Modal Particles & Commitment – The view from German *schon*

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Talk's objective:

Case study of how a single modal particle (schon) can be alternatively used for expressing strengthened or weakened speaker commitment to prejacent.

schon + context(s) 1a,b,...: weakening

schon + context 2: strengthening



Talk's objective:

Case study of how a single modal particle (schon) can be alternatively used for expressing strengthened or weakened speaker commitment to prejacent.

- ⇒ Depending on context, different interpretive effect on discourse structure
- ⇒ Speaker commitment NOT lexically coded!



Talk's objective:

Case study of how a single modal particle (schon) can be alternatively used for expressing strengthened or weakened speaker commitment to prejacent.

Q1: Universal property of modal expressions?

e.g. von Fintel & Gillies (2010) on variable force with universal modal *must*; see also §5!



Structure:

- §1 Intro: Modal particles and commitment strength in German
- §2 Main claim
- §3 Unified analysis of aspectual & modal *schon* (Krifka 2000, Zimmermann 2018)
- §4 schon & speaker commitment: Context!!!
- §5 Discussion



1.1. Diachronic Source of German modal particles

Most German particles used for modifying speaker certainty/ commitment strength diachronically derived from scale-based degree adverbs:

- (1) a. Hein ist wohl auf SEE. (weak)

 ,Hein may be at sea.'
 - b. Hein ist schon auf SEE, aber... (weak)

 Hein is at sea alright, but ...'
 - c. Hein ist fei auf SEE! [Hinterwimmer & Ebert 2018] ,But Hein is at SEA!



1.1. Diachronic Source of German modal particles

Most German particles used for modifying speaker certainty/ commitment strength diachronically derived from scale-based degree adverbs:

(2) a. wohl < wohl_{ADV} ,well' wohlerzogen well-educated

b. schon < schon_{ADV} ,nicely' Schlaf schön! Sleep well!

c. fei < fein (lat. Finis) fein gemacht well done



1.1. Diachronic Source of German modal particles

Q2: How common is the diachronic path from scale-based degree expression to modal particle from a cross-linguistic persepctive?

NB: the notion of degree-based comparison is inherent in a Lewis-Kratzer style semantics of modal expressions via the notions of *ordering*, *closeness*, *comparative possibility*, etc. (world ordering defined via equivalence classes)

[Kratzer 2012]



1.2. Accepting and modal strength

Some of the particles come in accented-unaccented pairs: Accent on the particle typically associated with stronger speaker commitment or assertive force (in a pre-theoretical sense).

- (3) a. Hein ist WOHL auf SEE!

 ,Hein is indeed / very well at sea.
 - b. Hein ist SCHON auf SEE! ,Hein IS at sea!



1.2. Accepting and modal strength

Some of the particles come in accented-unaccented pairs: Accent on the particle typically associated with stronger speaker commitment or assertive force (in a pre-theoretical sense).

⇒ Does (non-)accent on schon/SCHON mark a lexical distinction wrt speaker commitment, or is this just a reflex of information structure interacting with a uniform underlying particle meaning?



1.2. Accepting and modal strength

Some of the particles come in accented-unaccented pairs: Accent on the particle typically associated with stronger speaker commitment or assertive force (in a pre-theoretical sense).

Q3: Is speaker commitment lexically coded in natural language expressions, or rather a more indirect discourse effect?



2. Main Claim:

(Un)Accented instances of modal *schon* only weakly correlated with weak/strong speaker commitment

- (4) a. St. Pauli ist schon `n gutes TEAM, aber... weak ,St.Pauli are a decent team alright, but...'
 - b. St. Pauli ist SCHON `n gutes TEAM! strong ,St. Pauli are indeed a decent team.'



2. Main Claim:

(Un)Accented instances of modal *schon* only weakly correlated with weak/strong speaker commitment

⇒ In contrast to first impressions (4ab), we will argue that the German MP schon is not lexically ambiguous:

Observable differences in commitment strength are systematically derived from the interaction of a uniform basic lexical meaning and information & discourse structure.



