Grammaticalizing information status in Siksiká Blackfoot: A tenseless analysis*

Heather Bliss and Elizabeth Ritter
University of Calgary

This paper provides evidence that the verbal prefix *na-* used in the Siksiká dialect of Blackfoot (Plains Algonquian) is neither a grammatical nor an adverbial marker of past time reference, as has been previously suggested (Frantz 1991, Ritter & Wiltschko 2005). Rather, it is proposed that *na-* expresses epistemic modality, and more specifically that *na-* is used to assert the speaker's certainty that a given event has occurred. It is further proposed that this epistemic modal is COMP. This treatment is not only consistent with Ritter and Wiltschko's (2005) hypothesis that Blackfoot lacks tense inflection, but it also accounts for the fact that *na-* fails to occur in a range of clause-types with past time reference, including yes-no questions and negative clauses.

1 Introduction

Ritter and Wiltschko (2004, 2005) propose that Blackfoot is a tenseless language. One potential problem for this proposal is the existence of the prefix *na-*, which is used exclusively in the Siksiká dialect of Blackfoot, and is consistently interpreted as having past time reference. An example of *na-* is given in (1) below:[1]

(1) *Na Leo **ná**ókska'siwa*
na Leo **na**-okska'si-wa
DEM Leo **NA**-run.AI-PROX
'Leo ran. / *Leo is running.'

In (1), the prefix *na-* appears on the verb *okska'si* 'run' and the sentence is necessarily interpreted with past (rather than present) time reference. On the

* Siksiká Blackfoot is spoken on the Siksiká reserve near Gleichen, Alberta, east of Calgary . Many thanks to Mrs. Rachel Ermineskin for sharing her language with us. This research is supported by SSHRC grant 410-2005-0537 to E. Ritter.

[1] Abbreviations are as follows: 1, 2, 3 = first, second, third person; AI = animate intransitive; CONN(ective); DEM(onstrative); DIR(ect); DUR(ative); INAN(imate); INCL(usive); II = inanimate intransitive; INTERROG(ative); INV(erse); NEG(ative); NONAFFIRM(ative); NONFACT(ive); NONSPEC(ific); OBV(iative); PL(ural); POSS(essive); PRO(noun); PROX(imate); REL(ative); SBJN = subjunctive; SG = singular; TA = transitive animate; TI = transitive inanimate; UNSPEC(ified subject).

basis of examples such as (1), Frantz (1991) analyses *na-* as a past tense marker. Importantly, if *na-* is indeed a past tense marker, then it constitutes a fatal problem for Ritter and Wiltschko's tenseless hypothesis.

Our claim in this paper is that Siksiká Blackfoot *na-* does not in fact express past tense, but rather INFORMATION STATUS. In particular, we propose that *na-* expresses the speaker's certainty that a given event has occurred. The motivation for this claim is particularly evident in the comments of our Blackfoot consultant, Rachel Ermineskin.

(2) ***Ná****ísiksipiiwayi aní John*
na-i-siksip-(y)ii-wa-ayi an-(y)i John
NA-CONN-bite.TA-DIR-PROX-PRO DEM-OBV John
'It (the dog) did ***na-*** bite John.'

When asked to elaborate on the role of the prefix *na-* in (2), Ermineskin commented: "You cannot say this if you don't know, you have to know it for sure." The function of *na-* as a marker of information status is also evident in Ermineskin's comments on (3) below:

(3) ***Ná****ísootaaw*
na-i-sootaa-w(a)
NA-CONN-rain.II-PROX
'It ***na-*** rained.'

When asked to explain the difference between (3), with *na-*, and a similar sentence without *na-*, Ermineskin commented that in (3), "[i]t has already stopped raining, but you see that the ground is wet; it rained." Our consultant's comments on both (2) and (3) strongly suggest that the content of *na-* is something other past tense. If this is indeed the case, then *na-* does not in fact challenge the tenseless hypothesis.

2 *na-* as a challenge to the tenseless hypothesis

In this section, we address the question of whether *na-* can be analysed as a marker of past time reference. In §2.1, we look at Frantz's analysis of *na-* as a past tense marker, and provide evidence against this analysis. In §2.2, we consider an alternative, namely that *na-* is a past time adverbial, and here we provide evidence against an adverbial analysis. We conclude that although *na-* is an inflectional prefix, it does not mark past tense.

