

Micro-variation in Agreement, Clause-typing and Finiteness: Comparative Evidence from Blackfoot and Plains Cree

Rose-Marie Déchaine & Martina Wiltschko
(dechaine@mail.ubc.ca; Martina.Wiltschko@ubc.ca)

University of British Columbia

INTRODUCTION: SYNTACTIC MICRO-VARIATION

We address the following question: How can one model syntactic variation between languages? The theoretical literature approaches this question in two ways. On one view, a change in the value of large-scale macro-parameters has dramatic consequences for the grammar as a whole; this approach often models differences between (usually unrelated) language types. Irrespective of the merits of the macro-parametric approach—which remains controversial—it is not a useful analytic tool for modeling syntactic variation between related languages. In contrast, the micro-parametric approach posits that incremental differences in grammars of closely related languages reflect small-scale, fine-grained changes. A hallmark of micro-parametric syntactic analyses is that the syntactic properties of cognate morphemes are subject to variation. Consequently, the mapping between morphology and syntax is a primary source of variation. In this context, our goal is to explore micro-variation in agreement, clause-typing and finiteness in Blackfoot and Plains Cree. While Blackfoot (together with Cheyenne and Arapaho) is part of the geographic Plains sub-group, Plains Cree is the westernmost member of the Cree-Montagnais-Naskapi continuum, itself part of the Central Algonquian sub-group.¹

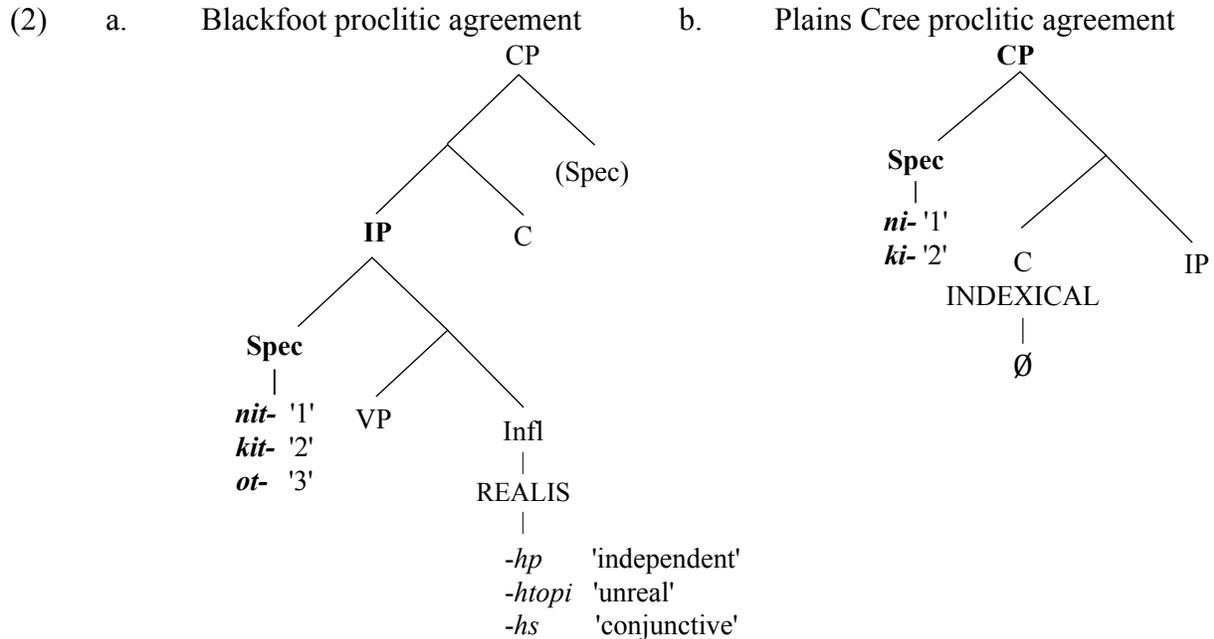
VERBAL AGREEMENT ASSOCIATES WITH THE IP- OR THE CP- DOMAIN

Syntactic structures divide into domains (Grohman 2003; Chomsky 2008), as in (1).² Argument structure, valency-marking and lexical aspect are associated with the VP-domain (sometimes called the theta-domain). Distinctions relating to finiteness, grammatical function, and grammatical aspect are associated with the IP-domain. Distinctions related to clause-typing (matrix/subordinate, affirmative/negative) and operator binding (relativization and content questions) are associated with the CP-domain.

(1)	[_{CP} ...	[_{IP} ...	[_{VP} ...]]]
	CP-DOMAIN	IP-DOMAIN	VP-DOMAIN
	<i>matrix/subordinate</i>	<i>finiteness</i>	<i>argument structure</i>
	<i>affirmative/negative</i>	<i>grammatical function</i>	<i>valency</i>
	<i>operator-binding</i>	<i>grammatical aspect</i>	<i>lexical aspect</i>

We compare the IP- and CP-domain in Blackfoot and Plains Cree as they relate to proclitic agreement and claim that the latter is the locus of micro-parametric variation. Blackfoot proclitic agreement is in the IP-domain, specifically in SpecIP, (2)a. Semantically, it is conditioned by finiteness, in particular by a realis feature. Plains Cree proclitic agreement is in the CP-domain, specifically SpecCP, (2)b. Semantically, it is conditioned by indexicality. We show that this difference in the placement of proclitic agreement accounts for morphological, syntactic, and

semantic differences in the deployment of agreement in the two languages. We first demonstrate how IP-domain agreement is deployed in Blackfoot, and then illustrate how CP-domain agreement patterns in Plains Cree. Along the way, we highlight points of divergence between the two languages. We conclude by assessing the prospects of Algonquian comparative syntax



BLACKFOOT IP-DOMAIN AGREEMENT IS CONDITIONED BY [\pm REALIS]

Our argument that Blackfoot agreement is in the IP-domain proceeds in five steps. **First**, Blackfoot agreement is sensitive to the realis/irrealis contrast, which holds of the IP-domain. **Second**, the deployment of proclitic agreement is insensitive to the matrix/embedded distinction; this is expected if the latter is a CP-domain distinction. **Third**, Blackfoot person agreement registers the highest A-position, an IP-domain position. **Fourth**, Blackfoot initial change is conditioned by aspect, an IP-domain contrast. **Fifth**, Blackfoot CP-domain contrasts—polarity marking and discourse-conditioned enclitics—are independent of IP-domain proclitic agreement.

Argument 1: the locus of Blackfoot agreement is the IP-domain

Ritter & Wiltschko (2010) position Blackfoot proclitic agreement in SpecIP. This predicts that Blackfoot proclitics will be sensitive to IP-domain contrasts. A candidate for such a contrast is the realis/irrealis distinction, which is coded in a series of suffixes that include *independent -hp*, *unreal -htopi* (an extended form of the independent), *conjunctive -hs*³, *subjunctive -iniki*, and *imperative -t* (Frantz 1971; 1991). There is a syntactic dependency between proclitic agreement in SpecIP and [\pm REALIS] marking in Infl. Four diagnostics support this claim. **First**, morphological classification of Blackfoot agreement paradigms partitions them according to the presence/absence of proclitic agreement. **Second**, semantic classification of Blackfoot agreement paradigms reveals that [+REALIS] forms have proclitic agreement (3)a, while [-REALIS] forms lack it (3)b. **Third**, suppletion of the 1st plural inclusive supports the claim that the head of Infl is sensitive to person features in SpecIP. **Fourth**, amongst [+REALIS] forms, there is a mutual

suppletion, and never occurs in verbal paradigms. The difference between partial versus complete suppletion of the 3rd person is, as we argue below, attributable to a difference between IP-domain versus CP-domain agreement.

