Objective
To present an analysis of how the Kwak’wala modal system is organized based on modal force and conversational background.

Language
Kwak’wala belongs to the Northern branch of the Tsimshianic language family. It is spoken by the Kwak’wa’ka’wakw people of Vancouver Island and the adjacent mainland. The following data is from my own elicitation with a consultant originally from Kingcome inlet.

Modal Logic
Modals are quantifiers that quantify over possible worlds. (Kratzer 1977, 1981)
• The meaning of modal expressions is composed from the interaction between modal force and conversational background.

Model Force:
• A proposition that is necessarily true is true in all worlds quantified over
• A proposition that is necessarily true may or may not be true, given the facts, but it is not necessarily false

Conversational Background:
• Conversational background restricts the possible set of worlds to those compatible with the modal type (Kaufmann 2006)
• A basic distinction is made between epistemic and deontic modal types

Epistemic
Compatible with the speaker’s knowledge or evidence

Deontic
Compatible with what is required or allowed according to the rules of the situation

Cross-Linguistic Variation
The interaction between modal force and type varies across languages

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Research Question: How is the Kwak’wala modal system organized based on the two parameters modal force and modal type?

Kwak’wala Modals
Not only is there variation across languages with respect to the interaction between modal force and modal type, but Kwak’wala shows that there is also language internal variation.

• The epistemic modal tense appears to have a variable modal force reading, being felicitous in both possibility and necessity contexts. The type of evidence available, like direct sensory evidence or indirect evidence based on previous knowledge, determines the modal force of tense. (Peterson 2009)

• The deontic modal tense appears to have variable conversational background and a necessity modal force. It is felicitous in both deontic and epistemic conversational backgrounds.

Acknowledgments
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Deontic Modals
Kwak’wala has one dedicated deontic possibility modal with fixed modal force and a fixed modal type (wef).

There is also a weak necessity modal with deontic readings (tsimasi).

POSSIBILITY - wef
Context: You want to feed the horses and you ask your mom if you can. Your mom says:

wef-ʔəm 3.LOC-DET salmon.berries pick-EMS.NEC-3.LOC ACC-salmon.berries

She must be picking the salmon berries

NECESSITY - tsimasi
a. Context: There is a sign in the employee bathroom telling everyone that they have to wash their hands.

tsimasi-ʔəm salmon.berries 3.LOC-DET salmon.berries

Everyone should/have to wash their hands

Epistemic Modals
The following modals have a fixed modal type but variable modal force.

• ‘g’mæna appears to be strictly possibility and is felicitous in contexts where there is strong inferential evidence available

POSSIBILITY
Context: Salmonberries grow in the summer. You haven’t gone berry picking yet so you don’t know if the berries are ripe, but it is summer and they are usually ripe at this time of year.

la qʷ’mæna-ʔəm tpú-3-LOC DET salmon.berries AUX-EMS.POSS ripe-3-LOC.DET salmon.berries

The salmon berries might be ripe

NECESSITY
Context: Sally lives on a farm with her mom and dad. One morning her dad asks her where she is.

'a la-ʔəm g’mæna-ʔəm salmon.berries 3.LOC-DET salmon.berries

Sally is supposed to be picking the salmon berries

• Both ‘g’mæna and ‘wef are inelicitous in deontic possibility and necessity contexts

POSSIBILITY
Context: The berries are ripe and Sally asks if she can pick the berries. Her dad says that she is allowed to.

If b’smwa-ʔəm qʷ’mæna-ʔəm salmon.berries pick-EMS.NEC-3.LOC ACC salmon.berries

She must be picking the salmon berries

NECESSITY
Context: Sally lives on a farm with her mom and dad. One morning her dad asks her where she is.

If a la-ʔəm b’smwa-ʔəm qʷ’mæna-ʔəm salmon.berries pick-EMS.POSS ripe-3-LOC.DET salmon.berries

The salmon berries must be ripe

Discussion
The Kwak’wala modal system does not fit neatly into a modal typology based on the interaction between modal base and conversational background. Evidence from Kwak’wala shows that there is not only variability in the organization of modal systems across languages but there is also variability within languages. For variable epistemic modals like ‘g’mæna, the type of evidence provided determines the modal force. The stronger the inferential evidence the more likely it is that ‘g’mæna will be glossed as a necessity modal. More elicitation is needed to explore the variability in the modal system presented above. It would also be interesting to explore the idea of a scale of modal force, as some modals seem to make stronger statements than others.

References