2.1 Tense in Blackfoot?

Frantz (1991) assumes that Blackfoot has both tense and aspect inflectional prefixes, and he notes that the past tense is "the most complicated of the tense and aspect morphemes" (p. 35). A table summarizing the verbal tense/aspect morphology in Blackfoot is given in (4).

(4)

Frantz's Analysis	Prefix	Notes
durative aspect	*á-*	
perfective aspect	*ákaa-*	
future tense	*yáak-*	
past tense	--	absence of both durative and future prefixes
	ii-	(V)CX → iiCX
	-ay-	restricted to small set of stems (I)CVX → CayX
	ná-	**-Siksika dialect only -in word initial position only**

The durative, perfective, and future prefixes in (4) are relatively straightforward, with a one-to-one mapping between function and form. The marking of past tense is more complex. Past tense may be marked either by the absence of both durative and future prefixes, or by the addition of one of three so-called past tense affixes. One of these affixes is the prefix *na-*, which as noted, is used only in the Siksiká dialect, and is restricted to word-initial position.

Contrary to Frantz's analysis are the analyses in the grammars of both Uhlenbeck (1938) and Taylor (1969). Uhlenbeck (1938: 133) explicitly states "this language possesses neither a true tense system, nor a true aspect system." Taylor (1969) makes no statements about the presence or absence of a tense system, but he characterizes the verbal prefixes in question as either aspectual or modal, but significantly not as tense morphemes.[2]

Independently, Ritter and Wiltschko (2004) propose that there is no inflectional tense in Blackfoot. Their claim is based on three main observations. The first of these is that Blackfoot manifests no effects of a privileged relationship between the subject and the head of the clause, such as nominative Case, cf. Ritter & Rosen 2005. Secondly, languages with tense normally have some tenseless (i.e. infinitival) clauses, but Blackfoot lacks infinitives. Finally, at least one of the past tense strategies identified by Frantz, namely the absence of other inflectional prefixes, is not consistently used for this purpose. Based on these observations, Ritter and Wiltschko speculate about alternative analyses of the so-called tense prefixes. In particular, they suggest that what Frantz (1991) refers to as the future tense morpheme *yáak-* may in fact be an irrealis mood marker, and that Frantz's past tense inflections *ii-, -ay-,* and importantly *ná-* may be past time adverbials.

Ritter and Wiltschko's suggestion that *na-* is a past time adverbial yields the prediction that *na-* should be optional in past time contexts. This prediction is borne out; *na-* is optional in past time contexts, as observed in (5) below:

[2] Taylor's grammar is based on fieldwork with the Blackfeet dialect spoken in Montana, and consequently makes no mention of *na-*. His list of prefixes differs from that of Frantz.

(5) *Ostóyi (nai)sapiipommaa pisátssaisski matónni*
ostoyi **na**-i-sapiipomma-(w)a pisatssaisski matonni
3SG.PRO **NA**-CONN-plant.AI-PROX flower yesterday
'S/he planted flowers yesterday.'

Whether the verb *sápiipommaa* 'plant' appears with or without a prefix, it is interpreted with past time reference. The optionality of *na-* as a marker of past time reference is inconsistent with Frantz's inflectional analysis, but is consistent with Ritter and Wiltschko's adverbial analysis. However, as demonstrated in the following section, *na-* is not a past time adverb either.

2.2 *na-* is not a past time adverbial

A second prediction of the adverbial analysis is that if *na-* is past time adverb, then it should co-occur with inflectional prefixes. This prediction is not borne out. Unlike other "past tense" prefixes, Siksiká Blackfoot *na-* is in complementary distribution with the inflectional person prefixes *nit-* (first) and *kit-* (second).

(6) a. ***Nit****ókska'si*
nit-okska'si
1-run.AI
'I ran.'

b. ***Kit****ókska'si*
kit-okska'si
2-run.AI
'You ran.'

c. *(**Ná**)okska'siwa*
na-okska'si-wa
NA-run.AI-PROX
'S/he ran.'