	INDEPENDENT	UNREAL	CONJUNCTIVE
1	<i>nit...</i>	<i>nit...htopi</i>	<i>nit...hsi</i>
2	<i>kit...</i>	<i>kit...htopi</i>	<i>kit...hsi</i>
1PL	<i>nit...hpinnaana</i>	<i>nit...hpinnaanopi</i>	<i>nit...hsinnaani</i>
2PL	<i>kit...hpoaawa</i>	<i>kit...hpoaawopi</i>	<i>kit...hsoaayi</i>
X	<i>... 'pa</i>	<i>...o'topi</i>	<i>...o'si</i>
3	<i>...wa</i>	<i>...wahtopi</i>	<i>ot...hsi</i>
3PL	<i>...yi</i>	<i>...wahtopiyi</i>	
3OBV	<i>...yini</i>	<i>... wahtopiyini</i>	

TABLE 4: BLACKFOOT VAI REALIS PARADIGMS (cf. Frantz 1991:145)

Argument 2: Blackfoot person agreement is insensitive to the matrix/subordinate distinction

We now consider a different type of patterning that indicates that Blackfoot proclitic agreement is in the IP-domain. Consider Table 5, which shows that proclitic agreement occurs in both matrix and subordinate clauses; in other words, it is independent of the clause-typing system. This is illustrated in (5), which shows that Blackfoot matrix clauses occur both with and without proclitic agreement. A matrix *independent mode* clause has proclitic agreement (5)a, while a matrix *imperative order* clause lacks proclitic agreement (5)b. Moreover, Blackfoot subordinate clauses also occur with and without proclitic agreement. (6)a shows that a subordinate *conjunctive mode* clause (in square brackets), marked with *-hsi*, has proclitic agreement. And (6)b shows that an subordinate *subjunctive order* clause (in square brackets), marked by *-iniki* and associated with epistemic predictive force, lacks proclitic agreement.

	MATRIX	SUBORDINATE
[+PROCLITIC]	<i>independent mode</i>	<i>conjunctive mode</i>
[-PROCLITIC]	<i>imperative order</i>	<i>subjunctive order</i>

TABLE 5: BLACKFOOT PROCLITIC AGREEMENT AND THE MATRIX/SUBORDINATE PARTITION

- (5) a. ***Kitsinóóhpoaawa*** INDEPENDENT MODE
kit-[ino-o]-hp-oaawa
 2-see.VTA-DIR.1:2-INDEP.SAP-2PL
 ‘I saw you (PL)’
- b. *noohkohpómmatook!* IMPERATIVE ORDER
 noohk-ohpommatoo-**k**
 please-buy.VTI -2PL.IMPERATIVE
 ‘Please buy it! (Frantz 1991:113, ex. t)’

- (6) a. *Nitssksinii'pa* [*kitsówatoohsoaayi*] CONJUNCTIVE MODE
 Nit-sksini-‘p-wa **kit**-Iowatoo-**hs**-oaa-yi
 1-know.VTI-THEME-IN.SG 2-eat.VTI-CONJ-2PL-CONJ
 ‘I know you ate it.’ (Frantz 1991:111, ex. f)
- b. [*ikkamínimmiinnaaniki*,] *nitáaksowatoo'pinnaana* SUBJUNCTIVE ORDER
 ikkam-Ini-mmiinnaa-**niki** nit-yáak-Iowatoo-‘p-innan-wa
 if-see.VTI-1PL-SUBJUNCTIVE 1-FUT-eat.VTI-THEME-1PL-INANIM.SG
 ‘If we see it, we’ll eat it.’ (Frantz 1991:112, ex. m)

Argument 3: Blackfoot person agreement registers the highest A-position

According to our analysis, Blackfoot proclitic agreement is in SpecIP, as in (7). One consequence of the IP-domain analysis is that Blackfoot proclitic agreement is A-agreement, i.e. agreement with an A-position. A-positions are the syntactic positions that determine grammatical function (GF), and are associated with case features (such as Nominative and Accusative) and GF-agreement (such as subject and object agreement). Accordingly, the IP-domain analysis predicts that Blackfoot proclitic agreement is GF agreement. As such, we expect it to code the A-position closest to SpecIP (Bliss, Ritter et al. 2010). In Algonquian, what counts as the highest A-position is determined by the person rankings in (8). To see the interplay between person ranking and proclitic agreement, consider Table 6, which presents the distribution of Blackfoot proclitic agreement in the *conjunctive mode*. In the local series, 2 outranks 1, so proclitic agreement is with the 2nd person. In the mixed series, LOCAL outranks 3, so proclitic agreement is with the 1st or 2nd person. As for the 3rd person series, 3rd person outranks 3rd person obviative, so proclitic agreement is with the highest ranked 3rd person.

- (7) [CP ... [IP *nit-/kit-/ot-* [VP ...]]]
 1 2 3

- (8) LOCAL SERIES: 2 > 1
 MIXED SERIES: LOCAL > 3
 3RD PERSON SERIES: 3 > 3OBV > 3.FURTHER.OBV

LOCAL SERIES (2>1)		MIXED SERIES (LOCAL>3)				3 RD PERSON SERIES (3>3’>3’')	
1:2	<i>kit...o:-hsi</i>	1:3		2:3		3:3OBV	
1:2PL	<i>kit...o:-hs-oaayi</i>	1:3PL	<i>nit...a:-hsi</i>	2:3PL	<i>kit...a:-hsi</i>	3PL:3OBV	<i>ot...a:-hsi</i>
1PL:2	<i>kit...o:-hsi-nnaani</i>	1:3OBV		2:3OBV		3OBV:3FRTH.OBV	
1PL:2PL							

TABLE 6: BLACKFOOT CONJUNCTIVE MODE AGREEMENT, VTA (cf. Frantz 1991:147-149)

Blackfoot IP-domain agreement registers the highest A-position, as defined by the person hierarchy. As such, it is compatible with any person, be it 1st, 2nd or 3rd, (9)a. This contrasts with the A’-agreement of Plains Cree, which, as we shall see, is restricted to discourse-linked 1st and 2nd person indexical agreement, (9)b.

- (13) BLACKFOOT INITIAL CHANGE
 [ASPP PERFECTIVE [VP *o*...] → [ASPP PERFECTIVE [VP *ii*...]

The *o*-initial form may be an *o*-initial verb stem, or if there is a preverb present, an *o*-initial preverb. Verb stems and pre-verbs show slightly different behavior, and here we only consider verb stems. Verb stems fall into two classes according to how they undergo IC (see Louie 2010). With one class of verbs, IC applies either at the left edge or following a proclitic, the latter being optional with some verbs. Consider the *o*-initial verb stem *oka'pipowat-* 'swear at, talk bad, say bad things VTA', which in the perfective surfaces as *ii*-initial both at the absolute left-edge (14)a, and after a proclitic (14)b. With other verbs, IC applies only if the verb stem is at the left edge (i.e. word-initial position). For example, with *ohkot-* 'give VTA', IC applies only if the stem is left-aligned, yielding the contrast between (15)a versus (15)b. Louie (2010) speculates that this may be because IC is the locus of pitch accent: if so, then (15)b is blocked for prosodic reasons, leaving the zero-marked perfective in (15)c as the only well-formed output. While the precise conditioning factors for Blackfoot IC are not well understood, they clearly involve a combination of morpho-syntactic and morpho-phonological factors. Relevant is the fact that Blackfoot IC has aspectual force; this is consistent with our claim that the left edge of the Blackfoot verb stem is associated with the IP-domain.

