THE STATUS OF NOMINAL GENDER IN ALGONQUIAN: EVIDENCE FROM PSYCH VERBS[*]

Sara Johansson
University of Calgary

1.   Introduction

Algonquian languages, including Plains Cree and Blackfoot, sort nouns into two genders: animate and inanimate. Animate nouns include all SENTIENT[1] beings, as well as language-specific sets of non-sentient objects. The remaining nouns, which all denote non-sentient, inanimate objects, are of the inanimate class. The grammatical gender classification of Algonquian nouns is illustrated below (1).

(1)   Algonquian Noun Classification

ANIMATE NOUNS	INANIMATE NOUNS
• ALL sentient beings (*e.g. boy, dog, fish*) • SOME inanimate entities (*e.g. tree, kettle, wagon*)	• Inanimate entities ONLY (*e.g. flower, shirt*)

This classification system is essentially semantic, and the set of non-sentient animates is a "leak" into the semantically animate class, cf. Corbett (1991).

The morphological form, or VERB CLASS, of an intransitive verb is determined by the grammatical gender of the subject DP. There are therefore two classes of intransitive verbs: animate intransitive (AI), and inanimate intransitive (II) (2).

(2)   Algonquian Intransitive Verb Classes

VERB CLASS		GENDER OF SUBJECT DP
AI	Animate Intransitive	subject is animate
II	Inanimate Intransitive	subject is inanimate

[1] The term SENTIENT is used in this paper to refer to beings that think or are able to experience emotion, following Speas and Tenny (2003).

Verb class membership, and therefore the gender of the subject DP, is signaled by a stem-final morpheme called a VERB FINAL[2]. AI finals co-occur with animate subject DPs, and II finals with inanimate subject DPs. These morphemes are in bold, below (3).

(3)   Plains Cree and Blackfoot Verbs with AI and II Forms

LANGUAGE	MEANING	AI FORM	II FORM
Plains Cree	'look good'	ᒥᔪᐋᓇᑯᓯ *miýo-nāk-**osi***	ᒥᔪᐋᓇᑴ *miýo-nākw-**an***
Blackfoot	'be small'	*ohpok-**ssi***	*ohpok-**ii***

Psych verbs, such as 'be angry' and 'be happy' only have an AI form in Plains Cree and Blackfoot (4). Only sentient beings can experience emotions, and all sentient beings are denoted by animate nouns; therefore, these psych verbs only allow an animate subject.

(4)   Psych Verbs in Plains Cree and Blackfoot Only Have an AI Form

LANGUAGE	VERB CLASS	VERB	MEANING
Plains Cree	AI	ᑭᓯᐋᓯ *kisiw-**āsi***	'be angry' (animate)
Blackfoot	AI	*i'táám-**ssi***	'be happy' (animate)

The existence of this set of verbs raises the question: How do Plains Cree and Blackfoot speakers describe a *fictional world* in which psychological states are ascribed to *inanimate* nouns? For the rest of this paper, I will use the term SENTIENT INANIMATES to refer to this class of nouns.

1.1   Three Hypotheses

Three possible strategies for dealing with sentient inanimates are expressed by the three hypotheses in (5).

(5)   H1:   The verb changes final to agree with the inanimate subject
        H2:   The subject changes gender when selected by an AI verb
        H3:   The noun and the verb remain unchanged

To test these hypotheses, I created a fictional world in which flowers, which are normally denoted by inanimate nouns[3], are capable of experiencing

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[2] Frantz (1991) uses the term STEM AGREEMENT MORPHEME to describe this morpheme; however, for the sake of consistency I will use the term VERB FINAL, which is more commonly used among Algonquianists.

psychological states and performing tasks. I presented speakers with visual prompts to facilitate the creation of the fictional world (6).

