Syntactic Realization of Verum Focus in English: A Case Study of VP Preposing*

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1. Introduction

In the literature, it has been pointed out that there is a grammatical category which emphasizes the truth value (or the polarity component) of a propositional content. This grammatical category is called *verum* in the recent term (e.g. Höhle (1992) and Lohnstein (2016)), which has been traditionally related to polarity (see Lohnstein (2016) for the brief summary). The concept of verum focus is proposed by Höhle (1992) to refer to a focus phenomenon in which the finite verb (or the complementizer) with a focal accent in C functions to emphasize the truth value of the proposition in German.¹ For concreteness, let us consider the following data showing that the focus is realized by the stressed finite verb in the matrix clause:²

- (1) a. ich habe Hanna gefragt, was Karl grade macht, und sie have Hanna asked, what Karl now and she does. hat die alberne Behauptung aufgestellt, dass er ein has the silly made, assertion that he a **Dreh**buch schreibt
 - screenplay writes
 - 'I asked Hanna what Karl is doing, and she made a silly claim that he's writing a SCREENplay.'
 - b. (das stimmt) Karl **schreibt** ein Drehbuch that is right Karl writes a screenplay '(That's right that) Karl IS writing a screenplay.'
 - c. es *trifft zu /* ist *wahr*, dass Karl ein Drehbuch schreibt it is correct./ is true that Karl a screenplay writes 'it is true that Karl is writing a screenplay.'

(Höhle (1992:13))

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¹ According to Höhle (1992), either the fronted finite verb or the complementizer can bear a focal accent to mark verum focus.

² The glosses and translations in (1a, b) are cited from Samko (2016:107-108).

The preceding context in (1a) shows that Hanna made a silly claim that Karl is writing a screenplay, and the truth value of Hanna's assertion is not yet presupposed to be true. The reply to (1a) in (1b) involves verum focus, which is realized on the finite verb *schreibt*; here, the utterer uses (1b) to emphasize the truth value of Hanna's assertion, as shown by the paraphrase of (1b) in (1c). In German, the verum focus effect is realized by a finite verb with a stress, while, in English, the same effect is shown by the so-called emphatic *do* as in (2a) or a stressed negative element as in (3):

- (2) a. I wonder whether Carl has finished his book.
 - b. Carl did finish his book.
 (Gutzmann and Castroviejo Miró (2011:144), with slight modifications)
- (3) John **never** lied. (Romero and Han (2004:654), bold ours))

The sentence with emphatic *do* in (2b) receives primary stress and serves as a positive answer to the indirect question in (2a). In this case, the sentence in (2b) not only gives the positive answer to the question but also accompanies the speaker's emphasis on the truth of the propositional content that Carl finished his book. The focalized negative element in (3) also indicates that the speaker puts emphasis on the truth value of the proposition that John never lied;³ the same sentence without focal stress on *never* does not convey such a verum focus interpretation. Thus, verum focus is realized on a focalized auxiliary/negation and functions to emphasize the truth value of a propositional content.

One of the issues with verum focus is whether (and how) it is involved in licensing certain syntactic operations. For example, López and Winkler (2000) argue that VP ellipsis in English is licensed by verum focus (more precisely, polarity focus in their term), or the presence of a focalized auxiliary/negation. If verum focus is seen as a necessary condition on licensing VP ellipsis, then the next question will be whether there are other syntactic operations which can be licensed by verum focus. In this connection, this paper will provide some pieces of evidence for the argument that VP preposing like the one in (4) is licensed by verum focus and attempt to extend López and Winkler's approach to it:

(4) As member of a Gray Panthers committee, we went to Canada to learn and [learn we did]. (Ward (1990:743))

³ In terms of polarity focus, the focal stress on the negative expression functions to put emphasis on the negative polarity of the propositional content.

