The Dimensions of Verum

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Introduction

- In this talk, we study the semantics of verum focus (VF).
- The term VF has been coined by Tilman N. Höhle (1992).
- VF refers to cases of non-contrastive focus on the verb or a complementizer located in C in German.
- Tilman N. Höhle (1992) assumes that VF is a way of realizing a corresponding VERUM operator.
- VERUM is supposed to put emphasis on the truth of the proposition it takes scopes over (Höhle 1992: 114).

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Claims and approach

VERUM ...

- is a multidimensional operator that takes at-issue content as input and returns CI content as output.
- takes as input a proposition p and conveys that ?p should be downdated from the Question Under Discussion.

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Verum focus in German

(1) A: I wonder whether Karl has finished his book.
B: Karl HAT sein Buch beendet.
karl has.VF his book finished
»Karl did finish his book«

Höhle (1992: 112) working paraphrase

(2) $[\![\text{VERUM}(p)]\!] \approx$ »It is the case/true that p«

Verum cross-linguistically

(3) A: I wonder whether Carl has finished his book.
B1: Karl HAT sein Buch beendet. (German ⇒ verum focus in C)
B2: Carl did finish his book. (English ⇒ *do* insertion)
B3: Carlos sí acabó su libro. (Spanish ⇒ *sí* insertion)

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Outline

Previous approaches to VERUM

A first approach to verum focus

- Höhle (1992) describes the meaning of VERUM as an emphasis on the truth of the propositional content of the sentence.

Höhle's (1992) »approach«

(4) $[\![\textsc{verum}(p)]\!] \approx$ »It is the case/true that p«

Paraphrases for VERUM (cf. Höhle 1992)

(5) a. David IST ein zombie.
⇝ It is true, that David is a zombie.
b. IST David ein zombie?
⇝ Is it true that David is a zombie.
c. NIMM den Stuhl!
⇝ Make it true that you take the chair.

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Problem:

- No actual difference semantic between asserting *p* and asserting *it is true that p* (also noted by Höhle 1992: 118)
- Therefore, this approach cannot make real predictions about the conditions under which the presence of VERUM– and therefore VF– are licensed, since asserting *It is true that p* will be felicitous in almost the same contexts as asserting *p*.

VERUM as a conversational operator

- Romero & Han (2004) (R&H) present a more sophisticated account for VERUM.
- They argue that VERUM can also be realized by certain morphems (e.g. *really*) or by word order variation like negation preposing.

VERUM expressed by negation preposing

(6) a. Does John not drink?
Neutral *yn*-question.

b. Doesn't John drink?
Positive epistemic implicature: The speaker believes or at least expects that John drinks.

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- R&H provide a formal definition of VERUM as a *conversational empistemic operator* that is »used not to assert that the speaker is entirely certain about the truth of *p*, but to assert that the speaker is certain that *p* should be added to the Common Ground (CG).« (Romero & Han 2004: 627).

VERUM (Romero & Han 2004)

(7) $[\![\text{VERUM}_i]\!]^{g x/i} = \lambda p_{\langle s,t\rangle} \lambda w. \forall w' \in \text{Epi}_x(w)\,[\forall w'' \in \text{Conv}_x(w')\,[p \in \text{CG}_{w''}]]$
$= \text{FOR-SURE-CG}_x$
$\rightsquigarrow$ »I am sure that we should add the proposition *p* to the common ground.«

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VERUM in different sentence types

- This operator takes the propositional content of an utterance as its argument and is in turn embedded under the sentence mood operator.

VERUM in assertions

(8) Peter did write a book.
»I want you to know that I am sure that we should add the proposition that Peter wrote a book to the common ground.«
$\rightsquigarrow$ ASSERT(VERUM(p))

VERUM in questions

(9) Doesn't Peter write a book?
»I want to know whether you are sure that we should add the proposition that Peter does not write a book to the common ground.«
$\rightsquigarrow$ QUESTION(VERUM(p))

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- Their one-dimensional approach predicts that what is asserted by a VERUM-declarative is that VERUM(p) and what is asked by a VERUM-*yn*-question is whether VERUM(p).
- This does not seem to be the case.
- If we deny the verum-assertion that p, we only deny that p, just as if we deny a plain assertion that p. Hence, the *b* sentences below are both negating the at-issue content of the previous utterance.

