

## On narrow focus *in situ* and *ex situ* in German and English

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### 1. Introduction: The issue

Present-day standard German and English appear to have a canonical position for narrow focus (or narrow focus *in situ*) and a non-canonical position for narrow focus (or narrow focus *ex situ*).<sup>1</sup> An utterance showing narrow focus *ex situ* seems to be generally substitutable by the corresponding one with narrow focus *in situ*, as exemplified in (1)–(4), where small capitals signal the word which carries the main sentence accent.<sup>2</sup> In these examples, the accented word is co-extensive with the phrase that is the focus expression. The meanings of the German sentences in (2a–b) and (4a–b) correspond to those of (1a–b) and (3a–b) respectively.

- (1) a. Q: Did you want tea? R: COFFEE I ordered. (cf. Ward 1985/1988: 114; focus *ex situ*)  
b. Q: Did you want tea? R: I ordered COFFEE. (focus *in situ*)
- (2) a. Q: Wollten Sie Tee? R: KAFFEE hatte ich bestellt. (focus *ex situ*)  
wanted you tea coffee had I ordered  
b. Q: Wollten Sie Tee? R: Ich hatte KAFFEE bestellt. (focus *in situ*)  
wanted you tea I had coffee ordered
- (3) a. They just bought a dog. FIDO they named it. (from Prince 1981: 259; *ex situ*)  
b. They just bought a dog. They named it FIDO. (*in situ*)
- (4) a. Sie haben sich gerade einen Hund gekauft. FIDO haben sie ihn genannt. (*ex situ*)  
they have SELF just a dog bought Fido have they him called  
b. Sie haben sich gerade einen Hund gekauft. Sie haben ihn FIDO genannt. (*in situ*)  
they have SELF just a dog bought they have him Fido called

The questions that are raised and answered in the present paper are the following ones. What does this apparent general substitutability of narrow focus *in situ* for narrow focus *ex situ* imply? Does it mean that the focus *ex situ* expression is of the same kind as, or identical to, the focus *in situ* expression? Does it mean that there is no semantically relevant syntactic difference between the respective sentences? The answer that will be given is ‘no’, straightforwardly so for German, less straightforwardly for English.

The data considered to be crucial for the argumentation in the present paper are of the following kind:

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<sup>1</sup> This paper is based on Breul (2004, 2007) and develops some of the ideas presented in those works.

<sup>2</sup> All examples of utterances under discussion are to be conceived of as spoken in a single intonation phrase. By ‘main sentence accent’ I mean the accent that licenses a phrase as the focus expression of a sentence by focus projection (see Selkirk 1995 among many others).

- (5) Q: Wen bewundert niemand?  
 whom admires nobody  
 ‘Who(m) does nobody admire?’  
 R1: #Niemand bewundert NIEMANDEN.  
 nobody admires nobody.ACC  
 ‘Nobody admires NOBODY.’  
 R2: NIEMANDEN bewundert niemand.  
 nobody.ACC admires nobody  
 ‘NOBODY is admired by nobody.’
- (6) Q: Wen bewundert nur Tim?  
 whom admires only Tim  
 ‘Who(m) does only Tim admire?’  
 R1: #Nur Tim bewundert den PROFESSOR.  
 only Tim admires the.ACC professor  
 ‘Only Tim admires the PROFESSOR.’  
 R2: Den PROFESSOR bewundert nur Tim.  
 the.ACC professor admires only Tim  
 ‘The PROFESSOR is admired only by Tim.’

The replies to the questions in (5Q) and (6Q) are felicitous only with the respective focus expression *ex situ*, although there is nothing syntactically wrong with the corresponding focus *in situ* constructions. That is, the movement of the object (*niemanden* and *den Professor*, respectively) into clause-initial position in the R-sentences is obligatory in the given contexts.

The paper contains two connected strands of argument, a semantic one and a syntactic one. The semantic strand of argument is this:

- A focus *ex situ* expression is semantically composed with its semantic sister constituent by employing the most complex semantic type and the corresponding denotation that is available for it such that semantic composition is licensed. Focus *in situ* expressions employ the least complex semantic type and corresponding denotation such that semantic composition is licensed. Only in a specific class of cases does this semantic difference result in a truth-conditional difference, as between (5R1) and (5R2), for instance.

The syntactic strand of argument is this:

- Both German and English have syntactically and focus-structurally distinct pre-spell-out positions for objects that are focused and located *in situ* and *ex situ*. The *in situ* position is a position within vP from which informational focus is projected to the vP or to the whole sentence. The *ex situ* (identificational focus) position is the specifier position of a functional phrase dominating TP, conveniently termed FocP. This specifier position can alternatively host a topic expression, in which case the functional phrase is conveniently termed TopP.<sup>3</sup> Whether a FocP or TopP or neither is projected depends on the kind of open proposition activated by the context. Very often, contexts can activate more than one kind of open proposition. Notably, contexts that activate an open proposition closeable by an utterance with an object as *ex situ* identificational focus expression also regularly activate an open proposition closeable by an utterance with a topic expression and the object as part of an informational focus expression. This is the source for the apparent general substitutability of narrow focus *in situ* for narrow focus *ex situ*.

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<sup>3</sup> This functional phrase dominating TP is called FocP in both cases in Breul (2004, 2007), the distinction being effected by the involvement of [+foc] features if there is an identificational focus expression and of [-foc] features if there is a topic expression. Contrary to the mainstream in the ‘cartographic approach’ in the tradition of Rizzi (1997), I assume that FocP and TopP are mutually exclusive in German and English.

Before presenting the details of the two strands of argument and their connection with respect to German in Section 3, a brief comment is given in Section 2 on a very basic difference between English and German as far as the contextual constraints on narrow focus *ex situ* are concerned. Section 4 explains what the problems are of applying the same arguments to English, although it will be suggested that they hold for this language as well. Section 5 discusses implications for the more general debate over whether or not focus and/or topic (and focus and topic features) play a role in (narrow) syntax. It is argued that the discussion in Sections 3 and 4 of the paper constitutes evidence against the position that focus *ex situ* is “triggered by an unselective edge feature of C (Chomsky 2008) requiring a filled SpecCP in all root and some embedded clauses” as recently proposed for German by Fanselow & Lenertová (2011: 184). In view of this evidence, their claim that “notions of information structure do not figure in the syntactic derivation, at least not in the sense of being formally responsible for movement” (Fanselow & Lenertová 2011: 170) is rejected.

For obvious reasons I will also use the term *focus preposing* for the German and English focus *ex situ* constructions.

## 2. Contextual constraints on focus preposing

Focus preposing in English is more narrowly restricted by contextual constraints than is focus preposing in German. Consequently, focus preposing in German is much more frequent in language use than in English.<sup>4</sup> For example, it is perfectly fine to reply to a German *wh*-question like (7Q) with either a focus *in situ* response as in (7R1) or a focus *ex situ* response as in (7R2). The corresponding English focus *ex situ* response, by contrast, tends to be considered as marginal, as shown in (8).

- (7) Q: Wen bewundert der Professor?  
       whom admires the.NOM professor  
       ‘Who(m) does the professor admire?’  
       R1: Er bewundert einen MUSIKER.  
           he admires a.ACC musician  
           ‘He admires a musician.’  
       R2: Einen MUSIKER bewundert er.  
           a.ACC musician admires he  
           ‘He admires a musician.’
- (8) Q: Who(m) does the professor admire?  
       R1: He admires a MUSICIAN.  
       R2: ??A MUSICIAN he admires.

According to Ward (1985/1988) and Birner & Ward (1998), an English preposed phrase, be it a topic or a focus expression, has to be licensed as a link to the prior discourse.