This paper is organized as follows. Section 2 reviews López and Winkler's (2000) arguments for verum focus in VP ellipsis and their analysis. Adapting López and Winkler's (2000) mechanism, Section 3 proposes a hypothesis that VP preposing is licensed by verum focus. The section also provides some pieces of evidence for the proposed hypothesis. Section 4 further discusses the difference in information structure between VP ellipsis and VP preposing, with special reference to the subject status. Finally, section 5 draws conclusions.

2. López and Winkler (2000)

As briefly mentioned in Section 1, López and Winkler (2000) argue that VP ellipsis in English is licensed by verum focus. Their argument is made on the basis of two observations: the emphasis on the truth value of a proposition and the obligatory focal stress on an auxiliary or negation. Let us first look at the following examples:

- (5) a. John has not seen "Wag the Dog" but Peter has.
 - b. Peter has seen "Wag the Dog" but John has **not**.

(López and Winkler (2000:624), bold ours)

According to López and Winkler, the function of verum focus in VP ellipsis is to either affirm or negate that there is an event that is introduced in the first coordinate sentence. For example, the first sentence describes the situation in which John has not seen the movie titled "Wag the Dog," and the second sentence with the elided VP emphasizes that the same situation is not true of Peter. Second, both the auxiliary and negation in bold in (5a, b) must receive focal stress; therefore, the auxiliary cannot undergo Aux reduction, as shown in (6).

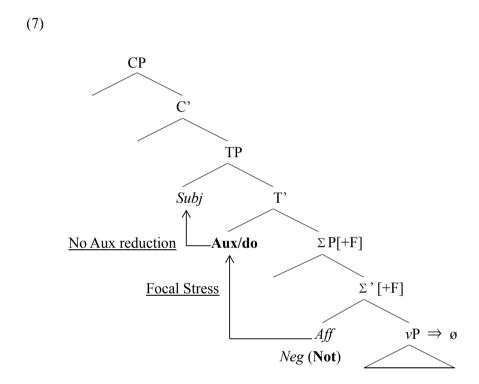
(6) * John had not read Dostoyevsky's Idiot but PETER'S.

(López and Winkler (2000:638))

Adapting Laka's (1990) Sigma system, López and Winkler (2000) proposes an analysis of the verum focus effects observed in (5) and (6). They first assume that the Sigma (Σ) projection is located below T in English and encodes the polarity value of a sentence either as affirmative or negative.⁴ More specifically, the sigma

⁴ Laka (1990) argues that the syntactic position of the Sigma projection is not uniform across languages. For example, the syntactic structure of Basque is different from that of English in the sense that the Sigma projection is higher than T. The syntactic position of the Sigma projection in a language is determined according to whether (i) IP deletion is available and/or (ii) there is a

head (Σ^0) possesses either the empty affirmative feature or the negative feature in English, and the latter is phonologically realized as *not*. Further assuming that the accented sigma head is focus-marked (cf. Selkirk's (1995) argument-structural approach), they propose that VP ellipsis in English is licensed if the following two conditions hold: (i) VPA is coherently [-F] and (ii) Σ^0 is [+F]. To sum up, their proposal is shown below:



According to their mechanism, the (accented) sigma head with [+F] encodes verum focus, which derives its interpretive and phonological effects (cf. (5) and (6)). On the interpretive side, verum focus realized by the sigma head with [+F] functions to emphasize the polarity value of a propositional content. On the phonological side, verum focus is realized on the sigma head as focal accent. More precisely, when the sigma head with [+F] possesses the empty affirmative feature, the phonological accentuation (i.e. the phonological effect of the focus feature) is realized on the auxiliary in the T head, which is adjacent to the sigma head, because the empty

subject-object asymmetry in negative polarity item licensing.

It should be also noted here that the sigma head is endowed with polarity features like the empty affirmative feature or the negative feature, but the Focus feature is assigned to the sigma head independently.

affirmative feature has no phonological material to receive focal stress.⁵ As a consequence, it is impossible for the auxiliary in the T head to undergo Aux reduction, as we have seen in (6), repeated below as (8), because the phonological focus effect becomes invisible at PF.⁶

This section has reviewed López and Winkler's (2000) analysis of the verum focus effects observed in VP ellipsis. Adapting their mechanism, the next section proposes a hypothesis that verum focus licenses VP preposing and provides some pieces of evidence for the hypothesis.