(7) a. ****Nanit****ókska'si*
na-nit-okska'si
NA-1-run.AI
'I ran.'

b. ****Kitna****óska'si*
kit-na-okska'si
2-NA-run.AI
'You ran.'

The examples in (6) show that like *nit-* and *kit-, na-* appears in initial position. (7) shows that *na-* cannot precede or follow *nit-* or *kit-*. Thus, regardless of the morpheme order, *na-* and the person prefixes cannot co-occur. The complementarity of *na-* and the inflectional person prefixes suggests that *na-* is not an adverbial prefix, but is rather some type of inflectional prefix.

3 *na-* expresses information status

In the previous section, we demonstrated that although *na-* is an inflectional prefix, it does not mark past tense. The question that we address in this section is what inflectional category *na-* does mark. Our claim is that *na-* is a marker of INFORMATION STATUS. In particular we will demonstrate that *na-* is used to assert the speaker's certainty that a given event has occurred, and therefore that the sentence that expresses this fact is true.

3.1 What is information status?

Information status is concerned with the source and reliability of the information, and how such information is acquired or evaluated by the speaker. Cross-linguistically, information status can be encoded in the grammar in a variety of ways, but two categories that are commonly associated with information status are evidentiality and epistemic modality.[3] In what follows, we demonstrate that *na-* is not an evidential marker, but rather, is an epistemic modal.

3.2 *na-* is not an evidential

Evidentiality refers to the marking of information source, or the means by which a speaker acquires the information asserted in a proposition. In essence, evidential markers indicate the type of evidence a speaker has for asserting a proposition.

Evidential markers exhibit a number of cross-linguistic tendencies. In a typological survey of evidentiality, Willet (1988) notes that only four types of evidence are grammaticized across languages. These are personal experience, direct evidence, indirect evidence, and hearsay. Building on this typology, Speas (2004) claims that evidential types lie in a hierarchy corresponding to the degree of speaker involvement. This hierarchy is shown in (8).

(8) personal experience >> direct evidence >> indirect evidence >> hearsay

Speas (2004) further notes that of the four evidential types, personal experience is the unmarked type, in the sense that, if a language marks any evidential distinctions, it will be those that contrast with personal experience. This is not to say that evidential types are necessarily autonomous. Willett (1988) notes that there are languages in which a single evidential marker is used for multiple evidential types, but in such cases, only adjacent and not non-adjacent types on the hierarchy in (8) may be combined.

If Siksiká Blackfoot *na-* were an evidential marker, we would expect it to conform to these cross-linguistic tendencies. For instance, if *na-* were an evidential, then it should mark an evidential distinction that contrasts with the unmarked evidential category, namely personal experience. This prediction is not borne out, as *na-* can be used in the context of personal experience, with the inclusive person.

---

[3] Some authors (e.g. Blain and Déchaine 2006; Palmer 1986; Rooryck 2001) treat these as belonging to a single category of evidentiality, whereas others (e.g. de Haan 2000; James, Clarke, and MacKenzie 2001; Weber 1986) distinguish markers of evidence type (evidentials) from markers of speaker commitment (epistemic modals). The Blackfoot facts documented here support a narrow definition of evidentiality, which excludes markers of speaker commitment.

(9) *Kiistówa ki niistówa **ná**óówato'p ani napáyini.*
kiistowa ki niistowa **na**-oowato-'p an-(y)i napayin-(y)i
2SG.PRO and 1SG.PRO **NA**-eat.TI-1:INAN DEM-OBV bread-OBV
'You and I ***na***- ate the bread.'

As observed in §2, *na-* cannot co-occur with inflectional person prefixes, but because the inclusive person is not marked with an overt prefix, *na-* can be used.

A second prediction is that if *na-* were an evidential, then it should mark some but not all evidential types. This prediction is also not borne out. In addition to appearing in the context of personal experience, *na-* can also be used with direct evidence (10&11), indirect evidence (12&13), and hearsay (14&15).

