Partee

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Focus and Quantification
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Frank Richter: Settling the Truth. Verum Focus in German

I want a you

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### 0. Introduction

Imagine that we are discussing what our friend Karl is doing these days. We have not seen him for some days, but Anna thinks he said he would be going to Utah to go hiking near Bryce Canyon. But I am quite sure that he is at home busy to write a novel - Bertha told me so the other day, and she always knows what Karl dees. After ten minutes of discussing Karl's occupation I might finally try to bring it to an end:

# (0) Karl SCHREIBT ein Buch! Karl IS writing a book.

What is curious about this sentence is that there doesn't seem to be the usual contrastive set which a theory of focus like Rooth's (1985) Association with Focus predicts: Karl's writing a book doesn't contrast with his reading a book, for example. If (0) contrasts with anything, then with Anna's assumption that Karl went hiking, but to obtain a VP focus which can evoke the corresponding p-set we would need broad focus, i.e., the main stress would have to be on <u>Buch</u> (book). Do we have to revise Rooth's theory of focus fundamentally?

No, not necessarily. After all, (0) carries a meaning which distinguishes it clearly from the cases Rooth deals with. On first glance, it seems to stress the undeniable truth of the statement. It settles the question of what Karl is doing - Karl is writing a book. Thus there are good reasons to assume that we are dealing with something new.

What I want to do in this paper is trying to link the phenomena of verum focus - for this shall be the name of it - to the focus literature. Guiding questions are, if verum focus really belongs to the range of phenomena that are dealt with under the header of focus, what kind of data are relevant for it and if it can enrich our picture of focus in general. Along the way of investigation I want to point out promising links of verum focus to current issues in the theory of German syntax and to the semantics of propositions.

The description of the facts in the sections (1.1.) - (1.3.) draws heavily on the work of Tilman Hoehle (1992) which is the most important source of empirical data so far. The notion verum focus also goes back to him. The phenomena in question have been discussed before under various other names, e.g. Gussenhoven's notion of polarity focus. I chose the name verum

focus, because it seemed to be the most neutral one and it doesn't favor a rash interpretation of the facts.

### 1.1. Verum Focus in Matrix V2 Sentences

I want to start out with a case that looks in some sense as the most natural and easiest, the case of assertive V2 sentences. Because of the apparent similarity in their behavior with respect to verum focus to corresponding English data they are very suitable to form some intuitions and ideas of what I mean with the notion verum focus. They also invite to some assumptions about the nature of verum focus which can be tested with other types of sentences and in various contexts. Two speakers A and B discuss what Karl is doing these days:

(1) A: Ich habe Anna gefragt, was Karl macht, und sie hat gesagt, dass er ein Buch schreibt.

I asked Anna what Karl is doing and she said that he is writing a book.

B: Stimmt, Karl SCHREIBT ein Buch.<sup>1</sup>

Right, Karl IS writing a book.

Right, it is true / the case that Karl writes a book

As can be seen, verum focus in German can be translated to English by stressing an auxiliary, at least in the case given above. The paraphrase gives an impression of the intuitive meaning of the sentence. In addition to uttering a proposition speaker B seems to emphasize the truth of the sentence or the of event denoted existence the bу the proposition. Furthermore, the paraphrase indicates a scope for the speakers emphasis. It comprises the whole sentence. For the time being I want to call this intuitively felt property of verum focus the scope of verum focus. The notion of scope brings along the concept of operators, and one might be tempted to consider verum focus a mere side effect of the illocutionary act of assertion formalized by an operator assert<sup>2</sup>. In a first tentative attempt to explain verum focus it is plausible to assume that speaker B in (1) stresses the illocutionary operator assert by stressing the verb.

<sup>&</sup>lt;sup>1</sup>Capital letters in the examples indicate stress.

<sup>&</sup>lt;sup>2</sup>Here and in the latter remarks on illocutionary operators I follow Krifka's (1991: pp129-130) analysis of illocutionary operators

(2) and (3) verify that it is indeed stress on a verbal element in the so-called verb second (V2) position, which triggers the verum focus reading.

(2) A: Hast du einen Roman geschrieben? Did you write a novel? B: Ja, ich HABE einen Roman geschrieben. Yes, I DID write a novel. Yes, it is true that I wrote a novel.

Stress on the auxiliary habe leads to a verum focus interpretation. On the other hand, stressing the main verb in sentence final (VF) position only leads to contrastive focus on the verb.