2. Main Claim:

(Un)Accented instances of modal *schon* only weakly correlated with weak/strong speaker commitment

- (5) a. schon/SCHON + some verum focus: strong
 - b. schon/SCHON + other focus: weak



2. Main Claim:

⇒ (Un)Accenting of schon predictable from information structure, but NOT from commitment strength!

(6) a. schon: accent can/must be placed elsewhere

b. SCHON: accent cannot be placed elsewhere (because of vP/VP-givenness ⇒ deaccenting)



3.1. Aspectual schon ,already' (Krifka 2000):

Aspectual *schon* is a focus-sensitive scale-alignment particle; it presupposes that the salient focus alternatives are at most as high on some (intrinsically ordered) scale as the focus denotation:

(7) ALREADY(
$$<$$
B, F, $\leq_A>$) \Leftrightarrow $<$ B, F, $\leq_A>$;
$$defined\ iff\ \forall X \in A[X \leq_A F]\ [Krifka\ 2000:404]$$



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(8) CONTEXT: Lydia grows older so fast. Sie ist jetzt schon DREI Monate alt

'She is now already three months old.'

(ALT: 1, 2, 3 months)

ORDERING_{ALT} "less or equal": {<1,1>, <1,2>, <1,3>,

<2,2>, <2,3>, <3,3>}



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Aspectual *schon* is a focus-sensitive scale-alignment particle; it presupposes that the salient focus alternatives are at most as high on some (intrinsically ordered) scale as the focus denotation:

 \Rightarrow Discourse effect: *schon* constrains set of licit focus alternatives to be less than or equal to the ordinary value of X_F . [cf. Beaver & Clark 2008 on *only*]



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Aspectual *schon* is a focus-sensitive scale-alignment particle; it presupposes that the salient focus alternatives are at most as high on some (intrinsically ordered) scale as the focus denotation:

Krifka adds a monotonic mapping between alternatives and temporal intervals

(7') ALREADY(<B, F, $\leq_A>$) \Leftrightarrow <B, F, $\leq_A>$; [Krifka 2000:406] defined iff \forall X \in A[X \leq F] & \leq_A is time-aligned



3.1. Aspectual schon ,already' (Krifka 2000):

Aspectual *schon* is a focus-sensitive scale-alignment particle; it presupposes that the salient focus alternatives are at most as high on some (intrinsically ordered) scale as the focus denotation:

 \Rightarrow Lower alternatives on the scale (1, 2, 3 months) tend to temporally precede the prejacent,

BUT...



3.1. Aspectual schon ,already' (Krifka 2000):

... there are counterexamples to a lexically hardwired relation between temporal and alternative ordering with aspectual *schon*, already':

(9) Q: When did Mary arrive?

A: Maria ist schon am MON\tag angekommen.

Mary is already on Monday arrived

'Mary has already arrived on MON\day.'

⇒ ALTs (Mon, Tue, Wed) are later!



3.1. Aspectual schon ,already' (Krifka 2000):

... there are counterexamples to a lexically hardwired relation between temporal and alternative ordering with aspectual *schon*, already':

(10) A: I've applied for American citizenship.

B: Is your husband also applying?

A: Er IST schon Amerikaner. Er ist dort geboren. 'He is alREA\dy American, for he was born in America.'



3.1. Aspectual schon ,already' (Krifka 2000):

... for which reason Krifka proposes an intensionalized analysis on which the particle presupposes an ordering of alternative developments B, that is event-time relations, in terms of their relative speed.

- (11) $\forall X \in A \forall i \forall i' [B(i)(X)(\zeta) \land B(i')(F)(\zeta) \rightarrow B(i) \leq B(i')]$ with i, i' intensional indices, B a backgrounded development relation between events and times, and ζ an event or time argument.
 - ⇒ Scalar comparison with aspectual schon does not necessarily operate on temporal scales



3.1. Aspectual schon ,already' (Krifka 2000):

... another example (Zimmermann 2018)

(12) A: What is Peter's profession?

B: #FRÜH/er war er BÄCK\er,

aber JETZT/ ist er schon FLEI\scher.

before was he baker but now he is already butcher #'Before he was a baker, but now he's already a butcher.'

⇒ (12B) infelicitous despite correct temporal ordering of alternatives as long as baker and butcher are ranked equally on the scales of social prestige, income etc.



