OBV	around-IMPF-work.AI-OBV-3SG.PRN	
		intended: "Her husband is working."		
	b.	*Annisk*	*óómi*	*a'páótakináyi*.
		ann-yi-hk	w-oom-yi	a'p-a-otaki-yini-ayi
		DEM-OBV-INVIS	3-husband-OBV	around-IMPF-work.AI-OBV-3SG.PRN
		"Her husband is working."		
(16)	a.	? *Ohkóyiks*	*a'páótakiaawa*.	
		w-ohko-iksi	a'p-a-otaki-yi-aawa	
		3-son-PL	around-IMPF-work.AI-PL-3PL.PRN	
		intended: "Her sons are working."		
	b.	*Annikssk*	*ohkóyiks*	*a'páótakiaawa*.
		ann-iksi-hk	w-ohko-iksi	a'p-a-otaki-yi-aawa
		DEM-PL-INVIS	3-son-PL	around-IMPF-work.AI-PL-3PL.PRN
		"Her sons are working."		

In (15) and (16), the nominal expression functioning as the subject is a possessed noun, and regardless of whether it is singular or plural, there is a strong preference for a demonstrative to be present. If the

[176] Again, Don Frantz (p.c.) reports that possessed nouns can appear without a demonstrative. My own fieldwork on this results in findings similar to those with proper nouns (see footnote 164). In short, my consultants strongly prefer the subject and indexed object arguments to have a demonstrative, regardless of whether the noun is common, proper, or possessed.

possessor is an overt noun, then the possessor itself is obligatorily modified by a demonstrative, and the possessed noun may also be modified by a demonstrative. Examples are given below.

(17) a.

?*Aakííwa*	*ohkóyiks*	*a'páótakiaawa.*
aakii-wa	w-ohko-iksi	a'p-a-otaki-yi-aawa
woman-PROX	3-son-PL	around-IMPF-work.AI-PL-3PL.PRN

intended: "The woman's sons are working."

b.

Oma	*aakííwa*	*ohkóyiks*	*a'páótakiaawa.*
om-wa	aakii-wa	w-ohko-iksi	a'p-a-otaki-yi-aawa
DEM-PROX	woman-PROX	3-son-PL	around-IMPF-work.AI-PL-3PL.PRN

"The woman's sons are working."

c.

Oma	*aakííwa*	*annikssk*	*ohkóyiks*	*a'páótakiaawa*.
om-wa	aakii-wa	annikssk	w-ohko-iksi	a'p-a-otaki-yi-aawa
DEM-PROX	woman-PROX	DEM	3-son-PL	around-IMPF-work.AI-PL-3PL.PRN

"The woman's sons are working."

In (17a), the possessor, *aakííwa* 'woman,' does not appear with a demonstrative, and this is marginal. In (17b) and (17c), the possessor is used with a demonstrative, and in (17c), the possessed noun is also used with a demonstrative. Both options are grammatical.

In sum, regardless of whether they are singular or plural, common nouns, proper nouns, nouns modified by an adjectival prefix, and possessed nouns all require (or at least strongly prefer) a demonstrative in order to function as the subject.[177] These findings are summarized in Table A.1 below.

Table A.1. Types of Nominal Expressions Functioning as the Subject

	No demonstrative	With demonstrative
N	✗	✗ (number marking required)
N-SG	✗	✓
N-PL	✗	✓
ADJ-N	✗	✓
Proper N	?	✓
POSS-N	?	✓

[177] The one exception, as shown in (9) and (10), is with plural nouns, which can occur without a demonstrative in order to yield a generic interpretation. This is similar to, for example, bare plural subjects in English, which are argued to behave semantically as proper nouns (Carlson 1977). However, Blackfoot does not strictly parallel English; bare plural subjects in Blackfoot differ from proper nouns in that the latter are preferred with a demonstrative. I set aside the question of how to analyse Blackfoot's bare plural subjects for future research.

A.2. Nominal Expressions that can Function as the Indexed Object

In this section I demonstrate that indexed objects pattern with subjects in the types of nominal expressions they permit. The indexed object is the the object of a morphologically transitive verb. In the case of ditransitive verbs, the indexed object corresponds to the thematic indirect object. Throughout this section, I refer to the indexed object simply as the object.

First consider cases in which the object is a common noun. Regardless of whether it is singular or plural, animate or inanimate, the object requires a demonstrative.[178] Illustrative examples are given below.

(18) a.

**Nitohkóónoawa*	*póós.*
nit-ohkoon-o-a-yi	poos-wa
1-find-TA-DIR-PROX	cat-PROX

intended: "I found a cat."

b.