The answer in (3) clearly contrasts with other things are learn to the answer in (3) clearly contrasts with other things are learn to the answer in (3) clearly contrasts with other things are learn to the answer in (3) clearly contrasts with other things are learn to the answer in (3) clearly contrasts with other things are learn to the answer in (3) clearly contrasts with other things are learn to the answer in the an

do with a novel, like reading or reciting, but doesn't allow a verum focus interpretation.

A first hint that stress on the V2 position might not be the whole story comes with (4).

(4) A: Karl hat bestimmt nicht gelogen. Karl certainly didn't lie.

a) B: (nein) Karl HAT nicht gelogen.

(no) Karl DIDN'T lie.

(no) it is true that Karl didn't lie

b) C: # (allerdings) das IST richtig.<sup>3</sup>

(indeed) that's correct

For a theory which views verum focus as emphasizing the truth of a proposition by foregrounding its assert-operator it is hard to explain why (4a) is a possible instance of verum focus whereas (4b) sounds weird. After all, the speaker B asserts the

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<sup>3 #</sup> indicates in all examples that the following sentence is not possible with the given stress in the given context. It doesn't mean that it is generally ungrammatical. A question mark means that a sentence is strange in the given context.

same thing as speaker C, assuming a certain level of abstraction for illocutionary acts.

Moreover, the connection with truth can't be taken literally. As (5) demonstrates, verum focus fits perfectly well to particles expressing various degrees of probability.

(5) A: Meinst du, Karl hat recht?

Do you think Karl is right?

B: Karl HAT vielleicht/wahrscheinlich/eventuell recht, aber mir ist das egal.

It is the case that Karl is maybe/possibly/perhaps right, but I don't care.

In the face of (5) it must be concluded that verum focus doesn't stand in opposition to degrees of probability. It can perfectly well be used to emphasize different degress of likelihood.

# 1.2. Verum Focus in V1 Sentences

The initial idea that verum focus is tied to the illocutionary act of assertion is falsified by the existence of questions that intuitively show the same properties as (1)-(5).

(6) A: Ich habe Anna gebeten, damit aufzuhoeren.

I asked Anna to stop it.

B: HOERT sie denn damit auf?

DOES she stop it?

Is it the case that she stops it?

] (are chally odd - may be: 15 sh stopping it?

As in the V2 examples, verum focus takes scope over the whole sentence in (6). And again the same semantic effect can be achieved by stressing an auxiliary instead of the main verb. Stress on the verb in sentence final position receives contrastive interpretation.

(7) Context: Discussion about Karl's opinion on a book, in which speaker A explicitely doubts that Karl read the book in question. After the discussion has been going on for a while:

A: HAT er das Buch jetzt gelesen?

DID he read the book?

Is it the case that he read the book?

(8) Hat Karl die Einbrecherin GESEHEN? Did Karl see the burglar?

gesehen in (8) is understood as contrasting with e.g. heard or whatever is sufficiently salient in the context.

The idea that verum focus inherently belongs to assertion has evidently to be given up. What remains so far is the observation that it is somehow connected with the verb position in front of the middle field. This generalization is borne out by (9), in which a verb in the imperative mood also reveals verum focus.

(9) Context: Anna, Bertha, Clara and Karl are about to watch slides. Karl is still standing in front of the bookshelf, fascinated by Bertha's books on linguistics
Anna: SETZ dich jetzt endlich hin!
DO sit down now!

Make it happen that you sit down.

If we want to stick to the initial assumption that verum focus has to do with an illocutionary operator, we have to generalize it to all types of illocutionary operators. By doing so this approach loses much of its intuitive appeal, which came from the fact that we think that to assert something amounts to making claims about the truth of a proposition. It is harder to see, how stressing or foregrounding the illocutionary act of questioning can result in a question which asks for an unequivocal answer. Menta this earlier this is a useful characterization of the effect in a question.

# 1.3. Verum Focus in Subordinated Clauses

The breakdown of a theory which links verum focus to illocutionary operators comes when we turn to subordinated clauses which clearly have no illocutionary force of their own. Subordinated clauses in German come basically in two varieties. One class of verbs which is usually equated with the class of bridge verbs allows embedded V2 clauses. Complementizer-introduced subcategorized clauses and free adverbial clauses as well as relative clauses have a verb final structure. Let us first turn to embedded V2 clauses.

