

## Passamaquoddy-Wolastoqey modals

The semantic category of modality is understudied in Algonquian languages, especially from a formal semantic lens (some notable exceptions being Cook 2014:§6.5 on Plains Cree and Louie 2015 on Blackfoot), and there isn't yet a good understanding of what variation we find across the family. In this paper, I focus on four common modals in Passamaquoddy-Wolastoqey (Eastern Algonquian)—the initials/preverbs *kis(i)-* 'can, may' and *(ah)cuw(i)-* 'should, must', and the particles *cipotu(k)* 'might, maybe' and *cu-al-lu* 'must, probably'—and show how they fit within a formal typology of modality.

I adopt a standard Kratzerian analysis of modals as quantifiers over possible worlds (Kratzer 1977, 1981, 1991, 2012, a.m.o.), and distinguish between modal force (quantificational strength) and modal flavor (what kinds of worlds are being quantified over). Working with four speakers of the language to investigate these issues and following standard semantic fieldwork methodology (e.g. Matthewson 2004), I show that Passamaquoddy-Wolastoqey grammaticalizes both modal force and flavor: *kis(i)-* and *(ah)cuw(i)-* express all types of root modality (e.g. deontic, circumstantial) whereas *cipotu(k)* and *cu-al-lu* are restricted to epistemic readings. Additionally, *kis(i)-* and *cipotu(k)* are possibility modals (existential quantifiers) whereas *(ah)cuw(i)-* and *cu-al-lu* are necessity modals (universal quantifiers), as summarized in the table below:

	Possibility ( $\exists$ )	Necessity ( $\forall$ )
Root	<i>kis(i)-</i>	<i>(ah)cuw(i)-</i>
Epistemic	<i>cipotu(k)</i>	<i>cu-al-lu</i>

Table 1: Passamaquoddy modals

Further points of discussion include interactions between modals and tense, scope possibilities with negation, and the pervasive ambiguity of *kis(i)-* between its modal reading and a perfect(ive) reading (a property common to its cognates in the other Northeastern languages as well as its Innu and East Cree cognates *tshî-/chii(h)-*). I also discuss how we can connect the morphosyntactic properties of these modals to their semantic properties.

## References

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