

The Scope of Negation and Modals in Blackfoot, Is it Ambiguous?



University of British Columbia - LING 432 Field Methods
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Research Question:

•What is the distribution of the negations *maat-* and *sa-* with circumstantial modals *ohkott* (*able*), *ohk* (*should*) and *sstsina'* (*must*)?

Table 1: Epistemic and Circumstantial Modal Strength

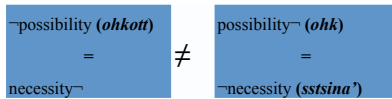
Strength	Epistemic	Circumstantial
Strong necessity	ááhk	sstsina'
Weak necessity	ááhkam	ohk
Possibility	áákama'p	ohkott

(Modified from Reis Silva, 2012 and Louie, unpublished)

Hypothesis:

•That the scope of negation and circumstantial modals will be reflected in the surface order

Table 2: Scope of Negation and Circumstantial Modals



•In the case of the possibility modal *ohkott* and the strong necessity modal *sstsina'*, where negation has scope over the modal, we would expect the negation to surface before the modal.

• For the weak necessity modal *ohk*, where the negation does not have scope over the modal, we would expect the negation to surface after the modal.

Predictions:

Table 3: Prediction of possible negation and modal surface order

a) <i>maat-aak-modal-wanist-yi</i> NEG-FUT-modal-do.that-? *ohkott *ohk *sstsina'	b) <i>aak-sa-modal-wanist-yi</i> FUT-NEG-modal-do.that-? *ohkott *ohk *sstsina'	c) <i>maat-aak-sa-modal-wanist-yi</i> NEG-FUT-NEG-modal-do.that-? *ohkott *ohk *sstsina'
d) <i>sa-aak-modal-wanist-yi</i> NEG-FUT-modal-do.that-? *ohkott *ohk *sstsina'	e) <i>aak-maat-modal-wanist-yi</i> FUT-NEG-modal-do.that-? *ohkott *ohk *sstsina'	f) <i>sa-aak-maat-modal-wanist-yi</i> NEG-FUT-NEG-modal-do.that-? *ohkott *ohk *sstsina'
g) <i>aak-modal-maat-wanist-yi</i> FUT-modal-NEG-do.that-? *ohkott *ohk *sstsina'	h) <i>aak-modal-sa-wanist-yi</i> FUT-modal-NEG-do.that-? *ohkott *ohk *sstsina'	

References

Louie, Meagan. Email communication. March 31 2012
Louie, Meagan. The University of British Columbia. *Mapping opposite truth-values: a semantics for Blackfoot naahk*. [unpublished]
Reis Silva, Amelia. LING 432 Guest Lecture. March 21 2012

Results:

Possibility - *ohkott*

Positive Form:

aakohkottanists
aak-ohkott-wanist-yi
FUT-able-do.that-?
"he can do it"

Negative Context 1: *A boy broke his leg, and when he tries to put any weight on it, it is really painful and he can't do it. He can't run or play outside with his friends. He can't do it*

Table 4: Speaker judgments for negative context 1

a) ✓ <i>maataakohkottanistsiwaatsiks</i> <i>maat-aak-ohkott-wanist-yi-waatsiks</i> NEG-FUT-able-do.that-?-NON.AFF 'he can't do it'	b) * <i>aaksohkottanistsi</i> <i>aak-sa-ohkott-wanist-yi</i> FUT-NEG-able-do.that-?	c) ✓ <i>maataaksohkottanistsiwaatsiks</i> <i>maat-aak-sa-ohkott-wanist-yi-waatsiks</i> NEG-FUT-NEG-able-do.that-?-NON.AFF 'he will not be able to do it'
d) * <i>soaakohkottanistsi</i> <i>sa-aak-ohkott-wanist-yi</i> NEG-FUT-able-do.that-?	e) * <i>aakimaatohkottanistsi</i> <i>aak-maat-ohkott-wanist-yi</i> FUT-NEG-able-do.that-?	f) * <i>soaakimaatohkottanistsi</i> <i>sa-aak-maat-ohkott-wanist-yi</i> NEG-FUT-NEG-able-do.that-?
g) * <i>aakohkottimaatanistsi</i> <i>aak-ohkott-maat-wanist-yi</i> FUT-able-NEG-do.that-?	h) * <i>aakohkottsaanistsi</i> <i>*aak-ohkott-sa-wanist-yi</i> FUT-able-NEG-do.that-?	

