

# Possession in Ability Modality

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## Main goals

To present an analysis of the ambiguity of the possibility nominal modal construction in Korean (*-(u)l swu iss-* sentences), and its implications for the compositional semantics:

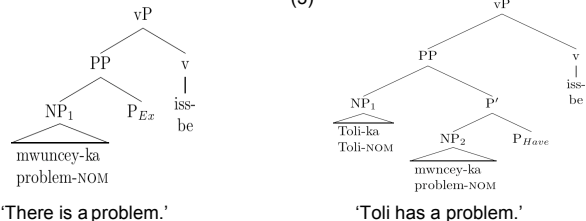
- (1) Toli-ka nolayha-l swu-(ka) iss-ta.  
Toli-NOM sing-ADNOM possibility-(NOM) be-DECL  
'It is possible that Toli will sing.' (epistemic reading)  
'Toli has the ability to sing.' (ability reading)
- *-(u)l swu iss-* is decomposed into three parts: (i) *-(u)l* is an adnominal suffix, (ii) *swu* is a noun, (iii) *iss-* is a copula (as independently argued in Ha 2007).
- The source of the ambiguity is structural: the copula *iss-* supports both the intransitive and the transitive structures.

Epistemic reading:  $[_{NP1} [_{CP} \text{Toli-ka nolayha-l}] [_N \text{swu-(ka)}]] \text{iss-ta.}$   
Ability reading:  $[_{NP1} \text{Toli-ka}] [_{NP2} [_{CP} \text{PRO nolayha-l}] [_N \text{swu-(ka)}]] \text{iss-ta.}$

- Intransitive structure is a projection of an existential P head ( $P_{Ex}$ ), and transitive structure is a projection of a possessive P head ( $P_{Have}$ ).

## Structure of existential and possession sentences

- Intransitive *iss-* sentences have an existential reading, transitive ones a possession reading.
- *iss-* sentences are a projection of an abstract P (Freeze 1992, Kayne 1993).
- Following Harley's (2002) extension of Freeze's P, the existential and possessive structures are projections of two different P's:  $P_{Ex}$  and  $P_{Have}$ .

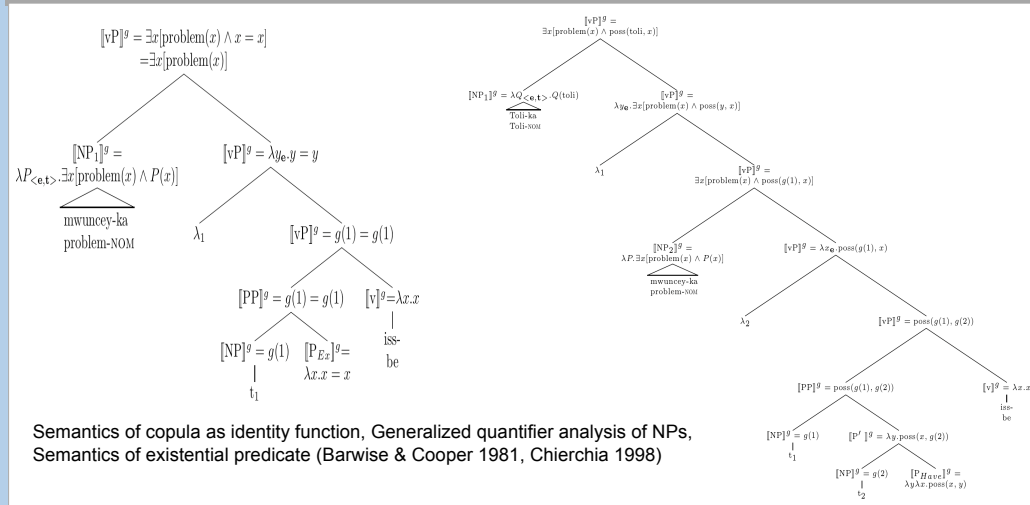


## NPI licensing in the possibility nominal modal construction

- Clause-mate Condition: An NPI can appear in both the subject and the object position as long as there is a licenser (negation) in the same clause (Choe 1988).
- Ha's observation: *-(u)l swu iss-* sentences with negation and an object NPI allow both the epistemic and ability readings, those with negation and a subject NPI allow only the epistemic reading.
- Ha's observation follows from the clause-mate condition and the proposed structural ambiguity.