(10) *Nítssksíni'p aná imitááwa **ná**ísiksipiiwayi ní John*
nit-ssksini-'p an-(w)a imitaa-wa **na**-i-siksip-(y)ii-wa-ayi ni J
1-know.TI-1:INAN DEM-PROX dog-PROX **NA**-CONN-bite-PROX-PRO DEM J
'I know that the dog ***na***- bit John.'

(11) *Ana **ná**óoyiwa akóópis*
an-(w)a **na**-ooyi-wa akoopis
DEM-PROX **NA**-eat.AI-PROX soup
'S/he ***na***- ate soup.'

Following Speas (2004), we assume that complements of predicates that assert the speaker's knowledge represent direct evidence. In (10), *na-* is observed in this context, in the clausal complement of *nitssksini'p* 'I know.' In (11), *na-* appears on a matrix verb *ooyi* 'eat', and the direct evidence the speaker has for asserting the proposition is clear from the context. Our consultant provides the following comment on (11): "Right now I am telling you 'she ate soup,' I saw her, she ate it." In this context, the speaker has personally witnessed the eating event, and the *na-* prefix is used.

The prefix *na-* can also be used with indirect evidence, as seen in (12) and (13) below:

(12) *Ni'tóóhkainakow na Rosie **ná**íhpiyiwa*
ni'toohk-a-inako-w(a) na Rosie **na**-ihpiyi-wa
visible-DUR-show.II-PROX DEM Rosie **NA**-dance.AI-PROX
'It shows that Rosie ***na***- danced.'

(13) *Na Leo **ná**ísapipoommaatooma omístsi pisátssaisskistsi*
na Leo **na**-i-sapipoommaatoo-m-(w)a om-istsi pisatssaissk-istsi
DEM Leo **NA**-CONN-plant.TI-3:INAN-PROX DEM-PL flower-PL
'Leo ***na***- planted those flowers.'

In (12), the matrix verb *ni'tóóhkainakow* 'it shows that' takes a complement representing an event that the speaker has not personally witnessed, but for which s/he has evidence. Similarly in (13), the context is such that the speaker has evidence for the event, even though s/he didn't witness it her/himself. This

is clear from our consultant's comments: "After the fact you say, 'Look, he planted these. There they are; they've grown."

The final evidential type is hearsay, when the speaker learns about the event from a third party. As seen in (14) and (15), *na-* can be used in these contexts, as well.

(14) *Nitohkáániikkoo nahk Rosie **ná**ihpiyihka*
nit-ohk-(w)aanii(st)-(o)k-oo na-hk Rosie **na**-ihpiyi-hk-(w)a
1-?-say.TA-INV-UNSPEC DEM-REL Rosie **NA**-dance.AI-REL-PROX
'Someone told me Rosie ***na***- danced.'

(15) *Nitóóhtsimaa nahk Rachel **ná**ikiikiyihk ni bingo*
nit-(y)oohtsim-a-(w)a na-hk Rosie **na**-ikiiki-yihk ni bingo
1-hear.TI-DIR-PROX DEM-REL Rosie **NA**-win.AI-REL DEM bingo
'I hear that Rachel ***na***- won at bingo.'

In sum, *na-* is used with each of the four grammaticalized evidential types, namely personal experience (with the inclusive person), direct evidence, indirect evidence, and hearsay. Importantly, *na-* does not mark an evidential distinction that contrasts with the unmarked category of personal experience. In fact, *na-* is not used to contrast evidential categories at all. Therefore we can conclude that *na-* is not an evidential marker.

3.3 *na-* is an epistemic modal

In this section, we demonstrate that *na-* marks epistemic modality. Epistemic modality refers to the marking of a speaker's commitment to, or evaluation of, the truth of a statement. In a language like English, epistemic modals are used to contrast varying degrees of speaker certainty. An example illustrating this is given in (16).

(16) a. John is here. — speaker is certain
b. John *must* be here.
c. John *might* be here.
d. John *may* be here. — speaker is uncertain

If a person utters the phrase "John is here" (with no modal) or "John must be here", then it is assumed that s/he is relatively certain about the truth of the statement. On the other hand, if the person says "John might be here" or "John may be here," then s/he is relatively less certain about the truth of the statement. Our hypothesis about Siksiká Blackfoot *na-* is that it marks the speaker's certainty that the event denoted by the clause has in fact occurred. In other words, we claim that *na-* is an epistemic modal that falls high along the epistemic continuum in (16).