(6)
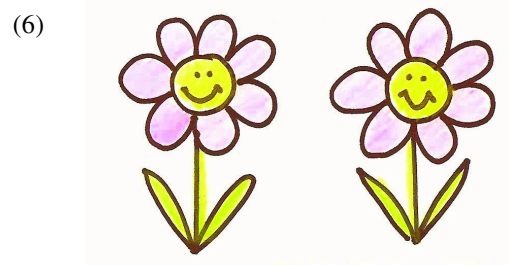
Speakers were asked first to describe the images, then to give grammaticality judgments on sentences I composed. The speakers did not hesitate to either accept or reject the sentences that I presented; the grammaticality judgments were clear. The results of testing each hypothesis are summarized below (7):

(7)   Summary of Results for Three Hypotheses

	H1: INAN. SUBJ. + II VERB	H2: AN. SUBJ. + AI VERB	H3: INAN. SUBJ. + AI VERB
Plains Cree	No	No	Yes
Blackfoot	No	Yes	No

An analysis of these results will lead me to claim that sentience plays a different role in Plains Cree than it does in Blackfoot. Specifically, I argue that in Plains Cree, sentience is a grammatical gender; in Blackfoot, it is semantic gender.

1.2   Organization of This Paper

In section 2 I will demonstrate that there is no evidence for II psych verbs in either Plains Cree or Blackfoot. In section 3 I will show that Plains Cree changes the gender of the subject noun in the context of sentient inanimates, then in section 4 I will present evidence that Blackfoot allows gender mismatch. In section 5 I will present an analysis of the facts. I will propose that the different

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[3] In Blackfoot, the noun *pisátssaisski* 'flower' is not compatible with an animate plural suffix *–iksi* (i). In Plains Cree, the noun *wa pikwaniy* 'flower' is not compatible with the animate singular demonstrative *awa* (ii).

(i)   Blackfoot: (ii)   Plains Cree:
   * *ámoksi*   *pisátssaisskiiksi*   * ⊲⊲·   ⊲˙·∧ḃ·σ⁺
     amo-(i)ksi   pisatssaisski-iksi   *awa*   *wāpikwaniy*
     this-**AN.PL**   flower-**AN.PL**   this.**AN.S**   flower.**AN.S**
     'This (*animate) flower'   'This (*animate) flower'

strategies chosen by Plains Cree and Blackfoot can be explained using a featural analysis. In section 6 I will outline some consequences of my analysis, and will propose a typology of gender in Algonquian languages. Finally, in section 7 I will conclude my paper, identify specific questions for further research, and consider cross-linguistic implications of my analysis.

2.   No II Psych Verbs

In this section, I will demonstrate that the hypothesis that verb finals always agree with the gender of their subject DP (implying that finals are inflectional morphemes) is not borne out by the data. The data give independent evidence that verb finals are derivational, cf. Bloomfield 1946, Bakker 2006, and Ritter and Rosen in press, to name a few.

Inflectional relationships are productive and predictable (Stump 1998). If verb finals are inflectional morphemes, each intransitive verb should be associated with a paradigm of two verb final morphemes: AI and II. In the right context, it should be relatively easy to elicit new forms to fill any gaps in the paradigm. This predicts that speakers will produce a new II verb final for AI psych verbs in the context of sentient inanimates, as schematized below (8).

(8) $[_{DPIN} \dots N_{IN} \dots]$ V + VF __ …
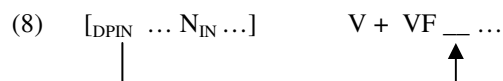
For testing purposes, I identified pairs of AI and II finals in Plains Cree and Blackfoot in order to create a morphologically well-formed II verb, in case the speaker did not spontaneously produce one.

Patterns of verb finals in Plains Cree and Blackfoot intransitive verbs are shown in (9), below. In Plains Cree, each AI final ends in –*si* and the II final ends in –*n*. In Blackfoot, the AI final of each verb is –*ssi* and the II final is –*ii*.

