

**Patterns of syncretism in nominal paradigms:  
A pan-Algonquian perspective**

Heather Bliss and Will Oxford

University of Victoria and University of Manitoba

Manuscript, July 31, 2015

To appear in *Papers of the 46th Algonquian Conference*

**Introduction<sup>1</sup>**

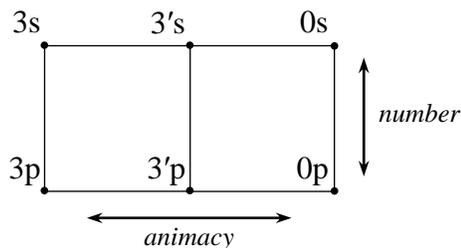
This paper examines the morphology of nominal paradigms from a pan-Algonquian perspective, focusing on inflectional syncretisms. From an empirical standpoint, our focus on syncretisms reflects their ubiquity: a nominal paradigm without syncretisms is unattested across the family. From a theoretical standpoint, syncretisms have the potential to deepen our understanding of the organization of nominal features. Paraphrasing Jakobson 1962, Caha (2009:17) observes that “syncretism points to the existence of a hidden level of linguistic organization inside an apparently indivisible unit: the morpheme.” A pan-Algonquian survey of nominal syncretisms will lay the groundwork for future studies of nominal features such as number, person, animacy, obviation, and absentation. Are these features grammatical primitives or are they derived? How are their exponents handled in the syntax? To what extent is variation possible? These are the types of questions that we can begin to address once we understand the distribution of syncretisms across the family.

The paper begins with a general discussion of the types of contrasts that occur in Algonquian nominal inflection; we then proceed to survey nominal syncretisms across the family. The scope of our investigation is restricted to “nominal categories” in the sense of Goddard 1979, including animacy, number, and obviation, but excluding possession and the “further obviative” marking that occurs in some possessed forms. (Following Wolfart 1978, we regard the “further obviative” as marking an obviative possessor rather than an additional degree of obviation on the possessed noun.) For the sake of simplicity, we also set aside absentative inflection.

## Contrasts in Nominal Inflection

Algonquian nominal paradigms are canonically regarded as having two dimensions of contrast: NUMBER, which can be singular or plural, and ANIMACY, which can be animate proximate (3), animate obviative (3'), or inanimate (0) (e.g. Bloomfield 1946 §29). This approach, illustrated in (1), treats the obviative as a special type of animate third person, thus inherently restricting obviation to occurring only on animate nominals.

(1) Two-dimensional system: Obviation part of animacy dimension



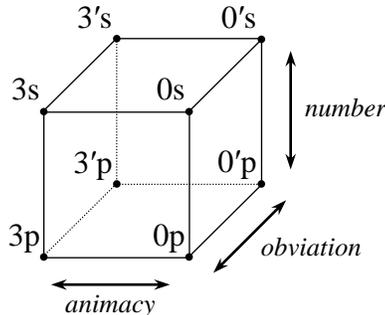
The two-dimensional analysis is widely held, as indicated by the following quotes (emphasis ours). Goddard and Bragdon (1988:493) describe obviation in Massachusetts as “a syntactic category marked on ANIMATE NOUNS that can roughly be described as a SECONDARY ANIMATE THIRD PERSON.” Costa (2003:215) states that obviation in Miami-Illinois applies “if there are two non-coreferential ANIMATE THIRD-PERSON participants in a clause.” Frantz (2009:13) notes for Blackfoot that “when two or more nouns of ANIMATE GENDER occur in the same sentence, only one ... can be [proximate].”

The two-dimensional analysis does not work for the entire family, however, because some Cree and Ojibwe dialects have developed INANIMATE obviative noun inflection. This is illustrated by the Innu examples in (2) (Clarke 1982:30). In (2b), where the subject is an animate third person, the inanimate object *ûsh* ‘boat’ carries the obviative suffix *-inu*.<sup>2</sup>

- (2) a. ni-mishken ûsh (1—0)  
 1-find.TI boat.0s  
 ‘I find the boat’.
- b. mishkam ût-**inu** (3—**0'**)  
 find.TI.3 boat-**0's**  
 ‘S/he finds the boat’.

In addition to Innu, this pattern is also attested in Moose Cree (Ellis 1971), East Cree (Junker 2000-14), and Oji-Cree (Rogers 1964; Todd 1971). In such languages we must recognize a THREE-DIMENSIONAL system of nominal contrasts in which obviation cross-classifies with both number and animacy rather than being part of the animacy dimension, as illustrated in (3).