This hypothesis yields a number of predictions about the distribution of *na-*. The first of these is that if *na-* is an epistemic modal, then it will be in complementary distribution with other epistemic modals, such as the prefix *aahk-* 'might/must.' As seen in (17) and (18), this prediction is borne out.

(17) *Na Rosie **(*ná)**áhkikkamihpiyiwa*
na Rosie aahk-ikkam-ihpiyi-wa
DEM Rosie might-if-dance.AI-PROX
'Rosie **(*na-)** might have danced.'

(18) (****Ná***)*áhksisstso'kiniwa*
aahk-isstso'kini-wa
must-be.hungry.AI-PROX
'He (****na***-) must have been hungry.'

The second prediction is that if *na-* marks speaker certainty, then it will be ungrammatical in contexts which assert a lack of certainty. This prediction is also borne out. As observed in (19) through (21), *na-* is grammatical in the complement of 'know,' which expresses speaker certainty, but not in the complement of 'think' or 'do not know,' both of which express a lack of speaker certainty.

(19) *Nítssksíni'p aná imitááwa **ná**ísiksipiiwayi ní John*
nit-ssksini-'p an-(w)a imitaa-wa **na**-i-siksip-(y)ii-wa-ayi ni J
1-know.TI-1:INAN DEM-PROX dog-PROX **NA**-CONN-bite-PROX-PRO DEM J
'I know the dog ***na-*** bit John.'

(20) *Nitsikáánistsi'takiwa aná imitááwa ...*
nit-ik-aanist-i'taki-wa an-(w)a imitaa-wa
1-very-say-feel-PROX DEM-PROX dog-PROX

*... **(*ná)**áhksiksipiiwayi ní John*
aahk-siksip-(y)ii-wa-ayi ni John
NONFACT-bite.TA-DIR-PROX-PRO DEM John

'I think the dog **(*na-)** bit John.'

(21) *Nimaatssksini'pa (*na)ikkamsiksipotsiiniki ani imitaay*i
n-imaat-sskini-'p-(w)a ikkam-siksip-otsiiniki an-(yi) imitaa-yi
1-NEG-know.TI-1:INAN-PROX if-bite.TA-SBJN.OBV:3 DEM-OBV dog-OBV
'I don't know if the dog (****na-***) bit him.'

In (19), *na-* appears on the verb *siksip* 'bite' in the complement of *nitssksini'p* 'I know.' In (20) and (21), *na-* is ungrammatical on the same verb in the complement of *nitikaanistsi'takiwa* 'I think' and *nimaatssksini'pa* 'I don't know.' What these examples demonstrate is that *na-* can be used in contexts

that assert speaker certainty of the truth of the proposition, but not in those that assert a lack of certainty.

The third and final prediction is that if *na-* asserts that the event denoted by a clause has indeed occurred, then it will be impossible in contexts that fail to make that assertion. The examples in (22) and (23) verify that prediction. In (22), *na-* is shown to be ungrammatical in negative clauses, which assert that the event denoted by the clause did not occur. Similarly in (23), *na-* is shown to be ungrammatical in yes/no questions, which ask whether or not the event denoted by the clause occurred.

(22) ***(*Na)****máátsiksipiiwaatsiks*
maat-siksip-(yii)-waatsiks(i)
NEG-bite.TA-DIR-3SG.NONAFFIRM
'S/he didn't **(*na-)** bite him/her.'

(23) *Na Rosiewa* ***(*ná)****ikatai'sstsimááhkatsiiwaatsiksi ...*
na Rosie-wa ikata'-i-sstsimaahkat-(y)ii-waatsiksi
DEM Rosie-PROX INTERROG-CONN-hire.TA-DIR 3SG.NONAFFIRM

...omi nínaayi
om-(y)i ninaa-yi
DEM-OBV man-OBV

'Did Rosie **(*na-)** hire that man?'