Nitohkóónoawa	*oma*	*póós.*
nit-ohkoon-o-a-yi	om-wa	poos-wa
1-find-TA-DIR-PROX	DEM-PROX	cat-PROX

"I found that cat."

(19) a.

**Nitohkóónoayi*	*póósiks.*
nit-ohkoon-o-a-yi	poos-iksi
1-find-TA-DIR-PL	cat-PL

intended: "I found (some) cats."

b.

Nitohkóónoayi	*omiksi*	*póósiks.*
nit-ohkoon-o-a-yi	om-iksi	poos-iksi
1-find-TA-DIR-PL	DEM-PL	cat-PL

"I found those cats."

(20) a.

**Kikatao'tsiksiiststoo'paatsiks*	*iitáí'nssimao'pi?*
kit-kata'-otsiksiiststoo-'p-wa-atsiks	iitai'nssimao'p-yi
2-INTERR-water.TI-1:INAN-PROX-3SG.PRN	garden-INAN

intended: "Did you water the garden?"

b.

Kikatao'tsiksiiststoo'paatsiks	*omi*	*iitáí'nssimao'pi?*
kit-kata'-otsiksiiststoo-'p-wa-atsiks	om-yi	iitai'nssimao'p-yi
2-INTERR-water.TI-1:INAN-PROX-3SG.PRN	DEM-INAN	garden-INAN

"Did you water the garden?"

[178] As with nominal expressions functioning as the subject, it may be possible for a numeral to be used in place of the demonstrative with nominal expressions functioning as the object. (See footnote 162.)

(21)	a.	**Kikatao’tsiksiiststoo’paatsiks*	*pisátssaisskiists?*	
		kit-kata’-otsiksiiststoo-’p-wa-aistsaawa	pisatssaisski-istsi	
		2-INTERR-water.TI-1:INAN-PROX-3SG.PRN	flower-PL	
		intended: “Did you water the flowers?”		
	b.	*Kikatao’tsiksiiststoo’paatsiks*	*omistsi*	*pisátssaisskiists?*
		kit-kata’-otsiksiiststoo-’p-wa-atsiks	om-istsi	pisatssaisski-istsi
		2-INTERR-water.TI-1:INAN-PROX-3SG.PRN	DEM-PL	flower-PL
		“Did you water the flowers?”		

In (18) and (19), the grammatically animate noun *poos* requires a demonstrative in order to function as the object, regardless of whether it is singular or plural. Similarly in (20) and (21), the grammatically inanimate nouns *itáí’nssimao’pi* ‘garden’ and *pisátssaisskiists* ‘flowers,’ respectively require a demonstrative in order to function as the object. As with common nouns functioning as the subject, common nouns functioning as the object must be marked as singular or plural.

Nouns modified by an adjectival prefix also require a demonstrative in order to function as the object. Examples are given below.

(22)	a.	**Nitáíka’kiomowa*	*kipitáákiiwa*.	
		nit-a-ika’ki-omo-a-wa	kipit-aakii-wa	
		1-IMPF-chop.wood-TA.BEN-DIR-PROX	old-woman-PROX	
		intended: “I chopped wood for an old lady.”		
	b.	**Nitáíka’kiomowa*	*annahkayi*	*kipitáákiiwa*.
		nit-a-ika’ki-omo-a-wa	ann-wa-hk-ayi	kipit-aakii-wa
		1-IMPF-chop.wood-TA.BEN-DIR-PROX	DEM-PROX-INVIS-*ayi*	old-woman-PROX
		intended: “I chopped wood for this old lady.”		

(23)	a.	**Nitsóówataa*	*omáhkapasstááminaama*.	
		nit-oowat-a-wa	omahk-apasstaaminaam-wa	
		1-eat.TA-DIR-PROX	big-apple-PROX	
		intended: “I ate a big apple.”		
	b.	*Nitsóówataa*	*annahkayi*	*omáhkapasstááminaama*.
		nit-oowat-a-wa	ann-wa-hk-ayi	omahk-apasstaaminaam-wa
		1-eat.TA-DIR-PROX	DEM-PROX-INVIS-*ayi*	big-apple-PROX
		intended: “I ate a big apple.”		

Finally, both proper nouns and possessed nouns functioning as the object pattern with proper nouns and possessed nouns functioning as the subject in that there is a strong preference that they appear with a demonstrative. This is illustrated in (24) and (25) below.