3.1. Aspectual *schon* ,already' (Krifka 2000):

Temporal ordering is of lesser importance for the licensing of *schon*. What IS relevant is the comparative ordering of salient alternatives on some scale!



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Temporal ordering is of lesser importance for the licensing of *schon*. What IS relevant is the comparative ordering of salient alternatives on some scale!

- NB: (12B) also infelicitous on Ippolito's (2007) analysis of aspectual *already*?
- (13) [[already]]^{c,g,w} = $\lambda t.\lambda D_i$. $\exists e \in D_i$. $\lambda P \in D_{<|c|t>>}$: $\exists t'>t [P(e)(t')] = 1$. P(e)(t) = 1



3.2. Extension to spatial and marginal *schon*:

Instances of spatial and marginal *schon*, already involve comparison of alternatives on non-temporal scales [König 1977]:

- (14) Konstanz is 48kms from here, ...
 - ... und Kreuzlingen ist schon 50\ km entfernt. and Kreuzlingen is already 50 km away 'Kreuzlingen is already 50 kilometers away.'
 - = 1 iff Kreuzlingen is 50km away from the speaker; defined iff ∀X∈ALT_{DIST}: X ≤_{DIST} 50km (48≤50)



3.2. Extension to spatial and marginal *schon*:

Instances of spatial and marginal *schon*, already involve comparison of alternatives on non-temporal scales [König 1977]:

(15) Paul ist noch geMÄ\ßigt. PE\ter ist schon radiKAL\. Paul is still a moderate. Peter is already radical.' 'Paul is still a moderate. Peter is (by comparison) already radical.' (König 1977:183)

ALT = {moderate, radical}



3.2. Extension to spatial and marginal *schon*:

Aspectual *schon* denotes scale-related generalized degree operator (Zimmermann 2018):

schon presupposes that all contextually salient focus alternatives be lower on some intrinsic or contextually given scale (temporal, speed, distance, property, ...)

Alternatives are either logically entailed or implicated by the at-issue component (Beaver & Clark 2008)



3.2. Extension to spatial and marginal *schon*:

Aspectual *schon* denotes scale-related generalized degree operator (Zimmermann 2018):

(16)
$$[[schon]]^{c} < BG, F, \leq_{A} > = BG(F);$$

defined iff $\forall X \in A_{c} [X \leq_{A} F]$



3.2. Extension to spatial and marginal *schon*:

Aspectual *schon* denotes scale-related generalized degree operator (Zimmermann 2018):

(9) A: Maria ist schon am MON\tag angekommen. Mary is already on Monday arrived 'Mary has already arrived on MON\day.'

Having arrived (result state) on Monday

⇒ Having arrived on Tuesday, Wednesday, ...



3.3. Extension to modal schon (Zimmermann 2018):

Modal schon denotes modal degree operator:

Modal *schon* compares prejacent p to its polar opposite ¬p along the modal dimension of (the amount of) available circumstantial evidence for p vs ¬p

(diachronically bleached focus operator (Eckardt & Speyer 2014) or flexible syntactic adjustment sites (Beck, accepted))



3.3. Extension to modal schon (Zimmermann 2018):

Modal schon denotes modal degree operator:

(17) $[[schon_{mod}]]^{C} < BG, F, \leq_{A} > = BG(F);$ $defined iff \forall X \in \{p, \neg p\} [X \leq_{EVAL,x} F]$ (18) $\neg p \leq_{EVAL,x} p = 1$ $iff |\{q \mid q \in MB_{CIRC,x} \land q \text{ supports } \neg p\}| \leq |\{q \mid q \in MB_{CIRC,x} \land q \text{ supports } p\}|$



3.3. Extension to modal schon (Zimmermann 2018):

(17) $[[schon_{mod}]]^{C} < BG, F, \leq_{\Delta} > = BG(F);$

Modal schon denotes modal degree operator:

defined iff
$$\forall X \in \{p, \neg p\} [X \leq_{EVAL,x} F]$$

(18) $\neg p \leq_{EVAL,x} p = 1$
iff $|\{q \mid q \in MB_{CIRC,x} \land q \text{ supports } \neg p\}| \leq |\{q \mid q \in MB_{CIRC,x} \land q \text{ supports } p\}|$

(more appropriately, comparison is between weighted sums of evidence for and against p ...)