The **link** within an utterance is the linguistic material representing information which stands in a contextually licensed poset [i.e. partially ordered set] relation with information evoked or

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<sup>4</sup> For focus preposing in English, see, among many others, Prince (1981), Ward (1985/1988), Birner & Ward (1998), Ward et al. (2002). See Frey (2004, 2005b) and the literature mentioned there for various German constructions involving the syntactic left periphery, including focus preposing and topic preposing; see Frey (2005a) for a comparison between English and German with respect to these constructions. Breul (2007) argues that the rather low frequency of instances of preposing in English in comparison to German and the reluctance among native speakers of English to accept preposing constructions if presented to them in isolation is also due to factors pertaining to syntactic processing. As for work on processing factors that condition preposing in German, see Fanselow et al. (2008: 414ff.) and the literature mentioned there.

inferred from the prior context, and serves as a point of connection between the information presented in the current utterance and the prior context. (Birner & Ward 1998: 20)

In contrast to (8), a link is available in the following example from Gundel & Fretheim (2004: 183), which is similar to (8) in that it also constitutes a dialogue consisting of a constituent question and a reply to it, but where the focus preposing is not marked as deviant:

- (9) Q: Which of these clothes do you think we should give to the Salvation Army?  
R: That COAT you're wearing I think we can give away.

Gundel & Fretheim (2004: 183) remark about the referent of the preposed object here that it “may be in contrast with other objects in some contextually relevant set”, which appears to be the factor that licenses the preposing. As far as focus expressions are concerned, German does not have this link constraint (see Frey 2005a: 108). It seems as if speakers of German may optionally choose between the focus *in situ* and *ex situ* constructions as long as the general constraint on narrow focus is fulfilled, namely that the focus expression provide a value for a variable in a contextually salient open proposition.

According to Fanselow & Lenertová (2011), among others, this apparent optionality is not even restricted to cases where *narrow* focus is involved. They claim that the German *ex situ* construction can also be used in utterances where, according to them, the vP/VP or the whole sentence is the focus expression, as in (10) and (11) respectively (see Fanselow & Lenertová 2011: 174f.).

- (10) Q: Was hat er getan? (‘What did he do?’)  
R: Ein BILD hat er zerrissen.  
a picture has he torn.up  
‘He tore up a picture.’
- (11) Q: Was gibt’s Neues? (‘What’s new?’)  
R1: Einen HASEN habe ich gefangen.  
a.ACC rabbit.ACC have I caught  
‘I have caught a rabbit (lit. hare).’  
R2: Einen HASEN hat wer gefangen.  
a.ACC rabbit.ACC has someone caught  
‘Someone has caught a rabbit.’

In the present paper it is argued that despite an apparent optionality in many cases between narrow focus *ex situ* and *in situ* in German, or substitutability of narrow focus *ex situ* by focus *in situ*, these two constructions are syntactically different in a semantically relevant way. The suggestion concerning utterances like (10R) and (11R) in the context of questions like (10Q) and (11Q) respectively is to consider them not as expressing vP/VP focus or (broad) sentence focus, but as instantiating narrow focus *ex situ* constructions with the preposed object being the focus expression after all.

Note that English focus *ex situ* versions of (10R) and (11R) (‘A PICTURE he tore up.’; ‘A RABBIT {I have / someone has} caught.’) would be infelicitous as replies to questions like (10Q) and (11Q). Within the framework of explanation of Ward (1985/1988) and Birner & Ward (1998), this is due to the fact that the preposed phrases would not be linked to the prior discourse in an appropriate way.

### 3. On narrow focus *in situ* versus *ex situ* in German

#### 3.1. Identificational focus expression, informational focus expression, topic expression

This subsection briefly states what is meant in the present paper by some terms that play a central role in it.

An identificational focus expression supplies a value for a variable in argument or adjunct position in an open proposition that is active in the speaker's mind at the point in a discourse where the respective utterance is made (see Lambrecht 1994: 122, *pass.*). In using the terms *identificational focus expression* and, below, *informational focus expression* for a different kind of focus expression, I am borrowing terminology, but not exactly the corresponding conceptual content from Kiss (1998). Specifically, I do not assume that what I call identificational focus expressions for languages like German and English need to be exhaustive, a semantic characteristic that Kiss ascribes to what she calls identificational focus for a language like Hungarian.

Asking the question in (12Q) may activate the open proposition 'x admires Mary', where *x* ranges over referential and quantificational expressions, and the answer in (12R) supplies the expression *Tom* as a value for that variable, which thus is an identificational focus expression in (12R).

- (12) Q: Who admires Mary?  
R: TOM admires her.

The question in (12Q) may additionally or alternatively activate a different kind of open proposition in the addressee's mind, namely 'Mary X', where the variable *X* ranges over predicative expressions. That is, mentioning Mary in that question may trigger propositions in the addressee's mind that are about her – propositions which, due to general pragmatic constraints operative in communication, for example of Gricean or relevance-theoretic nature (see Grice 1967/1989, Wilson & Sperber 1981, Sperber & Wilson 1986/1995 and related literature) are likely to involve references to admiration, but not necessarily so; see (13).

- (13) a. She has MANY admirers.  
b. She is admired by MANY people.  
c. She is admired by TOM.  
d. She doesn't attach any IMPORTANCE to being admired.  
e. She is WONDERFUL, isn't she.  
f. She will not marry ANYONE of them. So your question is irrelevant.

The expression *she*, which co-refers with the expression *Mary*, is a topic expression here. According to Lambrecht (1994: 131), "[a] constituent is a topic expression if the proposition expressed by the clause with which it is associated is pragmatically construed as being about the referent of this constituent". This is the notion of topic (expression) that is more specifically known as 'aboutness topic (expression)'. Note, however, that 'topic expression' is ultimately conceived of as a syntactic notion in the present paper – defined as an expression that moves to spec-TopP (see Section 3.3). The pragmatically characterised notion and the syntactically defined one converge where the topic expression is referential, i.e. non-quantificational.

(14A) is an utterance that activates the open proposition 'Tom X'.

- (14) A: Tell me something about Tom.  
B: He admires MARY.

In (14B), *he*, being co-referential with *Tom*, is a(n) (aboutness) topic expression just as *she* is in (13); the expression *Mary* in (14B) is not an identificational focus expression and the main sentence accent on *Mary* does not signal identificational focus. Indeed, there is a focus expression here as well, but this is *admires Mary*, which is not an argument or adjunct, of course. Thus, the context

utterance (14A) cannot be said to activate an open proposition with a variable in an argument or adjunct position. The type of focus expression displayed by (14B) is informational focus. Informational focus expressions extend over a predicate and its syntactic projections, that is, possibly including arguments and adjuncts, and thus possibly extending over a whole clause or sentence (sentence focus).

### 3.2. Semantics

**3.2.1. Predicate logical considerations.** For what follows, consider a model with three people, Anna, Bert and Tom, where Anna admires Bert and Tom, Bert admires Anna, and Tom does not admire anybody.

Sentence (15a) has an interpretation that can be represented by the logical formula in (15b), where  $y$  corresponds to the object and  $x$  to the subject in (15a).<sup>5</sup> The proposition expressed by (15a) with the meaning (15b) is false with respect to our model.<sup>6</sup>

- (15) a. Niemand bewundert niemanden.  
           nobody admires nobody.ACC  
           ‘Nobody admires nobody.’  
       b.  $\neg\exists x[\neg\exists y[(\text{admire}(y))(x)]]$

(15a) cannot be used to express the proposition in (16a) below, where the scope relation between the existential quantifiers binding  $x$  and  $y$  respectively is reversed in comparison to (15b). (15a) and (16a) have different truth conditions. While (15a) and its logical representation (15b) are false with respect to our model, (16a) is true. Two English paraphrases of (16a) are given in (16b–c).