(9)   Plains Cree and Blackfoot Verb Final Patterns (AI and II)

LANGUAGE	MEANING	ANIMATE INTRANSITIVE	INANIMATE INTRANSITIVE
Plains Cree	'look good'	ᒥᔭ�́ᓄᑯᓯ *miýo-nāko-si*	ᒥᔭᓇ́�智ᐧ *miýo-nākw-an*
	'be pretty'	ᒥᔭᓯ *miýo-si*	ᒥᔫᐧᐊᓯᐣ *miýw-āsi-n*
	'be useful'	ᐃᐟᐋᐸᑎᓯᔭ *itāpat-isi*	ᐃᐟᐋᐸᑕᐣ *itāpat-an*
Blackfoot	'be small'	*ohpok-ssi*	*ohpok-ii*
	'be stiff'	*ikksk-ssi*	*ikksk-ii*
	'be round'	*ohkóm-ssi*	*ohkóm-ii*

The Plains Cree psych verb 'be angry' and the Blackfoot psych verb 'be happy' fit the above patterns, and lead me to predict the following II forms: Plains Cree 'be angry' would end in *–n* and take the II form *kisiwāsin*, and Blackfoot 'be happy' would take an *–ii* final and have the II form *i'táám'ii* (10).

(10)   Predicted II Finals for Plains Cree and Blackfoot Psych Verbs

LANGUAGE	MEANING	ANIMATE INTRANSITIVE	INANIMATE INTRANSITIVE
Plains Cree	'look good'	ᒥᔦᐋᐘᑯᓯ *miýo-nāk-**osi***	ᒥᔦᐋᐘᑲᐤᐣ *miýo-nākw-**an***
	'be angry'	ᑭᓯᐋᐧᓯ *kisiw-**āsi***	?? ᑭᓯᐋᐧᓯᐣ *kisiw-**āsin***[4]
Blackfoot	'be small'	*ohpok-**ssi***	*ohpok-**ii***
	'be happy'	*i'táám-**ssi***	?? *i'táám-**ii***

The hypothesis that verb finals are inflectional was not borne out by the data. Importantly, the speakers did not spontaneously produce new verb forms. In addition, the speakers rejected the forms that I presented (11). I conclude that verb finals are derivational morphemes.

(11)   a.   Plains Cree:
         *ᐆᒪ   ᐋᐧᐱᒀᓂᕀ   ᑭᓯᐋᐧᓯᐣ
         ōma   wāpikwaniy   kisiwāsin
         this.**IN.S**   flower.**IN.S**   be.angry.**II**
         'This flower is angry (*inanimate)'

        b.   Blackfoot:
         *ámostsi   pisátssaisskiistsi   iikí'taamiiyaawa
         amo-**(i)stsi**   pisatssiasski-**istsi**   iik-i'taam-**ii**-(yi)-yaawa
         this-**IN.PL**   flower_(IN)-**IN.PL**   very-happy-**be.II**-pl-pron
         'These flowers are happy (*inanimate).'

3.   The Subject DP Changes Gender – Attested in Plains Cree

I have shown that verb finals do not change in the context of sentient inanimates. In this section I consider whether subjects change gender when selected by an AI verb. The data I gathered suggest that this is true of Plains Cree, but not Blackfoot.

       I will use Plains Cree and Blackfoot morphology as a diagnostic to determine whether or not nouns change gender. In Plains Cree I will use the

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[4] Jeff Mühlbauer (p.c.) points out that this form is an acceptable verb form in Plains Cree with the meaning 'You are angry.' While this homophony is less than ideal, the conclusions that can be drawn regarding Plains Cree are unchanged.

form of the demonstrative as a diagnostic, and in Blackfoot I will use the form of the plural marking on N and D.
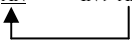
Plains Cree singular demonstratives agree with nouns and have two forms: animate *awa,* and inanimate *ōma.* The plural ending on animate Blackfoot nouns is *-iksi*, and the inanimate plural ending is *-istsi* (12).

(12)   Gender Diagnostics: DP Morphology in Plains Cree and Blackfoot

LANG.	TEST	GENDER	FORM	EXAMPLE
Plains Cree	Singular D	An.	◁◁· *awa* 'this'	◁◁· ȧVʳⁿ *awa nāpēsis* 'this.**AN.S** boy.**AN.S'**
		Inan.	▷L *ōma* 'this'	▷L ◁·Λb·σ⁺ *ōma wāpikwaniy* 'this.**IN.S** flower.**IN.S'**
Black-foot	Plural Ending on N and D	An.	*-iksi*	*ámo-(i)ksi issk*$_{(AN)}$*-iksi* 'this-**AN.PL** pails-**AN.PL'**
		Inan.	*-istsi*	*ámo-(i)stsi míín*$_{(IN)}$*-istsi* 'this-**IN.PL** berries-**IN.PL**'

In order to test whether the subject changes gender, I will assume that demonstratives *always* agree with the nouns they modify (Corbett 1991). In other words, a change in the gender of a noun will be reflected in D morphology.