(10) A: Hoffentlich hat Karl den Hund gefuettert! I hope that Karl fed the dog.

B: Ich bin mir sicher, Karl HAT den Hund gefuettert. Er vergisst das nie.

I am sure that it is the case that Karl fed the dog. He never forgets it.

Stressing the sentence final verb on the other hand doesn't lead to verum focus, it only allows a contrastive reading.

(11) Ich bin mir sicher, Karl hat den Hund GEFUETTERT. Er wuerde ihn niemals baden.

I am sure that Karl did feed the dog. He would never bathe it.

Thus we get exactly the same picture as for matrix V2 sentences. The only difference is that it is not possible to account for the data by means of illocutionary operators. The embedded sentence in (10) simply has no independent illocutionary function. It fully depends on its matrix clause. At this point we seem to be stuck. Fortunately, a look on verb final clauses not only reveals a significant difference between the English and the German way of expressing verum focus, it also provides some data that indicate a new line of investigating the puzzling facts.

(12) A: Weisst du, ob Anna kuerzlich in Rom war.Do you know if Anna has been in Rome recently?B: Ich weiss, DASS sie einmal in Rom war, aber ob es kuerzlich war, weiss ich nicht.

I know that it is the case that she was in Rome once, but I don't know whether this has been recently.

(13) Manfred sah, dass Karl den Hund FUETTERTE. Manfred saw that Karl did feed the dog.

Verum focus in <u>dass</u>-clauses goes with stress on the <u>dass</u>-complementizer, whereas the English complementizer <u>that</u> has nothing to do with verum focus. On first glance the German data fit well into the widely held view among syntacticians that <u>dass</u> and verbs in V2 occupy the same structural position, namely C°. Thus one may conclude that what we see in (12) is more evidence for the structural identity of a verbal position and a complementizer position and that <u>dass</u> bears some covert verbal features, which enable it to be a trigger for verum focus.

\* all the observation that stress on THAT is possible bout them contrasts with whither, when, why, etc. - Make it clear that that's not white, when, why, etc. - Make it clear that That's not whis joing a in (12) or set up does seem almost to be "THAT. -, but not wither. -"

But before we jump to rash conclusions we should take a step back and ask what we found out about verum focus so far. The main finding is a negative one: Verum focus has apparently nothing to do with illocutionary operators. According to our intuitive understanding of its contribution to meaning it takes scope over CPs, which suggests that it is located right beneath illocutionary operators in matrix sentences. And, finally, verum focus seems to be tied to stress on a lexical element directly in front of the middle field. The following (simplified) topology of German sentence structure illustrates this empirical observation:

V2:	1 XP	finite	middle	field	verb complex
V1:	208	finite	middle	field	verb complex
VF:	ě	comp	middle	field	finite
		<b>MMMM</b>			

The marked position is sensitive to verum focus. But what is verum focus, then? To find out, we take a closer look at seemingly parallel cases of V2 and VF clauses:

(14) A: Ich hoffe, Karl schreibt endlich ein Buch.

I hope, Karl writes a book finally.

a) B: Aber Anna sagt, er SCHREIBT nicht an einem Buch.

But Anna says, it is not the case that he writes a book

b) B: #Aber Anna sagt, DASS er nicht an einem Buch schreibt. But Anna says that it is the case that he doesn't write a book

Why is (14a) a felicitous continuation in the context set by speaker A while (14b) is not? The paraphrases given for each case provide the answer to this question. In (14a) the negation takes scope over the verum focus, which in turn takes scope over the rest of the sentence. In the case with dass complementizer the negation is prevented from taking scope over verum focus. Thus verum focus takes scope over the sentence including the negation. Therefore there's a negation which is not given by the context in the scope of verum focus. Since this is the the only relevant semantic difference between (14a) and (14b) it must also be the reason for why (14b) is impossible. Apparently the material within the scope of verum focus has to be given, i.e., it's topic. We can test this observation by putting the negation into the preceeding context:

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- (15) A: Ich hoffe, Karl schreibt nicht etwa ein Buch.
- I hope, Karl doesn't write a book.
- a) B: (keine Sorge) Anna sagte mir, DASS er nicht an einem Buch schreibt.

(don't worry) Anna told me that it is the case that he doesn't write a book.

As expected the continuation (15a) is fine.

Verum focus phenomena are obviously context sensitive in the sense that what's in the scope of verum focus is a topic which has already to be established. The question we are after now is therefore, how the topic must look like and, more importantly, what the focus of the focus background structure of verum focus sentences is, i.e., what the new information which that the sentences carry is.