- (16) a.  $\neg\exists y[\neg\exists x[(\text{admire}(y))(x)]]$   
       b. There is nobody whom nobody admires.  
       c. Everybody is admired by somebody.

(15a) is inappropriate as an answer to the question in (17Q) under any placement of the main sentence accent:

- (17) Q: Wen bewundert niemand? (‘Who(m) does nobody admire?’)  
       R1: #Niemand bewundert niemanden.

A version of (15a)=(17R1) in which the object *niemanden* occupies clause-initial position and carries the main sentence accent *is* appropriate as a reply to (17Q), and it is true with respect to our model:

- (17) Q: Wen bewundert niemand? (‘Who(m) does nobody admire?’)  
       R2: NIEMANDEN bewundert niemand.  
           nobody.ACC admires nobody  
           ‘NOBODY is admired by nobody.’

<sup>5</sup> In the present paper, the functional notation of functor-argument expressions will be used, i.e.  $(F(y))(x)$ , rather than the relational one, i.e.  $F(x,y)$ . The functional notation reflects the order in which the functor is combined with its argument more transparently. An implicit and underlying assumption of representing the semantics of (15a) by (15b) is that the verb *bewundert* syntactically combines with what is traditionally called the direct object (*niemanden*) first, that this syntactic combination of verb and direct object is then combined with what is traditionally called the subject, and that this syntactic order of combination is reflected in semantic composition.

<sup>6</sup> For many speakers (15a) also has the negative concord reading represented by  $\neg\exists x[\exists y[(\text{admire}(y))(x)]]$ , which can be expressed in English by the sentence *Nobody admires anybody*, for instance. This reading of (15a) plays no role for the argumentation in the present paper. But its presence may add to potential difficulties in eliciting the desired interpretation of (15a) and similar or related sentences in this paper.

While (15a)=(17R1) does not correspond to the logical formula in (16a), (17R2) does. With respect to our model, (17R2) and its logical representation (16a) are true, while (15a)=(17R1) and its logical representation (15b) are false. In sum, the correspondences between the German sentences and the logical expressions are as shown in (18).

- |         |                                     |  |
|---------|-------------------------------------|--|
| (18) a. | Niemand bewundert NIEMANDEN.        | $\neg\exists x[\neg\exists y[(\text{admire}(y))(x)]]$      |
|         | subject                      object | not: $\neg\exists y[\neg\exists x[(\text{admire}(y))(x)]]$ |
| b.      | NIEMANDEN bewundert niemand.        | $\neg\exists y[\neg\exists x[(\text{admire}(y))(x)]]$      |
|         | object                      subject | not: $\neg\exists x[\neg\exists y[(\text{admire}(y))(x)]]$ |

(17R1)=(18a) cannot express the proposition  $\neg\exists y[\neg\exists x[(\text{admire}(y))(x)]] = (16a)$ , which would be the proposition needed to ensure coherence by rejecting one of the implicatures associated with the question in (17Q), namely that there is someone whom nobody admires. (17R1)=(18a) does not assert a rejection of the existence implicature triggered by (17Q). By contrast, a dialogue like (19) is perfectly appropriate.

- (19) Q: Wen bewundert Tom? ('Who(m) does Tom admire?')  
 R: Er bewundert niemanden. ('He doesn't admire anybody.')

(19R) does assert a rejection of the existence implicature triggered by (19Q). Note, though, that in terms of surface structure, (17R1)=(18a) and (19R) are parallel in that they both show the order subject > object.

The argument gone through above can also be applied to analogous examples with *niemand* or other purely quantificational expressions as subject and other quantificational expressions than *niemanden* as object. The following are relevant data:<sup>7</sup>

- (20) Q: Wen bewundert niemand? ('Who(m) does nobody admire?')  
 R1: #Niemand bewundert JEDEN.  
 nobody admires everybody.ACC  
 'Nobody admires EVERYBODY.'  
 R2: JEDEN bewundert niemand. ('EVERYBODY is admired by nobody.')
- R3: #Niemand bewundert jeden PROFESSOR.  
 nobody admires every.ACC professor  
 'Nobody admires every professor.'  
 R4: Jeden PROFESSOR bewundert niemand. ('Every PROFESSOR is admired by nobody.')
- (21) Q: Wen bewundern viele Menschen? ('Whom do many people admire?')  
 R1: #Viele Menschen bewundern NIEMANDEN.  
 many people admire nobody.ACC  
 'Many people admire NOBODY.'  
 R2: NIEMANDEN bewundern viele Menschen. ('NOBODY is admired by many people.')

Another set of data where the same kind of focus-structural behaviour can be observed is cases that involve focus particles such as German *nur* ('only') and *sogar* ('even'), as in (22) and (23); but these cases differ from the preceding ones in that there is no truth-conditional difference between the respective focus *in situ* and *ex situ* versions:

<sup>7</sup> (20R2) is true with respect to any model in which nobody admires anybody and false with respect to any model in which at least one person admires someone. (20R4) is true with respect to any model in which nobody admires any professor and false with respect to any model in which at least one person admires one professor.

- (22) Q: Wen bewundert nur Tim?  
 whom admires only Tim  
 ‘Who(m) does only Tim admire?’  
 R1: #Nur Tim bewundert den PROFESSOR. (‘Only Tim admires the PROFESSOR.’)  
 R2: Den PROFESSOR bewundert nur Tim. (‘The PROFESSOR is admired only by Tim.’)
- (23) Q: Wen bewundert sogar Tim? (‘Who(m) does even Tim admire?’)  
 R1: #Sogar Tim bewundert den PROFESSOR. (‘Even Tim admires the PROFESSOR.’)  
 R2: Den PROFESSOR bewundert sogar Tim. (‘The PROFESSOR is admired even by Tim.’)

The combination of focus particle and associated noun phrase (*nur Tim*, *sogar Tim*) is commonly analysed as being quantificational – roughly, *nur Tim* meaning ‘nobody except for Tim’, *sogar Tim* meaning ‘some people including Tim’ with the additional implicational meaning that Tim may not have been expected to be a member of the group of people that includes him (see, among many others, Jacobs 1983: 144ff., Sudhoff 2010: 33ff., *pass.*). The other expression involved in (22)–(23), *den Professor*, is of a kind that is sometimes analysed as a referential expression (corresponding to type *e* in terms of the theory of semantic types), sometimes – i.e. in the semantic tradition that conceives of definite descriptions as so-called generalised quantifiers – as a quantificational one (see e.g. Chierchia & McConnell-Ginet 1990/2000: 513, Gamut 1982/1991, vol. 2: 139ff., Heim & Kratzer 1998: 131ff., Lohnstein 1996/2011: 187ff.). As will become clear in Section 3.2.2 below, the point of the present paper rests on the assumption that both interpretations of expressions like *den Professor*, the referential one and the quantificational one, are available (see also Partee 1987, Partee & Rooth 1983). For the time being, it is sufficient to observe with respect to (22)–(23) that, in order to be felicitous, *den Professor* has to move to clause-initial position despite the fact that there is nothing wrong syntactically with the focus *in situ* R1-sentences, nor that there is a truth-conditional difference between the R1-sentences and the corresponding focus *ex situ* R2-sentences. This means that, although there is no truth-conditional difference, *den Professor* cannot be interpreted in the same way in the corresponding R1- and R2-sentences.

