The Dimensions of VERUM

In this paper we study the semantics of VERUM from the point of view of a multi-dimensional semantic model, in contrast with the previous literature, which has treated VERUM as a one-dimensional semantic operator.

VERUM is a semantic operator that is realized differently in various languages and which somehow emphasizes the truth of the propositional content in its scope.

(1) a. A: I wonder whether Carl finished his book.
     b. B: Carl did finish his book.   (English: *do*-insertion)
     c. B: Karl HAT sein Buch beendet.   (German: verum focus in C)
     d. B: Carlos sí acabó su libro.   (Spanish: *sí*-insertion)

One of the investigation on VERUM is carried out by Höhle (1992), who is concerned with verum focus in German, which involves emphasis on the verb in second position or a complementizer. He suggests that verum focus is a way to realize VERUM. He paraphrases it as *it is true that/the case that…*, but he does not present a semantic analysis of VERUM.

One of the interesting properties of VERUM is that it does not only occur with declaratives, but with other clause types, such as interrogatives ((2)), which may suggest that VERUM has to do with one or more illocutionary operators.

(2) A: I asked Anna to stop it.   »IS she stopping it? / Is it the case
     B: HÖRT sie denn damit auf?   that she's stopping it?«

However, VF also occurs in embedded contexts, which characteristically do not have any illocutionary force. VF is either on the finite verb in the second position ((3a)) or on a complementizer if the verb is in final position ((3b)).

(3) A: Is he listening to her at all?   b. B': Anna denkt, DASS er ihr zuhört.
                                                             »Anna thinks that he does listen to
     a. B: Anna denkt, er HÖRT ihr zu.   her.«

Romero & Han (2004) (R&H henceforth) provide a semantic analysis of VERUM in the context of yes-no questions. They argue that VERUM is contributed by preposed negation (e.g., *Isn't Jane coming?*) or else by *really* in positive questions (e.g., *Does John really drink?*). They treat VERUM as a semantic operator that takes as input a proposition p and asserts that »the speaker is certain that p should be added to the Common Ground.« In what follows we argue that this proposal makes the wrong predictions in certain cases, and we defend the need of a multi-dimensional analysis of VERUM.

The problematic aspect of R&H's proposal is that it treats VERUM as an ordinary (one-dimensional) semantic operator that embeds the proposition it takes as argument. The question operator then takes the new proposition as its argument as shown by R&H's analysis of yes-no questions involving preposed negation. They thus assume something like $Q(\text{VERUM}(p))$ as the structure for a question containing VERUM. When it comes to declaratives, this analysis gives the wrong prediction regarding what is asserted by that sentence. Compare examples (4a) and (4b):

(4) a. A: Karl SCHREIBT ein Buch.   b. A: Karl schreibt ein Buch.
         B: No, that's not true.   B: No, that's not true.

In both (4a) and (4b), B is denying that Karl is writing a book. However, R&H's analysis of VERUM would predict that the structure of (4a) is $\text{ASSERT}(\text{VERUM}(p))$; that is, it should follow that A asserts that s/he is sure that the proposition that Karl is writing a book should be added to the common ground, and that B denies this assertion. This is obviously not what the dialog in (4a) is about, though. A similar objection applies to questions. A question containing VERUM is clearly not a question about the speaker's certainty that the proposition should be added to the common ground, as R&H claim. This can be illustrated by the following scenario: Suppose that A wants to know whether Peter was at the party, and B knows that Peter was at the party. However, for some reason, B has a special interest in not letting A know that Peter was at the party. In such a scenario, B's answer in (5) would count as sincere according to R&H's approach, but B's denial does not have the predicted interpretation. In other words, "No" does not mean "I don't want you to be certain that p should be added to the Common Ground".

(5) A: WAR Peter auf der Party? »Has Peter really been at the party?«   B: No.

We take these facts to be evidence that even in the presence of VERUM, what is asserted/asked is only the ordinary propositional content of the sentence without VERUM.

There is a further fact about the distribution of VERUM that still waits for an explanation: VERUM is unacceptable out of the blue, as noted by Richter (1993: 14), because the argument of VERUM already needs to be present in the discourse of utterance.

(6)   a.   A: What did Carl do on the weekend?
      B: He finished his book. / Er hat sein Buch beendet. / Acabó su libro.
      B′: #He did finish his book. / Er HAT sein Buch beendet. / Sí acabó su libro.

To account for this and to overcome the problems mentioned above, we make the following claims: (*i*) VERUM is an operator that takes as input at-issue content and returns CI content, and (*ii*) the argument of VERUM is p, a proposition. Furthermore, (*iii*) the meaning conveyed at the CI tier corresponds to the speaker's wish to downdate $?p$ – the question formed from the propositional argument – from the Question under Discussion (QUD for short).

To begin with, VERUM is a CI item in the sense of Potts (2005). Hence, it takes a propositional argument to yield an independent CI proposition, as presented in (7). By adopting such a multi-dimensional model, VERUM has no influence on the truth-conditional content of the utterance and hence leaves the asserted/asked proposition untouched.

(7) $Q(VF(p)) \rightsquigarrow Q(p) \bullet \text{VERUM}(p)$

We take the contribution of VERUM to be an instruction for interpretation as separate performatives (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 QUD.

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

QUD is conceived as a partially ordered set of questions that specifies the currently discussable issues (cf. Engdahl 2006; Ginzburg 1996). The members of QUD can be updated (when we add a further member to the list) or downdated (when the maximal question in QUD is resolved). In order to be downdated, the question $?p$ has to be maximal in QUD. This presupposes that $?p$ is already part of QUD, thereby accounting for the unacceptability of VERUM when uttered out of the blue. Going back to our examples, this multidimensional analysis predicts the following:

(9)   Karl SCHREIBT ein Buch. (=(1))
      at-issue: Karl writes a book.
      CI: I want to downdate from QUD whether Karl writes a book or not.

(10) Anna denkt, er HÖRT ihr zu. (=(3a))
      at-issue: A. thinks that he listens to her.
      CI: I want to downdate from QUD whether he listens to her or not.

Finally, we do not take the speaker's certainty about p to be part of the meaning of VERUM. It is inferred from its meaning and basic principles of cooperative communication: If the speaker asserts that p and wants to downdate $?p$, then s/he must be sure that p should be added to the Common Ground. If the speaker asks $?p$ and wants 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.

To conclude, we have argued that we need a multidimensional semantic model in order to explain some previously unattested properties concerning the semantics of VERUM. The analysis proposed captures the intuition that the proposition that VERUM takes as input must be under discussion, which in turn explains its restricted discourse distribution.

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