(3) Three-dimensional system: Obviation cross-classifies with number, animacy



Based on noun inflection alone, we might conclude that the three-dimensional system is an innovation limited to certain Cree and Ojibwe dialects. However, this cannot be the case: although inanimate obviative noun inflection is an innovation, inanimate obviative verb agreement is widely attested across the family. This is illustrated by the Plains Cree examples in (4) (Joseph 1980:168). In (4b), where the subject is an animate third person, the inanimate object *cîmân* ‘canoe’ does not inflect for obviation but the conjunct-order II verb that agrees with it does.

- (4) a. ni-wâpahten cîmân ê-misâ-k (1—0)  
 1-see.TI canoe PVB-big-3s  
 ‘I see a canoe which is big.’
- b. okimâw wâpahtam cîmân ê-misâ-yi-k (3—0’)  
 chief see.TI canoe PVB-big-OBV-3s  
 ‘The chief sees a canoe which is big.’

The occurrence of inanimate obviative verb agreement can be taken to indicate that in the relevant contexts inanimate nouns are covertly obviative despite the total absence of obviative noun inflection. The idea of a covert obviation contrast on inanimate nouns is not new. Hockett (1966) considers the proximate-obviative contrast in Potawatomi to apply to inanimates (p. 60) but states that it “is not shown” in the inflection of inanimate nouns (p. 62). For Plains Cree, Wolfart (1973:29) observes that “while ... there is no

inflectional distinction for obviation in inanimate nouns, this category is nevertheless present as shown by concord with verb forms.” For Ojibwe, Rhodes (1976) states that “the obviation of inanimates is left unmarked” (p. 199) but “by associating a relative clause with an inanimate noun we can see where it is obviated” (p. 203). Drapeau (2014:337) makes the same observation for Innu. All of the above languages, then, must underlyingly have the three-dimensional system in (3).

As for the distribution of the three-dimensional system throughout the family, inanimate obviative verb agreement is widely attested, occurring in Cree (Wolfart 1973), Ojibwe (Rhodes 1976), Meskwaki (Goddard 1994), Cheyenne (Goddard 2000), and early records of Delaware (Goddard 1979) and Arapaho (Cowell, Moss and C’Hair 2014);<sup>3</sup> it has also been reconstructed for Proto-Algonquian (Bloomfield 1946:94; Pentland 1996:349; Goddard 2000:98). The three-dimensional system is thus not an innovation. Rather, the innovation is the two-dimensional system, which may exist in languages that lack evidence for an inanimate obviative contrast in either noun inflection or verb inflection, such as Shawnee, Miami-Illinois, Menominee, and most Eastern languages.<sup>4</sup>

Recognizing a three-dimensional system forces us to acknowledge a deep syncretism in the nominal inflection of many of the languages. Except in the Cree and Ojibwe dialects that have developed inanimate obviative noun inflection, the obviation contrast is robustly neutralized in the inflection of inanimate nouns. The result is the paradigm in Table 1, with the shaded cells indicating the syncretism.

TABLE 1  
Obviation syncretism (all languages except some Cree and Ojibwe dialects)

	ANIMATE		INANIMATE	
	PROX	OBV	PROX	OBV
SG	3s	3’s	0(’)s	
PL	3p	3’p	0(’)p	

In order to know whether a syncretism can inform us about the nature of nominal features, we must first distinguish between accidental and non-accidental syncretisms. Accidental syncretisms result from phonological processes, and hence provide no deep lessons for grammar. Non-accidental syncretisms are properties of the morphological system rather than phonological artifacts. In what follows we apply Caha’s (2009)

diagnostics for accidental syncretisms to the inanimate obviation syncretism. The unanimous result is that the syncretism is non-accidental.

The first diagnostic is that accidental syncretisms are confined to a single paradigm while non-accidental syncretisms occur across all paradigms for a given category. As illustrated in (5), the obviation syncretism occurs across various inanimate stem types in Plains Cree, suggesting that the syncretism is non-accidental.

- (5) C-stems *maskisin* ‘shoe’ (0s and 0’s)  
 Cw-stems *pihko* ‘ashes’ (0s and 0’s)  
 Vy-stems *askiy* ‘land’ (0s and 0’s)  
 Vw-stems *meskanaw* ‘road’ (0s and 0’s)

The second diagnostic is that accidental syncretisms are limited to a single exponent while non-accidental syncretisms are repeated across multiple exponents. The obviation syncretism most obviously affects the nominal peripheral suffix (PA \*-i 0s and 0’s, \*-ali 0p and 0’p), but in many of the languages it also affects demonstratives that do not use the nominal suffix. This is illustrated by the Plains Cree inanimate demonstratives in (6) (Wolfart 1973:33), which are each syncretic for obviation. This is another indication that the syncretism is non-accidental.