The subject question (24Q) below can be answered by (24R1), where the subject *niemand* is in clause-initial position. Alternatively and equivalently to (24R1) in terms of truth conditions, (24Q) can be answered by (24R2), where the object *niemanden* is in clause-initial position and has either to be unaccented or to carry an accent characteristic of I-topicalisation, typically *L\*+H* on preposed *niemanden*.<sup>8</sup> The obligatory main sentence accent is on the subject *niemand* in both alternatives.

- (24) Q: Wer bewundert niemanden? (‘Who admires nobody?’)  
 R1: NIEMAND bewundert niemanden.  
 nobody admires nobody.ACC  
 ‘NOBODY admires nobody.’  
 R2: Niemanden bewundert NIEMAND.  
 nobody.ACC admires nobody

Note that the meaning of both (24R1) and (24R2) is  $\neg\exists x[\neg\exists y[(\text{admire}(y))(x)]] = (18a)$  and that the surface order object > subject in (24R2) does not mirror that of the corresponding quantifiers in (18a).

The discussion so far shows clearly that it is not the syntactic role of the quantificational expression *NIEMAND* as subject or object in sentences like (18a–b) which determines the scope relations between the two existential quantifiers in a logical representation of the meanings of the sentences, but their syntactic positions. This observation carries over in an analogical way to sentences like the R-sentences in (20)–(23), in which other quantificational expressions are involved alongside *NIEMAND*. (22) and (23) show that infelicity of the focus *in situ* utterance arises

<sup>8</sup> As for I-topicalisation see, among others, Jacobs (1997), Krifka (1998); see also Ladd (1996/2008: 151f.).



also if we replace the subjects by noun phrases that are associates of focus particles and the objects by definite descriptions; moreover, in this class of cases the effect arises without a corresponding truth-conditional difference. In addition, (24) shows that it cannot be the syntactic position of *NIEMAND* as subject or object in terms of surface ordering which determines truth-conditionally effective scope relations. The suggestion to be developed below is that the semantic scope relations are determined by whether or not *NIEMAND* as subject or object is located in a syntactic position that designates it as an identificational focus expression. That is, the proposal in the present paper provides a *derivation* of the observed semantic scope relations such that these do not only correspond with but actually follow from the syntactically represented focus structure of the respective sentences.

Note that it would not do to invoke a syntactic theory where there is covert movement to derive a syntactic representation at the level of logical form (LF) to explain the contrasts between the focus *in situ* and focus *ex situ* versions of the respective R-sentences discussed above. In such a syntactic framework (as in government and binding theory in the tradition of Chomsky 1981) it might be argued that the quantificational object expression has to move to a clause-initial position at LF in order to have scope over the rest of the sentence so as to get the truth conditions right, but is prevented to do so by the intervening quantificational subject expression. For (22)–(23), this attempt fails, however, since there the object expression would not need to move to get the truth conditions right. Moreover, as pointed out, (24) shows that a mismatch between the overt order of the quantificational expressions in the linguistic expression on the one hand and the order of the quantifiers in the representation of its meaning in terms of predicate logic on the other hand need not necessarily lead to linguistic infelicitousness in the first place.

*3.2.2. Semantic composition.* The present subsection argues that the truth-conditional difference between *Niemand bewundert NIEMANDEN* and *NIEMANDEN bewundert niemand* can be explained by making use of the the following assumptions. (i) The accented object *niemanden* in the first sentence is not an identificational focus expression; (ii) the preposed accented object *niemanden* in the second sentence *is* an identificational focus expression; (iii) an expression that is an identificational focus expression enters semantic composition with the most complex semantic type that is available for it so that functional composition is licensed; (iv) an expression that is *not* an identificational focus expression enters semantic composition with the least complex semantic type that is available for it so that functional composition is licensed. Assumptions (i) and (ii) will be substantiated in the syntactic subsection 3.3. Assumptions (iii) and (iv), which relate the focus-structural notion ‘identificational focus’ to the properties of identificational focus expressions in semantic composition, constitute the pivot of the present paper; they will now be elaborated on.

In a theoretical framework where syntactic movement is movement of only the phonological form of a constituent, with its semantic form left behind (see Breul 2004: 119ff., Sternefeld 2006, vol. 2: 502), semantic composition applies to constituents in their base positions.<sup>9</sup> Thus, disregarding tense, the semantic bracketing of the sentence *Coffee I ordered*, as in (1a) above (A: ‘*Did you order tea?*’ B: ‘*Coffee I ordered.*’), is (25).

(25) [I [ordered coffee]]

I assume that the semantic type of verbs is rigid, i.e.  $\langle e, t \rangle$  for 1-place verbs,  $\langle e, \langle e, t \rangle \rangle$  for 2-place verbs, etc. The denotations of *smell* and *order* are given in (26) below, where *s* corresponds to the syntactic argument that surfaces as the syntactic subject and *o* corresponds to the syntactic argument that surfaces as the syntactic object. (Different symbols for argument variables than *x* and *y* are used for the representation of the denotations of verbs at this point, since they are needed later anyway,

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<sup>9</sup> I prefer to think of syntactic movement as the movement of only the phonological form of a phrase or head. This avoids the cumbersome notion of reconstruction into the base position of moved constituents. But reconstruction is an alternative concept in principle.

i.e. in derivations (33) and (34) below. There the argument variables in the representation of the denotation of the verb *BEWUNDERN* have to be kept distinct from the argument variables  $x$  and  $y$  in the representation of the denotations of the nominal expression *NIEMAND*, with which *BEWUNDERN* combines.)

- (26) a.  $\lambda s[(\text{smell}(s))]$   $\langle e, t \rangle$   
 b.  $\lambda o[\lambda s[(\text{order}(o))(s)]]$   $\langle e, \langle e, t \rangle \rangle$

By contrast, I assume flexible types and corresponding denotations for nominal expressions. The nominal expression *COFFEE* is supplied with the denotations and types given in (27), among others that are needed for ditransitive constructions. In (27),  $Q$  is of type  $\langle e, t \rangle$  and  $P$  is of type  $\langle e, \langle e, t \rangle \rangle$ .

- (27) a. *coffee*  $e$   
 b.  $\lambda Q[Q(\text{coffee})]$   $\langle \langle e, t \rangle, t \rangle$   
 c.  $\lambda P[P(\text{coffee})]$   $\langle \langle e, \langle e, t \rangle \rangle, \langle e, t \rangle \rangle$

(27a) is the denotation for *COFFEE* as a subject or object that is not an identificational focus expression. (27b) is the denotation for *COFFEE* as a subject that *is* an identificational focus expression. (27c) is the denotation for *COFFEE* as an object that is an identificational focus expression. We can distinguish the following semantic derivations.

If *COFFEE* functions as a topic expression as in the utterance ‘*Coffee smells.*’ replying to an interlocutor’s request ‘*Tell me something about coffee.*’, semantic composition operates as in (28). Here and below the arrow ( $\leftarrow$ ) stands for ‘the formula results from ...’.

- (28)  $\lambda s[\text{smell}(s)](\text{coffee})$   $\leftarrow$  functional application  
 $\text{smell}(\text{coffee})$   $\leftarrow$   $\lambda$ -conversion

If *COFFEE* functions as an identificational focus expression as in the utterance ‘*COFFEE smells.*’ replying to an interlocutor’s question ‘*What smells?*’, for instance, semantic composition goes as in (29), resulting in the same meaning as in (28).