Before we proceed to address these questions, let me note another interesting fact. (15) can be felicitously continued by an answer with embedded V2 verum focus.

(15b) B: (keine Sorge) Anna sagte mir, er SCHREIBT nicht an einem Buch.

(don't worry) Anna told me that it is the case that he doesn't write a book

(15b) shows that the negation needn't take scope over verum focus in the embedded V2 case. In that respect the behavior of negation exactly parallels its scoping properties with respect to the verb. When occuring in the middle field the negation may either take scope over following lexical material including the preceding verb or excluding it. But notice that this is ascribed to a reconstruction of the verb to its sentence final position at the relevant level of interpretation. This kind of explanation is hardly feasable for verum phenomena, since they occur with stress on verbs exclusively in the V2 position and never sentence finally.

Taken together with the observation that verum focus in <u>dass</u> clauses obligatorily takes scope over negation these considerations favor a syntactic distinction between the position of the complementizer and the V2 position in German, such that the complementizer is in some sense higher up in the syntactic structure. Mueller/Sternefeld (forthcoming) accomplish this for purely syntactical reasons by suggesting a CP/TP analysis of German sentence structure, in which <u>dass</u>

occupies C° and a moved verb ends up in T°4. It would be interesting to examine their predictions with respect to verum focus.

# 2. Previous Approaches to Verum Focus

Before I proceed with the investigation of the focus background structure of verum focus sentences I want to evaluate previous approaches to verum focus with respect to the presented observations to find out to how far they can be used for my own considerations.

Brandt et al (1992) analyze verum focus in terms of an existential quantification, which can roughly be characterized as follows: They introduce the formula λQ [ ∃e [Q e]] as meaning of the syntactic position of dass and of the V2 position. For our purposes we can take Q as being a variable over propositions which stand in a relation to an element e of the set of circumstances (Sachverhalte) E (Brandt et al (1992: pp 36-36)). The existential quantification over the variable e is supposed to express the virtual existence of a circumstance<sup>5</sup>. When the lexical element in the corresponding syntactic position is stressed, it can (or, in the case of dass, must) result in emphasizing the virtual existence of a circumstance and thereby in verum focus. I am not interested here in the details of their formal mechanism, and they actually don't matter for the evaluation of their approach to verum focus. Whatever one their think about technical tools thev straightforward predictions be examined which can independently.

They capture the generalization that verum focus goes with all kinds of illocutions and they predict that verum focus is tied to complementizers and the V2 position. They don't say anything about felicity conditions of verum focus and those conditions certainly can't be derived in their approach. Actually, Brandt et al don't present any restrictions on the occurence of verum

<sup>&</sup>lt;sup>4</sup> They have to unify CP and TP at some level of representation for reasons of syntactic barriers and some of their claims contradict considerations of the present paper, e.g. their PF-rule for deleting dass (see below).

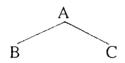
<sup>&</sup>lt;sup>5</sup>Since it is unclear to me what they exactly mean by that, I quote the relevant phrase in German:  $\exists c \ [...]$  drueckt also virtuelle Existenz des Sachverhaltes oder Faktizitaet aus. (Brandt et al (1991: 36))

focus. They need independent mechanisms or principles to handle the distribution ary facts.

I can't see how their theory could accommodate the scope phenomena with negation observed in (14), since the existential quantification over circumstances always takes scope over the whole proposition containing the negation. This means, they exclude cases like (14a), where the negation clearly takes scope over verum focus.

In short, the theory of Brandt et al. doesn't provide a solution for the questions I have formulated in section (1.3.). It fails to give a unified account of the observed phenomena and seems to be unable to derive them from more general principles. I conclude that an approach via existential quantification is on the wrong track.