•The results from Table 4 support the surface scope hypothesis because the negations in 1a and c precede the modal for which it has scope over

Weak Necessity – *ohk*

Positive Form:

aakohkanists
aak-ohk-wanist-yi
FUT-should-do.that-?
"he should do that"

Negative Context 2: *Someone told you about a man who has been stealing from corner stores and vandalizing public property and breaking many other laws. You say "he shouldn't do that".*

Table 5: Speaker judgments for negative context 2

a) ✓ <i>maataakohkanistsiwaatsiks</i> <i>maat-aak-ohk-wanist-yi-waatsiks</i> NEG-FUT-should-do.that-?-NON.AFF 'he should not have done that'	b) ✓ <i>aaksohkanistsi</i> <i>aak-sa-ohk-wanist-yi</i> FUT-NEG-should-do.that-? 'he shouldn't do that'	c) ✓ <i>maataaksohkanistsiwaatsiks</i> <i>maat-aak-sa-ohk-wanist-yi-waatsiks</i> NEG-FUT-NEG-should-do.that-?-NON.AFF 'he should not have done that'
d) * <i>soaakohkanistsi</i> <i>sa-aak-ohk-wanist-yi</i> NEG-FUT-should-do.that-?	e) * <i>aakimaatohkanistsi</i> <i>aak-maat-ohk-wanist-yi</i> FUT-NEG-should-do.that-?	f) * <i>soaakimaatohkanistsi</i> <i>sa-aak-maat-ohk-wanist-yi</i> NEG-FUT-NEG-should-do.that-?
g) * <i>aakohkimaatanistsi</i> <i>aak-ohk-maat-wanist-yi</i> FUT-should-NEG-do.that-?	h) * <i>aakohkisaanistsi</i> <i>aak-ohk-sa-wanist-yi</i> FUT-should-NEG-do.that-?	Volunteered: ✓ <i>aaksohkwonistsi</i> <i>aak-sa-ohk-?-wanist-yi</i> FUT-NEG-should-?-do.that-? 'he shouldn't do that' (polite, nice way to say it)

•The results in Table 5 do not support this hypothesis because the negation in a)-c) surfaces before the modal *ohk* when the negation does not have scope over the modal. Furthermore, the scope surface hypothesis might expect form h) to be acceptable in this context.

Results (cont):

Strong Necessity - *sstsina'*

Positive Form:

aaksstsina'anists
aak-sstsina'-wanist-yi
FUT-must-do.that-?
"he must do that"

Negative Context 3: *Jenny has work early tomorrow morning so she has to wake up early. But Bill doesn't have any plans for the next day and can sleep in as long as he wants. Bill doesn't have to wake up early. He doesn't have to do it.*

Table 6: Speaker judgments for negative context 3

a) ✓ <i>maataaksstsina'anistsi</i> <i>maat-aak-sstsina'-wanist-yi</i> NEG-FUT-must-do.that-? 'he doesn't have to do it/that'	b) * <i>aaksosstsina'anistsi</i> <i>aak-sa-sstsina'-wanist-yi</i> FUT-NEG-must-do.that-?	c) * <i>maataaksosstsina'anistsi</i> <i>maat-aak-sa-sstsina'-wanist-yi-waatsiks</i> NEG-FUT-NEG-must-do.that-?-NON.AFF 'he doesn't have to do it/that'
d) * <i>soaaksstsina'anistsi</i> <i>sa-aak-sstsina'-wanist-yi</i> NEG-FUT-must-do.that-?	e) * <i>aakimaatsstsina'anistsi</i> <i>aak-maat-sstsina'-wanist-yi</i> FUT-NEG-must-do.that-?	f) * <i>soaakimaatsstsina'anistsi</i> <i>sa-aak-maat-sstsina'-wanist-yi</i> NEG-FUT-NEG-must-do.that-?
g) * <i>aaksstsina'imaatanistsi</i> <i>aak-sstsina'-maat-wanist-yi</i> FUT-must-NEG-do.that-?	h) ✓ <i>aaksstsina'sawanistsi</i> <i>aak-sstsina'-sa-wanist-yi</i> FUT-must-NEG-do.that-? 'he doesn't have to do it/that'	Follow up: i) * <i>aaksosstsina'sawanistsi</i> <i>aak-sa-sstsina'-sa-wanist-yi</i> FUT-NEG-must-NEG-do.that-?
		j) * <i>maataaksstsina'sawanistsi</i> <i>maat-aak-sstsina'-sa-wanist-yi</i> NEG-FUT-must-NEG-do.that-?

•Form a) in Table 6 supports the surface scope hypothesis, but form h) does not

Conclusion:

•The findings do not support the surface scope hypothesis. It appears that *ohkott* is following surface scope, *ohk* is following reverse surface scope, and *sstsina'* surfaces as both.

•Follow-up elicitations:

→ It would be interesting to see the distribution of a "must not" necessity- context, and whether it follows surface scope or reverse surface scope.
→ Get clearer context distinctions for when these forms are used
→ Re-elicited with storyboards
→ Elicit with different person number (ie. 1st, 2nd, 3rd, PL, SG) and various types of verbs (ie. transitive, intransitive, activity, state, accomplishment, etc).
→ Elicit modal contexts that vary in their politeness and authority of the speaker.

•Future Research Questions:

→ Investigate the epistemic modals *áákama'p* (possibility), *ááhkam* (weak necessity), *ááhk* (strong necessity), and whether they have similar negation scope surface distribution as their circumstantial modal counterparts
→ Investigate negation stacking with modals. In what contexts is negation stacking permitted and with which modals?

Acknowledgments

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