According to this hypothesis, the sentient inanimate noun will become animate when selected by an AI psych verb, and this will be indicated by a change in the morphology within the DP. Specifically, an animate noun will be indicated by demonstrative *awa* in Plains Cree, and plural ending *-iksi* in Blackfoot. This is schematized below (13).

(13)   a.   Plains Cree:
            [$_{DPAN}$ D$_{\underline{AN}}$ + N$_{IN > AN}$…]   V + VF$_{AI}$ …

       b.   Blackfoot:
            [$_{DPAN}$ D$_{AN}$-PL$_{AN}$ + N$_{IN > AN}$-PL$_{\underline{AN}}$…]   V + VF$_{AI}$ …

This prediction is borne out in Plains Cree. In (14), the noun *wāpikwaniy* 'flower' takes the animate singular demonstrative *awa* 'this'. This animate DP is the subject of the AI verb *kisiwāsi* 'be angry'. Thus, the subject DP matches in grammatical gender with the AI verb, as expected.

(14) Plains Cree:
    ◁◁·   ◁·Λb·σ⁺   ᑭ⸝◁·⸝°
    awa   *wāpikwaniy*   *kisiwāsiw*
    awa   wāpikwaniy   kisiwāsi-w
    this.**AN.S** flower.**AN.S**   be.angry.**AI**-3.s
    'This (animate) flower is angry.'

Blackfoot, unlike Plains Cree, does not allow this strategy. Sentient inanimate nouns do not change gender when predicated of psych verbs (15).

(15) Blackfoot:
   * *ámoksi*   *pisátssaisskiiksi*   *iikí'taamssiiyaawa*
    amo-**(i)ksi**   pisatssaisski-**iksi**   iik-i'taam-**ssi**-y(i)-(y)aawa
    this-**IN.PL**   flower-**IN.PL**   very-happy-**be.AI**-pl-pron
    'These (*animate) flowers are happy.'

I have shown that Plains Cree changes the gender of sentient inanimate nouns, while Blackfoot does not. In the next section, I will demonstrate that Blackfoot leaves the gender of the noun unchanged.

4. Gender Mismatch is Allowed - Attested in Blackfoot

I will now show that the third hypothesis, which predicts that the noun and verb will remain unchanged, is borne out in Blackfoot. This hypothesis predicts that a sentient inanimate noun will remain inanimate when predicated of an AI psych verb, resulting in inanimate morphology in the DP: demonstrative *ōma* in Plains Cree, and plural ending *-istsi* in Blackfoot. This is schematized below (16).

(16) a.   Plains Cree:
            [$_{DPIN}$ D$_{\underline{IN}}$ + N$_{IN}$ …]   V + VF$_{AI}$ …

      b.   Blackfoot:
            [$_{DPIN}$ D$_{IN}$-PL$_{IN}$ + N$_{IN}$-PL$_{\underline{IN}}$…] V + VF$_{AI}$ …

Given that Plains Cree changes the grammatical gender of sentient inanimate DPs, it is not surprising that gender mismatch is not possible in Plains Cree. Sentient nouns cannot be grammatically inanimate when predicated of psych verbs (17).

(17) Plains Cree:

    *ᐅᒪ   ᐊᐧᐱᒃᐧᓂᐟ   ᑭᓯᐋᐧᓯᐤ
    *ōma   wāpikwaniy   kisiwāsiw
    ōma   wāpikwaniy   kisiwāsi-w
    this.**IN.S**   flower.**IN.S**   be.angry.**AI**-3s
    'This (*inanimate) flower is angry.'

However, Blackfoot, which does not change the grammatical gender of sentient inanimate DPs, does allow mismatch. In (18), the noun *pisátssaisski* 'flower' and the demonstrative *ámo* 'this' both take the inanimate plural suffix –*istsi*. This inanimate DP is the subject of the AI verb *i'táámssi* 'be happy'. The subject DP does not match the grammatical gender of the AI verb, as predicted.