(24)	a.	?*Nitsíīkamainoawa*	*Piohkomiaakii*.	
		nit-ii-okama-in-o-a-wa	P	
		1-IC-distinctly-see-TA-DIR-PROX	P	
		intended: "I distinctly saw Piohkomiaaki (lit: Far-Sounding Woman)."		
	b.	*Nitsíīkamainowa*	*annahk*	*Piohkomiaakii*.
		nit-ii-okama-in-o-a-wa	ann-wa-hk	P
		1-IC-distinctly-see-TA-DIR-PROX	DEM-PROX-INVIS	P
		"I distinctly saw Piohkomiaaki (lit: Far-Sounding Woman)."		

(25)	a.	?*Tsimáá*	*kitsítsinoahpa*	*niksíssta*?	
		tsimaa	kit-it-in-o-a-hpa	n-iksisst-wa	
		where	2-LOC-see.TA-DIR-NONAFF	1-mother-PROX	
		intended: "Where did you see my mother?"			
	b.	*Tsimáá*	*kitsítsinoahpa*	*na*	*niksíssta*?
		tsimaa	kit-it-ino-a-hpa	ann-wa	n-iksisst-wa
		where	2-LOC-see.TA-DIR-NONAFF	DEM-PROX	1-mother-PROX
		"Where did you see my mother?"			

In (24), the proper noun *Piohkomiaakii* (literally: "Far-Sounding Woman") functions as the object, and it is judged as marginal without the demonstrative. Similarly in (25), the possessed noun *niksíssta* "my mother" functions as the object, and it is marginal without the demonstrative. In sum, objects have the same restrictions on types of nominal expressions as do subjects. This is summarized in Table A.2.

Table A.2. Types of Nominal Expressions Functioning as the Indexed Object

	No demonstrative	With demonstrative
N	×	× (number marking required)
N-SG	×	✓
N-PL	×	✓
ADJ-N	×	✓
Proper N	?	✓
POSS-N	?	✓

A.3. Nominal Expressions that can Function as the AI Object

As discussed in Chapter 2, morphologically intransitive verbs (i.e., those formed with an AI final) can optionally take an object. Sometimes referred to as "paratransitive" (Frantz 2009) or "pseudo-transitive" (Taylor 1969), these morphologically intransitive verbs differ from their morphologically transitive counterparts in various respects. First, the object of a morphologically intransitive verb does not show any form of agreement on the verb; they are unindexed. Second, the object of a morphologically intransitive verb must immediately follow the verb. Whereas the object of a morphologically transitive can appear preverbally, the object of a morphologically intransitive verb is restricted to the immediate postverbal position. Third, morphologically intransitive verbs can take as their object a more restricted range of nominal expressions than morphologically transitive verbs. This third point is the focus of this section. (The other points are discussed in more detail in Chapter 3.) Henceforth, I refer to the unindexed object of a morphologically transitive verb as the AI OBJECT.

First consider bare (common) nouns. Although they cannot function as either the subject or the indexed object of a morphologically transitive verb, they can function as the AI object. This is shown in (26) below.

(26) *Nitáíkskimaa* *ponoká.*
nit-a-ikskimaa ponoka
1-IMPF-hunt.AI elk
"I am hunting elk / an elk."

In (26), the noun *ponoka* "elk" is uninflected[179] and unmodified, and it is grammatical as the AI object. (The number-neutral interpretation of bare nouns is discussed in Chapter 3.) Conversely, if a demonstrative is added to the nominal expression, it is ungrammatical, as shown in (27).[180]

[179] Frantz (2009: 11-12) discusses a "non-particular" suffix *–i* that appears on otherwise bare nouns. This suffix is absent from the grammars of both of my consultants.

[180] In fact, for at least some speakers, demonstratives formed with the so-called "verbalizing" suffix *-ayi* (cf. Frantz 2009, Uhlenbeck 1938) can modify the objects of a subset of morphologically intransitive verbs. This is discussed in Chapter 3.

(27) **Nitáíkskimaa oma ponoká(wa).*
nit-a-ikskimaa om-wa ponoka-wa
1-IMPF-hunt.AI DEM-PROX elk-PROX
intended: "I am hunting that elk."

In (27), the nominal expression *oma ponoká(wa)* is the AI object, and this is ungrammatical. Regardless of whether the noun is marked as singular (by virtue of the suffix *–wa*) or not, if it appears with the demonstrative, it cannot function as an AI object.

In fact, even without the demonstrative, a singular-marked noun alone cannot function as an AI object, as shown in (28).