3.3. Extension to modal schon (Zimmermann 2018):

Modal schon denotes modal degree operator:

- (19) a. St.Pauli ist schon_{MOD} 'n gutes TEAM\. 'St.Pauli is a good team, alright.'
 - b. Im Angriff sind sie zwar schwach_{q4,not-p}, aber sie haben eine gute Abwehr_{q1,p}, eine gute Nachwuchs arbeit_{q2,p}, und super Zuschauer_{q3,p}.
 - 'The strikers may be ineffective, but they have a good defense, talented youth players, and excellent supporters.'



3.3. Extension to modal schon (Zimmermann 2018):

Modal schon denotes modal degree operator:

- (19) a. St.Pauli ist schon_{MOD} 'n gutes TEAM\. 'St.Pauli is a good team, alright.'
 - b'.#Sie haben zwar eine schwache Abwehr_{q1,not-p}, praktisch keine Nachwuchsarbeit_{q2,not-p} und ein mieses Publikum_{q3,not-p}, aber im Angriff sind sie stark_{q4,p}.
 - 'The defense may be lousy, they may have practically no talented youth players, and the supporters are terrible, but their strikers are good.'



3.3. Extension to modal schon (Zimmermann 2018):

Modal schon denotes modal degree operator:

Range of evidence considered can be made explicit with *insgesamt*, all in all':

(20) Insgesamt ist St.Pauli schon_{MOD} 'n gutes TEAM\. 'All in all, St.Pauli is a good team, alright.'



3.3. Extension to modal schon (Zimmermann 2018):

Modal schon denotes modal degree operator:

Presence of modal *schon* points to existence of some evidence for $\neg p$, for otherwise the non-modal alternative would be preferable.

(21) Die Erde ist (??schon) eine KU\gel., Earth is round alright.



3.3. Extension to modal schon (Zimmermann 2018):

Modal schon denotes modal degree operator:

Informally:

Use of modal *schon* expresses overall speaker commitment to p, whilst acknowledging that there are legitimate reasosn for believing $\neg p$.

⇒ this acknowledgement will result in a weakened commitment to p with factual/ discourse-external circumstantial evidence.



3.4. Kinds of circumstantial evidence:

Modal *schon* frequently found in subjective assessments of debatable statements that are evaluated against the available external, factual evidence (19a, 20)

BUT: Modal *schon* also licit in more objective statements, in particular with accented *SCHON*!



3.4. Kinds of circumstantial evidence:

(22) CONTEXT: There is no debating!

Die UKRAINE ist SCHON\ ein unabhängiger Staat! the Ukrain is PRT_{MOD} a sovereign nation 'There is no debating. Ukrain is a sovereign nation, alright.'

⇒ Licit because of an interlocutor's implicitly or explicitly manifest belief that ¬p, which constitutes relevant evidence for ¬p in the circumstantial modal base



3.4. Kinds of circumstantial evidence:

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Die UKRAINE ist SCHON\ ein unabhängiger Staat! the Ukrain is PRT_{MOD} a sovereign nation 'There is no debating. Ukrain is a sovereign nation, alright.'

⇒ Interlocutors' public discourse commitments to ¬p can license almost any instance of modal schon – as long as the interlocutor is taken serious or as a peer.



3.4. Kinds of circumstantial evidence:

(23) Naive Western observer: The Donbass no longer belongs to Ukrain.

Ukrainian ambassador:

Doch, der Donbass gehört (??SCHON\) zur Ukraine. but the Donbass belongs PRT to Ukrain

'Well, the Donbass belongs to the Ukraine, alright.'

⇒ Use of schon indicates that Westerner's remark is despite its rejection – taken serious by ambassador as potential evidence for ¬p (rhetorical function)



3.4. Kinds of circumstantial evidence:

⇒ schon illicit in super-objective statements that any (sane) person would commit to:

(24) ?#Gegenstände fallen SCHON\ auf den Boden, wenn man sie los lässt.

objects fall PRT to the ground if one them go lets

'Objects fall to the ground, alright, if one lets go of them.'