(18) Blackfoot:

    ámostsi   pisátssaisskiistsi   iikí'taamssiiyaawa
    amo-**(i)stsi**   pisatssaisski-**istsi**   iik-i'taam-**ssi**-y(i)-(y)aawa
    this-**IN.PL**   flower**(in)**-**IN.PL**   very-happy-**be.AI**-pl-pron
    'These (inanimate) flowers are happy.'

5.   Analysis

In this section I will present a featural analysis of the Plains Cree and Blackfoot facts. The central proposal of this paper that sentience is a grammatical gender in Plains Cree, but a semantic gender in Blackfoot. I will show that this difference nicely captures the different responses of each language to sentient inanimates.

A summary of the results we have seen so far is presented below (19):

(19)   Summary of Results for Three Hypotheses

	H1: INAN. SUBJ. + II VERB	H2: AN. SUBJ. + AI VERB	H3: INAN. SUBJ. + AI VERB
Plains Cree	No	No	Yes
Blackfoot	No	Yes	No

To explain these results, I propose two distinct types of gender features. One is a purely morphological gender feature, which I will call the GRAMMATICAL GENDER feature. This is the formal feature that undergoes agreement (Corbett 1991). The second is a SEMANTIC GENDER feature, which does not have any consequences for agreement.

In theory, any language could have one or both of these features. In other words, every noun has two possible FEATURE SLOTS (20).

(20)   N $\begin{bmatrix} \text{grammatical gender} \\ \text{semantic gender} \end{bmatrix}$

Plains Cree is a language that only has grammatical gender. As a result, sentience in Plains Cree is a semantically determined grammatical gender. In other words, Plains Cree has three grammatical genders: animate, inanimate and sentient. This system results in three possible nominal variations (21).

(21)   Possible Plains Cree Nouns

a.   N $\begin{bmatrix} anim \\ ------ \end{bmatrix}$ b.   N $\begin{bmatrix} inan \\ ------ \end{bmatrix}$ c.   N $\begin{bmatrix} sent \\ ------ \end{bmatrix}$

    e.g. tree   e.g. flower   e.g. man; sentient inan.

The sentient gender (21c) triggers agreement, because it is a grammatical gender. However, there are only two Plains Cree intransitive verb finals: animate intransitive and inanimate intransitive (2, above). The sentient gender therefore requires a redundancy rule, which states that all sentient nouns trigger animate agreement (22).

(22)   Plains Cree redundancy rule:
       sentient → animate

The combination of the treatment of sentience as a grammatical gender and the redundancy rule correctly predicts that sentient inanimate nouns in Plains Cree will be grammatically animate.

In languages that have both grammatical gender and semantic gender, the features are stored separately, and might not always match. Blackfoot is a language that has both types of gender. In Blackfoot, sentience is a semantic gender, meaning that it does not trigger grammatical agreement, and can co-occur with grammatical gender. Because sentience and grammatical gender are able to co-occur, there are four possible types of nouns in Blackfoot (23).

(23)   Possible Blackfoot Nouns

a.   N $\begin{bmatrix} anim \\ ------ \end{bmatrix}$ b.   N $\begin{bmatrix} anim \\ sent \end{bmatrix}$

    e.g. tree   e.g. man

c.   N $\begin{bmatrix} inan \\ ------ \end{bmatrix}$ d.   N $\begin{bmatrix} inan \\ sent \end{bmatrix}$

    e.g. flower   e.g. sentient inanimate

This analysis of the Blackfoot feature [sentient] as semantic gender correctly predicts that sentient inanimates will be grammatically inanimate, because it is the grammatical gender feature [inanimate] that triggers agreement.

The following table provides a comparison of demonstrative agreement and featural representation in Plains Cree and Blackfoot (24).

(24)   Demonstrative Agreement in Plains Cree and Blackfoot

PLAINS CREE	BLACKFOOT
$D_{\underline{IN}}$ N_{IN}	$D_{\underline{IN}}$ N_{IN}
$D_{\underline{AN}}$ N_{AN}	$D_{\underline{AN}}$ N_{AN}
$D_{\underline{AN}}$ $N_{SENT \rightarrow AN}$	$D_{\underline{AN}}$ N $(AN)_{SENT}$
sentient $\rightarrow$ animate	$D_{\underline{IN}}$ N $(IN)_{SENT}$

The result of the different treatment of sentience in Plains Cree and Blackfoot is that in Plains Cree all sentient nouns are grammatically animate, while in Blackfoot sentient inanimates are grammatically inanimate.