Denial of the assertion that *p*

(10) a. A: Karl schreibt ein Buch.
b. B: No, that's not true. $\rightsquigarrow$ Karl doesn't write a book.

Denial of the verum-assertion that *p*

(11) a. A: Karl SCHREIBT ein Buch.
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- That we can deny a subpart of asserting VERUM(p) is not a problem for R&H, since this is also possible with other embedded propositions.

Inner and outer denial

(12)
a. A: I believe John is rich enough to buy a house.
b. B1: No, that's not true. He can't afford it.
⇒ Denial of the embedded proposition
c. B2: No, that's not true. I know that you don't believe that.
⇒ Denial of the outmost proposition

- In contrast, in the case VERUM, we can never deny the entire proposition, i.e. VERUM(p).

No outer denial in the case of VERUM

(13)
a. A: Karl SCHREIBT ein Buch.
b. B1: No, that's not true. He writes a personal diary.
   ⇒ Denial of the inner proposition that p
c. #B2: No, that's not true. You are not sure about that.
   #⇒ Denial of VERUM(p).

- Recall that according to R&H what is asked about by a VERUM-*yn*-question is whether the addressee is sure the proposition should be added to the common ground.
- Just with assertions, this makes the wrong predictions.

A conspiracy

(14) SCENARIO A wants to know whether Lisa was at the party, and B knows that Lisa was at the party. However, B has a special interest in not letting A know that Lisa was at the party.

A: WAR Lisa auf der Party?
B: No.

- According to R&H's approach, B's answer in (14) would count as sincere.
- But B's denial does not have the predicted interpretation.
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A multidimensional analysis of VERUM

Claims

- VERUM is a CI/expressive/use-conditional item in the sense of Potts (2005, 2007) and Gutzmann (2008).
- VERUM is an operator that takes as input at-issue content and returns CI content.
- The argument of VERUM is a proposition p.

Expressive types

(15)
a. e, t, and s are descriptive types.
b. u is a use-conditional type.
c. If σ and τ are descriptive types, then $\langle \sigma, \tau \rangle$ is a descriptive type.
d. If σ is a descriptive type, then $\langle \sigma, \varepsilon \rangle$ is a expressive type.

- We analyse VERUM as a CI item yielding expressive content, if applied to a propositional argument.

(16) $\text{VF} \rightsquigarrow \lambda p.\textsc{verum}(p) : \langle \langle s, t \rangle, \varepsilon \rangle$

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(16) $\text{VF} \rightsquigarrow \lambda p.\textsc{verum}(p) : \langle \langle s, t \rangle, \varepsilon \rangle$

- The expressive proposition is independent from the ordinary at-issue proposition.

The At-issue tier and the CI tier

(17) a. Karl SCHREIBT ein Buch.
b. AT-ISSUE TIER: write(book)(karl)
c. CI TIER: VERUM(write(book)(karl))

- This is achieved by the special rule of CI-application:

CI-application

(18)

$$\begin{array}{c} \beta : \sigma \\ \bullet \\ \alpha(\beta) : \varepsilon \\ \hline \alpha : \langle \sigma, \varepsilon \rangle \quad \beta : \sigma \end{array}$$

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Karl schreibt ein Buch

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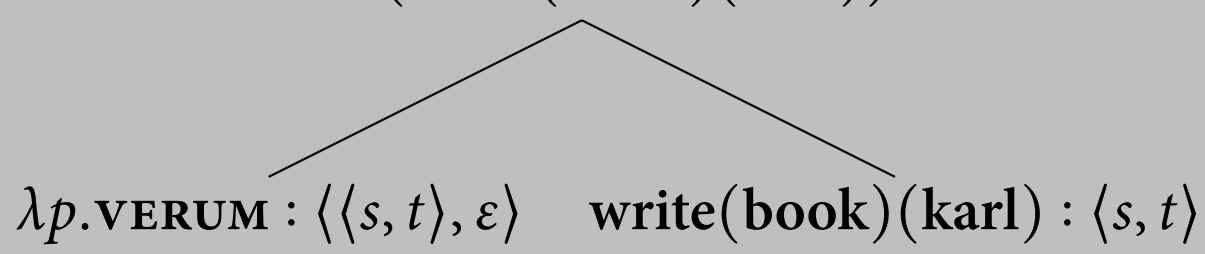