In sum, *na-* cannot co-occur with other epistemic modals, nor can it be used in contexts which express a lack of speaker certainty (such as the complements of 'think' or 'do not know') or in contexts which fail to assert that an event has occurred (such as negative clauses or yes/no questions). These facts are consistent with our hypothesis that *na-* is an epistemic modal that expresses the speaker's certainty that the event denoted by the clause has occurred, but inconsistent with the view that *na-* is a marker of past tense or evidentiality.

3.4 The past tense flavour of *na-*

A residual question is that if *na-* marks information status and not tense, why is it invariably interpreted as past? Our answer to this question is that *na-* marks past time, but only indirectly. We have analysed *na-* as expressing the speaker's certainty that a given event has occurred. This analysis is consistent our consultant's observation that *na-* is used "after the fact." Consider, for example, her description of (24) and (25) below.

(24) *Na Leo* ***ná****óksisawoo*
na Leo na-oksisawoo
DEM Leo NA-visit.AI
'Leo ***na-*** went visiting.'

(25) *Na Leo íiksisawoo*
na Leo ii-oksisawoo
DEM Leo PST-visit.AI
'Leo ***ii***- went visiting.'

When asked to elaborate on the distinction between (24) and (25), our consultant commented that *náóksisawoo* is used "…after the fact, that he DID go and visit, that he's back home now." In contrast, *íiksisawoo* is used if Leo has left to go visiting, but has not yet returned home. From these comments it is clear that the past time interpretation of *na-* arises indirectly. Because the event is completed and the speaker has evidence of the event's occurrence (i.e. Leo's return), the speaker can be certain that the event occurred. In other words, the speaker can only be certain that an event has occurred "after the fact."

4 The syntax of *na-*

In this section we turn our attention to the syntax of *na-*. The questions we address here are the following: What is the syntactic category of *na-* and what position does it occupy in the clause? In §2 above, we established that *na-* is an inflectional prefix. From this it follows that *na-* belongs to a functional syntactic category. Moreover, if it is an epistemic modal, then it is reasonable to suppose that it belongs to one of the higher functional categories in the clause – either INFL or COMP. The two hypotheses make different predictions about co-occurrence possibilities, which we explore in §4.1. In §4.2, we extend this analysis to show that other prefixes we discussed in §3 are neither INFL nor COMP.

4.1 *na-* and person prefixes are in COMP

In §2 we noted that *na-* and the person prefixes are in complementary distribution.[4] Following Ritter and Wiltschko (this volume), we assume that the person prefixes are INFL elements. Now observe that in a semantically appropriate context for *na-*, it is the person prefix *nit-* 'first person' or *kit-* 'second person', and not *na-*, that appears on the verb:

(26) a. ***Nit****ókska'si*
nit-okska'si
1-run.AI
'I ran.'

b. ***Kit****ókska'si*
kit-okska'si
2-run.AI
'You ran.'

c. *(**Ná**)okska'siwa*
na-okska'si-wa
NA-run.AI-PROX
'S/he ran.'
*'I/you ran.'

[4] *na-* is also in complementary distribution with third person *ot-*, which has a more complex distribution than that of *nit-* and *kit-*. For example, in matrix clauses, *ot-* occurs only when obviative third person acts on proximate third person, but in embedded (conjunct) clauses, *ot-* is used whenever there is a third person subject and no first (exclusive) or second person object, cf. Frantz 1991.

The explanation for this cannot be that *na-* is semantically incompatible with either first or second person since it appears on verbs with an inclusive (first and second person) argument, as shown in (27):

(27) (*Ná)ókska'so'p*
na-okska'si-o'p
NA-run.AI-INCL
'We (incl) ran.'