- (29)  $\lambda Q[Q(\text{coffee})](\lambda s[\text{smell}(s)])$   $\leftarrow$  functional application  
 $\lambda s[\text{smell}(s)](\text{coffee})$   $\leftarrow$   $\lambda$ -conversion  
 $\text{smell}(\text{coffee})$   $\leftarrow$   $\lambda$ -conversion

If *COFFEE* functions as an identificational focus expression in the utterance ‘*COFFEE I ordered.*’ as in (1a) (A: ‘*Did you order tea?*’ B: ‘*Coffee I ordered.*’), semantic composition goes as in (30).

- (30)  $\lambda P[P(\text{coffee})](\lambda o[\lambda s[(\text{order}(o))(s)]])$   $\leftarrow$  functional application  
 $\lambda o[\lambda s[(\text{order}(o))(s)]](\text{coffee})$   $\leftarrow$   $\lambda$ -conversion  
 $\lambda s[(\text{order}(\text{coffee}))(s)]$   $\leftarrow$   $\lambda$ -conversion  
 $\lambda s[(\text{order}(\text{coffee}))(s)](I)$   $\leftarrow$  functional application  
 $(\text{order}(\text{coffee}))(I)$   $\leftarrow$   $\lambda$ -conversion

The outcome is obviously the same as the one we would get for *I ordered coffee*.

The semantic bracketing of our familiar sentences (31a–b) is as given in (31c).

- (31) a. Niemand bewundert NIEMANDEN.  $\neg \exists x[\neg \exists y[(\text{bewundern}(y))(x)]]$   
 b. NIEMANDEN bewundert niemand.  $\neg \exists y[\neg \exists x[(\text{bewundern}(y))(x)]]$   
 c. [niemand [niemanden bewundert]]

The nominal expression *NIEMAND* is supplied with the denotations and types given in (32), among others that are needed for ditransitive constructions. In (32),  $Q$  is of type  $\langle e, t \rangle$ ,  $P$  is of type  $\langle e, \langle e, t \rangle \rangle$  and  $R$  is of type  $\langle \langle e, t \rangle, t \rangle$ .

- (32) a.  $\lambda Q[\neg \exists x[Q(x)]]$   $\langle \langle e, t \rangle, t \rangle$   
 b.  $\lambda P[\lambda x[\neg \exists y[(P(y))(x)]]]$   $\langle \langle e, \langle e, t \rangle \rangle, \langle e, t \rangle \rangle$   
 c.  $\lambda P[\lambda R[\neg \exists y[R(P(y))]]]$   $\langle \langle e, \langle e, t \rangle \rangle, \langle \langle e, t \rangle, t \rangle \rangle$

$Q$  is a variable over functions that cause the nominal expression *NIEMAND* as a subject to be combinable with a predicate of type  $\langle e, t \rangle$ , such as an intransitive verb.  $P$  is a variable over functions that cause *NIEMAND* as an object to be combinable with a predicate of type  $\langle e, \langle e, t \rangle \rangle$ , such as a transitive verb, with the outcome of the combination being a predicate of type  $\langle e, t \rangle$ .  $R$  is a variable over functions that, in combination with  $P$ , cause *NIEMAND* as an object to be combinable with a predicate of type  $\langle e, \langle e, t \rangle \rangle$  with the outcome of the combination being an expression of type  $\langle \langle e, t \rangle, t \rangle$ . (32a) is the denotation for *NIEMAND* as a subject that may or may not be an identificational focus expression. (32b) is the denotation for *NIEMAND* as an object that is not an identificational focus expression. (32c) is the denotation for *NIEMAND* as an object that *is* an identificational focus expression. The semantic derivation of (31a) is as given in (33); that of (31b) is as given in (34).

- (33)  $\lambda P[\lambda x[\neg \exists y[(P(y))(x)]]](\lambda o[\lambda s[(\text{bewundern}(o))(s)]])$   $\leftarrow$  functional application  
 $\lambda x[\neg \exists y[(\lambda o[\lambda s[(\text{bewundern}(o))(s)]](y))(x)]]$   $\leftarrow$   $\lambda$ -conversion  
 $\lambda x[\neg \exists y[\lambda s[(\text{bewundern}(y))(s)]](x)]]$   $\leftarrow$   $\lambda$ -conversion  
 $\lambda x[\neg \exists y[(\text{bewundern}(y))(x)]]$   $\leftarrow$   $\lambda$ -conversion
- $\lambda Q[\neg \exists x[Q(x)]](\lambda x[\neg \exists y[(\text{bewundern}(y))(x)]])$   $\leftarrow$  functional application  
 $\neg \exists x[\lambda x[\neg \exists y[(\text{bewundern}(y))(x)]](x)]$   $\leftarrow$   $\lambda$ -conversion  
 $\neg \exists x[\neg \exists y[(\text{bewundern}(y))(x)]] = (31a)$   $\leftarrow$   $\lambda$ -conversion
- (34)  $\lambda P[\lambda R[\neg \exists y[R(P(y))]]](\lambda o[\lambda s[(\text{bewundern}(o))(s)]])$   $\leftarrow$  functional application  
 $\lambda R[\neg \exists y[R(\lambda o[\lambda s[(\text{bewundern}(o))(s)]](y))]]$   $\leftarrow$   $\lambda$ -conversion  
 $\lambda R[\neg \exists y[R(\lambda s[(\text{bewundern}(y))(s)]])]$   $\leftarrow$   $\lambda$ -conversion
- $\lambda R[\neg \exists y[R(\lambda s[(\text{bewundern}(y))(s)]]](\lambda Q[\neg \exists x[Q(x)]])$   $\leftarrow$  functional application  
 $\neg \exists y[\lambda Q[\neg \exists x[Q(x)]](\lambda s[(\text{bewundern}(y))(s)]])]$   $\leftarrow$   $\lambda$ -conversion  
 $\neg \exists y[\neg \exists x[\lambda s[(\text{bewundern}(y))(s)]](x)]]$   $\leftarrow$   $\lambda$ -conversion  
 $\neg \exists y[\neg \exists x[(\text{bewundern}(y))(x)]] = (31b)$   $\leftarrow$   $\lambda$ -conversion

Crucially, the desired and empirically correct interpretations result only if we assume that the types and corresponding denotations of the object *niemanden* differ in the two sentences. That is, we get the correct interpretation for (31a) only if it is assumed that the object *niemanden* is not an identificational focus expression.

In more general terms, there is the principle in (35), which I would like to call the type employment principle (TEP).<sup>10</sup>

- (35) Type employment principle (TEP)
- An identificational focus expression  $E$  is functionally composed with its semantic sister constituent by employing the most complex semantic type and the corresponding denotation for  $E$  that is available for  $E$  so that functional composition is licensed.
  - An expression  $E$  that is not an identificational focus expression is functionally composed with its semantic sister constituent by employing the least complex semantic type and the corresponding denotation for  $E$  that is available for  $E$  so that functional composition is licensed.

<sup>10</sup> The TEP in connection with the semantic type assumed for identificational focus expressions that are objects in monotransitive constructions (see (27c) and (32c) above) is proposed as an improvement of the “type determination principle” (TDM) (Breul 2004: 239–246). The TEP is simpler and more general than the TDM. More importantly, the TEP, but not the TDM, captures the truth-conditional difference between (31a) and (31b). And, as we will see in Section 3.3, it accommodates quantificational expressions that are topic expressions in the syntactic but not the pragmatic (‘aboutness’) sense, which the TDM does not.