(28) a. **Nitáíkskimaa ponokáwa.*
nit-a-ikskimaa ponoka-wa
1-IMPF-hunt.AI elk-PROX
intended: "I am hunting an/the elk (proximate)."

b. **Nitáíkskimaa ponokáyi.*
nit-a-ikskimaa ponoka-yi
1-IMPF-hunt.AI elk-OBV
intended: "I am hunting an/the elk (obviative)."

In (28a), the noun is inflected with the proximate singular suffix *–wa*, and in (28b), the noun is inflected with the obviative singular suffix *–yi*. In both cases, this is ungrammatical; singular-marked nouns cannot function as AI objects.

Unlike singular nouns, plural nouns can function as AI objects.[181] However, like singular nouns, plural nouns cannot be used with demonstratives in this context. This is shown in (29) through (32) below.

(29) a. *Annáhk Carmelle ááhksikkamaapi ksísskstakiks.*
annwa-hk C aahk-ikkam-yaapi-wa ksisskstaki-iksi
DEM-PROX-INVIS C MOD-if-see.AI-PROX beaver-PL
"Carmelle might see (some) beavers."

[181] Don Frantz (p.c.) reports that plural nouns do not appear as AI objects in his data set. However, plural nouns are regularly used as AI objects by both of my consultants, and I have found examples with at least one other speaker as well. Frantz suggests that my consultants may have generalized the generic use of bare plurals in subject position (see (9) and (10) above) to allow bare plurals to function as non-specific AI objects.

b. **Annáhk Carmelle ááhksikkamaapi omiksi ksísskstakiks.*
annwa-hk C aahk-ikkam-yaapi-wa om-iksi ksisskstaki-iksi
DEM-PROX-INVIS C MOD-if-see.AI-PROX DEM-PL beaver-PL
intended: "Carmelle might see those beavers.'

(30) a. *Náihkiitaawa napayínists.*
na-ihkitaa-wa napayin-istsi
EVID-bake.AI-PROX bread-PL
"S/he baked breads."

b. **Náihkiitaawa omistsi napayínists.*
na-ihkitaa-wa om-istsi napayin-istsi
EVID-bake.AI-PROX DEM-PL bread-PL
intended: "S/he baked those breads."

(31) a. *Nitáíssksi'ma'tstohki sááhkomaapiksi ki aakiikoaiksi.*
nit-a-ssksinima'tstohki saahkomaapi-iksi ki aakiikoan-iksi
1-IMPF-teach.AI boy-PL and girl-PL
"I teach boys and girls."

b. **Nitáíssksi'ma'tstohki omiksi sááhkomaapiksi ki aakiikoaiksi.*
nit-a-ssksinima'tstohki om-iksi saahkomaapi-ksi ki aakiikoan-iksi
1-IMPF-teach.AI DEM-PL boy-PL and girl-PL
intended: "I teach those boys and girls."

(32) a. *Anna Joel áí'pihtakiwa óóhkotokists*.
ann-wa J wai'piht-aki-wa oohkotok-istsi
DEM-PROX J haul-AI-PROX rock-PL
"Joel hauled some rocks."

b. **Anna Joel áí'pihtakiwa omistsi óóhkotokists*.
ann-wa J wai'piht-aki-wa om-istsi oohkotok-istsi
DEM-PROX J haul-AI-PROX DEM-PL rock-PL
intended: "Joel hauled those rocks."

In (29a), the animate plural noun *ksísskstakiks* "beavers" functions as the AI object, and in (29b), this noun appears with a demonstrative and this is ungrammatical. Similarly in (30), the inanimate plural noun *napayínists* "breads" functions as the AI object, and if it is used with a demonstrative, it is ungrammatical. Additional examples illustrating the same generalization are given in (31) and (32).

To this point, we have seen that AI objects pattern differently than subjects and indexed objects. Whereas common nouns that function as either the subject or the indexed object require a demonstrative, common nouns that function as the AI object cannot be used with a demonstrative. Conversely, whereas bare nouns or bare plural nouns can function as the AI object, nouns must be either singular- or plural-marked and modified by a demonstrative in order to function as the subject or the indexed object.

The same is true of nouns modified by an adjectival prefix. Bare (i.e., uninflected) nouns can be prefixed with an adjective and function as the AI object, as shown in (33a). The addition of a demonstrative in this context renders it ungrammatical, as shown in (33b).

(33) a.

Nitsitóhtohkoonimaahpinnaan	*pokómitaa*	*na*	*Leo*	*oomi*	*okóówayi*.
nit-it-oht-ohkoonimaa-hpinnaan	pok-omitaa	ann-wa	L	oom-yi	w-ookoowa-yi
1-LOC-near?-find.AI-1PL	little-dog	DEM-PROX	L	DEM-INAN	3-house-INAN

"We found a little dog near Leo's house."

b.