- (14) a. *ii*ká'pi'powatsi *annisk Lucy*
ii-oka'p-ipowat-yii *annisk Lucy*
 PERF.IC-bad.say.about.VTA-3:3OBV DEM.3.OBV Lucy
 'He swore at Lucy; he said bad things about Lucy'
 (adapted from Louie 2010, (1c))
- b. *nitsii*ka'pi'powata *annahk Lucy*
 nit-*ii*-oka'p-ipowat-a *annahk Lucy*
 1-PERF.IC-bad-say.about.VTA.1:3 DEM.INVIS Lucy
 'I swore at Lucy; I said bad things about Lucy' (adapted from Louie 2010, (1a))
- (15) a. *ii*hkotsii *ani*
ii-ohkot-yii *an-yi*
 PERF.IC-give.VTA-3:3OBV DEM-3OBV
 'He gave it to her' (Louie 2010, (9c))
- b. **nitsskoota*⁵
 nit-*ii*-ohkot-a
 1-PERF.IC-give.VTA-SAP:3
 [INTENDED: 'I gave it to her'] (Louie 2010, (9a))
- c. *aná nitohkoota*
 an-wa nit-∅-ohkot-a
 DEM-3 1-PERF-give.VTA-SAP:3
 'I gave it to her' (Louie 2010, (9a'))

Argument 5: Blackfoot has CP-domain contrasts

If Blackfoot proclitic agreement is in the IP-domain, and if left-edge phenomena are conditioned by IP-domain contrasts, then the question arises as to whether Blackfoot has CP-domain contrasts. There are two candidates: (i) polarity contrasts in affirmative and negative clauses; (ii) discourse-sensitive pronominal enclitics. We consider each in turn.

Candidate 1: Blackfoot has polarity contrasts

Blackfoot contrasts affirmative and non-affirmative modes; this partition between positive and negative polarity is associated with the CP-domain. (See Reinholtz (2007) on Swampy Cree.) While Blackfoot affirmative clauses have no dedicated affirmative morphology (16)a, there is non-affirmative morphology with negation and yes/no questions in the form of the suffix **-waatsi(ksi)**, (16)b-c. Syntactically, polarity contrasts associated with negation and yes/no questions are usually analyzed as forming part of the C-domain (Laka 1990). The presence of non-affirmative morphology indicates that C is syntactically active in Blackfoot, and leads us to conclude that the non-affirmative suffix is a C-head.

- (16) a. *Sakoaopiiwa*
saaki-a-opii-wa
still-DUR-stay.VAI-3
'He's home.' (Frantz 1971:26)
- b. *Matsakiaopiiwaatsi(ksi)*
mat-saaki-a-opii-watsiks
NEG-still-DUR-stay.VAI-3NON.AFFIRM
'He's not home.' (Frantz 1971:26)
- c. *sakiaopiiwaatsi(ksi)*
saaki-a-opii-watsiks
still-DUR-stay.VAI-3NON.AFFIRM
'He's not home?' (Frantz 1971:26)

Candidate 2: Blackfoot has discourse-conditioned enclitics

Frantz (1991:46ff.) identifies a series of 'attached pronouns' in Blackfoot. These are given in Table 7. We take these forms to be candidates for (discourse-linked) pronominal agreement at the CP-level. These enclitics occur only when there is another third person in the immediate context, and appear at the right-edge of the verbal complex. (17)a-b shows that the object of a VTI stem may be reinforced by means of enclitics. (17)c shows that locative arguments may be reinforced. These enclitics can iterate, as in (18), where the enclitic **-áyi** ('singular') reinforces the subject, while **-aiksi** ('animate plural') reinforces the object. These enclitics can also iterate across a series of related clauses, as in (19), where the enclitic **-aawa** ('plural') occurs both in the antecedent *if*-clause, and the consequent clause. Moreover, within the consequent clause, it occurs on both the matrix verb 'want', and the embedded verb 'eat'. We take this cross-clausal chaining to be characteristic of CP-level marking. This is consistent with our claim that, in Blackfoot, regular pronominal agreement is introduced at the IP-level, leaving the CP-layer available for discourse-conditioned enclitics.

	SG	ANIM PL	INANIM PL
DISTINCT THIRD PERSON	... <i>áyi</i>	... <i>aiksi</i>	... <i>aistsi</i>
LONG PLURAL FORM	—	- <i>aawa</i>	

TABLE 7: BLACKFOOT DISCOURSE-CONDITIONED ENCLITICS (cf. Frantz 1991:49)

- (17) a. *nohkówa áakohpommatoomáyi*
n-ohkó-wa [yáak-ohpommatoom-wa]-**áyi**
1-son-3SG FUT-buy.VTI-THEME-3SG-PRO.SG
‘My son will buy it’ (Frantz 1991:47, ex. e)
- b. *nohkówa áakohpommatoomaistsi*
n-ohko-wa [yáak-ohpommatoom-wa]-**aistsi**
1-son-3SG FUT-buy.VTI-THEME-3SG-PRO.INANIM.PL
‘My son will buy them (INANIM)’ (Frantz 1991:47, ex. h)
- c. *oma aakiíkoana itohkítopiiwaistsi*
Om-wa aakiíkoaN-wa [it-ohkít-opii-wa]-**aistsi**
DEM-3SG girl-3SG THERE-UPON-sit-3SG-PRO.INANIM.PL
‘That girl sat on them (INANIM)’ (Frantz 1991:48, ex. o)
- (18) *Anni otáni, itohkítopiiyináyiksi*
Ann-yi w-itán-yi, [it-ohkít-opii-yini]-**áyi-aiksi**
DEM-3OBV 3-daughter-3OBV THERE-UPON-sit-3OBV-PRO.SG-PRO.ANIM.PL
‘His daughter sat on them (ANIM), she did’ (Frantz 1991:49, ex. q) [trans. by D&W]
- (19) *kátá’yo’kaawahtopiyaawa, áaksstaayaawa mááhksoyssaawa*
[kátá’-yo’kaa-wahtopi-yi]-**aawa** [yáak-sstaa-yi]-**aawa** [m-áhk-loyi-hsi]-**aawa**
NEG-sleep-UNREAL-3PL-PRO.PL FUT-want-3PL-PRO.PL 3-might-eat-CNJT-PRO.PL
‘If they weren’t asleep, they’d want to eat’ (Frantz 1991:114, ex. y)

INTERIM SUMMARY: BLACKFOOT IP-DOMAIN AGREEMENT

Blackfoot agreement paradigms are sensitive to the [\pm REALIS] contrast, a finiteness contrast located in the IP-domain. This accounts for the fact that Blackfoot proclitic agreement is insensitive to CP-domain features such as clause-typing (e.g., the distinction between matrix and embedded clauses), and discourse-linking (e.g. indexicality). In this respect, Blackfoot proclitic agreement differs from its Plains Cree counterpart, as we show below. The IP-domain is the locus of other morpho-syntactic phenomena in Blackfoot. We highlighted two syntactic diagnostics, which to our knowledge, have not been explicitly observed before for Blackfoot. **First**, the highest syntactic position targeted by Blackfoot proclitic agreement is an A-position within IP. Notably, Blackfoot proclitic agreement never registers an A’-position. This has two immediate consequences: (i) discourse roles are not registered by Blackfoot agreement; (ii) operator positions related to wh-movement, which are canonical syntactic A’-positions, are not registered by Blackfoot agreement. Thus, Blackfoot agreement is insensitive to CP-domain contrasts such as discourse-linking and A’-movement. But then this raises the question of

whether there are identifiable CP-domain effects in Blackfoot: we showed that there are, in the form of polarity contrasts (affirmative versus negative) and discourse-conditioned enclitics. The **second** novel diagnostic for the IP-domain concerns the morpho-phonological process of initial change, which in Blackfoot is aspectually conditioned.