6.   Consequences

An analysis in which sentient inanimate DPs in Blackfoot are grammatically inanimate, as in (23), raises a major question: If the verb final of a Blackfoot psych verb is not selecting for the grammatical gender of its subject DP, what *is* it selecting for? In this section I will explore this question.

Ritter and Rosen (in press) give evidence that some Blackfoot verb finals[5] impose a semantic animacy constraint on arguments. I propose that this constraint is imposed by a third intransitive verb class: Sentient Intransitive (SI). SI finals select sentient subject DPs, regardless of their grammatical gender (25).

(25)   Proposed Classification of Verb Classes in Blackfoot

VERB CLASS		GENDER OF SUBJECT DP	EXAMPLE ARGUMENTS
AI	Animate Intransitive	subject is animate	themes of physical states; themes of unaccusatives
SI	Sentient Intransitive	subject is sentient	experiences of psych verbs; agents
II	Inanimate Intransitive	subject is inanimate	themes of unaccusatives; emitters[6]

SI finals differ from AI finals in that SI finals do not have II counterparts. In fact, this analysis predicts that SI finals should only ever have one form, since they are able to select both sentient animate and sentient inanimate subjects. A

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[5] Ritter and Rosen (2008) specifically argue that all transitive verb finals impose this constraint, as well as AI verb finals with experiencer or agent subjects; however, this paper is only concerned with the AI finals.

[6] Johansson and Ritter (2008)

set of non-sentient verb final counterparts to SI verbs is not easily imagined; however, it is possible to create a verb like 'appear happy', in which a non-sentient entity looks to be smiling. This verb, however, is AI/II, depending on the grammatical gender of the subject[7] (26).

(26) Blackfoot:
    ámoyi   *pisátssaisski*   *iikí'taaminaattsi*
    amo-yi   pisatssaisski-(yi)   iik-i'taam-inaattsi
    this-**IN.S**   flower-**IN.S**   very-happy-**appear.II**
    'This flower looks happy'

In addition, Blackfoot speakers seem to intuit the difference between SI and AI verbs. Ritter and Rosen (in press) note a comment made by their Blackfoot consultant that the psych verb final *i'taki* means that "you feel something".

I have now developed an analysis in which Plains Cree has three grammatical genders, and Blackfoot has three intransitive verb classes. From this, I propose a typology of gender in Algonquian languages (27). Type I languages treat [sentient] as grammatical gender, and have a redundancy rule (sentient → animate). Type II languages treat [sent] as semantic gender, and have SI finals.

(27)   Proposed Typology of Gender in Algonquian

TYPE I: [SENT] IS GRAMMATICAL GENDER		TYPE II: [SENT] IS SEMANTIC GENDER	
intr. verb finals	nominal gender	intr. verb finals	nominal gender
AI — animate II — sent → anim inanimate		AI SI — animate II — inanimate	

Goddard's (2002) description of sentient inanimates in three Algonquian languages (Plains Cree, Menominee and Fox) reveals two general patterns: either the noun changes gender or gender mismatch is allowed. Goddard's findings are consistent with my findings for Plains Cree, and he shows that Menominee patterns in the same way. Fox, however, displays a different pattern, which is consistent with the pattern I found in Blackfoot (28). Importantly, no language Goddard discusses uses II finals with sentient inanimates. I argue that this is not coincidental, and predict that no Algonquian language will be found to use II finals with sentient inanimates.

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[7] It is possible to mismatch the inanimate noun 'flower' with the SI verb 'appear happy'. I argue that, in this context, 'appear happy' is an SI verb because it requires an interpretation in which the flower is sentient.