**Nitsitóhtohkoonimaahpinnaan*	*oma*	*pokómitaa(wa)*	*na*	*Leo*	*oomi*	*okóówayi*.
nit-it-oht-ohkoonimaa-hpinnaan	oma	pok-omitaa(-wa)	na	L	oomi	w-ookoowa-yi
1-LOC-near?-find.AI-1PL	DEM	little-dog(-PROX)	DEM	L	DEM	3-house-INAN

Intended: "We found that little dog near Leo's house."

Unlike common nouns, proper nouns cannot function as the AI object, regardless of whether they appear with a demonstrative or not. The same is true of possessed nouns. Examples of both are given in (34) and (35) below.

(34) a.

**Nitsáápi*	*Mai'stóó*.[182]
nit-yaapi	M
1-see.AI	M

intended: "I saw Mai'stoo."

b.

**Nitsáápi*	*annahk*	*Mai'stóó*.
nit-yaapi	ann-wa-hk	M
1-see.AI	DEM-PROX-INVIS	M

intended: "I saw Mai'stoo."

(35) a.

**Nitsáápi*	*kó'tasa*.
nit-yaapi	k-o'tas-wa
1-see.AI	2-horse-PROX

intended: "I saw your horse."

b.

**Nitsáápi*	*annahk*	*kó'tasa*.
nit-yaapi	ann-wa-hk	k-o'tas-wa
1-see.AI	DEM-PROX-INVIS	2-horse-PROX

intended: "I saw your horse."

[182] This sentence is grammatical if the noun *mai'stóó* "crow" is interpreted as a common noun and not a proper noun.

In summary, the types of nominal expressions that can function as the AI object are restricted to bare (common) nouns, bare nouns modified by an adjective, and bare plural nouns. Singular-marked nouns, proper nouns, possessed nouns, and nouns modified by a demonstrative cannot function as the AI object. These findings are summarized in Table A.3.

Table A.3. Types of Nominal Expressions Functioning as the AI object

	No demonstrative	With demonstrative
N	✓	×
N-PL	✓	×
ADJ-N	✓	×
N-SG	×	×
Proper N	×	×
POSS-N	×	×

A.4. Nominal Expressions that can Function as the Unindexed Object of Ditransitive Verb

Ditransitive verbs in Blackfoot are always TA (transitive animate) verbs; the indexed object is animate, and corresponds with the thematic indirect object (see §2 above). The unindexed object corresponds to the thematic direct object (i.e., patient or theme argument). Unindexed objects are relatively unrestricted with respect to the types of nominal expressions they permit.

First consider bare (i.e., uninflected, common) nouns. These can be used as the unindexed object of a ditransitive verb, as shown in (36).

(36)	*Nitáwaahkanomowainnaana*	*si'káán.*
	nit-a-waahkan-omo-a-innaan-wa	si'kaan.
	1-IMPF-sew-TA.BEN-DIR-1PL-PROX	blanket
	"We are sewing him/her a blanket."	

In (36), the bare noun *si'káán* 'blanket' functions as the unindexed object. Plural nouns can also function as the unindexed object of a ditransitive verb, as shown in (37).

(37)	*Anna*	*Joel*	*nitáí'pohtoka*	*miistsííks.*
	ann-wa	J	nit- wai'poht-o-ok-wa	miistsis-iksi
	DEM-PROX	J	1-haul-TA-INV-PROX	tree-PL
	"Joel hauled some trees for me."			

In (37), the plural noun *miistsííks* functions as the unindexed object. Bare singular nouns can also function as the unindexed object of a ditransitive verb; an example is given in (38).[183]

(38)	*Nítohpommoawa*	*nitákkaawa*	*napayíni*.	
	nit-ohpomm-o-a-wa	n-itakkaa-wa	napayin-yi	
	1-buy-TA-DIR-PROX	1-friend-PROX	bread-OBV	
	"I bought the bread for my partner."			(Don Frantz, p.c.)

In (38), the obviative-marked noun *napayíni* 'bread' functions as the unindexed object.

Both singular and plural nouns that are modified by a demonstrative can function as the unindexed object of a ditransitive verb. Examples are given in (39) and (40) below. (As seen in the preceding sections, only nouns that are number-marked can be modified by a demonstrative.)

(39)	*Kitsskitató*	*amo*	*pisátsskitaani.*
	kit-ihkitat-o	amo	pisatsskitaan-yi
	2-bake.TA-1:2	DEM	cake-INAN
	"I baked this cake for you."		