3. VP Preposing and Verum Focus

3.1. Proposal

As we have already seen in the previous section, López and Winkler (2000) propose that verum focus is seen as a necessary condition for licensing VP ellipsis. An interesting issue that arises here is whether or not other syntactic operations, as well as VP ellipsis, are also sanctioned by verum focus. In this connection, it will be interesting to compare VP ellipsis with VP preposing like the one in (4), repeated below as (9), because they share a similar syntactic configuration in which the auxiliary *do* emerges at the end of a sentence, except that VP preposing includes a topic VP at the beginning of the sentence (e.g. Emonds (1976) and Aboh (2006)).

(9) As member of a Gray Panthers committee, we went to Canada to learn and [learn we did]. (= (4))

Within the generative framework, it has been argued that VP preposing is syntactically licensed because the auxiliary at the T(I) head satisfies ECP (e.g. Chomsky (1986) and Roberts (1990)). This traditional argument may be interpreted as suggesting that the occurrence of the auxiliary in VP preposing also relates to verum focus. Thus, it will be hypothesized that VP preposing is sanctioned by verum focus, or the obligatory presence of a focalized auxiliary (or focalized negation). If verum focus is substantiated from VP preposing, then what

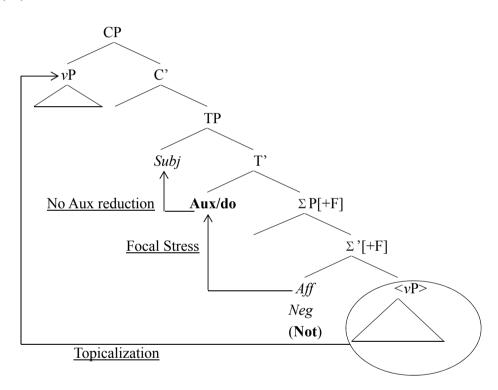
⁵ López and Winkler (2000) assume that the sigma head undergoes head-movement to T, but for the sake of simplicity, we adopt Laka's (1990) explanation of the realization of the phonological focus effect on the T element.

⁶ It is generally assumed that Aux reduction is a PF operation. Applying Aux reduction to the structure in (7) amounts to nullifying the focal accent realized on the sigma head which phonologically indicates verum focus.

satisfies ECP in VP preposing will be the sigma head with [+F].

More concretely, as shown in the structure in (10), the sigma head with [+F] is expected to license preposing vP to [Spec, CP], which is regarded as a kind of topicalization (e.g. Emonds (1976) and Aboh (2006)). If the hypothesis is correct, it will be expected that the auxiliary or negation in VP preposing shows the interpretive and phonological properties of verum focus. The next subsection provides several pieces of evidence for the hypothesis that verum focus is a necessary condition for licensing VP preposing.

(10)



3.2. Supportive Evidence

The first piece of evidence comes from the property of *proposition assessment*, described by Ward (1990) and Huddleston and Pullum (2002). Although they do not use the term *verum focus*, proposition assessment clearly indicates the presence of verum focus in VP preposing. Huddleston and Pullum state that VP preposing "has the focus on the polarity of the clause, positive or negative, and serves as a means of assessing the truth of the proposition expressed. (Huddleston and Pullum (2002: 1376))." For concreteness, let us consider the following example:

(11) At the end of the term I took my first exams; it was necessary to pass if I was to stay at Oxford, and [pass I did].

(Huddleston and Pullum (2002:1377))

The first sentence in (11) mentions the necessity of passing if the person in question was to be able to stay on at Oxford; it does not entail that the person in question passed. Then, the second sentence with VP preposing emphatically affirms that the person in question passed the first exams. Thus, VP preposing in (11) implies that the speaker affirms a commitment to the proposition explicitly expressed in the preceding discourse. Ward (1990), furthermore, points out another interpretive property which indicates verum focus: VP preposing cannot be used when the truth value of a proposition is already presupposed in the preceding discourse. This property is illustrated in the following example:

(12) I am so proud of Andy for getting a hundred on his exam.

