

Tense above and below modals: evidence from Bulgarian

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Background. The interactions between tense and non-root (epistemic) modals have been subject to great interest especially since Condoravdi’s 2001 seminal work. Drawing on data mainly from English, Condoravdi argues that past tense can project either higher or lower than the modal, giving rise to epistemic and counterfactual (‘CF’) readings, respectively:

- (1) Mary **might have** (a. still/b. already) won the race.
 - a. epistemic: modal > past (I wonder if she actually did)
 - b. counterfactual: past > modal (But she didn’t.)
 - c. logically impossible: #/* past > modal > past

Condoravdi’s theory predicts that it is impossible for tense to appear in **both** positions (1c). While much cross-linguistic work has been done since (see Laca, 2012; Karawani, 2014; Xie, 2015; Qin, 2019; Fălăuş and Laca, 2020), this prediction has not been verified to date.

Research question. I test Condoravdi’s prediction on tense in Bulgarian – a language that has overtly tensed modals as well as no infinitives, which means that its temporal morphology is fully transparent, unlike English and most languages. This makes it ideally suited for determining the position at which tense is interpreted wrt the modal.

Findings. The first set of data demonstrates that Condoravdi’s predictions regarding the correlation between past tense and modal interpretation in the cases with only one past tense are borne out only with regards to (1a): a low past under a modal tensed for present (2a) gives rise to epistemic readings only and cannot be CF. When the modal is tensed for past and the main verb is present, (2b), the structure is ambiguous between a CF and an epistemic reading, as opposed to only CF, as per Condoravdi’s (2001) model. Note that while in both readings the orientation of the main verb is future with regards to the modal, the anchoring of the modal is present on the CF reading and past on the epistemic one.

- (2) a. Može da e pristignal. b. Može-she da pristigne.
might-PRES SUBJ aux.3SG arrive.PP might-PST SUBJ arrive.3SG.PRES
‘He might have arrived (a. epistemic only; b. both epistemic and CF).’

To account for these findings, I propose that the tense on the modal can be interpreted at one of two positions that are each higher than the modal itself: at TP for epistemic readings giving a real tense interpretation, and at MoodP for the CF readings, giving rise to a fake past interpretation in the sense of Iatridou (2000). This also explains why we don’t see a CF interpretation on (2a): the CF needs past morphology (there is no fake present!).

My proposal predicts that the interpretation of the modal is independent from the tense of the complement, i.e. (i) two past tenses are logically possible (*pace* (1c)); (ii) they should allow both the epistemic and the CF readings, as (2b). Both are borne out:

- (3) {vse oshte} Može-she {veche} da e pristignal.
still might-PST already SUBJ aux.3SG arrive.PP
‘He might have arrived.’
 - a. epistemic reading : we had incomplete information in the past about his arrival
 - b. counterfactual: if he hadn’t missed the train...

Conclusion. The novel data demonstrate finer-grained temporal interpretations of modals and CF than previously thought possible. The distinction between the CF and the epistemic reading is determined entirely above the modal. This has intriguing consequences for the understanding of modality, counterfactuality, and their interaction with tense.

References

- Condoravdi, Cleo (2001). Temporal interpretation of modals – modals for the present and for the past. In *The Construction of Meaning*, pages 59–88. CSLI Publications.
- Fălăuş, Anamaria and Laca, Brenda (2020). Modal–temporal interactions. In *The Wiley Blackwell Companion to Semantics*, pages 1–33. Wiley Online Library.
- Iatridou, Sabine (2000). The grammatical ingredients of counterfactuality. *Linguistic inquiry*, 31(2):231–270.
- Karawani, Hadil (2014). *The Real, the Fake, and the Fake Fake in Counterfactual Conditionals, Crosslinguistically*. PhD thesis, University of Amsterdam.
- Laca, Brenda (2012). On modal tenses and tensed modals. In *Building a bridge between linguistic communities of the Old and the New World*, pages 163–198. Brill.
- Qin, Longlu (2019). *The Elements of Counterfactuality in Mandarin Chinese*. PhD thesis, Stanford University.
- Xie, Zhiguo (2015). Non-root modals for the past and temporal shifting in Mandarin Chinese. 1(1):1–22.