3.5. Summary: Modal *schon* as a modal degree operator:

- i. Compares p vs ¬p along the modal dimension of circumstantial evidence:
 - objective facts OR
 - discourse events: speaker commitments
- ii. Expresses that there's more evidence for p than against
- iii. Concedes that there may be some reason for thinking¬p (often leading to weaker commitment)
- iv. Can occur in two forms: unaccented or accented



4.1. Distribution of (un)accented *schon/SCHON*:

Accented *SCHON*: restricted to contexts in which the rest of the clause is explicitly or implicitly given, and hence deaccented (Schwarzschild 1999):

. Answers to Y/N-questions: weak commitment

(25) a. A1: Is St.Pauli a GOOD team?

B: Ja, das ist SCHON\ 'n gutes Team. (#schon)



4.1. Distribution of (un)accented *schon/SCHON*:

Accented *SCHON*: restricted to contexts in which the rest of the clause is explicitly or implicitly given, and hence deaccented (Schwarzschild 1999):

ii. Affirmation/Acceptance: weak commitment

(25) b. A2: St.Pauli is a GREAT\ team!

B: Ja, das ist SCHON\ 'n gutes Team! (#schon)



4.1. Distribution of (un)accented schon/SCHON:

Accented SCHON: restricted to contexts in which the rest of the clause is explicitly or implicitly given, and hence deaccented (Schwarzschild 1999):

iii. Correction: strong commitment!

(25) c. A3: St.Pauli isn't a GOOD\ team!

B: Doch! Das ist SCHON\ 'n gutes Team.

(#schon)



4.1. Distribution of (un)accented *schon/SCHON*:

Accented *SCHON*: restricted to contexts in which the rest of the clause is explicitly or implicitly given, and hence deaccented (Schwarzschild 1999):

- iv. implicit QUD (Büring 2003): weak commitment
- (26) A: Tell me something about St.Pauli!

 QUD_{impl}: Are they a good team?
 - B: Das ist SCHON\ 'n gutes Team.



4.1. Distribution of (un)accented *schon/SCHON*:

Accented *SCHON*: restricted to contexts in which the rest of the clause is explicitly or implicitly given, and hence deaccented (Schwarzschild 1999):

Accented SCHON occurs with high frequency in CT-FOC contexts with focus on sentence polarity (yes/no) (26):

commitment = normal assertion (with speaker-internal contrast)



4.1. Distribution of (un)accented schon/SCHON:

Accented *SCHON*: restricted to contexts in which the rest of the clause is explicitly or implicitly given, and hence deaccented (Schwarzschild 1999):

(27) In DIE/sem Jahr wird es KEI\ne Spende von mir geben. In this year will it no donation from me be 'This year, there will be no donation from me.'

GENERELL/_{CT} mache ich das SCHON\.
normally do I that PRT_{MOD}
'Normally, I do donate.'



4.1. Distribution of (un)accented schon/SCHON:

Unaccented schon: in contexts in which accent can or must be placed elsewhere in the clause:

- i. Narrow contrastive focus: weak
- (28) A: Did Peter WALK or did he RUN?
 - B: Na, er ist schon (eher) geRANNT\. (#SCHON) well, he is PRT_{MOD} rather run 'Well, he RAN alright.



Digression:

schon is the not-at issue counterpart of at issue eher, rather (Herburger & Rubinstein 2014)

... same as wohl vs modal werden (DeVeaugh-Geiss 2014)

Q4: How frequent is lexicalized at-issue/not-at issue doubling in the expression of modal meanings?



4.1. Distribution of (un)accented *schon/SCHON*:

Unaccented schon: in contexts in which accent can or must be placed elsewhere in the clause:

- ii. Verum focus + accent on AuxinC: strong
- (29) A: St. Pauli aren't a good team, are they?
 - B: Doch, das IST\ schon `n gutes Team (even if they often lose ...)



4.1. Distribution of (un)accented *schon/SCHON*:

Unaccented schon: in contexts in which accent can or must be placed elsewhere in the clause:

iii. Last resort accent placement on (non-given) V: strong

(30) A: There's a hole in my pants.