And get a hundred he did.

(Ward (1990:752))

The first sentence involves the implicative verb *be proud*, which takes a presupposed proposition as its complement; in other words, the gerundive complement presupposes that both the speaker and the hearer share the knowledge that it is true that Andy got a hundred on his exam. Thus, it is odd that the speaker emphasizes the presupposed truth value again. This discourse property can be accounted for if we assume that VP preposing involves verum focus; that is, if there is no salient proposition whose truth value is necessary to be emphasized, VP preposing is infelicitous.

The second piece of evidence comes from Roberts' (1990) observation that Aux reduction is impossible in VP preposing. Let us consider the following contrast:

(13) a. He claimed he could take first place, and taken first place he has -!
b. *He claimed he could take first place, and taken first place he's -!
(Roberts (1990:379))

The contrast above suggests that the auxiliary in VP preposing cannot undergo Aux reduction. This pattern is the same as the one with VP ellipsis in (6). Within the GB framework, Roberts (1990) argues that VP preposing must satisfy ECP at PF because Aux reduction is not available. His argument implies that the presence of

the auxiliary at the T(I) head is required to morphologically support the Tense affix. From the perspective of verum focus, Roberts' PF requirement is understood as a phonological effect which indicates verum focus realized on the sigma head with [+F].

In this subsection, we have provided several pieces of evidence for the hypothesis that VP preposing, as well as VP ellipsis, is licensed by verum focus. On the interpretive side, VP preposing shows the proposition assessment effect which is naturally captured in terms of verum focus, or the sigma head with the focus feature; on the phonological side, the ban on Aux reduction in VP preposing is attributed to the sigma head with the focus feature. Thus, the arguments provided so far suggest that López and Winkler's (2000) mechanism can be extended to VP preposing.

The discussions above suggest that VP ellipsis and VP preposing are similar in that they are licensed by verum focus, or the focalized sigma head. The next section provides an argument that they differ from each other in that the subject of the elided VP may receive a contrastive focus interpretation, while that of the preposed VP doesn't.

4. Further Discussion

López and Winkler (2000) argue that verum focus in VP ellipsis can be interpreted (either) as presentational focus or contrastive focus. They assume that the former is evoked when the sigma head is assigned the focus feature [+F]; the latter is when the sigma head covertly moves (through T) to C at LF. For example, the elided VP in (14B) allows a presentational focus reading.

- (14) A: Who did what? (having Anna and Sandra in mind)
 - B: ANNA LEFT but SANDRA DIDN'T.

(López and Winkler (2000:636))

The answer to the *wh*-question by person B in (14) involves two different events; a leaving event by Anna and a not-leaving event by Sandra. In this case, the two different events are introduced as new information; the assertive negation in (14B) is assumed to be realized by the sigma head with [+F] and conveys a presentational reading. The answer to the question in (15) by person B, on the other hand, carries a contrastive focus interpretation.

(15) A: Can John solve the problem?

B: No. he CAN'T

(López and Winkler (2000:637))

The contrastive focus reading in (15) is obtained by assuming that the focalized sigma head undergoes head-movement to C at LF. Thus, López and Winkler's (2000) mechanism allows the focalized sigma head to receive either a presentational focus reading or a contrastive focus reading; furthermore, their mechanism opens a new possibility that if the focalized sigma head receives a presentational focus reading, the subject of a sentence will carry contrastive focus.

More concretely, López and Winkler's (2000) mechanism makes a further prediction that the subject of the elided VP receives a contrastive focus interpretation when the sigma head is allowed to convey presentational focus. They argue that this prediction is borne out by the following example:

(16) A: Some frat guys will bring the booze.

B: No, MARY will (not the frat guys).