- (6) *ôma* ‘this’ (0s and 0’s)  
*ôhi* ‘these’ (0p and 0’p)  
*anima* ‘that’ (0s and 0’s)  
*anihi* ‘those’ (0p and 0’p)

The third diagnostic is that non-accidental syncretisms target a morphosyntactic class while accidental syncretisms do not. The obviation syncretism clearly targets a morphosyntactic class, namely inanimate nominals, including nouns, demonstratives, and pronouns. Again, this suggests that the obviation syncretism is non-accidental. A summary of the three diagnostics is given in Table 2.

TABLE 2  
 Obviation syncretism is non-accidental

<i>Accidental syncretism diagnostics</i>	<i>Obviation syncretism</i>
Confined to a single paradigm	✗
Limited to a single exponent	✗
Does not target a morphosyntactic class	✗

We conclude that the obviation syncretism is non-accidental. It is also perhaps the most deep-rooted of all the nominal syncretisms, so much that its existence often goes unacknowledged (as evidenced by the pervasiveness of the two-dimensional analysis).

## Survey of Nominal Syncretisms

All Algonquian languages have at least one syncretism in their nominal inflection, and several syncretisms recur in multiple languages. Establishing the range of variation in syncretisms is important, as a theory of Algonquian nominal features must not rule out any attested system; it should also capture which syncretisms are natural and which are not. To this end, the following section surveys the syncretisms in noun inflection that are attested across the family. The survey is based on a compilation of Algonquian nominal paradigms, which is included as an appendix to this paper; see the appendix for complete data and sources for any of the languages mentioned in the survey.

We begin with syncretisms in which obviation is neutralized. The first syncretism of this type was discussed above: obviation is neutralized in the inflection of inanimate nominals. This syncretism is attested in Proto-Algonquian, Meskwaki, Kickapoo, most Ojibwe dialects, Plains Cree, Delaware, Cheyenne, and Blackfoot.<sup>5</sup>

A second obviation syncretism occurs in Blackfoot and in some animate stem classes in Mi'gmaq. In this pattern, obviation is neutralized not only on inanimate nominals, but on animate plural ones as well, as illustrated in Table 3.<sup>6</sup>

TABLE 3

a. Blackfoot animates

	ANIMATE	
	PROX	OBV
SG	<i>-wa</i>	<i>-yi</i>
PL	<i>-iksi</i>	

b. Some Mi'gmaq animates

	ANIMATE	
	PROX	OBV
SG	$-\emptyset$	<i>-l</i>
PL	<i>-k</i>	

Illustrative examples from Blackfoot are given in (7); the same plural inflection appears on the object regardless of whether the subject is first or third person.

- (7) a. Nitsikáístsimmayi omiksi aakí**ks**. (1—3p)  
 nit-ik-a-istsimm-a-yi om-iksi aakii-**iksi**  
 1-INTNS-IMPF-respect-DIR-PL DEM-PL woman-**PL**  
 'I respect those women.'

- b. Anna Anna iikáístsimmiwa omiksi aakííks. (3—3'p)  
 ann-wa A iik-a-istsimm-yii-wa om-iksi aakii-**iksi**  
 DEM-PROX A INTNS-IMPF-respect-3:4-PROX DEM-PL woman-**PL**  
 ‘Anna respects those women.’

A third obviation syncretism occurs in Moose Cree, East Cree, Innu, and Oji-Cree. These are the dialects that have developed inanimate obviative noun inflection. However, the obviation contrast is marked only on inanimate singular nouns; obviation is neutralized on inanimate plural nouns, as in the Innu forms in Table 4.

TABLE 4  
 Innu inanimates

	INANIMATE	
	PROX	OBV
SG	-∅	- <i>ĩnu</i>
PL	- <i>a</i>	

The Innu sentences in (8), from Drapeau 2014:38, illustrate this syncretism. While the 0s and 0's forms of the noun *min* ‘fruit’ are distinguished by the obviative suffix *-ĩnu*, the 0p and 0'p forms are both marked by the same plural suffix *-a*.