Hoehle (1992) deals with verum focus in terms of a predicate called VERUM, which he introduces structurally. The corresponding rule, which is restricted to the according functional projections in the syntactic tree, looks as follows:



M(A) = M(B) (VERUM (M(C)))

This means that the meaning of the root of the tree A is derived by combining the meaning of B and VERUM of the meaning of C. Like the theory of Brandt et al Hoehle's predication theory of verum captures the independence of verum focus from different types of illocutions, and by the restrictions on the applicability of his rule he accounts for the dependency of verum focus on stress on a certain position. By the way of spelling out the details of reconstructing the verb into the sentence final position and the interaction of that process with negation Hoehle might even be able to describe the scope ambiguities with respect to negation, although he doesn't address this problem explicitely<sup>6</sup>. But the main burden

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<sup>&</sup>lt;sup>6</sup>More importantly, it goes against the original idea of reconstruction, which aims at giving the negation scope over the verb by moving the verb to a position which is c-commanded by the negation. But since there is a structural relation between the two verbal positions it should nevertheless be technically possible to arrive at a formalism that allows the negation to take scope over verum focus.

of his theory rests on spelling out a semantics for the VERUM predicate and the conditions it imposes on its argument. Since Hoehle doesn't say anything about the semantics of the VERUM predicate it remains completely unclear what contextual restrictions on the occurence of verum focus his theory predicts. Although it can not be excluded that it is possible to give an interesting semantics for VERUM and make it follow from more general principles of grammar all this remains a task still to be accomplished.

Because my own line of thinking about verum focus takes a different direction I don't want to follow up on Hoehle's technical suggestions. His rule can be seen as one possibility to state the syntactic restrictions on verum focus in German, which are needed in addition to the semantic analysis I am concerned with. So far I can't see any principled semantic reason for preventing a negation within dass clauses to take scope over verum focus and suggest that it is handled in the syntax, maybe by means of a CP/TP analysis of German sentence structure.

Closing this section I conclude that the previous approaches to verum focus don't say anything about the focus background structure of verum focus sentences, nor do they give proposals for explaining their distribution. That's the point where tripartite structures come in.

# 3. Verum Focus in Tripartite Structures

With the exception of thetic sentences - which are different form verum focus sentences - every sentence consists of a topic part and a focus part, i.e., has a nontrivial focus background structure. Following Partee (1991) I assume that topic focus structures can generally be described in terms of tripartite structures with the topic as domain restriction of an operator and the focus as the nuclear scope of that operator. According to Krifka (1991), who treats focus phenomena in a framework of structured meanings which is compatible with the idea of tripartite structures, focus phenomena allow recursive embedding. On the level of a matrix sentence an illocutionary operator is finally applied to the highest focus background structure represented by a structured meaning. The application of the operator generates an unstructured formula which is truthconditionally interpreted in a model. From this point of view verum focus sentences consist of a topic part and a focus

part like every other sentence. In matrix V2 clauses like (1) such a structure is the argument of the illocutionary operator assert, but in principle every operator of the right type may apply to it.

I am going to use the concept of tripartite structures as a working hypothesis and a means of asking questions about verum focus. To illustrate the usefulness of that method consider (14), repeated below.

(14) A: Ich hoffe, Karl schreibt endlich ein Buch.

I hope, Karl writes a book finally.

a) B: Aber Anna sagt, er SCHREIBT nicht an einem Buch.

But Anna says, it is not the case that he writes a book

b) B: #Aber Anna sagt, DASS er nicht an einem Buch schreibt. But Anna says that it is the case that he doesn't write a book

Using Kratzer's (1989) analysis of negation in natural languages as a quantifier with restrictor and nuclear scope we arrive at the following representation of the embedded sentences:

(14') a) (not: he writes (V) a book) he writes (+) a book b) (dass: he doesn't write (V) a book) he doesn't write a book

(+)

V should be understood as a verum variable, the presence of which is triggered by stress and which is instantiated in the nuclear scope. dass is meant to be an operator which mediates between the matrix clause and the subcategorized dass clause and possibly contributes the ill-understood meaning of dass to the meaning of the sentence (see below). The tripartite structures in (14') account together with the usual hypotheses about the availability of antecedents for sentence topics for the distribution of verum focus in (14). The topic of (14a) is he writes a book which is given by the preceding context. Thus (14a) is fine. In (14b) the negation operator can't take scope over the dass operator for syntactic reasons. Therefore he doesn't write a book is topic. But this topic is not provided by context and for that reason verum focus in (14b) is infelicitous. At least two questions arise immediately: What has to be provided as a topic for verum focus to be felicitous? And: What does this curious variable V stand for, i.e., what is the nuclear scope or new information contributed by verum focus? Let me just insert some remarks on the German dass complementizer, which plays an important role in (14'b),

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before I go on by trying to give some preliminary answers to these questions. dass in (14'b) is taken as an operator which contributes with its own meaning to the meaning of the subordinated clause and mediates between the subordinated and the matrix clause. To be consistent and accomodate cases like the embedded V2 clause in (15b) a parallel, phonologically empty and different operator has to be assumed for mediating between embedded V2 clauses and their matrix sentence. This is only empirically justified if there is an actual difference in meaning between an embedded V2 and an embedded dass clause. Especially syntacticians are used to deny the existence of such a diffence implicitly and feel free to introduce PF rules of dass deletion and/or dass insertion to accomodate their theories<sup>7</sup>.

