# Formale Semantik 09. Tempus und Modalität

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Stets aktuelle Fassungen: https://github.com/rsling/VL-Semantik

# Inhalt







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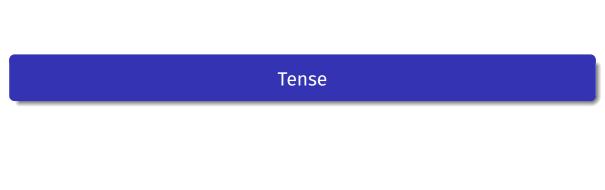
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- Get a first idea of why we need the up operator ^.



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- What<sub>i</sub> did you expect t<sub>i</sub>? vs. Nani-o yokishi-ta-ka.

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- $[TP NP T VP] \Rightarrow [TP T NP VP]$  (T raising)

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- $V(\beta)(\langle w,i\rangle)$ : V valuates  $\beta$  to a function from world-time pairs to the denotata of the predicate (sets of individuals, tuples of them, etc.)

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## Reichenbach

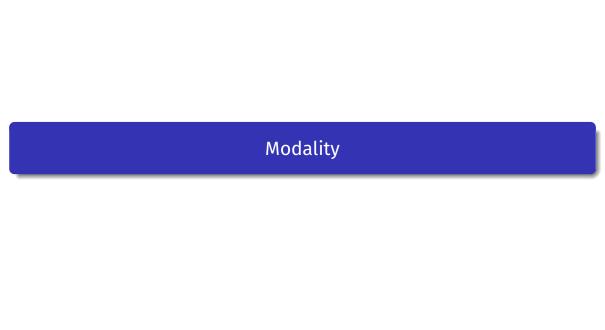
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- affixes: Frau Eckardt is recognizable.

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- modal Aux in English is tense-insensitive (evidence for Infl)
- $\bullet \ \square$  and  $\lozenge$  in intensional predicate calculi (IPC): exploit the full set of possible worlds
- in NL: evaluation of modal expressions against restricted conversational backgrounds

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- we call the conversationally relevant background the set of  $\langle w, i \rangle$  pairs relevant to the interpretation of the sentence

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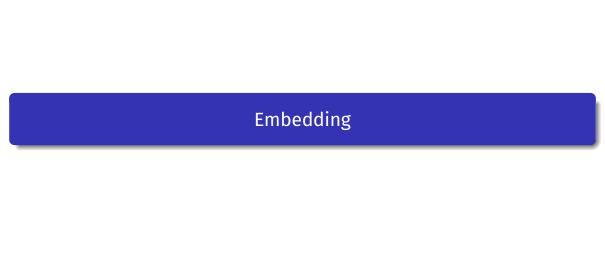
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- statable in propositional form (ten commandments, law, ...)

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- such that all possible worlds are:  $\bigcap g(\langle w, i \rangle)$



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- CP (fully fledged sentence) receives theta role by believe under government.

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- belief:  $\langle w, i \rangle$  is an element of the proposition of CP

# Translating that as<sup>^</sup>

• value of propositional attitude (PA) verbs: functions  $[\langle w, i \rangle \to \langle u_n, p \rangle]$  with  $u_n \in U$ , p a proposition (set of  $\langle w_n, i_m \rangle$ ) and compatible to  $u_n$ 's background

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- rids us of the problem that the belief content looks truth-conditional (a sentence) but doesn't contribute to the embedding sentence's truth-value. PA verbs take intensions as arguments.

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- Only Ralph doesn't know.

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- true: since Ortcutt and the guy in the hat are one individual
- false: since Ralph doesn't know that and in a way 'doesn't believe it'

• the Russelian interpretation for *the* like  $\exists$  with a uniqueness condition (as a GQ):  $\lambda Q \lambda P \left[ \exists x \left[ Q(x) \wedge P(x) \right] \wedge \forall y \left[ Q(y) \leftrightarrow y = x \right] \right]$ 

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- makes the sentence false: the de dicto reading

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- Names are rigid designators across world-time-pairs, definite descriptions aren't.

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- John tries to sing.

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- John tries to sing.
- try(j, ^swim)

## Literatur I

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