(40)	*Nitsííko'tomoawa*	*na*	*niksíssta*	*amostsi*	*pisátssaiskists*.
	nit-iik-o'to-omo-a-wa	ann-wa	n-iksisst-wa	amo-istsi	pisatssaiski-istsi
	1-INTNS-take-TA.BEN-DIR-PROX	DEM-PROX	1-mother-PROX	DEM-PL	flower-PL
	"I picked these flowers for my mother.				

In (39), *amo pisátsskitaani* "this cake" functions as the unindexed object, and in (40), *amostsi pisátssaiskists* "these flowers" functions as the unindexed object.

[183] Because word-final proximate and obviative suffixes are often voiceless or even soundless (see Chapter 1, also Gick et al. 2012), for many nouns it is difficult to distinguish singular-marked nouns from bare nouns. However, for some speakers, the final consonant in nouns such as *napayín* "bread" is omitted when the proximate or obviative suffix is absent (cf. Frantz 2009: 12), allowing us to distinguish singular from bare nouns. Because my consultant in Vancouver does not systematically omit the final consonant, it is impossible at this time for me to test that singular nouns (without a demonstrative) can be used as unindexed objects of ditransitive verbs. Hence, the example in (38) has been kindly supplied by Don Frantz.

As observed in the preceding sections, the addition of an adjectival prefix doesn't affect the un/grammaticality of a given nominal expressions in a given context. Thus, just as bare nouns, singular nouns, plural nouns, and singular- and plural-marked nouns modified by a demonstrative can all function as the unindexed object of a ditransitive verb, so can their adjectivally-marked counterparts. Illustrative examples are given below.

(41)	*Nítsskóhkotawa*	*ni*	*aanatssitsímaani*	*ni*	*oksíssts.*
	nit-sskohkot-a-wa	ann-yi	waanat-issitsimaan-yi	ann-yi	w-iksisst-yi
	1-give.back.to.TA-DIR-PROX	DEM-OBV	cute-baby-OBV	DEM-OBV	3-mother -OBV
	"I gave the cute baby back to her mother."				

(42)	*Anna*	*Rosie*	*awááhkanomoyiiwa*	*i'náksokásimists*	*anni*	*otáni.*
	ann-wa	R	a-waahkan-omo-yii-wa	i'nak-asokasim-istsi	ann-yi	w-itan-yi
	DEM-PROX	R	IMPF-sew-TA.BEN-3:4-PROX	small-dress-PL	DEM-OBV	3-daughter-OBV
	"Rosie is sewing some small dresses for her daughter."					

In (41), the prefix *waanat-* "cute" modifies the obviative-marked noun *issitsímaani* "baby," which functions as the unindexed object. Similarly in (42), the adjectival prefix *i'nák-* "small" modifies the plural noun *asokásimists* "dresses" functioning as the unindexed object.

Like common nouns, proper nouns can function as unindexed objects of ditransitive verbs either with or without a demonstrative. The strong preference observed with subjects and indexed objects to include a demonstrative does not extend to unindexed objects. An example is given in (43).

(43)	a.	*Nítsskóhkotayini*	*Lucy*	*anni*	*oksíssts.*
		nit-ssk-ohkot-a-yini	L	ann-yi	w-iksisst-yi
		1-back-give.TA-DIR-OBV	L	DEM-OBV	3-mother-OBV
		"I gave Lucy back to her mother."			

b.	*Nítsskóhkotayini*	*annssts*	*Lucy*	*anni*	*oksíssts.*
	nit-ssk-ohkot-a-yini	ann-sst-yi	L	ann-yi	w-iksisst-yi
	1-back-give.TA-DIR-OBV	DEM-DIM-OBV	L	DEM-OBV	3-mother-OBV
	"I gave Lucy back to her mother."				

In (43), the proper noun *Lucy* that functions as the unindexed object can be used either with or without the demonstrative.

Finally, possessed nouns can also function as unindexed objects of ditransitive verbs either with or without a demonstrative. This is shown in (44).

(44) a. *Na* *niksíssta* *nitáákohpopaatomooka* *nitáni*.
ann-wa n-iksisst-wa nit-aak-ohpopaat-omo-ok-wa n-itan-yi
DEM-PROX 1-mother-PROX 1-FUT-babysit-TA.BEN-INV-PROX 1-daughter-OBV
"My mother is going to babysit my daughter for me."

b. *Na* *niksíssta* *nitáákohpopaatomooka* *anni* *nitáni*.
ann-wa n-iksisst-wa nit-aak-ohpopaat-omo-ok-wa ann-yi n-itan-yi
DEM-PROX 1-mother-PROX 1-FUT-babysit-TA.BEN-INV-PROX DEM-OBV 1-daughter-OBV
"My mother is going to babysit my daughter for me."