For getting an intuitive idea of the difference consider the sentence pairs in (16) and (17).

(16a) Ich schlage vor, wir treffen uns um 8 Uhr.

I suggest, we meet at 8 o'clock.

(16b) Ich schlage vor, dass wir uns um 8 Uhr treffen.

I suggest that we meet at 8 o'clock.

(16a) sounds more determined than (16b). The speaker seems to have made a final decision on the time one is to meet. (16b) sounds more like a suggestion which can still be opposed. Speaking for myself, I would prefer (16a) in a situation where it's clearly up to me to make a decision, like on an answring machine when I can't get a response from the other person. In a conversation I would choose the more friendly (16b).

The same effect of friendliness versus determination can be detected in the scenario in (17), in which an employee has just been sacked. The former employer or her secretary might point out the dismissal from 10 minutes ago in two ways:

(17a) Ich sagte ihnen doch, sie sind entlassen.

I told you, you are sacked.

(17b) Ich sagte ihnen doch, dass sie entlassen sind.

I told you that you are sacked.

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<sup>&</sup>lt;sup>7</sup>c.f. Mueller/Sternefeld (forthcoming) for a recent example. c.f. Portner (1992) for a semantics of the English complementizer that which runs against the traditional syntactic view.

(17a) sounds considerably harsher than (17b) and comes close to repeating the unpleasant event itself. (17b) sounds more like bringing the act of dismissing back to memory.

However the difference is to be captured formally, it is difinitely there.

# 3.1. What is the Topic?

Sentences with verum focus can not be uttered out of the blue.

- (18) Context: Anna is bumping into the classroom at 8 AM:8
- a) #Karl SCHREIBT ein Buch.
- It is the case that Karl writes a book.
- b) #Ich habe erfahren, DASS Karl ein Buch schreibt.
- I have heard that it is the case that Karl writes a book
- c) #Wer KOMMT heute abend zu meiner Party?

For which person(s) x is it the case that x comes to my party this evening?

- d) #KENNT jemand das neue Buch von Karl?
- Is it the case that someone knows the new book of Karl?
- e) #SETZT euch hin!

Make it happen that you sit down.

(a) and (b) make the case for assertion, (c) and (d) for questions, and (e) demonstrates that even an imperative with verum focus needs a certain context.

In order to narrow down the possibilities we start at the other end of the problem and ask how much information has to be given. The examples used so far seem to indicate that all lexical material has to be previously made salient or explicitly mentioned. But one could suspect that this is only true for material inside the VP. (19)-(21) show that VP-material has indeed to be given:

(19) A: Ich denke, Karl schreibt einen Brief.

I think Karl writes a letter

B: #Karl SCHREIBT ein Buch.

It is the case that Karl writes a book

<sup>&</sup>lt;sup>8</sup>(18a)-(18e) are perfectly fine with broad focus, if Karl is known to the people who are addressed.

(20) A: Ich glaube, Karl liest ein Buch.

I believe Karl reads a book

B: #Karl SCHREIBT ein Buch.9

It is the case that Karl writes a book

It is not even easily possible to modify arguments of the verb by introducing new information:

(21) A: Ich glaube, Karl liest ein Buch.

I believe Karl reads a book

B: ?? Karl LIEST ein Buch von Krifka.

It is the case that Karl reads a book of Krifka

The question whether the subject has also necessarily to be provided by context is harder to settle because there is a rather strong tendency that they are topic anyway. The scenario in (22) suggests that not only the object arguments but also the subject of the sentence must be previously mentioned or be salient in the context.

(22) Context: Karl is a pupil in the class under discussion.

A: Ich habe Hans gefragt, was seine Klasse morgen macht, und er hat gesagt, sie schreiben morgen eine Arbeit.

I asked Hans what his class will be doing tomorrow and he said that they will write a quiz.

B: #Stimmt, Karl SCHREIBT morgen eine Arbeit.