- (8) 1-0s *nimitshin min* ‘I eat a fruit’  
 3-0's *mitshu min**ĩnu*** ‘S/he eats a fruit’  
 1-0p *nimitshin mina* ‘I eat fruits’  
 3-0'p *mitshu mina* ‘S/he eats fruits’

To this point, we have considered three different syncretisms in which obviation is neutralized. We turn now to a syncretism that neutralizes number. In Menominee, Ojibwe, Cree, Delaware, Massachusetts, and Cheyenne, number is neutralized in the inflection of animate obviative nominals, as illustrated for Menominee in Table 5.

TABLE 5  
 Menominee animates

	ANIMATE	
	PROX	OBV
SG	-∅	- <i>an</i>
PL	- <i>ak</i>	

The number syncretism is non-accidental. It occurs across multiple exponents (i.e. on both noun and demonstrative inflection) and multiple paradigms (i.e. nominal inflection,

independent and conjunct verb agreement). The syncretism could have arisen from regular sound change in Cree, but not in the other languages (Bloomfield 1946:94). The question, then, is why this number syncretism is such a common innovation. It is worth noting that, as was the case for the obviation syncretism, verb agreement can occasionally provide evidence that animate obviatives continue to be subject to a covert number contrast. This is the case in the East Cree conjunct dubitative, which, as shown in (9), uses the plural marker *-waa* to distinguish 3's and 3'p (Junker and MacKenzie 2011-14).

- (9)
- |    |     |  |                              |
|----|-----|--|------------------------------|
| a. | 3s  | nepaa- <b>k</b> -we<br>sleep -3-DUB                              | ‘if s/he is sleeping’        |
| b. | 3p  | nepaa- <b>waa-k</b> -we- <b>nich</b><br>sleep -PL -3-DUB-3p      | ‘if they are sleeping’       |
| c. | 3's | nepaa- <b>yi-k</b> -we- <b>nh</b><br>sleep-OBV-3-DUB-3'          | ‘if s/he [obv] is sleeping’  |
| d. | 3'p | nepaa- <b>yi-waa-k</b> -we- <b>nh</b><br>sleep-OBV-PL -3-DUB -3' | ‘if they [obv] are sleeping’ |

Because the number contrast emerges in verb agreement, we cannot say that animate obviatives are inherently numberless. Instead, the absence of a number contrast in the inflection of animate obviative nominals is simply another syncretism. We have thus observed two different syncretisms for animate nouns: the Blackfoot-type pattern in Table 3, in which obviation is neutralized on animate plural nouns, and the Menominee-type pattern in Table 5, in which number is neutralized on animate obviative nouns. The latter pattern is much more widespread.

We now turn to syncretisms that neutralize animacy. The first pattern is one in which animacy is neutralized in the inflection of proximate singular nouns. Put more concretely, this is the common pattern in which 3s and 0s are both  $-\emptyset$ . This occurs in Menominee, Ojibwe, Cree, Mi'gmaq, Maliseet-Passamaquoddy, Penobscot, Delaware, Massachusetts, and Cheyenne, and is illustrated by the Oji-Cree paradigm in Table 6.

TABLE 6  
Oji-Cree

	ANIMATE		INANIMATE	
	PROX	OBV	PROX	OBV
SG	-∅	-an	-∅	-iniw
PL	-ak		-an	

Unlike the obviation and number syncretisms discussed above, this syncretism is clearly accidental, arising from deletion of final short vowels (\*-a 3s, \*-i 0s). As such, it does not affect multiple exponents: although the 3s and 0s peripheral suffixes merge, the 3s and 0s demonstratives typically remain distinct, as in the Oji-Cree forms in (10) (Todd 1971).

- (10)
- |         |               |              |
|---------|---------------|--------------|
|         | 3s            | 0s           |
| near    | <i>wahawe</i> | <i>ohowe</i> |
| distant | <i>ahawe</i>  | <i>ihawe</i> |

Blackfoot also has an animacy syncretism, but in this case, the same suffix *-yi* is used for animate obviative singular as well as inanimate (proximate and obviative) singular. This is illustrated in Table 7 and exemplified in (11) below.

TABLE 7  
Blackfoot

	ANIMATE		INANIMATE	
	PROX	OBV	PROX	OBV
SG	-wa	-yi		
PL	-iksi		-istsi	

- (11) a. Omi sááhkomaapiyi íksspitaayináyi.  
om-**yi** saahkomaapi-**yi** iik-sspitaa-yini-ayi  
dem-OBV boy-OBV INTNS-be.tall.AI-OBV-3SG.PRN  
‘That boy (obv) is tall.’
- b. Omi náápioyisi íksspíiwa.  
om-**yi** naapioyis-**yi** iik-sspíi-wa  
DEM-INAN house-INAN INTNS-be.tall.II-3  
‘That house is tall.’