In (44), the possessed noun *nitáni* "my daughter" functions as the unindexed object and it is grammatical without (a) or with (b) a demonstrative.

To summarize, unindexed objects of ditransitive verbs are relatively unrestricted with respect to the types of nominal expressions they permit. Bare, singular, plural, proper, and possessed nouns can all occur with or without a demonstrative. The only restriction – that bare nouns cannot occur with a demonstrative – is a restriction on bare nouns, and not a restriction unique to unindexed objects. A summary is given in Table A.4 below.

Table A.4. Types of Nominal Expressions Functioning as the Unindexed Object of a Ditransitive Verb

	No demonstrative	With demonstrative
N	✓	×
N-SG	✓	✓
N-PL	✓	✓
ADJ-N	✓	✓
Proper N	✓	✓
POSS-N	✓	✓

A.5. Nominal Expressions that can Function as an Oblique

The final grammatical function to consider is oblique. As defined in chapter 2, obliques are nominal expressions that are licensed via an adpositional prefix and do not show any agreement on the verb. Obliques pattern with unindexed objects of ditransitive verbs in permitting a wide range of different nominal expressions.

Bare, singular, and plural nouns can also function as obliques, as shown in (45)-(47) below.

(45)	*Nítsooyi*	*akóópskaan*	*(ki)*	*nomóhpioyi*	*napayín*.
	nit-ioyi	akoopskaan	(ki)	n-omohp-ioyi	napayin
	1-eat.AI	soup	(and)	1-ACCOMP-eat.AI	bread
	"I ate soup and I ate it with bread."				

(46)	*Nitáákohtahkayi*	*áípottaawa*.	
	nit-yaak-oht-waahkayi	aipottaa-wa	
	1-FUT-means-go.home.AI	plane-PROX	
	"I'll go home by plane."		(Frantz 2009: 92)

(47)	*Pisátsi'nsimaanists*	*nomóhpioyoo'si.*
	pisatsi'nsimaan-istsi	n-omohp-ioyo'si
	vegetable-PL	1-ACCOMP-cook.AI
	"I cooked (it) with vegetables."	

In (45), the bare noun *napayín* "bread" functions as an oblique, introduced by the adposition *omohp-* in the second conjunct. In (46), the singular noun *áípottaawa* "airplane" functions as an oblique, introduced by the adposition *oht-*. Finally in (47), the plural noun *pisátsi'nsimaanists* "vegetables" functions as an oblique, introduced by the adposition *omohp-*.

Singular and plural nouns that are modified by a demonstrative can also function as obliques, as shown in (48) and (49) below.

(48)	*Nimáánsskohtoto*	*omi*	*kaná'pssin*.
	nit-maan-ssk-oht-oto	om-yi	kana'pssin-yi
	1-recently-return-from-go.AI	DEM-INAN	rodeo-INAN
	"I just now came back from the rodeo."		

(49)	*Nitsitáíhpiyi*	*amostsi*	*itáípasskao'pists*.
	nit-it-a-ihpiyi	amo-istsi	itaipasskao'p-istsi
	1-LOC-IMPF-dance.AI	DEM-PL	dance.hall-PL
	"I danced at these dance halls."		

In (48), *omi kaná'pssin* "the rodeo" functions as an oblique, introduced by the adposition *oht-*, and in (49) *amostsi itáípasskao'pists* "these dance halls" functions as an oblique, introduced by the adposition *it-*.

Nouns modified with an adjectival prefix can also function as obliques, either with or without a demonstrative. Examples are given in (50) and (51).

(50)	*Ííhtsooyiwa*	*omáhksinnoohsoyi*	
	iiht-ooyi-wa	omahk-innoohsoyis	
	INSTR-eat.AI-PROX	big-spoon	
	"S/he ate with a big spoon."		

(51)	*Nitsitapíksi'kayi*	*annahkayi*	*sikohkiááyowa*.
	nit-itap-iksikka'yi	ann-wa-hk-ayi	sik-kiaayo-wa
	1-toward-walk.AI	DEM-PROX-INVIS-*ayi*	black-bear-PROX
	"I walked towards this black bear."		

In (50), the prefix *omahk-* "big" modifies the noun *innoohsoyis* "spoon," which functions as an oblique, introduced by the adposition *iiht-*. In (51), the prefix *sikohk-* "black" modifies the noun *kiaayo,* which, along with the demonstrative, functions as an oblique introduced the adposition *itap-*.