Right, it is the case that Karl writes a quiz tomorrow.

B's answer is completely felicitous without verum focus and the inference from Karl to the class is easily available in that case in order to make sense of the sentence.

There is of course a certain grey area that needs to be investigated to explain all the facts. James Joyce seems to be sufficiently salient among Irish writers to be introduced in verum focus (23) and the event of hanging oneself can be picked up by the broader notion of committing suicide (24).

(23) Von den meisten irischen Schriftstellern habe ich kaum etwas gelesen. Aber ich HABE das Werk von James Joyce gelesen.

<sup>&</sup>lt;sup>9</sup>The contrastive reading is of course fine.

I've hardly anything read of most of the Irish writers. But it is the case that I have read the work of James Joyce.

(24) A: Ich habe gehoert, deine Tante hat sich erhaengt, aber ich weiss nicht, ob ich das glauben soll.

I have heard that your aunt has hanged herself, but I don't know if I should believe it

B: Ja, sie HAT sich umgebracht.

Yes, it is the case that she committed suicide

But (24) doesn't work the other way round:

(24') A: Ich habe gehoert, deine Tante hat sich umgebracht, aber ich weiss nicht, ob ich das glauben soll.

I have heard that your aunt has committed suicide, but I don't know if I should believe it

B: ??Ja, sie HAT sich erhaengt.

Yes, it is the case that she hanged herself

Luckily, (23)-(24') stay within the range of variability which is  $\sqrt{\phantom{a}}$  to be expected from similar effects in topicalisation and focus movement in English, and maybe they can be accounted for in terms of cognitive principles.

The situation looks a little bit more complicated when we consider adverbials. If they aren't too long they can be added quite freely.

(25) A: Hast du denn wirklich einen Roman geschrieben?Did you really write a novel?B: Ja, ich HABE kuerzlich einen Roman geschrieben.Yes, it is the case that I wrote a novel recently

- (26) A: Hast du den Praesidenten schon einmal gesehen? Have you ever seen the president?
- a) B: ?Ja, ich HABE Clinton unlaengst in Washington gesehen Yes, it is the case that I have seen Clinton in Washington recently
- b) B: ?? Ja, ich HABE Clinton an seinem Ferienort gesehen. Yes, it is the case that I saw Clinton at his vacation site

For the time being it is safe to say that for verum focus to be felicitous the verb and its arguments must be given by the context to form its topic and other material like adverbials can

/ eg with

be added as long as it doesn't introduce an unexpected scenario.

# 3.2 Nuclear Scope: Excluding Alternatives

After we got an idea of what the topic in a verum focus sentence is we are still left with the question what its nuclear scope is or, to put it more generally, what kind of new information such an utterance brings about. If we take Krifka's formalization of the assert operator seriously, every sentence which is asserted must contain some new, previously not established information (Krifka 1991:pp 129-130). I would expect something quite similar as a condition on other types of illocutionary operators. In the case of verum focus we are obviously dealing with rather intricate properties of discourse and dialogue. The speaker tries to settle a discussion, to urge a difinitive answer to a question or she puts special emphasis on a demand. To find out what is predicated about the topic we should therefore look at cases which highlight those characteristics of verum focus. Take for instance a context containing the particle doch:10

(27) A: Ich bin mir sicher, Karl schreibt NICHT ein Buch. I am sure that Karl does NOT write a book a) B: Und Karl schreibt DOCH ein Buch. Whatever you think, Karl writes a book.

doch apparently cancels the previous proposition from the stack of propositions which form the common ground and allows to replace it by the opposite. An alternative way for B to achieve the same result is to cancel the negation in A's sentence first (which seems easy to do because it is in focus) and then come up with a verum focus:

(27b) B: Das ist doch Quatsch. Karl SCHREIBT ein Buch. That's utter nonsense. It is the case that Karl writes a book.

But it is impossible to just state the opposite of what A said by using verum focus:

s not until

<sup>10</sup> It roughly means 'contrary to the current assumptions' (in the given examples). I couldn't find a one-word translation although I consulted dictionaries. I don't think then's an equivalent in Egylish. Somethins there may be purp hosses with too as so, I think:

I did too tell him about its,

ch. book. " optoral sandrusting

(27c) B: #Karl SCHREIBT ein Buch. It is the case that Karl writes a book.

(27d) is an extremely unfriendly, but still possible reaction to A's remark:

(27d) B: Karl schreibt ein BUCH. Karl writes a BOOK.