PLAINS CREE CP-DOMAIN AGREEMENT IS CONDITIONED BY [\pm INDEXICAL]

In Plains Cree the locus of agreement is the CP-domain. Our argument proceeds in six steps. **First**, we establish that Plains Cree agreement is conditioned by the [\pm INDEXICAL] contrast, and this partition holds of the CP-domain. **Second**, we show that Plains Cree proclitic agreement is obligatorily discourse-bound. **Third**, we demonstrate that the deployment of proclitic agreement in Plains Cree is sensitive to the distinction between matrix and embedded clauses. **Fourth**, we illustrate how Plains Cree agreement is sensitive to clause-typing. **Fifth**, we show that Plains Cree initial change is conditioned by clause-typing, a CP-domain contrast. **Sixth**, we argue that Plains Cree has IP-domain agreement in a restricted set of contexts.

Argument 1: the locus of Plains Cree agreement is the CP-domain

Here we focus on the finding from Cook’s (2008) investigation of clause-typing in Plains Cree, namely that the primary distinction between clause-types in that language lies in the contrast between indexical clauses (20)a, and non-indexical clauses (20)b. Of interest is the fact that the two clause-types are morphologically differentiated. Indexical clauses, which correspond to the *independent order*, are associated with proclitic agreement in SpecCP, and a null C head. In contrast, non-indexical clauses (called anaphoric clauses by Cook 2008), which correspond to the *conjunct order*, are associated with a null operator in SpecCP, with C being filled by one of four morpho-phonological forms: the *ê-conjunct* prefix, the *kâ-conjunct* prefix, the *initial-change conjunct* (marked by a change in vowel quality), and the *simple conjunct* (which is zero marked).

(20)	a.	[_{CP} SPEC	[_C Ø] [IP ...]]	PLAINS CREE INDEXICAL CLAUSE
		{ ni-, ki- }		
		SPEAKER/HEARER		
	b.	[_{CP} OP	[_C ...] [IP ...]]	PLAINS CREE NON-INDEXICAL CLAUSE
			{ ê-, kâ-, IC, Ø }	

Consider the Plains Cree verbal agreement paradigm in Table 8, which contrasts indexical clauses (in the *independent order*) with non-indexical clauses (in the *conjunct order*). Observe that indexical clauses have proclitic agreement only with 1st and 2nd person; there is no 3rd person proclitic agreement in Plains Cree. As for non-indexical clauses, they have no proclitic agreement at all; instead there is a clause-typing prefix which is invariant for all persons: *ê-*, *kâ-*, *IC-*, or a null prefix. The invariance of Plains Cree clause-typing prefixes contrasts with Blackfoot typing affixes, whose surface form is conditioned by person and number.

PROCLITIC AGR		✓	✗	✗	✗	✗
SEMANTIC PARTITION		INDEXICAL	NON-INDEXICAL			
ORDER		<i>independent</i>	<i>conjunct</i>			
MODE			<i>changed conjunct</i>			<i>simple conj</i>
			<i>ê-conjunct</i>	<i>kâ-conjunct</i>	<i>IC-conjunct</i>	
AGREEMENT & CLAUSE- TYPING	1	<i>ni...n</i>	<i>ê...yân</i>	<i>kâ...yân</i>	<i>IC...yân</i>	<i>Ø...yân</i>
	1PL	<i>ni...nân</i>	<i>ê...yâhk</i>	<i>kâ...yâhk</i>	<i>IC...yâhk</i>	<i>Ø...yâhk</i>
	2	<i>ki...n</i>	<i>ê...yan</i>	<i>kâ...yan</i>	<i>IC...yan</i>	<i>Ø...yan</i>
	21	<i>ki...nânaw</i>	<i>ê...yahk</i>	<i>kâ...yahk</i>	<i>IC...yahk</i>	<i>Ø...yahk</i>
	2PL	<i>ki...nâwâw</i>	<i>ê...yêk</i>	<i>kâ...yêk</i>	<i>IC...yêk</i>	<i>Ø...yêk</i>
	3	<i>...w</i>	<i>ê...t</i>	<i>kâ...t</i>	<i>IC...t</i>	<i>Ø...t</i>
	3PL	<i>...wak</i>	<i>ê...cik</i>	<i>kâ...cik</i>	<i>IC...cik</i>	<i>Ø...cik</i>
3OBV	<i>...yiwa</i>	<i>ê...yit</i>	<i>kâ...yit</i>	<i>IC...yit</i>	<i>Ø...yit</i>	

TABLE 8: PLAINS CREE INTRANSITIVE VERB PARADIGM (cf. (Wolfart 1973))

Argument 2: Plains Cree proclitic agreement is obligatorily discourse-bound

Indexical clauses have proclitic agreement only with the 1st and 2nd person. This is an important clue. What makes 1st and 2nd person special is their discourse function: 1st person picks out the speaker, 2nd person the hearer. This picking out of the speaker or the hearer is called indexing, and many analyses treat 1st and 2nd person as having a privileged relation with indexicality (Fillmore 1997). Cook (2008) analyzes the 1st and 2nd person agreement found in the Plains Cree *independent order* as indexical agreement. This accounts for the fact that 3rd person is not part of the proclitic series in Plains Cree: 3rd person, unlike 1st and 2nd person, is not inherently indexical. It also sheds light on a difference between Plains Cree and Blackfoot. To see this, look at Table 9. While Plains Cree never permits 3rd person proclitic agreement with verbal forms, Blackfoot does. Plains Cree proclitic agreement is discourse-bound and inherently indexical, and so picks out the speaker and hearer, namely 1st and 2nd person. In contrast, Blackfoot proclitic agreement is not indexical: it is pure person agreement, and so compatible with any person. Structurally, the correlate of this distinction is that Plains Cree proclitics are in SpecCP, while the corresponding forms in Blackfoot are in SpecIP.

TYPE OF AGREEMENT	LANGUAGE	STRUCTURE
INDEXICAL	Plains Cree	[_{CP} <i>ni-/ki-</i> [_{IP} [_{VP ...}]]] SPEAKER/HEARER
PERSON	Blackfoot	[_{CP} [_{IP} <i>nit-/kit-/ot-</i> [_{VP ...}]]] 1 2 3

TABLE 9: THE SYNTAX OF PROCLITIC AGREEMENT IN PLAINS CREE AND BLACKFOOT

The indexical analysis of Plains Cree proclitic agreement accounts for discourse restrictions that hold of the *independent order*. First, *independent order* forms are obligatorily discourse-bound. As such, they must anchor to a speech act participant: an actual speaker or hearer. For example, if a speaker is reporting their current state, only the *independent order* is felicitous, (21).