(28)   Behaviour of Sentient Inanimates in Algonquian, cf. Goddard (2002)

NOUN CHANGES GENDER	GENDER MISMATCH ALLOWED
DP_{AN} V + VF_{AI}	DP_{IN} V + VF_{AI}
• Plains Cree • Menominee	• Fox • Blackfoot

Adapting these patterns to my typology, I argue that languages in which nouns changes gender are Type I, while languages in which gender mismatch is allowed are Type II. Whether or not this typology holds across all Algonquian languages remains to be seen; but I do not know of any exceptions at present.

7.   Conclusions

In this section, I will summarize the conclusions drawn in this paper, identify some questions for future research, and consider cross-linguistic implications of my analysis.

7.1   Verb Finals are Derivational Morphemes

I have shown that verb finals in Plains Cree and Blackfoot are derivational morphemes (§2). This supports the decisions made in the dictionaries I used, in which verb finals are treated as part of the verb stem, as well as traditional Algonquianist analyses (Wolvengrey 2001, Frantz and Russell 1995; Bloomfield 1946, Bakker 2006, Ritter and Rosen in press). Taylor's Blackfoot grammar (1969:234) makes mention of a possibly gender-neutral stative verb final –*isi*[8], which I have not had the opportunity to test; however the fact that it was not spontaneously used by the speaker may suggest that use of this final is not a productive strategy. Bloomfield (1946) notes that Fox and Menominee use the morpheme -*makate* to derive verbs for use with inanimate subjects. This raises the question: Are there such suffixes in Plains Cree and Blackfoot, and do they affect sentient inanimates? This is a question that I will leave to future research.

7.2   Sentience and Grammatical Gender in Algonquian

I have argued that the reason sentient inanimate nouns change gender in Plains Cree is because sentience is a grammatical gender is realized as animate by way of a redundancy rule. On the other hand, sentient inanimates in Blackfoot do not change gender because of the existence of a Sentient Intransitive (SI) verb final which selects for sentient subject DPs, regardless of their grammatical gender.

An alternate explanation for the difference between Plains Cree and Blackfoot is offered in Corbett (1991). Corbett (citing Goddard p.c.) notes that Fox nouns, like Blackfoot nouns, are marked for gender in the singular as well

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[8] Thank you to Solveiga Armoskaite for drawing my attention to this final (tack för det!)

as in the plural[9]; this singular marking is a formal factor that hinders gender change. However, this analysis is problematic, because it cannot explain why Plains Cree nouns, which are marked for gender in the plural, do change gender.

Context is important to Plains Cree gender, as illustrated by the "Calvin and Hobbes" problem (Mühlbauer 2008). *Calvin and Hobbes* is a comic strip in which the character Hobbes is a (toy) tiger who is a sentient being to a boy named Calvin, but an inanimate toy to his mother. Mühlbauer demonstrates that the noun denoting Hobbes is inanimate when Hobbes is considered to be non-sentient, but animate when he is considered to be sentient. This is in keeping with my analysis of Plains Cree, in which sentient → animate.

A final question to be left to future research is: Can the different treatment of [sentient] in Plains Cree and Blackfoot account for the different order of number and gender morphemes in the complex plural suffixes of these languages? In Plains Cree the number marker (*a*) precedes the gender marker (*k/0*), while in Blackfoot the gender marker (*iks/ists*) precedes the number marker (*i*) (29).

(29)   Number and Gender Order in Plains Cree and Blackfoot Plural Suffixes

	PLAINS CREE	BLACKFOOT
Animate	*-a-k*	*-iks-i*
Inanimate	*-a*	*-ists-i*
Order	# - G	G - #

7.3   Cross-Linguistic Considerations

Allowing two feature slots can offer a revised look at gender agreement across languages. Consider the German neuter noun *Mädchen* 'girl', which may take either a feminine or a neuter personal pronoun (Batliner 1984; Goddard 1991). Within this analysis, the grammatical gender slot is filled with [neuter], and the semantic gender slot with [feminine], and both features are visible to a personal pronoun for agreement (30). What I cannot speak to is what sets personal pronoun agreement apart from other types of agreement.

(30)   German *Mädchen*
        N
          $\begin{bmatrix} \text{neut} \\ \text{fem} \end{bmatrix}$

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[9] In my field work experience Blackfoot gender marking seems to be often absent/silent in the singular.

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