Like the other animacy syncretism, Blackfoot’s animacy syncretism appears to be accidental. It is confined to the nominal paradigm only, is limited to a single exponent, and does not target a morphosyntactic class. In general, then, there is no evidence for non-accidental animacy syncretisms in Algonquian.

The two final syncretism patterns that we discuss are those that cross-cut nominal categories. First, in the inflection of Proto-Algonquian and most Central and Eastern languages (but not Miami-Illinois and Massachusett), inanimate plural and animate obviative singular forms are syncretic, as illustrated for Proto-Algonquian in Table 8.

TABLE 8  
Proto-Algonquian

	ANIMATE		INANIMATE	
	PROX	OBV	PROX	OBV
SG	*-a	*-ali	*-i	
PL	-aki	*-ahi	*-ali	

This syncretism is clearly non-accidental, since, as Wolfart (1973:14) has observed, it occurs across multiple exponents. In Plains Cree, for example, the 3'/0p syncretism affects the nominal peripheral suffix *-a(h)* (3'/0p), the demonstrative *ôhi* 'this' (3'/0p), and the question word *tâniwêhâ* 'where is' (3'/0p). Unlike other non-accidental syncretisms in Algonquian, however, the 3's/0p syncretism does not target a coherent morphosyntactic class and does not involve adjacent cells in the paradigm. In the typological literature, this is referred to as a "polarity syncretism" (Baerman et al. 2005), and non-accidental examples of these syncretisms are said to be rare (ibid. 105-7).

What are the implications of this pervasive pattern of syncretism? One possible analysis, proposed by Piriyawiboon (2007) for Ojibwe, is that 3's and 0p are in fact the same category: a personless nominal with indeterminate number. A problem for this analysis is that the 3's/0p syncretism, although pervasive, is not universal: it is not found in Miami-Illinois, Massachusett, or the Plains languages. Any analysis that completely erases the 0p/3's distinction will not be applicable to these languages. Since the function of obviation in Miami-Illinois appears to be quite parallel to that in Ojibwe, it seems undesirable to posit such a fundamental difference between the two languages. Moreover, despite their inflectional syncretism, 3's and 0p nouns co-occur with different verb classes (AI and II, respectively), which clearly rules out an analysis in which they are grammatically identical.<sup>7</sup> The 3's/0p syncretism thus remains unexplained.

Interestingly, a different pattern of polarity syncretism is found in Miami-Illinois. In this language, the 0p suffix changed from the PA pattern (syncretic with OBVIATIVE singular *-ali*) to being syncretic with PROXIMATE singular *-a*, as shown in Table 9.

TABLE 9  
Miami-Illinois

	ANIMATE		INANIMATE	
	PROX	OBV	PROX	OBV
SG	<i>-a</i>	<i>-ali</i>	<i>-i</i>	
PL	<i>-aki</i>	<i>-ahi</i>	<i>-a</i>	

The fact that Miami-Illinois retains obviative singular *-ali* from PA indicates that shift of the inanimate plural suffix from *\*-ali* to *-a* cannot be due to regular sound change. Rather, the system seems to have switched from one polarity syncretism to another. The reason for this change remains unexplained.

### Generalizations

Having surveyed the range of syncretisms across Algonquian, we now point to some generalizations. In particular, we saw that non-accidental syncretisms involving neutralization of obviation and number contrasts are common, but those involving neutralization of animacy contrasts are unattested. In the inanimate sub-paradigm, obviation syncretism is widely attested, and in the animate sub-paradigm, there are two different patterns: one in which obviation is neutralized (with plural nouns in Blackfoot, for example) and one in which number is neutralized (with obviative nouns in Menominee, for example). We also saw two types of polarity syncretisms: the widely attested pattern in which inanimate plural is syncretic with animate obviative singular, and the Miami-Illinois innovation in which inanimate plural is syncretic with animate proximate singular. In short, while syncretisms are pervasive across Algonquian nominal paradigms, the range of variation is constrained. This provides a valuable test for any potential analytical framework for Algonquian nominal features: only these syncretisms should follow naturally, and only the attested variation should follow naturally.