- (21) a. *nikawacin*
 ni-kawaci-n
 1-cold.VAI-SAP(INDEP)
 ‘I’m cold’
- b. *#?ê-kawaciyân*
 ê-kawaci-yân
 C-cold.VAI-SAP(CONJ)
 ≠ (i) I’m cold’ = (ii) ‘...when I was cold’
 CONSULTANT’S COMMENT: *it’s referring to when I was cold...I wouldn’t say this to you. I would say nikawacin ‘I’m cold’ ...for ‘I’m cold’ I wouldn’t use [this form] (Cook 2008:113, (103))*

Argument 3: Plains Cree agreement is sensitive to the matrix/subordinate distinction

A consequence of the indexicality of Plains Cree *independent order* clauses is that their syntactic distribution is highly constrained. To see this, consider Table 10, which compares Blackfoot and Plains Cree with respect to the distribution of proclitic agreement in matrix and subordinate clauses. As discussed above, Blackfoot proclitic agreement is insensitive to the matrix/subordinate distinction. In contrast, Plains Cree proclitic agreement is only found in matrix clauses. Essentially, Plains Cree indexical clauses in the *independent order* are never in subordinate clauses. This contrasts with the non-indexical agreement found with *conjunct order* forms, which occur in both matrix and subordinate clauses.

	BLACKFOOT		PLAINS CREE	
	MATRIX	SUBORDINATE	MATRIX	SUBORDINATE
[+PROCLITIC]	<i>independent mode</i>	<i>conjunctive mode</i>	<i>independent order</i>	
[-PROCLITIC]	<i>imperative order</i>	<i>subjunctive order</i>	<i>conjunct order</i>	<i>conjunct order</i>

TABLE 10: MATRIX/SUBORDINATE PARTITION IN BLACKFOOT AND PLAINS CREE

The distributional difference between Plains Cree indexical and non-indexical clauses is pervasive. While both indexical (*independent order*) and non-indexical (*conjunct order*) clauses are found in matrix contexts, only non-indexical clauses are found in embedded contexts, (22). The prohibition against embedding Plains Cree indexical clauses is completely general. They also fail to be embedded in non-finite contexts; instead, the *simple conjunct order* is used, accompanied by irrealis marking in the form of the preverb *ka-*, (23). Not only do Plains Cree indexical clauses fail to embed as complement clauses, they never occur in a subordinate context. Thus, as illustrated in (24), while indexical clauses (*independent order*) are not licit in temporal adjunct clauses, non-indexical clauses (*conjunct order*) are.

- (22) a. *nichkêyihêtên* / *ê-cihkêyihêtâmân*
 ni-cihkêyihêtê-n ê-cihkêyihêtâm-ân
 1-happy.VTI-SAP(INDEP) C-happy.VTI-1(CONJ)
 ‘I’m happy’ (Cook 2008:58, (7))

- (26) a. [CP *OP*_{TOPIC} [C *ê-*] [IP ...]] *Plains Cree ê-conjunct mode*
 b. [CP *OP*_{WH} [C *kâ-*] [IP ...]] *Plains Cree kâ-conjunct mode*
 c. [CP *OP*_{QUANT} [C *IC-*] [IP ...]] *Plains Cree IC-conjunct mode*

Diagnostic 1: indexical clauses don't support bound variable anaphora

While indexical clauses don't support bound variable anaphora, non-indexical clauses do. Consider (27).⁶ The *independent order* cannot serve as an antecedent for predicate elision (27)a, but the *conjunct order* can (27)b. Furthermore, observe that the ellipsis in (27)b can only be construed as having a sloppy reading: in other words, as bound variable anaphora, (27)b-i.⁷

- (27) a. **niya niwâpamâw atim nintonâw, mâka môya Jeff*
niya ni-wâpam-â-w atim ni-niton-â-w mâka môya Jeff
 1.EMPH 1-see.VTA-DIR-3 dog 1-look.for.VTA-DIR-3(INDEP) but NEG Jeff
 [INTENDED: 'I saw the dog I was looking for, but Jeff didn't (see the dog I/he was looking for)] (Cook 2008:79, (41b))
- b. *niya niwâpamâw atim kâ-nitonak, mâka môya Jeff*
niya ni-wâpam-â-w atim kâ-niton-ak mâka môya Jeff
 1.EMPH 1-see.VTA-DIR-3 dog C-look.for.VTA-1:3(CONJ) but NEG Jeff
 = (i) BOUND VARIABLE ANAPHORA:
 'I saw the dog **I** was looking for, but Jeff didn't see the dog **he** was looking for'
 ≠ (ii) STRICT COREFERENCE:
 'I saw the dog **I** was looking for, but Jeff didn't see the dog **I** was looking for'
 (Cook 2008:79, (41a))

Semantically, the bound variable reading corresponds to contexts where the value of the elided argument co-varies with the value of the antecedent. In (27)b(i), the value of the arguments of *niton-* 'x look for y' vary. In particular the value of x varies: in the antecedent clause it is linked to the 1st person (*the dog I was looking for*), and in the elided clause it is linked to the 3rd person (*the dog he was looking for*). The strict reading, which corresponds to co-reference, is not possible in this context, (27)b(ii). The absence of the strict identity reading in (27)b(ii) is consistent with our claim that the pronominal agreement of the *conjunct order* is non-indexical. Strict identity is possible only with indexical agreement. This raises the question of why the strict identity reading is unavailable in (27)a with the *independent order*, which is analyzed as having indexical agreement. The confound comes from the fact that, in this context, the *independent order* form *nintonâw* 'I look for him/her' would be ruled out in any case, as it is not in a matrix clause. This leads us to expect that if we contrast two matrix clauses, as is possible with coordinated clauses, then the *independent order* (*qua* indexical clause) will be compatible only with strict coreference. This is indeed what we see, as shown in (28).⁸

- (28) *niminôs ninitonâw, êkwa Jeff nitonêw mîna*
 ni-minôs ni-niton-â-w êkwa Jeff niton-ê-w mîna
 1-cat 1-look.for.VTA-DIR-3(INDEP) and Jeff look.for.VTA-DIR-3 also
 ≠ (i) BOUND VARIABLE ANAPHORA:
 ‘I’m looking for **my** cat, and Jeff is looking for **his** cat too’
 = (ii) STRICT COREFERENCE:
 ‘I’m looking for **my** cat, and Jeff is looking for **my** cat too’
 (TC 09Feb2011)

Diagnostic 2: indexical clauses don’t support A’-binding

A’-binding contexts include content-questions and relative clauses. What these two construction types share in common is the presence of a wh-operator in SpecCP. In our analysis, Plains Cree indexical clauses locate their proclitic agreement in SpecCP, while non-indexical clauses have an abstract operator in SpecCP (Blain 1997). This predicts that indexical clauses will not support A’-binding, but that non-indexical clauses will. This prediction is confirmed: relativization is only compatible with non-indexical (*kâ-conjunct*) forms, as are content-questions:

- (29) a. *ana iskwêw {*ocêmêw / kâ-ocêmât } Johna*
 ana iskwêw ocêm-ê-w **kâ-ocêm-â-t** John-a
 DEM.NA woman kiss.VTA-DIR-3(INDEP) C-kiss.VTA-DIR-3(CONJ) John-OBV
 [INTENDED: ‘that woman who kissed John...’]
- b. *awîna ana {* ocêmêw / kâ-ocêm-â-t } Johna*
 awîna ana ocêmêw **kâ-ocêm-â-t** John-a
 who DEM.NA kiss.VTA-DIR-3(INDEP) C-kiss.VTA-DIR-3(CONJ) John-OBV
 ‘Who is it that kissed John’ (Blain 1997:68)

Argument 5: Plains Cree initial change (IC) is sensitive to clause-typing

Distributional criteria indicate that Plains Cree IC is integrated into the clause-typing system. First, IC never applies to *independent order* forms; it is only found in the conjunct order (Cook 2008:343). Second, the application of IC in the conjunct order yields a partition that is one of the two primary divisions in Cree verb forms (Wolfart 1973:45b), the other being the presence or absence of the subjunctive *-i* suffix. This yields a four-way division, as summarized in Table 11. Note that the iterative is the convergence of two morphological markers: IC at the left edge, and the subjunctive *-i* suffix at the right edge.

	NO <i>-i</i> SUFFIX	WITH <i>-i</i> SUFFIX
[+INITIAL CHANGE]	<i>changed conjunct</i>	<i>iterative</i>
[-INITIAL CHANGE]	<i>simple conjunct</i>	<i>subjunctive</i>

TABLE 11: DIVISION OF PLAINS CREE CONJUNCT MODES (cf. Wolfart 1973:45b)

Table 12 lists the morphological, semantic, and syntactic correlates of IC. By hypothesis, Plains Cree conjunct modes have a null operator in SpecCP. For forms with IC, which include the *changed conjunct* and the *iterative*, we locate IC in the C-head. Forms without IC have a null C-head, namely the *simple conjunct* and the *subjunctive*. Semantically, IC contributes veridical

force (Cook 2008). As for the *-i* suffix, we locate it in the IP-domain: when *-i* co-occurs with IC, this yields the iterative; when *-i* co-occurs with the null C-head, this yields the subjunctive.

SEMANTICS	MORPHOLOGY		SYNTAX	DESCRIPTOR	GLOSS (W1973:45b)
	IC	<i>-i</i>			
VERIDICAL	✓	✗	[_{CP} OP [_C IC [_{IP} ...]]]	<i>changed conjunct</i>	‘it being...’
	✓	✓	[_{CP} OP [_C IC [_{IP} ... <i>-i</i>]]]	<i>iterative</i>	‘whenever it is...’
A-VERIDICAL	✗	✗	[_{CP} OP [_C ∅ [_{IP} ...]]]	<i>simple conjunct</i>	‘that it is...’
	✗	✓	[_{CP} OP [_C ∅ [_{IP} ... <i>-i</i>]]]	<i>subjunctive</i>	‘if it be...’

TABLE 12: SEMANTIC CLASSIFICATION OF PLAINS CREE CONJUNCT MODES

Our analysis of Plains Cree conjunct modes accounts for the application of IC in the CP-domain. Plains Cree IC targets the first vowel of the verbal complex: Table 13 illustrates the application of IC to vowel-initial verb stems; Table 14 shows how IC applies to preverbs. Wolfart (1973:77) divides preverbs into two classes: grammatical preverbs (position 1); and lexical preverbs (position 2). We draw attention to the two shaded rows in Table 14. Note that the clause-typing prefixes *ê-* and *kâ-*, which we locate in C, are the product of IC. (The asterisk on **i-* and **kî-* indicates that they no longer surface in Plains Cree (Wolfart 1973:77a).⁹)

	TARGET	BASE FORM	CHANGED FORM	GLOSS
<i>i</i> → <i>ê</i>	#V...	<i>itâpi-</i>	<i>êtâpi-</i>	‘look thither or thus, VAI’
<i>a</i> → <i>ê</i>	#V...	<i>api-</i>	<i>êpi-</i>	‘sit down, VAI’
<i>o</i> → <i>wê</i>	#V...	<i>otawâsimisi-</i>	<i>wêtawâsimisi-</i>	‘have children, VAI’
<i>â</i> → <i>iyâ</i>	#V...	<i>âpasâpi-</i>	<i>iyâpasâpi-</i>	‘look back, VAI’

TABLE 13: PLAINS CREE IC WITH VERB STEMS (cf. Wolfart 1973:82f.)

	PRE-VERB TYPE	BASE FORM	CHANGED FORM	GLOSS
<i>î</i> → <i>ê</i>	<i>grammatical</i>	<i>*i-</i>	<i>ê-...</i>	‘ <i>ê</i> -conjunct’
<i>î</i> → <i>â</i> , <i>iyî</i>	<i>grammatical</i>	<i>*kî-...</i>	<i>kâ-...</i>	‘ <i>kâ</i> -conjunct’
	<i>lexical</i>	<i>wî-...</i>	<i>wâ-...</i>	‘will, intend to’
	<i>lexical</i>	<i>kîsi-...</i>	<i>kiyîsi-</i>	‘finish, complete’
<i>a</i> → <i>ê</i>	<i>grammatical</i>	<i>ka-</i>	<i>kê-...</i>	‘irrealis’
<i>ê</i> → <i>iyê</i>	<i>lexical</i>	<i>pê-...</i>	<i>piyê-...</i>	‘come hither’

TABLE 14: PLAINS CREE IC WITH PRE-VERBS (cf. Wolfart 1973:77f., 82f.)

Consider the examples in (30), which illustrate the distribution of Plains Cree IC. In the absence of a pre-verb, the verb stem is the locus of IC, as indicated by a change in vowel quality (30)a; such forms are typically found in adjunct temporal clauses. When a lexical pre-verb is present, as with futurate *wî-*, the pre-verb is the locus of IC (30)b. And when a grammatical clause-typing pre-verb is present, as with *ê-* and *kâ-*, initial change is obligatory; an unchanged form is unavailable in Plains Cree, (30)c-d. Regarding *ê-*, Wolfart (1973:76a) comments that “it is an empty “vehicle” for initial change since it seems to be [IC] which actually does the subordinating”. We suggest that *kâ-* is likewise an empty vehicle for IC.