One interpretation of the contrast between (27c) and (27d) is that (27c) contains more new information than (27d) such that it turns the utterance from a merely unfriendly to one to an impossible one. The difference has to do with the fact that the negation of Karl doesn't write a book has not been discarded before coming up with the verum focus, as (27b) indicates. In (27b) verum focus is fine because A's proposition has been rejected before. Moreover, (27c) is possible if A and B are literally shouting at each other, showing a significant amount of disagreement which might cause them not to put the other persons utterances in the base of common ground of shared knowledge.

These observations make sense if we assume that the proposition of a sentence with verum focus, which is basically also its topic, is not merely confirmed but especially emphasized by expressing the opinion that it is false to confirm its negation.

(28) illustrates the idea by giving a tripartite structure for the sentence Karl SCHREIBT ein Buch (It is the case that Karl writes a book) with verum focus interpretation:

(28) (assert: Karl writes a book & X) Karl writes a book & it is false: Karl doesn't write a book

The proposal makes the following claim: A verum focus clause P with an operator applying to the focus background structure of that clause is represented by the following triparite structure:

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ps 12 2707

 $(\upsilon)$ 

Male broketing clear

P&X

Who down X 2?

(29) (Op: P& X) P & it is false: not P

where X is a variable over propositions. 11

Show how they works in examples

The fact that in matrix V2 clauses and in questions and imperatives the illocutionary operator quantifies over P explains, why there is such a remarkable pragmatic effect of verum focus. The formalization in (29) fits to the observations we have made with respect to the effect of verum focus on the different types of illocutions.

The data in (30) support our explanation:

(30) A: Hat Karl das Buch DOCH gelesen?

Did he read the book contrary to what I assumed?

a) B: Ja, er hat das Buch GELESEN.

Contrasts when the broke

Yes, it is the case that Karl read the book. In (20=)

In (30a) an open question is settled. In (30b) B goes overboard by additionally excluding the alternative which had been considered to be true by A. (30b) is at best an unfriendly answer to A's moderate question.

#### 4. Conclusion

In the course of our investigation we were able to clarify some of the puzzling intuitive properties of verum focus. It was possible to indicate a way in which verum focus can be embedded into a general theory of focus like Partee's theory of tripartite structures and Krifka's structured meaning approach to focus. This allows us to deduce the properties of verum focus, its distribution and its function in discourse from more about focus phenomena in natural general assumptions languages.

It should be pointed out that some of our initial notions about verum focus turned out to be derivable from the focus background structure of sentences in general. The close relation to illocutionary operators results from the fact that

30 a' Yes, he did read the book.

30 b' If Yes, he did read the book.

"contradicting you" interestion

<sup>&</sup>lt;sup>11</sup>For the sake of simplicity I am ignoring cases in which P introduces admissable new information as discussed in section (3.1.). It is easy to see how (29) can be extended to handle these cases.

illocutionary operators quantify over structures which are determined by verum focus. What seemed to be the scope of verum focus turned out to be basically the topic part of a structured meaning and not the scope of a quantifier.

Also it has become clear that verum focus interacts in an interesting way which can fruitfully explored with assumptions on German sentence structure. It contributes to the longstanding question of the nature of the V2 and the complementizer position. And by virtue of being intimately connected to the dass complementizer it is also related to the investigation of different types of propositions, the way of connecting subordinated propositions to their matrix propositions and its implications for situation theory.

An important task for the future is the investigation of verum focus in different Germanic languages, especially in Dutch and in Yiddish. For example, it would be very interesting to know, whether the Yiddish counterpart of the German dass can trigger verum focus when stressed. To know more about it would contribute significantly to the research on the similarities and differences between Yiddish and German sentence structure.

Finally, I frankly admit that I am not completely satisfied with the hypothesis in (29) on verum focus. I would prefer a theory which provides a reason for why it is the V2 and the complementizer position that are crucial for verum focus and what the verb in V2 and dass have semantically in common. Maybe a further investigation of the meaning and function of dass would be a way to proceed. Somehow I have the feeling that verum focus is tied to phenomena of point of view or the indication of the information source the speaker relies on to make her statement: if she has seen an event herself, has been told about it or just heard a rumor. It would be interesting to know whether there are languages which mark those aspects morphologically.

I simply don't know about such languages and I still can't make my intuitions on those things explicit enough to form hypotheses. There remains a lot to be done. no

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