For expressions that are potentially referential (type *e*) or quantificational, this principle has the following effect. The essential semantic difference between an expression *E'* that is an identificational focus expression and the corresponding expression *E* that differs minimally from *E'* in that it is not an identificational focus expression (a topic expression or neither a topic nor an identificational focus expression) lies in the direction of the semantic composition (functional application) that *E'* and *E* are involved in as semantic functor or semantic argument: *E'* is a functor; *E* is a functional argument. Thus, the semantic difference between the syntactic constructions that differ minimally in that they contain either *E'* or *E* lies in their different semantic compositional histories (cf. the related notion “derivational history” in Gamut 1982/1991, vol. 2: 148). Not being potentially of type *e*, exclusively quantificational expressions are different in that there is no choice for them to enter semantic composition but as functors. Yet, as the difference between *NIEMAND* as an identificational and as a non-identificational focus object shows, whether quantificational expressions are identificational or non-identificational focus expressions also entails different compositional histories. In many cases, different compositional histories do not result in truth-conditionally different interpretations, as in (28) and (29), for instance. In some cases, as in (33) and (34), they do result in truth-conditionally different interpretations.

Applying the TEP to (24R1–R2), here repeated as (36R1–R2), with the appropriate denotations and types from (32) results in the required interpretation – i.e.

$\neg\exists x[\neg\exists y[(\text{bewundern}(y))(x)]]$  – as well:

- (36) Q: Wer bewundert niemanden? (‘Who admires nobody?’)  
 R1: NIEMAND bewundert niemanden.  
 R2: Niemanden bewundert NIEMAND.

The semantic derivations of both (36R1) and (36R2) are the same as the derivation in (33). For the object *niemanden*, type (and corresponding denotation) (32b) has to be chosen as this is the least complex one of the two available types (32b–c) that license functional composition. For the subject *niemand*, type (and corresponding denotation) (32a) has to be chosen as this is the only available type that licenses functional composition.

### 3.3. Syntax

In theories of German syntax in which it is assumed that there is a TP in German main clauses as well, just like in English, a German subject occupies the position spec-TP and the finite verb occupies the T head position at some stage of the syntactic derivation. In such frameworks, a German TP is commonly held to be head-final.<sup>11</sup> A dissenting view with respect to this latter point has been held by Travis (1984: 108ff.) and Zwart (*inter alia* 1997a: 224ff., 1997b: 260ff.), who assume that Continental West-Germanic languages, including Dutch and German, project a head-initial functional phrase (AgrSP, IP) below CP in finite main clauses, which corresponds to TP in more recent terminology.<sup>12</sup> This is not the place for a discussion of the relevant issues, which have kept researchers of German syntax debating for quite some time now. A statement specifying my

<sup>11</sup> However, there is a debate on whether German projects a TP (=IP); see e.g. Sternefeld (2006, vol. 2: 507ff.) and the literature mentioned there. See especially Haider (2010) for the view that German does not project a TP.

<sup>12</sup> Although couched within a different theory of the nature and mechanisms of the syntactic operation merge, Zwart’s assumptions about the position of the finite verb and the subject in finite declarative main clauses of Continental West Germanic languages – basically, the finite verb as the head of a head-initial TP; the subject in spec-TP – has not changed in his more recent work; see Zwart (2009: 73ff.). Note also that Zwart’s (2009: 74) explanation of topic fronting in Continental West Germanic – “topics are removed from unmarked propositions (‘TP’) in Continental West-Germanic, i.e., merged anew, followed by erasure of the topic from its position inside the proposition” – comes very close to what I am suggesting below.



Why do the objects not have to move to spec-FocP in cases like these? The answer to this question is that, as already pointed out above (Section 3.1), questions like (39Q) do not necessarily activate exclusively an open proposition with a variable in argument or adjunct position in their addressee's mind. They may also activate the open proposition 'Tom X'. The speakers of (39R1–R2) supply values for the predicate variable *X* (predicate focus), which entails that *niemanden* in (39R1) and *Anne* in (39R2) are not identificational focus expressions. They are the carriers of the main sentence accent which projects focus to the vP, which is an informational focus expression, providing the requested information about the topic Tom. The fact that the verb *BEWUNDERN* is mentioned in the context question and is thus active in the discourse does not prevent the vP from being an informational focus expression.

Sentences like those presented in (22)–(23) above, here repeated as (40)–(41), show cases where substituting a felicitous focus *ex situ* construction by the corresponding focus *in situ* construction leads to infelicity even though there is no truth-conditional difference between them.

- (40) Q: Wen bewundert nur Tim? ('Who(m) does only Tim admire?')  
 R1: Den PROFESSOR bewundert nur Tim. ('The PROFESSOR is admired only by Tim.')
- (41) Q: Wen bewundert sogar Tim? ('Who(m) does even Tim admire?')  
 R1: Den PROFESSOR bewundert sogar Tim. ('The PROFESSOR is admired even by Tim.')

(40R2) and (41R2) are fine uttered out-of-the blue or in the context of questions like '*Has your thinking about admiration given you any insights?*'; there is no truth-conditional difference between (40R1) and (40R2), nor between (41R1) and (41R2).<sup>13</sup> This means that the difference in appropriateness between (40R1) and (40R2) as well as between (41R1) and (41R2) is a purely focus-structural one. And this suggests that the inappropriateness of (42R) in the – by now familiar – dialogue (42), is due to both its semantic and focus-structural inappropriateness.

- (42) Q: Wen bewundert niemand? ('Who(m) does nobody admire?')  
 R: #Niemand bewundert NIEMANDEN.

Clause-initial nominal expressions, subjects and non-subjects, may also be topic expressions in German main clauses. It is thus reasonable to assume that the functional phrase dominating TP may, in principle, not only host an identificational focus expression, but, alternatively, a topic expression. In this case, the functional phrase dominating TP may be conveniently called TopP. (43R2) is an example where the object pronominal phrase *ihn* is a topic expression in spec-TopP.

- (43) Q: Wer bewundert den Professor?  
 who admires the.ACC professor  
 'Who admires the professor?'  
 R1: [<sub>FocP</sub> NIEMAND<sub>2</sub> [<sub>Foc'</sub> bewundert<sub>1</sub> [<sub>TP</sub> t<sub>2</sub> [<sub>T'</sub> t<sub>1</sub> [<sub>vP</sub> t<sub>2</sub> ihn t<sub>1</sub>]]]]]  
 him:ACC  
 R2: [<sub>TopP</sub> ihn<sub>3</sub> [<sub>Top'</sub> bewundert<sub>1</sub> [<sub>TP</sub> NIEMAND<sub>2</sub> [<sub>T'</sub> t<sub>1</sub> [<sub>vP</sub> t<sub>2</sub> t<sub>3</sub> t<sub>1</sub>]]]]]  
 him.ACC

<sup>13</sup> There are two semantic types (and corresponding denotations) available for the expression *den Professor* such that functional composition is licensed, types *e* and  $\langle\langle e, \langle e, t \rangle \rangle, \langle e, t \rangle \rangle$ . According to the TEP, the first type is to be employed in (40R2) and in (41R2) (informational focus); the second type is to be employed in (40R1) and (41R1) (identificational focus). This, however, does not lead to a truth-conditional difference between the R1- and the R2-sentence in each case. The result of the semantic combination of *den Professor* with the verb (type  $\langle e, \langle e, t \rangle \rangle$ ) is an expression of type  $\langle e, t \rangle$  in all cases. This expression is then semantically combined with the same *nur Tim* in (40R1–R2) and the same *sogar Tim* in (41R1–R2).

The least complex semantic type that is available for the object *ihn* is *e*, and this is the type that has to be chosen for it according to the TEP.