Further evidence that the complementarity of *na-* and the person prefixes is not due to semantic incompatibility is the fact that *na-* is possible in the third person, but only in contexts where the overt third person prefix *ot-* cannot occur, i.e. in a subset of independent order clauses. The correct generalization is that only inflected verbs that have a phonologically null person prefix may be prefixed with *na-*, i.e. the inclusive and third persons in the independent order, and the inclusive person in the conjunct order. This fact strongly suggests that the observed complementarity is due to the fact that *nit-*, *kit-* and *na-* are all realized in the same syntactic position**.**

The question is whether this position is INFL, the original Merge position of the person prefixes, or COMP, the closest landing site for an INFL element that undergoes head movement. If *na-* and person prefixes were both INFL elements, then we would expect *na-* to be inserted instead of a person prefix because it makes a more specific semantic contribution, and its contribution is not recoverable from DPs or agreement suffixes. However, if the epistemic modal is Merged in COMP, it could be identified by raised INFL. Let us suppose then that the epistemic modal is Merged in COMP as an abstract element [NA], and that INFL raises to COMP. The result is spelled out as an overt person prefix if one exists and as *na-* elsewhere. The two scenarios are schematized below:

(28) $[_{CP}$ NA $[_{IP}$ *nit-/kit-*… $[_{VP}$ V]]]

(29) $[_{CP}$ *na-* $[_{IP}$ ∅ $[_{VP}$ V]]]

This analysis of the Blackfoot epistemic modal is reminiscent of English conditionals, which can be alternatively be realized with an overt modal in INFL and a bare auxiliary verb in its original Merge position (30), or with an abstract modal and an inflected auxiliary verb that has raised to INFL (31).

(30) If I would have seen it, …

(31) a. If I had seen it, …

b. If I [COND] had seen it …

Our proposal is that, like English auxiliary *had* in (31), the Blackfoot person prefixes undergo head movement to provide phonetic content for an abstract modal in a higher syntactic position. In English, the modal is in INFL, and in Blackfoot it is in COMP. If this is correct, we predict that *na-* should be in complementary distribution with other COMP elements. We postpone this question until such elements have been identified for Blackfoot.

4.2 Semantic incompatibility of *na-* and other prefixes

In §3 above we observed that *na-* does not occur in clauses containing the nonfactive modal prefix *aahk-* 'might/must', the negative prefix *maat-* 'not' or the interrogative prefix *ikata'-*. Here we argue that the complementarity of *na-* and these other prefixes is due to semantic incompatibility, rather than syntactic constraints. First, indirect evidence that *aahk-*, *maat-* and *ikata'* do not occupy the same position as the epistemic modal comes from the fact that all three may co-occur with the person prefixes, as exemplified in (32)-(34):

(32) ***Kááhk****ikkamaapi píítai*
k(it)-aahk-ikkam-(y)aapi piita-(y)i
2-might-if-see.AI eagle-NONSPEC
'You might see some eagles.'

(33) ***Nimáát****sikakitsaapi píítai*
ni(t)-maat-ikak-it-(y)aapi piita-(y)i
1-NEG-even-there-see.AI eagle-NONSPEC
'I didn't even see any eagles.'

(34) ***Kikatá****i'tsaapi'pa píítai*
k(it)-ikata'-it-(y)aapi-hpa piita-(y)i
2-INTERROG-there-see.AI-NONAFFIRM eagle-NONSPEC
'Did you see any eagles?

If *na-* occupies the same position as person prefixes, then clearly *na-* cannot also occupy the same position as *aahk-*, *maat-* and *ikata'*. Consequently, the incompatibility of *na-* and these prefixes cannot be due to the fact that they are competing for the same syntactic position. Moreover if person prefixes are INFL then clearly these prefixes do not belong to the category INFL. The fact that *aahk-*, *maat-* and *ikata'* all appear closer to the verb root than the person prefix suggests that they are not COMP elements either. This follows from the Mirror Principle (Baker 1985), which would lead us to expect a COMP prefix to appear further from the root than an INFL prefix. Note further that *aahk-* may co-occur with *sta'-*, a non-initial prefix that functions as either a negative or interrogative morpheme (Frantz 1991). If *sta'-* is an allomorph of both *maat-*

and *ikata'* then the fact that it may appear in the same clause as *aahk-* provides additional evidence that these elements belong to distinct categories, and that they are neither INFL nor COMP.

(35) ***Aahksta****o'ksisawaatsiiwatotsiksi oksissti*
aahk-sta'-oksisawaat-(y)ii-wa-waatsiksi w-(i)ksisst-yi
might-INTERR-visit-DIR-PROX-NONAFFIRM 3POSS-mother-OBV
'Might he have visited his mother?'

