

# Place of modal ambiguity in a modular grammar

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## Two properties of modals

Property 1: Modals are often ambiguous between epistemic and non-epistemic readings

Property 2: Modal readings have different structural properties

- Epistemic modals are above T in syntax
- Non-epistemic modals are below T

Two properties pull in different directions:

- Systematic ambiguity motivates a single lexical entry
- Syntactic inequality motivates separate lexical entries

## How to bring two properties together

Wrong questions: they presuppose different lexical entries

- Why are epistemics above T?
- Why are non-epistemics below T?

Right questions: but they require a theory of structural context’s influence on interpretation

- Why are modals above T epistemic?
- Why are modals below T non-epistemic?

## ‘Global’ approaches

Influence of syntax is regular and arises via composition

- Distribution of modal readings arises due to underspecified lexical semantics and the process of semantic composition with the structural context
- Hacquard 2006: modals are event-relative, high modals are relative to the speech act event, low modals are relative to the aspectual event
- Ramchand 2018: choice semantics for modals, either choice between possible assertions or possible situations

These approaches are related to ideas of universal syn-sem correspondence, where ‘externalization’ is the locus of linguistic variation (Chomsky’s later work; the Meaning-First Approach)

## Strong prediction of ‘global’ists

Two claims of ‘global’ approaches

- Modals above T are epistemic
- This property follows from semantics of functional spine, lexical semantics for modals, and composition

These properties entail that the syntactic generalization is due to a semantic constraint on possible scope relations

⇒ Examples of tense outscoping epistemics are problematic for ‘global’ approaches

## Dutch modal verbs and tensde

Van Dooren (2020) argues that Dutch epistemics can be interpreted in the scope of tense, unlike English epistemic (*contra* Rullmann, Matthewson 2018)

- (1) *Gisteren moest hij nog in Portugal geweest zijn op zijn*  
yesterday must.PST he still in Portugal been be on his  
*verjaardag, maar het nieuwe bewijsmateriaal toont aan dat*  
birthday but the new evidence shows on that  
*dat een foute conclusie was.*  
that a wrong conclusion was

‘Yesterday it was still highly likely that he had been in Portugal on his birthday, but the new evidence indicates that that conclusion was wrong.’

## Russian modal adjectives and tense

Similar behavior is found in Russian modal adjectives (maybe English as well)

- (2) a. *Vozmozhno to na den’ rozhdenija Dzhon byl v Portugalii*  
possible that on day birth John was in Portugal  
‘It is possible that John was in Portugal on his birthday.’
- b. *Bylo vozmozhno to na den’ rozhdenija Dzhon byl v*  
was possible that on day birth John was in  
*Portugalii, no nash agent govotit to videl ego v tot*  
Portugal but our agent says that saw him on that  
*den’ v Parizhe*  
day in Paris

‘It was possible that John had been in Portugal on his birthday but our agent says that he saw John in Paris that day.’

## Alternative to ‘global’ approaches

The more restrictive generalization does not appear to hold — epistemic can be in scope of tense

There are workarounds of course (e.g., posit more speech act operators in the structure) but is there an alternative?

‘Local’ approach: the influence of syntactic context on the interpretation of syntactic objects is arbitrary (cf. substance-free phonology) — maybe one should always expect that in lexical mapping between modules (Scheer 2012, 2022)

## Allosemy and imperfect syn-sem mapping

DM literature has developed a mechanism for syntactically-conditioned selection of meaning – allosemy (Wood 2015; Myler 2016; Schwarzschild 2022; Wood 2023)

Late insertion: syntactic terminals do not come with pre-packaged meanings, meanings are read off syntactic terminals and their surroundings (see Preminger 2022 for an argument based on non-constituent idioms like *the shit out of*)

Once such mechanism is available, we should aim to reach the boundaries of what’s possible with allosemy (however: there may be learnability issues as argued by Ramchand 2015)

## Modals: what you see is what you get

Allosemy appears to be a perfect match for modal ambiguity:

- modal reading is partly brought by the modal, partly by the surrounding syntactic context
- structure-reading match isn’t perfect (CPs in epistemic adjectives, TPs in epistemic verbs)

Allosemy accounts for:

- interaction with argument structure (dynamic and directed deontic readings of modals cross-linguistically)
- interaction with case assignment (e.g., Poshart Chuvash *-mala*, Knyazev 2021)
- variation in structural properties (BCS epistemics embed CPs, Veselinović 2019)