## Asymmetries in the expression of modality in Bishnupriya Manipuri

Recent work has identified modals with variable force—those that can express either necessity or possibility depending on context—in a number of languages, especially those of North America (Rullmann et al. 2008; Deal 2011; Bochnak 2015, a.o.). This talk presents novel data from Bishnupriya Manipuri (Indo-Aryan; Bangladesh & India), showing that one modal in the language exhibits a similar pattern of force variability, but with an asymmetry between modal flavors. In Bishnupriya Manipuri, the verbal suffix *-ibo*, when combined with the auxiliary *tha*, gives rise to epistemic interpretations that are compatible with both possibility (1) and necessity (2) readings.

(1) Context: Ira is looking for her necklace. She's not sure if she lost it or if it's somewhere in the house. She's checked the closet and dresser, but she hasn't yet checked under the bed. (adapted from Vander Klok 2015)

ira-r thabak han maŋ-o tha-ibo. Ira-gen beaded.necklace clf be.lost-ptcp aux-modal

'Ira's necklace might be lost.'

(2) Context: Ira believes strongly in her theory that that every man with a mustache snores. Since Ruhit has a mustache, she concludes that:

ta niŋsa dakh-e tha-ibo. 3sg.м breath call-ртср аux-модаl

'He must snore.'

However, when *-ibo* appears directly on the main verb (without an auxiliary), it receives a circumstantial interpretation and is restricted to strict possibility readings (3). A necessity interpretation is unavailable in this context (4).

(3) Context: The ground is snowy and icy, and Ruhit is wearing slippers. You think it's dangerous and that:

ta setu iya por-ibo. 3sg.m slipperiness due.to fall-modal

'He could fall from the slipperiness.'

(4) Context: There is a bridge that is famously difficult to cross in the winter because of how icy and slippery it is. Anyone who is not well-prepared and wearing the right shoes is sure to fall. Seeing that Ruhit is wearing slippers, you think:

#ta setu iya por-ibo. 3sg.m slipperiness due.to fall-modal

Intended: 'He will fall from the slipperiness.'

I argue that this asymmetry in modal force arises from the modal inventory of the language. Bishnupriya Manipuri lacks a dedicated epistemic necessity modal but does have a circumstantial necessity modal—namely, the future marker. Following Deal (2011), I propose that *-ibo* is underlyingly a possibility modal, but that the absence of an epistemic necessity modal in the

language means that no scalar implicature arises to restrict epistemic *-ibo* to strict possibility interpretations. Consequently, both weak and strong readings are available in epistemic contexts. In contrast, the availability of a stronger circumstantial necessity modal gives rise to a scalar implicature that restricts circumstantial *-ibo* to strict possibility readings and implicates that the stronger necessity claim is false. This explains the infelicity of (4), which competes with the felicitous (5), containing the future marker.

(5) ta setu iya por-itoi. 3sg.m slipperiness due.to fall-fut.3sg 'He will fall from the slipperiness.'

Thus, Bishnupriya Manipuri displays a hybrid pattern: its epistemic modals pattern like those in Nez Perce (Deal 2011), while its circumstantial modals pattern like those in English. The asymmetric modal inventory of Bishnupriya Manipuri offers support for the scalar implicature-based approach to modal force variability.

An alternative analysis of variable force modals treats them underlyingly as necessity modals whose interpretation can be weakened in context (Rullmann et al. 2008; Bochnak 2015). However, this approach cannot account for the Bishnupriya Manipuri facts. In downward-entailing environments—for example, in the restriction of a universal quantifier (6)—epistemic -ibo no longer shows force variability, but instead behaves like an English-type possibility modal. This is predicted on the implicature-based analysis, since in non-upward-entailing contexts, necessity modals are not logically stronger than possibility modals, and scalar implicatures are therefore not generated.

- (6) [habbi [nogor-e tha tha-ibo marup gi]]=re ta dakh-itoi. all nagar-loc stay Aux-modal friend clf.pl=acc 3sg.m call-fut.3sg
  - a. He will call all of his friends who may live in Nagar.
  - b. # He will call all of his friends who must live in Nagar

To express modal flavors beyond epistemic and circumstantial, Bishnupriya Manipuri makes use of a diverse set of modal verbs. Unlike -ibo, these modals generally exhibit fixed force and flavor, with parallels to the articulated modal system described for Javanese (Vander Klok 2013). As the first study of modality in Bishnupriya Manipuri, this talk offers a broader survey of the language's modal system, showing that it displays both flexibility and rigidity, but asymmetrically across its inventory. While some modals exhibit variation in force or flavor, others are more semantically restricted, illustrating how distinct modal strategies can coexist and interact within a single language.

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