The exclusively quantificational expression *NIEMAND* does not have type *e* available and consequently may not function as an aboutness topic expression. A reflection of this is the fact that it sounds odd to say ‘*Tell me something about nobody.*’. However, it is not at all odd to have a dialogue like that in (44).

- (44) Q: Was tut niemand? (‘What does nobody do?’)  
R: Niemand raucht. (‘Nobody smokes.’)

I assume that the subject *niemand* moves to spec-TopP in (44R) and is thus a topic expression in the syntactic sense of being an expression in spec-TopP, although not an aboutness topic expression in its pragmatically characterised sense (see Section 3.1 above). This assumption ties in well with what we observe in (36R2), repeated below as (45R2), where the object *niemanden* has moved to clause initial position, resulting in a clause whose use in an answer to (45Q) is perfectly fine. The clause-initial position is spec-TopP and *niemanden* is a topic expression, although not an aboutness topic expression. Consequently, as an alternative to the derivation where TP is the topmost functional phrase with *niemand* in spec-TP, nothing prevents us from assuming the same kind of movement into spec-TopP for the subject *niemand* in (46R2).

- (45) Q: Wer bewundert niemanden? (‘Who admires nobody?’)  
R1: NIEMAND bewundert niemanden.  
R2: Niemanden bewundert NIEMAND.  
  
(46) Q: Wen bewundert niemand? (‘Who(m) does nobody admire?’)  
R1: NIEMANDEN bewundert niemand.  
R2: #Niemand bewundert NIEMANDEN.

But recall from Section 3.2.2 that the TEP leads to a difference in truth conditions between (46R1) and (46R2) while it does not lead to such a difference for (45R1) and (45R2), which accounts for the difference in acceptability between (45R2) and (46R2) in their respective contexts.

It will have become clear at this point that focus structure – more specifically, the presence of FocP or TopP dominating TP and movement of identificational focus expressions into spec-FocP and of topic expressions into spec-TopP, or the lack of FocP and TopP – has the task of telling the semantics whether a phrase is to be computed as a functor or as a functional argument in conformity to the context requirement set up by the open proposition that the utterance of the respective sentence is supposed to close – as long as there is a semantic choice of treating the respective phrase as functor or functional argument. A phrase in spec-TopP is semantically computed with its least complex semantic type (and corresponding denotation) that licenses functional composition. A phrase in spec-FocP is semantically computed with its most complex type (and corresponding denotation) that licenses functional composition. A potentially referential (type *e*) phrase in spec-TopP is an aboutness topic expression; an exclusively quantificational phrase in spec-TopP is not.

The conclusion of the argumentation so far is this: German allows for the projection of a functional phrase on top of TP, conveniently called FocP or TopP respectively, whose specifier position hosts, alternatively, an identificational focus expression or a topic expression; an identificational focus expression or a topic expression *must* move into spec-FocP or spec-TopP respectively. Consequently, a phrase that remains within the TP cannot be an identificational focus expression nor a topic expression.

#### 4. On narrow focus *in situ* versus *ex situ* in English

I now consider whether the conclusion just drawn for German can also be argued to hold for English. English is different from German in that, among other things, it does not have the finite V2

property. English allows for preposing – recall examples (1a) and (3a) – although to a different extent than German (see Section 2 above). On the basis of what has been said so far, it is straightforward to assume that English also allows for the projection of a FocP or TopP above TP and that the preposed phrases move into spec-FocP or spec-TopP. If this is granted, then the argumentation applied to German in Section 3 can be applied to English in a parallel fashion, though with one complication. The central examples are given in (47)–(50).

- (47) Q: Has your thinking about admiration given you any insights?  
 R: Nobody admires NOBODY.
- (48) Q: Who(m) does Tom admire?  
 R1: He admires NOBODY.  
 R2: %NOBODY he admires. (%NOBODY does he admire.)
- (49) Q: Who(m) does nobody admire?  
 R1: #Nobody admires NOBODY.  
 R2: %NOBODY nobody admires. (%NOBODY does nobody admire.)
- (50) Q: Who(m) does {only / even} Tom admire?  
 R1: #{Only / Even} Tom admires the PROFESSOR.  
 R2: The PROFESSOR is admired {only / even} by Tom.

As in German, the utterance of (47R) is appropriate out-of-the-blue or in the context of a question like (47Q), but inappropriate in the context of a question like (49Q), and (50Q) cannot be appropriately answered with (50R1). As in German, the inappropriateness is due to the fact that the context question requires a reply in which the object *nobody* or *the professor*, respectively, is an identificational focus expression. In (49R1) and (50R1) the object is in a position where it can function within an informational focus expression, but not as an identificational focus expression. For (49R1), this also entails that semantic composition results in a meaning which does not provide an appropriate answer to (49Q), nor does (49R1) provide a rejection of the existence implicature triggered by (49Q). In the case of (50), the R1-sentence does not differ truth-conditionally from the R2-sentence, yet the former is infelicitous and the passive version with *the professor* as an identificational focus expression in spec-FocP is fine.

In contrast to (49R1), the focus *in situ* utterance (48R1) is fine in the context of (48Q) since (48Q) activates an open proposition that can be closed by a predicate (informational) focus utterance, with *he* referring to Tom as aboutness topic expression, alongside the open proposition that can be closed by an argument (identificational) focus utterance. Since *nobody* and expressions like {only / even} *Tom* cannot be aboutness topic expressions, a predicate (informational) focus construal of (49R1) and (50R1) is neither possible nor activated by the respective context question.

As for German, the pivot of the argumentation is that the *in situ* focus position is not an identificational focus position.

The complication is that many native speakers of English find it hard to accept the focus preposing constructions in (48R2) and (49R2). However, some native speakers of English do accept sentences like (48R2) and (49R2). This is confirmed by Grewendorf (2002: 79), who refers to a judgement by Andrew Simpson, by Reeve (2011: 149), who mentions the sentence *NOTHING, he drank* as a “perfectly possible” example of focus preposing, and I have elicited this judgement from several speakers while others are reluctant to accept it.<sup>14</sup> The problem has to do with the general rarity of focus preposing, its being constrained by the contextual and processing factors mentioned in Section 2 above. Note that the marginality of (48R2) and (49R2) does not seem to be due to the fact that they do not show what is often called negative inversion, i.e. *DO*-support in these cases.

<sup>14</sup> For focus preposing versions of (50R2) (*The PROFESSOR {only / even} Tom admires.*) I anticipate additional complications due to the focus particles, which prevent me from trying to find native speaker support or evidence in the literature to the effect that they are acceptable.



Cormack & Smith (2000: 402), consider both the sentence *Nothing, I ate for breakfast* and its inverted, *DO*-supported, version *Nothing did I eat for breakfast* to be grammatical, characterising both as instances of focus preposing. Referring to these examples, they observe that “[f]or many speakers, the answer to [the question whether negative object preposing requires inversion] is ‘yes’, but for us and for many others from the South of England, it is ‘not always’” (2000: 401). The question what precisely the constraints on negative inversion are does not seem to have found an answer to everyone’s satisfaction yet (see e.g. Jacobsson 2007; but see also Buring 2005). But this problem seems orthogonal to the issue the present paper is concerned with (but see Cormack & Smith 2000). In sum, I would argue that (48R2) and (49R2) are grammatical, although marginal due to contextual constraints and processing reasons, and that consequently the argumentation presented for German applies analogically to English as well, not only in part but as a whole, a conclusion supported by the fact that (50R1) is infelicitous in the context of (50Q), although there is nothing wrong with it syntactically nor semantically.