As we look towards developing an analysis of Algonquian nominal features, we note that interactions between features can be taken to reveal dependency relations among the features (Aihkenvald and Dixon 1998; Aalberse and Don 2011; Baerman et al. 2005). Our survey of syncretisms sheds light on these interactions in Algonquian. The non-accidental syncretisms that we have observed are consistent with respect to which features can condition the neutralization of which other features. The pattern,

summarized in Table 10, is as follows: the neutralization of obviation can be conditioned by either number or animacy; the neutralization of number can be conditioned by obviation; and the neutralization of animacy does not occur at all.

TABLE 10  
Neutralization patterns in non-accidental syncretisms

<i>Syncretism</i>	<i>Context for neutralization</i>
obviation	number, animacy
number	obviation
animacy	— (all accidental)

The pattern in Table 10 suggests the dependency relation in (12).

(12) Obviation, Number >> Animacy

Moreover, in terms of pan-Algonquian variation, we have observed that in some languages (Menominee, Ojibwe, Cree, Delaware, Massachusetts, Cheyenne), number is neutralized in the context of obviation, suggesting a dependency relation like that in (13a), whereas in other languages (Blackfoot, Mi'gmaq), obviation is neutralized in the context of number, suggesting a dependency relation like in (13b).

- (13) a. Number >> Obviation >> Animacy  
b. Obviation >> Number >> Animacy

## Conclusion

This pan-Algonquian survey of syncretisms in nominal inflection has enabled us to draw several generalizations about the range of possible and impossible patterns and has given us a window on the dependency relations that hold between nominal features. These results, we suggest, can help to guide the way towards a deeper analysis of nominal features in Algonquian.

## Appendix: Survey of Nominal Paradigms

The following paradigms show the forms of the nominal peripheral suffix in each language. The paradigms are presented in a regularized orthography, with *č*, *š* for alveopalatals, *ʔ* for glottal stop, and *ə* for schwa.

### Proto-Algonquian (Bloomfield 1946)

	3	3'	0	0'
SG	-a	-ali	-i	
PL	-aki	-ahi	-ali	

### Central Languages

LANGUAGE		3	3'	0	0'
Shawnee (Andrews 1994)	SG	-a	-ali	-i	
	PL	-aki	-hi	-ali	
Miami-Illinois (Costa 2003)	SG	-a	-ali	-i	
	PL	-aki	-ahi	-a	
Meskwaki, Kickapoo (Goddard 1994, Voorhis 1967)	SG	-a	-ani	-i	
	PL	-aki	-ahi	-ani	
Menominee (Bloomfield 1962)	SG	-∅	-an	-∅	
	PL	-ak		-an	
Nishnaabemwin (Valentine 2001)	SG	-∅	-an	-∅	
	PL	-ag		-an	
Oji-Cree, Deer Lake <sup>8</sup> (Todd 1971)	SG	-∅	-an	-∅	-iniw
	PL	-ak		-an	
Oji-Cree, Round Lake (Rogers 1964)	SG	-∅	-an	-∅	-ini
	PL	-ak	-a	-an	-an/-ini
Potawatomi (Hockett 1966)	SG	-∅	-ən	-∅	
	PL	-ək		-ən	
Plains Cree (Wolfart 1973, morphophonemic)	SG	-a	-ah	-i	
	PL	-ak		-ah	
Plains Cree (Okimāsis 2004, phonemic)	SG	-∅	-a	-∅	
	PL	-ak		-a	
Moose Cree (Ellis 1971)	SG	-∅	-a(h)	-∅	-iliw
	PL	-ak		-a(h)	
Southern East Cree (Junker 2000–14)	SG	-∅	-h	-∅	-iyuu
	PL	-ač		-h	
Innu (Drapeau 2014)	SG	-∅	-a	-∅	-iñu
	PL	-at		-a	

### Eastern Languages

LANGUAGE		3	3'	0	0'
Maliseet-Passamaquoddy (Francis and Leavitt 2008)	SG	-∅	-ol	-∅	
	PL	-ok	-∅ <sup>9</sup>	-ol	
Penobscot (Voorhis 1979)	SG	-∅	-al	-∅	
	PL	-ak	-a	-al	
Delaware (Goddard 1979)	SG	-∅	-al	-∅	
	PL	-ak		-al	
Massachusetts (Goddard and Bragdon 1988)	SG	-∅	-ah	-∅	
	PL	-ak		-aš	

LANGUAGE		3	3'	0	0'
Mi'gmaq (Proulx 1978)	SG	-∅	-l	-∅	
	PL	-k	-∅ <sup>10</sup>	-l	
Mi'gmaq (some stem types) (Proulx 1978)	SG	-∅	-l	-∅	
	PL		-k	-l	
Listuguj Mi'gmaq (Manyakina 2012)	SG	-∅	-l	-∅	
	PL		-g	-l	