B: Das MERKT schon /*SCHON keiner. that notices PRT_{MOD} nobody 'No one will notice, don't worry.'



4.2. Accounting for strong/weak speaker commitment

Both versions of schon have the same lexical meaning:

 schon/SCHON express weak speaker commitment in contexts without previous (explicit or inferred) discourse commitment to ¬p.

This includes SOME verum focus contexts: Affirmation

(25) b. A2: St.Pauli is a GREAT\ team!

B: Ja, das ist SCHON\ 'n gutes Team!

 \Rightarrow without *schon*: verum accent on Aux *IST*:



4.2. Accounting for strong/weak speaker commitment

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 schon/SCHON express weak speaker commitment in contexts without previous (explicit or inferred) discourse commitment to ¬p.

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(25) b'. A2: St.Pauli is a GREAT\ team!

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4.2. Accounting for strong/weak speaker commitment

Both versions of schon have the same lexical meaning:

 ii. schon/SCHON express strong speaker commitment in contexts containing an explicit previous discourse commitment to ¬p: corrective verum focus



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Both versions of schon have the same lexical meaning:

- ii. schon/SCHON express strong speaker commitment in contexts containing an explicit previous discourse commitment to ¬p: corrective verum focus
 - ⇒ Strong speaker commitment is due to the fact that the previous interlocutor's assertion is corrected.
- ⇒ Same strong commitment found with corresponding corrective utterances without modal schon/SCHON!



4.2. Accounting for strong/weak speaker commitment

Both versions of schon have the same lexical meaning:

- ii. schon/SCHON express strong speaker commitment in contexts containing an explicit previous discourse commitment to ¬p: corrective verum focus
- (28') A: St. Pauli aren't a good team, are they?
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4.2. Accounting for strong/weak speaker commitment

Both versions of schon have the same lexical meaning:

 i. schon/SCHON express strong speaker commitment in contexts containing an explicit previous discourse commitment to ¬p: corrective verum focus

⇒ Strong commitment not lexically coded in schon/SCHON, nor is weak commitment!



5. Conclusion & Implications

- Do modal particles code commitment strength?
- Case study of German schon/SCHON as a generalized (modal) degree operator comparing evidence for and against p
- schon/SCHON uncorrelated with commitment strength
- no lexical coding; strength of commitment follows from contextual factors = information structure and discourse structure (verum focus, correction)
 - Implications for other expressions/ other languages?



5. Conclusion & Implications

Other modal expressions in other languages show the same underspecification wrt strong/weak commitment:

- (30) a. She climbed Mount Toby.
 - b. She must have climbed Mount Toby. weak (Kratzer 1991)

(31) The ball is in A or in B or in C.

It is not in A. . . . It is not in B.

So, it must be in C.

(von Fintel & Gillies 2010)

strong



5. Conclusion & Implications

Other modal expressions in other languages show the same underspecification wrt strong/weak commitment:

- (32) A: They said it was going to rain. I wonder whether it has started.
 - B: I don't think so, it was still dry when I came in 5 minutes ago.
 - A: Look, they're coming in with wet umbrellas.

 There is no doubt at all. It must be raining now.

 strong

(von Fintel & Gillies 2010)



5. Conclusion & Implications

Other modal expressions in other languages show the same underspecification wrt strong/weak commitment:

- (32') A: They said it was going to rain. I wonder whether it has started.
 - B: I don't think so, it was still dry when I came in 5 minutes ago.
 - A: Look, they're coming in with wet umbrellas.

 There is no doubt at all. It IS raining now. strong

⇒ corrective verum focus = strong *schon*



5. Conclusion & Implications

Q5: Is commitment strength ever a semantic meaning component of modal expressions?

⇒ Judith Degen et al. (2019, Journal of Pragmatics). Definitely, maybe: A new experimental paradigm for investigating the pragmatics of evidential devices across languages.

"We offer a novel experimental paradigm to the crosslinguistic investigation of speaker commitment in modals and evidentials."



5. Conclusion & Implications

Q5: Is commitment strength ever a semantic meaning component of modal expressions?

⇒ How much sense does it make from a semantic point of view to measure commitment strength of lexical items (in the absence of context)?

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