(López and Winkler (2000:652), with slight modifications)

The subject of the elided VP in (16) is interpreted as contrastive focus, and the auxiliary *will* conveys presentational focus. This interpretive pattern is expected because their assumption allows the focalized sigma head to receive presentational focus and leaves room for the rest of the sentence (i.e. the subject) to get a contrastive focus reading.

Having the discussions above in mind, let us examine whether the same pattern as the one in (16) can be observed in VP preposing. Our informant reported that VP preposing, unlike VP ellipsis, does not allow a contrastive focus reading on the subject of the preposed VP, as shown in (17).

(17) A: Some frat guys will bring the booze.

B:* (No,) Bring the booze MARY will (not the frat guys).

The difference between (16) and (17) seems to point to the peculiar nature of the preposed VP. In the case of VP preposing, the preposed VP behaves as a topic (or a VP anaphor) which establishes an anaphoric relation to its antecedent VP including the subject in the preceding sentence. In the case of VP ellipsis, on the

⁷ Our informant, a native speaker of English from Canada, judged the sentence by person B in (17) as an unacceptable response to the preceding sentence uttered by person A.

other hand, no such anaphoric relationship is established between an elided VP and its antecedent. The contrast between (16) and (17) needs further investigations, and so we will leave for future research the question of how the contrast is accounted for in a principled way.

5. Concluding Remarks

Following López and Winkler's (2000) approach to verum focus, we argued that VP preposing shows verum focus effects on the sigma head with [+F]. As for verum focus effects, the parallelism between VP ellipsis and VP proposing can be captured under López and Winkler's (2000) mechanism. The discourse property imposed on a subject in VP ellipsis, however, differs from that in VP preposing: the subject of the ellipted VP may receive contrastive focus, while that of the preposed VP may not. We tentatively conclude that this difference is attributed to the possibility that the preposed VP (including the subject) establishes an anaphoric relationship with the antecedent VP, and therefore the subject of the preposed VP is obligatorily behaves as a topic. We will leave for future research the question of whether such an analysis is on the right track.

Finally, we would like to conclude by mentioning a further possibility to analyze VP preposing from a cross linguistic perspective. We proposed that the focalized sigma head encodes verum focus and licenses VP preposing. In this connection, Aboh (2006) argues that VP preposing in English falls under the class of the so-called predicate clefts (or predicate doubling) (cf. (18)). If we extend our proposal to predicate clefts, it will be expected that predicate clefts express verum focus cross-linguistically; in fact, the derivation of predicate clefts seems to involve the focalized sigma head realizing verum focus. The relevant data are provided below:⁸

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(18) a. Russian

Napisat'[-to] stat'ju[-to] ja (stat'ju)

write.<sub>INF</sub>(-PTCL) article.<sub>ACC</sub>(-PTCL) I.<sub>NOM</sub> (article.<sub>ACC</sub>)

napisala,

write.<sub>PST.FEM.S</sub>

'As for writing the article, I did write it.'

(Aboh and Dyakonova (2009:1040))
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⁸ The following abbreviations are used here: ACC = accusative, CL = clitic, INF = infinitive, Neg = negation, Nom = nominative, PST = past, PTCL = particle, Top = topic.

b. Spanish

Comprar. Juan ha comprador un libro. pero no buy._{INF} Juan has bought book but not 10 ha leído CL has read

'As for buying, it is true that Juan has bought a book, but he never read it afterwards'

(Vicente (2007:64))

c. Japanese

Taro-wa ringo-o muita ni/koto/no-wa mui-ta Taro-Top apple-Acc peel-past ni/koto/no-Top peel-past (ga tabe-na-katta).

But eat-Neg-PST

'As for Taro's peeling the apple, he did peel it, (but he didn't eat it).'
(Ishihara (2010:58))

As the examples in (18) show, all the translations include emphatic *do* and the word *true*. Thus, we further would like to pursue the possibility that the focalized sigma head licenses predicate clefts cross-linguistically. It should be noted, however, that predicate clefts are slightly different from VP preposing in English in the sense that both the preposed VP and the stranded V(P) are pronounced and they allow an adversative reading, as *but* in the translations indicates. Given this point, it seems that the predicate clefts in (18) have two interpretive properties; a verum focus interpretation and an adversative reading. At this point, it remains unclear how the two interpretive properties of predicate clefts are accounted for.