### Plains Languages

LANGUAGE		3	3'	0	0'
Blackfoot (Frantz 2009, Bliss 2013)	SG	-wa		-yi	
	PL		-iksi		-istsi
Cheyenne (Goddard 2000)	SG	-e		-e	
	PL	-o	-o	-ote	
Arapaho (Cowell and Moss 2008)	SG	-∅	-∅ <sup>11</sup>	(-i) <sup>12</sup>	
	PL	-oʔ	-o	-o	

### Notes

1. We are grateful to David Pentland, Conor Quinn, Sonja Thoma, Martina Wiltschko, the audience at the 46<sup>th</sup> Algonquian Conference, and two anonymous reviewers for helpful discussion and suggestions. This work was supported by a SSHRC postdoctoral fellowship (#756-2013-0189) awarded to the first author.

2. Abbreviations are as follows: 0= inanimate; 1,2,3=first, second, third person; DEM=demonstrative; DIR=direct; DUB=dubitative; IMPF=imperfective; INAN=inanimate; INTNS=intensifier; PL=plural; PRN=pronoun; PROX=proximate; PVB=preverb; OBV=obviative; SG=singular; TI=transitive inanimate.

3. We thank an anonymous reviewer for pointing out the earlier Arapaho data.

4. It could in fact be the case that inanimate obviative verb agreement may have existed in some of these languages as well, with the relevant verb forms never having been documented due to their infrequent occurrence (David Pentland, personal communication, 2014).

5. Blackfoot also neutralizes animate obviative singular with inanimate. We return to this below.

6. An anonymous reviewer indicates that this pattern occurs for most noun stems in Gros Ventre as well.

7. We thank Ives Goddard (personal communication, 2014) for pointing this out.

8. Vestiges of PA 3s \*-a and 0s \*-i are found on monosyllabic stems in Ojibwe and Oji-Cree, but the number of such stems is small and there are also animate nouns that end in -i (e.g. *inini* 'man') (Valentine 2001:178). Synchronically, we feel that there is no justification for positing an underlying 3s -a and 0s -i on all Ojibwe nouns. We have thus amended the paradigms from Oji-Cree to show the 3s and 0s suffixes as -∅ in place of the -a and -i given by the original authors.

9. The Maliseet-Passamaquoddy 3'p suffix -∅ is distinguished from the 3s/0s suffix -∅ by morphophonemic effects.

- 
10. The Mi'gmaq 3p suffix -Ø is distinguished from the 3s/0s suffix -Ø by morphophonemic effects.
  11. A stem-final consonant is retained after 3's -Ø but not after 3s -Ø.
  12. Inanimate singular -i is not pronounced but has morphophonemic effects.

## References

- Aalberse, Suzanne, and Jan Don. 2011. Person and number syncretisms in Dutch. *Morphology* 21: 327-350.
- Aihkenvald, Alexandra Y., and R.M.W. Dixon. 1998. Dependencies between grammatical systems. *Language* 74: 56-80.
- Andrews, Kenneth. 1994. Shawnee grammar. PhD thesis, University of South Carolina.
- Baerman, Matthew, Dunstan Brown, and Greville G. Corbett. 2005. *The syntax-morphology interface: A study of syncretism*. Cambridge, UK: Cambridge University Press.
- Bloomfield, Leonard. 1946. Algonquian. In *Linguistic structures of native America*, ed. by Harry Hoijer et al., pp. 85–129. Viking Fund Publications in Anthropology 6. New York.
- Bloomfield, Leonard. 1962. *The Menomini language*, ed. by Charles F. Hockett. New Haven: Yale University Press.
- Caha, Pavel. 2009. The nanosyntax of case. PhD thesis, University of Tromsø.
- Clarke, Sandra. 1982. *North-West River (Sheshâtshît) Montagnais: A grammatical sketch*. Ottawa, Ontario: National Museum of Man Mercury Series, Canadian Ethnology Service Paper 80.
- Costa, David J. 2003. *The Miami-Illinois language*. Lincoln, Nebraska: University of Nebraska Press.
- Cowell, Andrew, and Alonzo Moss, Sr. 2008. *The Arapaho language*. Boulder, Colorado: University Press of Colorado.
- Cowell, Andrew, Alonzo Moss, Sr., and William J. C'Hair. 2014. *Arapaho stories, songs, and prayers: A bilingual anthology*. Norman, Oklahoma: University of Oklahoma Press.
- Drapeau, Lynn. 2014. *Grammaire de la langue innue*. Montreal, Quebec: Presses de l'Université du Québec.
- Ellis, C. Douglas. 1971. Cree verb paradigms. *International Journal of American Linguistics* 37: 76–95.
- Francis, David A., and Robert M. Leavitt. 2008. *Peskotomuhkati Wolastoqewi Latuwewakon: A Passamaquoddy-Maliseet dictionary*. Orono, Maine: University of Maine Press; Fredericton, New Brunswick: Goose Lane Editions.
- Frantz, Donald G. 2009. *Blackfoot grammar*, 2nd edition. Toronto, Ontario: University of Toronto Press.
- Goddard, Ives, and Kathleen J. Bragdon. 1988. *Native writings in Massachusetts*. American Philosophical Society Memoirs 185, Philadelphia.
- Goddard, Ives. 1979. *Delaware verbal morphology: A descriptive and comparative study*. New York: Garland.
- Goddard, Ives. 1994. *Leonard Bloomfield's Fox lexicon: Critical edition*. Algonquian and Iroquoian Linguistics Memoir 12, Winnipeg.
- Goddard, Ives. 2000. The historical origins of Cheyenne inflections. In *Papers of the 31st Algonquian Conference*, ed. by John D. Nichols, pp. 77-129. Winnipeg: University of Manitoba.
- Hockett, Charles F. 1966. What Algonquian is really like. *International Journal of American Linguistics* 32: 59-73.