	<i>changed conjunct</i>			<i>simple conj</i>	<i>subjunctive</i>
	<i>ê-conjunct</i>	<i>kâ-conjunct</i>	<i>IC-conjunct</i>		
1	<i>ê...yân</i>	<i>kâ...yân</i>	<i>IC...yân</i>	<i>∅...yân</i>	<i>∅...yân-i</i>
1PL	<i>ê...yâhk</i>	<i>kâ...yâhk</i>	<i>IC...yâhk</i>	<i>∅...yâhk</i>	<i>∅...yâhk-i</i>
2	<i>ê...yan</i>	<i>kâ...yan</i>	<i>IC...yan</i>	<i>∅...yan</i>	<i>∅...yan-i</i>
21	<i>ê...yahk</i>	<i>kâ...yahk</i>	<i>IC...yahk</i>	<i>∅...yahk</i>	<i>∅...yahk-o</i>
2PL	<i>ê...yêk</i>	<i>kâ...yêk</i>	<i>IC...yêk</i>	<i>∅...yêk</i>	<i>∅...yêk-o</i>
3	<i>ê...t/k</i>	<i>kâ...t/k</i>	<i>IC...t/k</i>	<i>∅...t/k</i>	<i>∅...c-i/k-i</i>
3PL	<i>ê...cik</i>	<i>kâ...cik</i>	<i>IC...cik</i>	<i>∅...cik</i>	<i>∅...t-wâw-i</i>
3OBV	<i>ê...yit</i>	<i>kâ...yit</i>	<i>IC...yit</i>	<i>∅...yit</i>	<i>∅...yit-i</i>

TABLE 15: PLAINS CREE VAI CONJUNCT ORDER PARADIGM FOR (cf. Wolfart 1973:43a, Table 11)

The cluster of properties associated with the Plains Cree *subjunctive mode*—suffixal head-marking in the IP-domain, suppletion of the clause-typing suffix, suppletion of pronominal enclitic agreement—is reminiscent of the properties of Blackfoot IP-domain agreement. In Blackfoot, IP-domain head-marking enters into a direct relation with pronominal proclitic agreement. Similarly, we suggest that the Plains Cree IP-domain subjunctive suffix enters into a direct relation with enclitic agreement, (31). It is this direct dependency that accounts for why, in Plains Cree, the *subjunctive mode* is the only conjunct mode with suppletive forms. Although our analysis does not predict which part of the subjunctive paradigm will show suppletion, it does predict that, if there is suppletion, it will occur in the subjunctive.

(31) [CP OP [C ∅ [IP [VERB STEM] [-AGR] [IRR -i]]]]

Candidate 2: Plains Cree proclitic stacking

The other candidate for IP-domain agreement comes from proclitic stacking. There are two contexts in which Plains Cree proclitics iterate. Nominal possessors stack when a normally inalienable body part noun such as *-stikwân* ‘head’ is alienably possessed, (32). And with verbal possessor predicates, proclitic stacking is obligatory, (33). The fact that proclitic stacking is attested in both nominal and verbal contexts suggests that there is a syntactic parallel between NP and VP. Thus, just as there are syntactic domains above the VP, so too are there syntactic domains above the NP. (We discuss this in more detail below.)

- | | | | |
|------|--|--|--|
| (32) | <i>nistikwân</i>
ni-stikwân
1-head
‘my head’ | <i>ostikwân</i>
o-stikwân
3-head
‘his/her head’ | <i>nôstikwânim</i>
n-[ô-stikwân-im]
1-3-head-DEP
‘my severed head’
(lit. my his head’) |
| (33) | * <i>ni-môhkomânin</i>
n-[môhkomân]-i-n
1-knife-have-SAP
[INTENDED: ‘I have a knife’] | * <i>ni-nimôhkomânin</i>
n-[n-môhkomân]-i-n
1-1-knife-have-SAP
[INTENDED: ‘I have a knife’] | <i>n-ômôhkomânin</i>
n-[ô-môhkomân]-i-n
1-3-knife-have-SAP
‘I have a knife’ |

Plains Cree proclitic stacking is restricted such that the second occurrence of the proclitic is the 3rd person *o*-form. We take this to indicate that the “internal” proclitic position is located in the intermediate domain, which is IP in verbal projections, and PhiP in nominal projections. This is illustrated in (34).

- (34) a. [CP *n*- [IP *ô*- [VP *môhkoman-i*]] -*n*]
 1 3 knife-VAI SAP
 ‘I have a knife’
- b. [DP *n*- [PhiP *ô*- [NP *stikwân-im*]]]
 1 3 head-DEP
 ‘my severed head’

INTERIM SUMMARY: PLAINS CREE CP-DOMAIN AGREEMENT

The locus of Plains Cree proclitic agreement is in the CP-domain. This accounts for the fact that it is obligatorily discourse-bound and indexes the speaker and/or hearer. It also accounts for the fact that it interacts with clause-typing: it occurs only in matrix clauses and doesn’t support bound-variable anaphora or A’-binding. Moreover, Plains Cree IC is part of the clause-typing system, indicating it is part of the CP-domain. Finally, IP-domain agreement is attested in Plains Cree, and its distribution is predictably different from CP-domain agreement.

CONCLUSION: TOWARDS COMPARATIVE ALGONQUIAN SYNTAX

The comparative approach pursued here sheds light on otherwise puzzling differences in the distribution of cognate morphemes in Blackfoot and Plains Cree. In both languages, pronominal agreement is sensitive to clause-typing, but the conditioning factors differ. While pronominal agreement in Blackfoot is conditioned by finiteness, in Plains Cree, it is conditioned by indexicality. We treat this as a structural distinction between IP-domain agreement (the locus of finiteness), and CP-domain agreement (the locus of indexicality). Finiteness partitions Blackfoot verbal agreement, and so clause-typing is organized around the realis/irrealis distinction, an IP-level contrast. Indexicality partitions Plains Cree verbal agreement, and so clause-typing is organized around the indexical/non-indexical distinction, a CP-level contrast.

The structural differentiation of agreement has consequences elsewhere in the grammar, as summarized in Table 16. Semantically, clause-typing is partitioned by person features in Blackfoot, but by discourse-linking in Plains Cree. Specifically, pronominal agreement is conditioned by the [±REALIS] contrast in Blackfoot, but by [±INDEXICAL] in Plains Cree. As for the syntax, the IP-/CP-domain contrast has consequences for the distribution of initial change (conditioned by Aspect in Blackfoot, but by clause-type in Plains Cree), for the target of agreement (A-positions in Blackfoot, but A’-positions in Plains Cree), and for the coding of A’-dependencies such as content-questions and relativization (via nominalization in Blackfoot, but via operator-variable binding in Plains Cree). Another correlate of the IP-/CP-domain contrast is

that, while both languages have discourse-conditioned clitics, in Blackfoot they are enclitics, and in Plains Cree they are proclitics.

		BLACKFOOT	PLAINS CREE
PARAMETER	• <i>locus of proclitic agreement</i>	IP	CP
SEMANTICS	• <i>clause-typing partitioned by:</i>	participant anchoring	discourse linking
	• <i>agreement partitioned by:</i>	[±REALIS]	[±INDEXICAL]
SYNTAX	• <i>initial change conditioned by:</i>	aspect (Infl)	clause-type (C)
	• <i>agreement targets:</i>	A-position	A'-position
	• <i>A'-dependency coded by:</i>	type-shifting	Op-variable binding
DISCOURSE	• <i>discourse-conditioned clitics</i>	enclitics	proclitics

TABLE 16: DIFFERENCES BETWEEN BLACKFOOT AND PLAINS CREE VERBAL AGREEMENT

Initial change is a locus of variation across the language family. While Blackfoot IC is aspectually conditioned, in Plains Cree, it is conditioned by clause-type. As discussed elsewhere, Ojibwe IC is conditioned by tense (James 1982; Blain 1999; Lochbilder and Matthieu in press). Putting these observations together leads to the conclusion that IC anchors to the left-edge of a phrasal constituent (XP), and that the anchor can differ from language to language: in Plains Cree it is CP, in Ojibwe it is TP, and in Blackfoot it is AspP, (35).

$$(35) \quad \begin{array}{cccc} [\text{CP} \dots & & [\text{TP} \dots & & [\text{ASPP} & & [\text{VP} \dots & &]]] \\ \uparrow & & \uparrow & & \uparrow & & & & \\ \text{IC} & & \text{IC} & & \text{IC} & & & & \\ \text{PLAINS CREE} & & \text{OJIBWE} & & \text{BLACKFOOT} & & & & \end{array}$$

In addition to conditioning the cluster of semantic and syntactic differences examined in this paper, we believe that the IP-/CP- domain contrast may have consequences elsewhere in the grammar. For verbal syntax, the features listed in Table 17 are candidates for an IP-/CP-difference.

