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 so- with circumstantial modals ohhk (able), ohk (should) and sstsina’ (must)?

Table 1: Epistemic and Circumstantial Modal Strength

<table>
<thead>
<tr>
<th>Strength</th>
<th>Epistemic</th>
<th>Circumstantial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong necessity</td>
<td>áákha</td>
<td>ststsina’</td>
</tr>
<tr>
<td>Weak necessity</td>
<td>áákham ohhk</td>
<td></td>
</tr>
<tr>
<td>Possibility</td>
<td>ááákamaat ohhk p</td>
<td></td>
</tr>
</tbody>
</table>

(Modified from Reis Silva, 2012 and Louie, unpublished)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

<table>
<thead>
<tr>
<th>possibility (ohhk)</th>
<th>possibility (ohk)</th>
<th>possibility (stsstsina)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≠</td>
<td>≠</td>
<td>≠</td>
</tr>
</tbody>
</table>

In the case of the possibility modal ohhk and the strong necessity modal sstsina’, where negation has scope over the modal, we 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:

Transitions: a) maat- + negation + modals = maat- + negation + modals b) so- + negation + modals = so- + negation + modals c) ohhk = ohhk d) ohk = ohk e) sstsina’ = sstsina’ f) so- + negation + modals = so- + negation + modals g) maat- + negation + modals = maat- + negation + modals

Results:

Possibility - ohhk

Positive Form: aakohkantansisti aak-ohk-want=styi 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

<table>
<thead>
<tr>
<th>a) maat- + negation + modals = maat- + negation + modals</th>
<th>b) so- + negation + modals = so- + negation + modals</th>
<th>c) ohhk = ohhk</th>
</tr>
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</table>

Weak Necessity – ohk

Positive Form: aakohkantansisti aak-ohk-want=styi 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

<table>
<thead>
<tr>
<th>a) maat- + negation + modals = maat- + negation + modals</th>
<th>b) so- + negation + modals = so- + negation + modals</th>
<th>c) ohhk = ohhk</th>
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<td>so- + negation + modals = so- + negation + modals</td>
<td>ohhk = ohhk</td>
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</table>

Results (cont):

Strong Necessity - sstsina’

Positive Form: aakstsina’anistsi aak-ststsina’-want=styi 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

<table>
<thead>
<tr>
<th>a) maat- + negation + modals = maat- + negation + modals</th>
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Conclusion:
The findings do not support the surface scope hypothesis. It appears that ohhk is following surface scope, ohk is following reverse surface scope, and sstsina’ surfaces as both.

Follow-up elicitation:
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-elicted with storyboards
Elicit with different person number (ie. 1st, 2nd, 3rd, PL, SG) and various types of verbs (ie. transitive, intransitive, active, state, accomplishment, etc.)
Elicit modal contexts that vary in their politeness and authority of the speaker.

Future Research Questions:
Investigate the epistemic modals dákama’s (possibility), dákhom (weak necessity), dohk (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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References
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Reis Silva, Amella. LING 432 Guest Lecture. March 21 2012