- Jakobson, Roman. 1962. Beitrag zur allgemeinen Kasuslehre: Gesamtbedeutungen der russischen Kasus. In *Selected writings*, vol. 2, 23–71. The Hague: Mouton.
- Joseph, Brian. 1980. Locatives and obviation in Cree. *International Journal of American Linguistics* 46: 168-9.
- Junker, Marie-Odile, and MacKenzie, Marguerite. 2011-2014. *East Cree (Southern dialect) verb conjugation* (3rd ed.). <<http://verbs.eastcree.org>>. Accessed 30 July 2015.
- Junker, Marie-Odile (ed.). 2000-2014. *The interactive East Cree reference grammar*. <<http://www.eastcree.org/cree/en/grammar>>. Accessed 30 July 2015.
- Manyakina, Yuliya. 2012. An analysis of obviation in Mi'gmaq. BA Honours thesis, Concordia University.
- Okimāsis, Jean. 2004. *Cree: Language of the plains*. Regina, Saskatchewan: Canadian Plains Research Centre.
- Pentland, David H. 1996. Verbs of precipitation in Algonquian. In *nikotwāsik ikswāhtēm, pāskih̄tēpayih!* *Studies in honour of H.C. Wolfart*, ed. by John D. Nichols and Arden C. Ogg, 338-53. Winnipeg, Manitoba: Algonquian and Iroquoian Linguistics.
- Piriyawiboon, Nattaya. 2007. Algonquian obviation reanalysis. *Proceedings of the 2007 annual conference of the Canadian Linguistic Association*, ed. by Milica Radišić. Saskatoon: University of Saskatchewan.
- Proulx, Paul. 1978. Micmac inflection. Ph.D. thesis, Cornell University.
- Rhodes, Richard A. 1976. The morphosyntax of the Central Ojibwa verb. PhD thesis, University of Michigan.
- Rogers, Jean H. 1964. Survey of Round Lake Ojibwa phonology and morphology. *Contributions to anthropology 1961-62*, part II, 92-154. National Museum of Canada Bulletin 194, Ottawa.
- Todd, Evelyn M. 1971. A grammar of the Ojibwe language: The Severn dialect. PhD thesis, University of North Carolina.
- Valentine, J. Randolph. 2001. *Nishnaabemwin reference grammar*. Toronto, Ontario: University of Toronto Press.
- Voorhis, Paul. 1967. Kickapoo grammar. PhD thesis, Yale University.
- Voorhis, Paul. 1979. *Grammatical notes on the Penobscot language from Frank Speck's Penobscot transformer tales*. Winnipeg, Manitoba: University of Manitoba Anthropology Papers 24.
- Wolfart, H.C. 1973. *Plains Cree: A grammatical study*. Transactions of the American Philosophical Society, n.s., vol. 63, part 5, Philadelphia.
- Wolfart, H.C. 1978. How many obviatives: Sense and reference in a Cree verb paradigm. In *Linguistic studies of native Canada*, ed. by Eung-Do Cook and Jonathan Kaye, 255-272. Vancouver: UBC Press.