## 5. Implications

The ideas and arguments presented above imply that focus and topic features as well as functional focus and topic phrases (FocP, TopP) are involved in narrow, pre-spell-out syntax, with the features driving the movement of (the phonological form of)<sup>15</sup> the respective phrase into spec-FocP or spec-TopP. Assumptions about the architecture of grammar that are in correspondence with this implication have been contested, recently by Fanselow & Lenertová (2011). The rest of the present paper is devoted to a defense of this implication in view of some – though not all – of the arguments put forward by Fanselow & Lenertová (2011). The aim is to show that it may be worthwhile to look at their data and arguments again from a different perspective.

Fanselow & Lenertová (2011: 173) point out that assumptions according to which topic and focus features are involved in syntactic derivation is incompatible with the inclusiveness condition,<sup>16</sup> and they refer to Chomsky (2008) for the view that “notions of information structure do not figure in the syntactic derivation, at least not in the sense of being formally responsible for movement” (Fanselow & Lenertová 2011: 173). As the quotation in footnote 16 shows, the inclusiveness condition is held as an *assumption* by Chomsky which should hold if human language is a perfect language – ‘perfect’ in the sense elaborated in the minimalist program (MP). As far as I can see, it has not yet been established beyond doubt that human language is perfect in the relevant sense, nor that the assumption of perfection in the sense of the MP is a fruitful working hypothesis in the long run; moreover, it is not clear in what sense the presence of topic and focus features, supplied to the syntactic derivation by the conceptual-intentional system at some stage, should render language imperfect.

A specific passage from Chomsky (2008: 151) that Fanselow & Lenertová’s (2011) approach is designed to substantiate is this: “Take, say, Topicalization of DP. EF [edge feature] of a phase head PH can seek any DP in the phase and raise it to Spec-PH. There are no intervention effects, unless we assume that phrases that are to be topicalized have some special mark. That seems superfluous even if feasible”. Quite to the contrary, the class of examples exemplified by (51)–(52) below, which has figured prominently in the preceding discussion, provides evidence that the object here needs to have some special mark (analysed as an identificational focus feature in the present

<sup>15</sup> See footnote 9 above.

<sup>16</sup> “A ‘perfect language’ should meet the condition of inclusiveness: any structure formed by the computation (in particular,  $\pi$  and  $\lambda$ ) is constituted of elements already present in the lexical items selected for N; no new objects are added in the course of computation apart from rearrangements of lexical properties [...]. Let us assume that this condition holds (virtually) of the computation from N to LF” (Chomsky 1995: 228).

paper), necessitating its movement to some sentence-initial spec-position (called spec-FocP in the present paper), and differentiating it from the same object in the minimally different version of the sentence with the object *in situ*.

- (51) Q: Wen bewundert niemand? ('Who(m) does nobody admire?')  
 R1: #Niemand bewundert NIEMANDEN. ('Nobody admires NOBODY.')
- (52) Q: Wen bewundert {nur / sogar} T.? ('Who(m) does {only / even} T. admire?')  
 R1: #{Nur / Sogar} T. bewundert den PROF. ('{Only / Even} T. admires the PROF.')

R2: NIEMANDEN bewundert niemand. ('NOBODY is admired by nobody')

R2: Den PROF bewundert {nur / sogar} T. ('The PROF is admired {only / even} by T.')

Closely connected to this point: focus and topic preposing in German is conceived of as optional by Fanselow & Lenertová (2011: 173). Indeed, if these movement operations were optional, a theory in which focus and topic features are assumed to drive pre-spell-out movement would hardly be tenable. However, the present paper argues that focus and topic preposing are not optional, but obligatory. If topic and focus features are present as material the syntactic derivation has to operate with, XP movement to spec-FocP or spec-TopP has to take place, and overtly so in German as well as, arguably, English. Again, the crucial piece of evidence is the obligatory preposing of the object displayed by (51)–(52) and similar examples. Sentences of this kind may very well be the only clear cases that prove the obligatoriness of preposing, and this may cause suspicion. However, I argue that the apparent optionality of preposing in other cases is due to the fact that an alternative focus-structural interpretation is possible for the focus *in situ* sentence (see the discussion of (39) above).

The most prominent kind of data used by Fanselow & Lenertová (2011) in their argumentation against the syntactic relevance of focus and topic features is what they call “subpart of focus fronting (SFF)” (Fanselow & Lenertová 2011: 174 and *pass.*). By this they mean data with preposed objects such as (10)–(11) above and (53)–(56) below (slightly adapted from Fanselow & Lenertová 2011: 175, 182, 197), with respect to which the authors ask “How can the fronting of just some part of the focus fulfil an agreement requirement for a focus feature?” (Fanselow & Lenertová 2011: 174), assuming that the examples instantiate sentence-wide focus and predicate-wide focus respectively.

- (53) Q: What's new?  
 R: 'Npaar BÜCHER hab' ich mir gekauft.  
 some books have I me bought  
 'I have bought some books.'
- (54) Q: And what happened then?  
 R: Ein TAXI hat sie gesagt, dass sie sich nehmen wird.  
 a taxi has she said that she SELF take will  
 'She said she would take a taxi.'
- (55) Q: What did he do?  
 R: Ein BUCH hat er zerrissen.  
 a book has he torn.up  
 'He tore up a book.'
- (56) Q: What has she been doing there so long?  
 R: Das AUTO denk ich hat sie versucht zu reparieren.  
 the car think I has she tried to repair  
 'I think she has been trying to repair the car.'

Indeed, it would seem impossible for a theory as presented in the present paper to account for these data if they had to be described as instances of sentence-wide focus or of predicate-wide focus with only a part of the predicate preposed.<sup>17</sup> It is my claim, though, that examples like these are not to be analysed in this way, but as cases where the preposed phrase is an identificational focus expression. Questions like ‘*What did you do?*’ or ‘*What happened?*’ do not necessitate a reply with predicate-wide or sentence-wide focus in order to be coherent. Very often, utterances with an identificational focus can easily be accommodated in the context of such questions. What is needed for coherence is a reply which provides a value for the variable of the respective open proposition or which contradicts an implicature triggered by the open proposition. These conditions are fulfilled by the examples adduced by Fanselow & Lenertová (2011). The utterances with identificational foci do provide a value for the variable constituting the radically open proposition activated by (53Q) and (54Q) and for the predicate variable *X* in the open propositions activated by (55Q) and (56Q). What Fanselow & Lenertová’s (2011) data show is that context questions like the ones mentioned do not necessarily trigger replies with predicate-wide or sentence-wide focus respectively. They do not prove that the preposed objects are not identificational focus expressions.<sup>18</sup>

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<sup>17</sup> See Frey (2005b: 157ff.) for a discussion of similar data presented by Fanselow in earlier work (Fanselow 2004). This discussion shows that ‘subpart of focus fronting’ (SFF) is not generally available in German and that in some cases the acceptability judgments involved are problematic. For Frey (2005b), SFF is only acceptable if the preposed phrase can be given a contrastive interpretation. He analyses these cases as involving movement of the preposed phrase into the specifier position of a functional contrast phrase (KontrP). Note that (identificational) focus may be argued to be inherently contrastive (see e.g. Breul 2004: 50f., 252f. and the literature mentioned there).

<sup>18</sup> The same point is made by Riester (2012) when he asks with respect to the conclusions drawn by Skopeteas & Fanselow (2010) from their “elicitation study into the syntactic realization of ‘identificational’ vs. ‘non-identificational’ focus (information focus)” (Riester 2012: 97): “Isn’t it possible that in those cases in which participants gave a non-canonical answer to a non-identificational question [...] what they (intuitively) intended was to nevertheless answer the question *identificational*?” (Riester 2012: 97; emphasis in the original).

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