Parsetree interpretation

(20) $[\![(19)]\!] = \langle [\![\text{write(book)(karl)}]\!], [\![\text{VERUM(write(book)(karl))}]\!] \rangle$

Karl schreibt ein Buch

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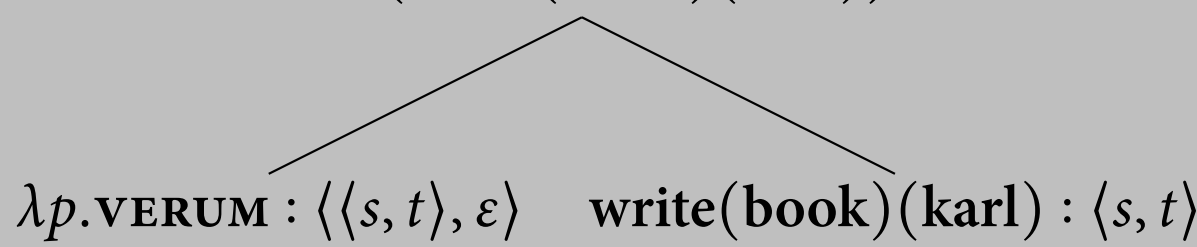

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- Since it is the at-issue content that is asserted or asked about, this two-dimensional approach can solve the problems of R&H's approach.

VERUM and ASSERT

(21) a. Karl SCHREIBT ein Buch.

b. $[_{CP}$ A VF $[_{IP}$ Karl writes a book$]] \rightsquigarrow \textsc{assert}(p), \textsc{verum}(p)$

VERUM and QUESTION

(22) a. SCHREIBT Karl denn ein Buch?

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The discourse semantics of VERUM

- So far, we have only given the combinatorics of the semantics of VERUM.
- Due to its role as a »conversational operator«, its meaning is very elusive.
- In the following, we collect some data, ideas, and problems.

- Richter (1993) observes that sentences with VF cannot be uttered out of the blue.

(23) a. He, hast Du es schon gehört? # Karl SCHREIBT ein Buch.
hi has you it already heard Karl writes.VF a book
»Hi, did you already hear it? Karl IS writing a book«

b. [Telephone call] # Mit wem SPRECHE ich?
with whom talk I
»Who IS speaking?«

- At least part of the lexical material must be given (»topic« in his terms).

(24) a. A: What did Carl do on the weekend?
b. B: He finished his book. Er hat sein Buch beendet. Acabó su libro.
c. B': # He did finished his book. Er HAT sein Buch beendet. Sí acabó su libro.

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- The fact that verum focus cannot be used out of the blue, is also a problem for R&H's approach (»being sure that it should be CG«).

(25) SCENARIO: A goat walks in. A sees the goat and is pretty sure that it is a goat. B hasn't seen the goat yet.

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- To account for this discourse restrictions on the felicity of verum focus, we relate the semantics of VERUM to the discourse component.
- VERUM is an instruction to be interpreted as a separate performative (cf. Portner 2007).
- The argument of VERUM is a proposition p and the instruction is that the speaker wants to downdate the corresponding question $?p$ from the Question under Discussion (QUD).

A discourse semantics for VERUM

(26) $[\![\text{VERUM}(p)]\!]^c \approx$ The speaker c_S wants to downdate $?p$ from QUD.

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What is the QUD?

QUD

(28) Question under Discussion (from Engdahl (2006: 95))

a. QUD: A partially ordered set that specifies the currently discussable issues. If a question *q* ismaximal in QUD, it is permissible to provide any information specific to *q* using (optionally) a short answer.

b. QUD update: Put any question that arises from an utterance on QUD.

c. QUD downdate: When an answer *a* is uttered, remove all questions resolved by *a* from QUD.

(29) A: Does Karl write his book?
↝ QUD Update: QUD = ⟨?**write**(**book**)(**karl**)⟩
B: Yes. ↝ QUD Downdate: QUD = ⟨ ⟩

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a. B: Er hat sein Buch beendet.
b. B': # Er HAT sein Buch beendet.
$\rightsquigarrow$ The speaker wants to downdate ?**finish**(**book**)(**karl**).