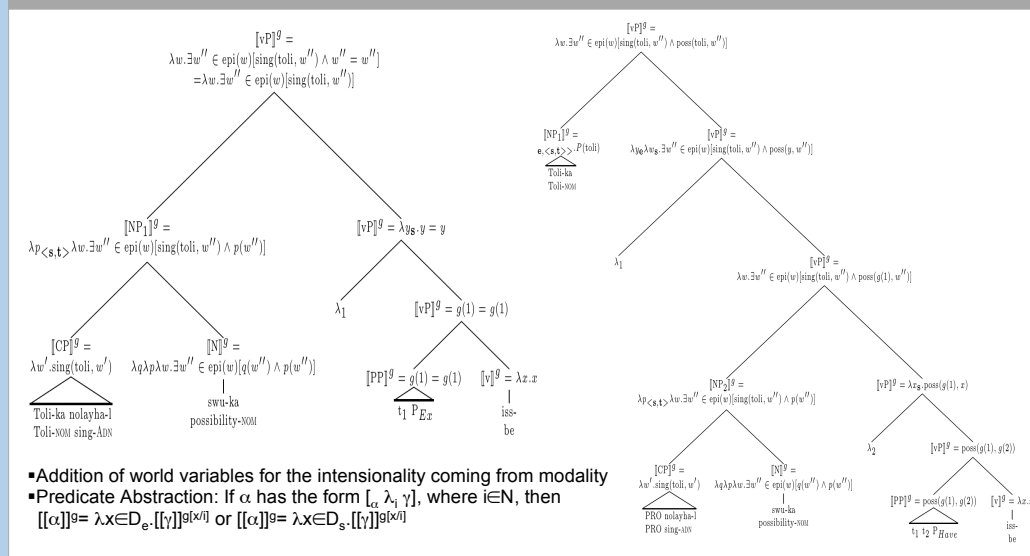
- (4) Toli-ka amwukesto an masi-l swu-ka iss-ta.  
Toli-NOM anything NEG drink-ADNOM possibility-NOM be-DECL  
'Toli has the ability to not drink anything.'  
'There is a possibility that Toli will not drink anything.'
- (5) Amwuto maykcwu-lul an masi-l swu-ka iss-ta.  
anyone beer-ACC NEG drink-ADNOM possibility-NOM be-DECL  
'Nobody has the ability to drink beer.'  
'There is a possibility that nobody will drink beer.'

## Compositional semantics for $P_{Ex}$ and $P_{Have}$ structures



Semantics of copula as identity function, Generalized quantifier analysis of NPs, Semantics of existential predicate (Barwise & Cooper 1981, Chierchia 1998)

## Compositional semantics for the possibility nominal modal construction



- Addition of world variables for the intensionality coming from modality
- Predicate Abstraction: If  $\alpha$  has the form  $[\alpha \lambda_i \gamma]$ , where  $i \in \mathbb{N}$ , then  $[[\alpha]]^g = \lambda x \in D_e. [[\gamma]]^{g[\alpha/i]}$  or  $[[\alpha]]^g = \lambda x \in D_s. [[\gamma]]^{g[\alpha/i]}$

## Conclusion and Future Work

- Correlated the structural ambiguity of copula sentences with the epistemic and ability readings in possibility nominal modal construction
- Reveals another instance of a close connection between existential and possession expressions, and how they interact with modality
- Meaning of ability includes the meaning of possession and possibility
- How general is the proposed analysis cross-linguistically?
- What does it mean for an individual to be in a possession relation with a possible world?

## Selected References and Acknowledgments

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