Proper nouns and possessed nouns can also function as obliques, either with or without a demonstrative. Examples are given below.

(52)	a.	*Nitsitapaohkomataki*	*Mohkinsstsis.*	
		nit-itap-a-ohkomataki	mohkinsstsis	
		1-toward-IMPF-drive.AI	Calgary	
		"I drove to Calgary."		
	b.	*Nitsitapaohkomataki*	*aami*	*Mohkinsstsis.*
		nit-itap-a-ohkomataki	aam-yi	mohkinsstsis
		1-toward-IMPF-drive.AI	DEM-INAN	Calgary
		"I drove (all the way) to Calgary."		

(53)	a.	*Nomóhtoto*	*niksíssta*	*ookóówayi*.		
		n-omoht-oto	n-iksisst-wa	w-ookoowa-yi		
		1-source-go.AI	1-mother-PROX	3-house-INAN		
		"I came from my mother's house.				
	b.	*Nomóhtoto*	*annahk*	*niksíssta*	*ookóówayi.*	
		n-omoht-oto	ann-wa-hk	n-iksisst-wa	w-ookoowa-yi	
		1-source-go.AI	DEM-PROX-INVIS	1-mother-PROX	3-house-INAN	
		"I came from my mother's house.				
	c.	*Nomóhtoto*	*annisk*	*niksíssta*	*ookóówayi.*	
		n-omoht-oto	ann-yi-hk	n-iksisst-wa	w-ookoowa-yi	
		1-source-go.AI	DEM-INAN-INVIS	1-mother-PROX	3-house-INAN	
		"I came from my mother's house.				
	d.	*Nomóhtoto*	*annahk*	*niksíssta*	*annisk*	*ookóówayi.*
		n-omoht-oto	ann-wa-hk	n-iksisst-wa	ann-yi-hk	w-ookoowa-yi
		1-source-go.AI	DEM-PROX-INVIS	1-mother-PROX	DEM-INAN-INVIS	3-house-INAN
		"I came from my mother's house.				

In (52), the proper noun *Mohkinsstsis* “Calgary” (literally “elbow”) is an oblique, introduced by the adposition *itap-*, and can be used either without (a) or with (b) a demonstrative. In (53), the possessed noun *niksíssta ookóówayi* “my mother’s house” is an oblique, introduced by the linked *omoht-*. In the absence of the demonstrative (a), the grammaticality of this is questionable, but with a demonstrative modifying the possessor (b), the possessed noun (c), or both (d), this sentence is grammatical. Further, the grammaticality improves when the possessor is not an overt noun, as shown in (54).

(54) *Nomóhtoto* *ookóówayi.*
n-omoht-oto w-ookoowa-yi
1-source-go.AI 3-house-INAN
“I came from her house.”

In sum, obliques show the same unrestricted behaviour as unindexed objects of ditransitive verbs. They permit bare, singular, plural, proper, and possessed nouns both with and without a demonstrative. A summary of these findings is given in Table A.5 below.

Table A.5. Types of Nominal Expressions Functioning as an Oblique

	No demonstrative	With demonstrative
N	✓	✗
N-SG	✓	✓
N-PL	✓	✓
ADJ-N	✓	✓
Proper N	✓	✓
POSS-N	✓	✓

A.6. Summary

The preceding sections have revealed that the five grammatical functions (subject, indexed object, AI object, unindexed object of ditransitive verb, and oblique) can be grouped into three categories, according to the types of nominal expressions that they permit. In particular, the grammatical functions of subject and indexed object show the same restrictions; they require number marking and a demonstrative. AI objects show a unique pattern; they only permit bare nouns, plural nouns, and nouns modified by an adjectival prefix. Finally, unindexed objects of ditransitive verbs pattern with obliques in permitting the widest range of nominal expressions; the one restriction is against bare nouns with demonstratives, a type of nominal expression that arguably ruled out on independent grounds (i.e., demonstratives can only modify inflected nouns). These findings are summarized in Table A.6 below.

Table A.6. Summary of Types of Nominal Expressions

	Subject & Indexed Object		AI Object		Unindexed Object and Oblique	
	No dem	Dem	No dem	Dem	No dem	Dem
N	✗	✗	✓	✗	✓	✗
N-PL	✗	✓	✓	✗	✓	✓
ADJ-N	✗	✓	✓	✗	✓	✓
N-SG	✗	✓	✗	✗	✓	✓
Proper N	?	✓	✗	✗	✓	✓
POSS-N	?	✓	✗	✗	✓	✓