PROPERTY	BLACKFOOT	PLAINS CREE
• <i>position of negation</i>	IP-domain	CP-domain
• <i>relative roots</i>	not A'-bound	A'-bound
• <i>passive-like morphology</i>	absent	present
• <i>suppletive direct-inverse morphology</i>	yes	no
• <i>stem-internal VP structure</i>	opaque	transparent

TABLE 17: CANDIDATES FOR CP- / IP-DOMAIN DIFFERENCES IN BLACKFOOT AND PLAINS CREE

For nominal syntax, we adopt the hypothesis that there is a parallel between nominal and verbal structure (Grimshaw 2005). Accordingly, just as one can identify syntactic layers above VP, one can identify syntactic layers above NP, (36). In the nominal domain, we expect to find (at least) three layers: NP, PhiP, and DP (Déchaine and Wiltschko 2002). The NP-domain is associated with lexical contrasts such as inalienable possession and the count/mass distinction. The intermediate PhiP-domain—so named because it is the locus of nominal agreement morphology such as number and gender, which in generative grammar are called ‘phi features’—is the locus of number-marking, gender-marking, and bound variable anaphora. And the outermost DP-

domain is the locus of obviation, D-quantification and reference tracking. Possible loci of micro-parametric variation in the nominal domain are listed Table 18.

(36)	[_{DP} ...	[_{PhiP} ...	[_{NP} ...]]
	DP-DOMAIN	PHIP-DOMAIN	NP-DOMAIN
	<i>obviation</i>	<i>number: sg/pl</i>	<i>(in)alienable possession</i>
	<i>D-quantification</i>	<i>gender: (in)animate</i>	<i>count/mass distinction</i>
	<i>reference-tracking</i>	<i>bound variable anaphora</i>	

PROPERTY	BLACKFOOT	PLAINS CREE
• <i>determiner syntax</i>	quasi-obligatory D	non-obligatory D
• <i>quantifier-variable binding</i>	unrestricted	restricted
• <i>obviation morphology</i>	suppletive	transparent
• <i>number marking</i>	singular/plural contrast	only plural is marked
• <i>animacy</i>	lexically determined	contextually determined
• <i>inalienable possession</i>	coded on proclitic agreement	coded on nominal stem
• <i>count/mass distinction</i>	not lexicalized	not lexicalized

TABLE 18: CANDIDATES FOR DP- / PHIP-DOMAIN DIFFERENCES IN BLACKFOOT AND PLAINS CREE

Regarding determiner syntax, while Blackfoot determiners are essentially obligatory, Plains Cree determiners are not. Consequently, bare nouns (i.e. nouns without determiners) are severely restricted in their distribution in Blackfoot (Glougie 2001), but not in Plains Cree. As for quantifier-variable binding, Blackfoot quantifiers scope over events or individuals; i.e. their quantificational scope is not restricted to the argument domain. In contrast, Plains Cree quantifiers have restricted domains of quantification: nominal quantifiers scope over individuals; event quantifiers over events. Regarding obviation morphology, it is subject to suppletion in Blackfoot, but is relatively transparent in Cree (Muehlbauer 2008). And while Blackfoot has distinct morphemes to code singular and plural contrasts, Plains Cree marks only the plural form of the noun. Finally, animacy distinctions in Blackfoot nouns seem to be lexically determined (Armoskaite in preparation), but in Plains Cree they are contextually determined (Muehlbauer 2008). Within the NP-domain, the [\pm inalienable] contrast is coded on proclitic agreement in Blackfoot (Ritter and Thomas Rosen 2010) but on the nominal stem in Plains Cree (Muehlbauer 2007). Finally, Blackfoot does not seem to have a lexical contrast between count and mass nouns (Wiltschko 2008), and neither does Plains Cree. In our future research, we plan to investigate to what extent these (and other) surface contrasts might be accounted for by differences in the morphology-syntax mapping. In closing, we hope to have shown that a micro-parametric analysis of proclitic agreement of Blackfoot and Plains Cree opens up exciting avenues of research for comparative Algonquian syntax.

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² Abbreviations used are as follows: 1=1st person, 2=2nd person, 21=1st plural inclusive, 3=3rd person, AGR=agreement, ANIM=animate, ASPP=Aspect Phrase, C=complementizer, CONJ=conjunct, CNJT=conjunctive, DEM=demonstrative, DEP=dependent, DIR=direct, DIST=distal, DUR=durative, EMPH=emphatic, FUT=future, FRTH.OBV = further obviative, IC=initial change, IMPF=imperfective, INANIM=inanimate, INCHOAT=inchoative, Infl=inflection, INDEF=indefinite, INDEP=independent, INSTR= instrumental, INT=intend, INV=inverse, IRR=irrealis, ITER=iterative, NA=animate noun, NEG=negation, NI=inanimate noun, NOM=nominalization, NONVER=non-veridical, NON.AFFIRM=non-affirmative, NUMP=Number Phrase, OBV=obviative, PERF=perfective, PL=plural, PRESUP=presupposed, PREV=previous, PRO=attached pronoun, PROX=proximate, Q=yes/no question marker, SAP=1st or 2nd person (speech act participant), SG=singular, SPEC=specifier position, SUBJ=subjunctive, USC=unspecified subject, VAI=intransitive verb with animate actor, VER=veridical, VII=verb with inanimate actor, VTA=transitive verb with animate goal, VTI=transitive verb with inanimate goal, X=impersonal.

³ Frantz 1971 uses the label *conjunct* while Frantz 1991 uses the label *conjunctive*.

⁴ Frantz (1991:114) mentions that unreal may be present in both antecedent and consequent of counterfactual conditional clauses, but only cites examples with unreal in the antecedent.

⁵ A reviewer points out that the target phonologization would yield *nitsiĥkota*; it remains to be confirmed whether this form is acceptable.

⁶ The VTA stem ‘look for someone’ is usually *nitonaw-* (rather than *niton-* as in the main text). Accordingly, the form in (26a) would be *ninitonawâw*, that of (26b) would be *kâ-nitonawak*, and those of (27) would be *ninitonawâw* and *nitonawêw* in (27b). We assume that some form of haplology has occurred.

⁷ There is speaker variation in the resolution of ellipsis, for which we have no account. The factor constraining the interpretations—namely, syntactic parallelism—is also observed for ellipsis in English. We leave this to future research.

⁸ In this context, many speakers would use *niminôsim* (rather than the reported *niminôs*).

⁹ Plains Cree *ê*-conjunct may have arisen by analogy with the IC form of vowel-initial stems. The prevalence of initial relative-root verbs beginning with *#i...* makes **i-* a likely precursor to *ê-*. The placement of IC across the Algonquian language family is a topic for future investigation: IC may have begun at an inner layer (as in Blackfoot) and moved outwards (as in Plains Cree).

¹⁰ In northern Plains Cree, *-wâw* is the general third person pluralizer, replacing *-ik*.