

Two readings of *be supposed to* and *sollen*

- (1) **Deontic context:** A student asks the department administrator when Professor Plum will be in the office. The university's rules state that professors must have office hours between 10-11am every day. The administrator says:
Reportative context: A student asks the department administrator when Professor Plum will be in the office. Earlier that day, Professor Plum's partner called the administrator and said that they are running late but will come in at 10am. The administrator says:
 a. Professor Plum **is supposed to** be here at 10.
 b. Professor Plum **soll** um 10 hier sein.

We provide a unified analysis for *be supposed to* and *sollen*

Reportative use

Modals can encode speaker's evidence type (Faller 2012, Matthewson et al 2007)

- e.g. epistemic *must* → inferential evidential component (von Fintel & Gillies 2010)
 - be supposed to* requires reportative evidence, cf. (1)
- (2) Context: The ball is either under cup A, cup B, or cup C. It's not under A, and it's not under B.
 a. It must be under cup C. b. #It's **supposed to** be under cup C.
- (3) Context: You look out the window and see that it is raining.
 a. It is raining. b. #It must be raining. c. #It's **supposed to** be raining.

Can be embedded like other evidential modals:

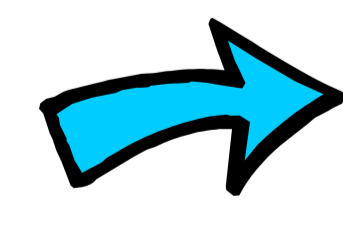
- (4) Context: You and a friend are planning to go sightseeing in Edinburgh. Your friend asks if you should bring umbrellas. You don't know what the weather will be like, so you say:
 a. If it's supposed to rain, we will bring umbrellas. = 'If it is reported that it will rain, we will bring umbrellas.'
 ≠ 'It is reported that if it will rain, we will bring umbrellas.'

Reportative component projects out of negation

- (5) Context: You and a friend are planning to go sightseeing in Edinburgh. Your friend asks if you should bring umbrellas. You say:
 a. It's not supposed to rain. = 'It is reported that it won't rain.'
 ≠ 'There is no reportative evidence that it will rain.'
 ≠ 'The evidence that it will rain is not reportative.'

Deontic use with reportative restriction

- (6) Context: Your friend has just parked in front of a fire hydrant. You say:
 a. You're not supposed to park there. (reports a rule)
- be supposed to* cannot be used performatively
 - i.e., cannot be used to issue a rule; reports on existing rules
- (7) Context: You are playing Calvinball, a game where the rules are made up on the spot, and no rule can be re-used. The players shout out the rules as they make them up.
 a. Now you {have to/must/#are supposed to} throw the ball across the field.



Towards a unified analysis

Kratzerian framework: (Kratzer 1981, 2012)

- modals quantify over possible worlds
 - modal flavours → conversational backgrounds restrict modal domain
- (8) **Reportative informational conversational background:** a function g_t such that for any w in the domain of g_t , $g_t(w)$ represents the propositional content of a report made in w at a time $t' < t$
- (9) $[[be\ supposed\ to]]^{c,w,t} = \lambda P \lambda x. \forall w' \in \max_{g_t(w)} (\bigcap f(w')) : P(x)(w') = 1$ defined only if c provides a circumstantial modal base f and reportative informational ordering source g_t
- time of the report t' precedes reference time t
 - ensures deontic use cannot be performative

Comparison with German *sollen*

- sollen* dispreferred when the issuer of the report is identical with the grammatical subject (Kratzer 1981, Schenner 2008, Hinterwimmer 2014)
 - reportative modal *wollen* used instead
- (10) Context: You're at a party, and at 8pm someone asks when Maria will arrive. Earlier today, she told you she would arrive at 9pm.
 a. Maria is supposed to be here at 9pm.
 b. Maria {#soll/✓will} um 9 hier sein.

Proposal: *sollen* has the same semantics as *be supposed to* in (9)

- sollen* infelicitous in (10) due to pragmatic competition with *wollen*
- wollen* presupposes the source of the report is the same as the subject of the sentence (cf. Schenner 2008, Gärtner 2012)
- sollen* and *wollen* compete via Maximize Presupposition (Heim 1991)
- wollen* is used whenever its presuppositions are supported in the context

Prediction: *sollen* is used in ignorance contexts (report could have been issued by the subject or by someone else)

- (11) Context: Alex and Ben are planning a party. Their flaky friend Chris only sometimes RSVPs to parties, and one might only hear about Chris's attendance through rumours.

A: **Soll** Chris zur Party kommen? = 'Is Chris supposed to come to the party?' (A doesn't know whether B heard from C or someone else)

A': **Will** C zur Party kommen? (only: A believes B heard directly from C)



Temporal interpretation & performativity

Lauer (2015): anti-performative modals are simple stative predicates

- modal statement required to be true at speech time
- if state s is the result of an event e , then s will not obtain before the final moment of $\tau(e)$
- if an obligation is created as a result of uttering a modal sentence, then a present tense stative modal statement will never be true at speech time
- Stative modals cannot be used to talk about speaker preferences**

So maybe we don't need to stipulate the existence of a report at time $t' < t$

Reports vs. intentional acts

Apparently non-reportative uses of *sollen*: (Hinterwimmer 2014)

- sollen* requires an antecedent **intentional act** (not necessarily a speech act)

- (12) Context: Peter is singing *Yesterday* to his baby daughter.

A: Why is he doing that?

B: Das **soll** das Baby beruhigen. = 'It's supposed to calm the baby down.'

- must be coerced into reportative interpretation → accommodation
- or possibly different modal flavour (see below)

Deontic or bouletic?

Maybe the deontic readings of *sollen/be supposed to* are actually bouletic

- could account for (12) → Peter wants baby to calm down

Problem: Lauer would predict performativity if Speaker is a deontic authority

- even if Speaker is a deontic authority, we still get reportative reading

- (13) Context: The child has stayed up past his bedtime. The parent says:
 a. You (know you are) supposed to be in bed by 9.

Compare:

- (14) Context: The parent is setting a curfew for the child.
 a. I want you to be home by 9. /#You are supposed to be home by 9.

References

- Faller 2012. Evidential scalar implicatures. *L&P* • von Fintel & Gillies 2010. Must ... stay ... strong! *NaLS* • Gärtner 2012. Does Searle's challenge affect chances for approximating assertion and quotative modal *wollen*. *Practical Theories and Empirical Practice* • Heim 1991. Artikel und Definitheit. *Semantics: An International Handbook of Contemporary Research* • Hinterwimmer 2014. The semantics of German *sollen* (slides) • Kratzer 1981. The notional category of modality. *Words, Worlds, and Contexts: New Approaches to Word Semantics* • Kratzer 2012. *Modals and Conditionals*. OUP • Lauer 2015. Performative uses and the temporal interpretation of modals. AC 2015 • Matthewson et al 2007. Evidentials as epistemic modals: Evidence from St'át'imcets. *Linguistic Variation* • Schenner 2012. Double face evidentials in German: Reportative 'wollen' and 'sollen' in embedded contexts. *SuB 12*