(36) *Kitsíiksstato* ***kááhksstai****'pottahsi*
kit-iiksstat-o k-ááhk-sta'-ipottaa-hsi
2-want.TA-1:2 2-might-NEG-fly-CONJ
'I want you not to fly.' (Frantz 1991: 86)

Thus, the conclusion we draw is that there is no syntactic restriction on the co-occurrence of *na-* and *aahk-*, *maat-* and *ikata'*. Rather, in this case the complementarity is due to semantic incompatibility.

5 Conclusion

In conclusion, we have argued that Siksiká Blackfoot *na-* is an epistemic modal that expresses speaker's certainty that the event denoted by the clause has occurred. Consequently, it marks past time, but only indirectly. Our syntactic analysis of *na-* as COMP provides support for our hypothesis, but is inconsistent with the claim that it is a past tense morpheme. More generally, our analysis of *na-* as a marker of information status is consistent with Ritter and Wiltschko's (2005) tenseless hypothesis. It has now been established that two of the so-called past tense markers, i.e. *na-* and ∅, do not in fact belong to this class. In order to confirm the tenseless hypothesis what remains to be determined is whether the other so-called tense markers identified by Frantz (1991) should be otherwise characterized.

References

Baker, Mark. 1985. The Mirror Principle and Morphosyntactic Explanation. *Linguistic Inquiry* 16: 373-415.

Blain, Eleanor, and Rose-Marie Déchaine. 2006. Evidential Marking across the Cree Dialect Continuum. To appear in *International Journal of American Linguistics*.

de Haan, Ferdinand. 2000. The Relation Between Modality and Evidentiality. In *Linguistiche Berichte*. Hamburg: Helmut Buske Verlag.

Frantz, Donald G. 1991. *Blackfoot Grammar*. Toronto: University of Toronto Press.

James, Deborah, Sandra Clarke, and Marguerite MacKenzie. 2001. The Encoding of Information Source in Algonquian: Evidentials in

Cree/Montagnais/Naskapi. *International Journal of American Linguistics* 67(3): 229-263.
Palmer, F.R. 1986. *Mood and Modality.* Cambridge: Cambridge University Press.
Ritter, Elizabeth and Sara Thomas Rosen. 2005. Agreement without A-positions: A closer look at Algonquian. *Linguistic Inquiry* 36: 648-660.
Ritter, Elizabeth and Martina Wiltschko. 2004. The Lack of Tense as a Syntactic Category: Evidence from Blackfoot and Halkomelem. *Papers from the 39th International Conference on Salish and Neighbouring Languages*: 341-370.
Ritter, Elizabeth and Martina Wiltschko. 2005. Anchoring Events to Utterances without Tense. *Proceedings of WCCFL 24*. Somerville, MA: Cascadilla Proceedings Project, Cascadilla Press, pp.343-351.
Ritter, Elizabeth and Martina Wiltschko. 2007. Varieties of INFL: TENSE, LOCATION, AND PERSON. Paper presented at WSCLA 12. University of Lethbridge, March 30-April 1, 2007.
Rooryck, Johan. 2001. *Evidentiality: State of the Article*. GLOT International 5.
Speas, Margaret. 2004. Evidentiality, Logophoricity, and the Syntactic Representation of Pragmatic Features. *Lingua* 114: 255-276.
Taylor, Allan Ross. 1969. *A Grammar of Blackfoot*. PhD Dissertation, University of California, Berkeley.
Uhlenbeck, C.C. 1938. *A Concise Blackfoot Grammar: Based on Material from the Southern Peigans*. Amsterdam: Noord-Hollandsche uitgevers-maatchappij. Reprinted in 1978. New York: AMS Press
Weber, David J. 1986. Information Perspective, Profile, and Patterns in Quechua. In Chafe, Wallace, and Johanna Nichols (eds). *Evidentiality: The Linguistic Coding of Epistemology*. Norwood, NJ: Ablex Publishing: 137-155.
Willett, Thomas. 1988. A Cross-Linguistic Survey of the Grammaticalization of Evidentiality. *Studies in Language* 12(1) 51-97.