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Y/N-questions

Out of the blue context

(32) SCENARIO: The pupils A, B, C have to find out the capitals of the German states.

A: #IST Wiesbaden die Hauptstadt von Hessen?

Question already in QUD

(33) A: Peter behauptet, dass Frankfurt die Hauptstadt von Hessen ist.

B: IST Frankfurt denn die Hauptstadt von Hessen?

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What does VERUM have to do with truth?

- The emphasis on the truth of *p*/the speaker's certainty about *p* is not part of the meaning of VERUM.
- However, it can be inferred from its meaning and basic principles of cooperative communication:
- If the speaker asserts that *p* and at the same time wants to downdate *?p*, then s/he must be sure that *p* should be added to the Common Ground.
- If the speaker asks whether p and at the same time to downdate *?p*, the certainty condition applies to the addressee and his/her answer, since the speaker in a question is by definition not committed to its propositional content (if the speaker were sure about *p*, s/he would not ask whether *p*).

What does VERUM have to do with truth?

- The emphasis on the truth of *p*/the speaker's certainty about *p* is not part of the meaning of VERUM.
- However, it can be inferred from its meaning and basic principles of cooperative communication:
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- In imperatives, an appeal to QUD does not seem very plausible, since imperatives do not seem to be connected with question-answer pairs.
- However, we could argue, that uttering an imperatives raises the question of whether the addressee fullfils the order.

Imperatives and QUD

(34) A: Nimm den Stuhl!
$\rightsquigarrow$ QUD Update: QUD = $\langle ?\mathbf{take}(\mathbf{the\text{-}chair})(c_A)\rangle$
B: Ja. $\rightsquigarrow$ QUD Downdate: QUD = $\langle\ \rangle$

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Conclusion and open puzzles

Conclusion

- VF introduces the expressive operator VERUM.
- We can account for its properties by providing a multidimensional analysis: VERUM takes an at-issue proposition as its argument and returns an independent use-conditional proposition.
- Since this proposition is on an independent tier, what is asserted/questioned is still the ordinary propositional at-issue content.
- VERUM expresses that the speaker wants to downdate the question built from p.
- This can account for many of the discourse conditions under which VF is felicitous.
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The role of *ja*

(35) A: Schreibt Karl ein Buch? (Does Karl write a book?)
B: Ja, er schreibt ein BUCH.
B' ??Er SCHREIBT ein Buch.
B" Ja, er SCHREIBT ein Buch.
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(36) A: Carlos escribe un libro? (Does Karl write a book?)
B: Sí, escribe un LIBRO.
B' ??Sí escribe un libro.
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Direct vs. indirect questions

Direct *yn*-question

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The role of polarity/bias

No bias

(39) A: Schreibt Karl ein Buch? B: ??Karl SCHREIBT ein Buch.
Does Karl write a book?

Positive bias

(40) A: Schreibt Karl nicht ein Buch? (Doesn't Karl write a book?)
$\rightsquigarrow$ A expects (p = Karl writes a book) and wants to double-check $\neg p$
B: Karl SCHREIBT ein Buch. $\rightsquigarrow$ B confirms A's expectation that p.

Negative bias

(41) A: Karl behauptet, er würde ein Buch schreiben. Aber schreibt Karl wirklich ein Buch? $\rightsquigarrow$ A expects ($\neg p$ = Karl does not write a book) and wants to double-check p.
B: Karl SCHREIBT ein Buch. $\rightsquigarrow$ B rejects A's expectation that $\neg p$.

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The agreement problem

(42)
A: Do you think Peter will like this picture?
B: Ich denke, es wird ihm gefallen.
C: Ja, es wird ihm bestimmt gefallen.
D: #Es WIRD ihm gefallen.

(43) SCENARIO: A, B, and C are considering going to the party. However, they will only go if each of them wants to go.
A: Gehen wir zur Party? Ich denke, wir sollten hingehen.
B: Ja, wir gehen zur Party.
C: Ok, wir GEHEN zur Party.

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wh-questions

A technical problem:

- In wh-questions, there is no proposition that could serve as the argument for VERUM.
- Instead, VERUM has to take a set of propositions as its argument.

Wir DANKEN Ihnen für die Aufmerksamkeit!

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