REFERENCES

Aboh, Enoch. O. (2006) "When Verbal Predicates Go Fronting," ZAS Papers in Linguistics 46, 21-48.

Aboh, Enoch O. and Marina Dyakonova (2009) "Predicate Doubling and Parallel Chains," *Lingua* 119, 1035-1065.

⁹ Samko (2016) points out that VP preposing in English differs from predicate clefts in that "[t]he preposed ν P certainly does not contrast with some other ν P in (or recoverable from) the discourse. Instead, the opposite is true: The preposed ν P recapitulates the content of some other ν P in the discourse or inferable from the discourse." Thus, the preposed VP cannot bear contrastive topic (CT in his notation) intonation, namely fall-rise B accent:

⁽i) a. FRED_{CT} ate the BEANS_F b. * [EAT THE BEANS]_{CT} he DID_F

- Chomsky, Noam (1981) Lectures on Government and Binding, Foris, Dordrecht.
- Chomsky, Noam (1986) Barriers, MIT Press, Cambridge.
- Emonds, Joseph (1976) A Transformational Approach to English Syntax: Root, Structure-Preserving, and local Transformations, Academic Press, New York.
- Gutzmann, Daniel and Elena Castroviejo Miró (2011) "The Dimensions of Verum," *Empirical Issues in Syntax and Semantics* 8, ed. by O. Bonami and P. C. Hofherr, 143-165.
- Höhle, Tilman N. (1992) "Über Verum-Fokus im Deutschen," *Linguistische Berichte, Sonderheft* 4, 13-56.
- Huddleston, Rodney and Geoffrey K. Pullum (2002) *The Cambridge Grammar of the English Language*, Cambridge University Press, Cambridge.
- Ishihara, Yuki (2010) "Non-Identical Verb Forms in the Japanese Predicate Doubling Construction," *Linguistic Research* 26, 39-65, The University of Tokyo.
- Laka, Miren I. (1990) Negation in Syntax: On the Nature of Functional Categories and Projections, Doctoral dissertation, MIT.
- Lohnstein, Horst (2016) "Verum Focus," *The Oxford Handbook of Information Structure*, ed. by C. Féry and S. Ishihara, 290-313. Oxford University Press, Oxford.
- López, Luis and Susan Winkler (2000) "Focus and Topic in VP-Anaphora Constructions," Linguistics 38, 623-664.
- Nagata, Shohei and Masatoshi Honda (2016) "Predicate Clefts at the Syntax-Semantics Interface," paper presented at the 37th Annual Meeting of the Tsukuba English Linguistics Society, November 19-20, University of Tsukuba.
- Nagata, Shohei and Masatoshi Honda (2017) "On the Syntactic Realization of Verum Focus in English: A Case Study of VP Preposing," poster presented at the ELSJ 10th international spring forum 2017, April 22-23, Meiji Gakuin University.
- Roberts, Ian (1990) "Some notes on VP-fronting and head government," *Grammar in Progress: GLOW Essays for Henk van Riemsdijk*, ed. by J. Mascaró and M. Nespor, 387-396, Foris, Dordrecht.
- Romero, Maribel and Chung-Hye Han (2004) "On Negative Yes/No Questions," *Linguistics and Philosophy* 27, 609-658.
- Samko, Bern (2016) Syntax and Information Structure: The Grammar of English Inversions, Doctoral dissertation, University of California.
- Vicente, Luis (2007) *The Syntax of Heads and Phrases: A Study of Verb (Phrase) Fronting*, Doctoral dissertation, Leiden University.
- Ward, Gregory L. (1990) "The Discourse Functions of VP Preposing," Language 66, 742-763.

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