On Gisbert Fanselow's (2002) Argument Against VP Remnant Movement

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Abstract

The theory of chain linearization I propose in a number of works predicts a typology in which German would exemplify a type of language in which some cases of incomplete category fronting do not involve VP remnant movement. This is precisely what Gisbert Fanselow argues for in one of his papers. In this note, I present this argument in its dialectical background and respond to some issues which arise from it.

1. Copy Deletion

In my first journal publication, Trinh (2009, 2010), and subsequently my doctoral dissertation and book publication, Trinh (2011, 2019), I propose the following constraint on the linearization of chains.

(1) Constraint on Copy Deletion (CCD)

Copy Deletion can apply to β in a chain (α, β) only if β ends an XP, i.e. only if the rightmost morpheme of β coincides with the rightmost morpheme of a maximal projection

I also propose that languages are divided into those in which Copy Deletion applies categorically and those in which it applies conditionally. This distinction can be considered a parameterization of Copy Deletion.

(2) Parameterization of Copy Deletion

- a. Copy Deletion must apply (Type A)
- b. Copy Deletion must apply when it can (Type B)

English is a Type A language. This is evidenced by the fact that topicalization of a verb in English is possible only if the verb is intransitive.

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(3) English

- a. *buy John certainly will that book
- b. sleep John certainly will

Assuming that intransitives are really transitives with a null object NP $_{\emptyset}$ (Hale and Keyser 1993, 2002), the analyses of (3-a) and (3-b) are (4-a) and (4-b), respectively.

(4) a. *buy_i John certainly will [$_{\text{VP}}$ buy_i this book] b. [$_{\text{VP}}$ sleep NP₀]_i John certainly will [$_{\text{VP}}$ sleep NP₀]_i

Since Copy Deletion must apply in English, the lower copy of *buy* in (4-a) must delete, but then CCD is violated, because this copy does not end an XP. In (4-b), however, what is topicalized is the whole VP, so deletion of the lower copy in this case is deletion of VP, which is, of course, an XP.

Hebrew is a Type B language. Topicalization of a verb in Hebrew requires doubling when the verb is transitive. When it is intransitive, doubling is allowed, but not required (Landau 2006, 2007).

- (5) a. liknot Dan kiva *(liknot) et ha-sefer buy Dan hoped buy the book 'As for buying, Dan hoped to buy the book'
 - b. lalexet Dan kiva (lalexet)walk Dan hoped walk'As for walking, Dan hoped to walk'

Fronting of transitive *liknot* 'buy' results in a chain whose lower copy does not end an XP. Given that Hebrew is Type B, Copy Deletion cannot and hence does not apply.

(6) $liknot_i$ Dan kiva [VP $liknot_i$ et ha-sefer]

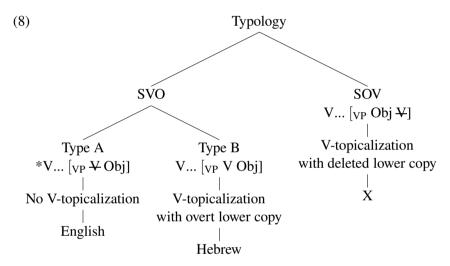
When the verb is intransitive, i.e. when the complement of V is NP_{\emptyset} , there are two scenarios: either V is fronted to the exclusion of NP_{\emptyset} and Copy Deletion cannot apply, or VP including NP_{\emptyset} is fronted and Copy Deletion must apply.

(7) a. lalexet_i Dan kiva [$_{VP}$ lalexet_i $_{P0}$] b. [$_{VP}$ lalexet $_{P0}$]_i Dan kiva [$_{VP}$ lalexet $_{P0}$]_i

Since V fronting and VP fronting have the same phonological profile in case

V is intransitive, the "optionality" of doubling is observed. Languages similar to Hebrew include Vietnamese (Trinh 2009), Vata (Koopman 1984, 2000), Nupe (Kandybowicz 2006, 2007, 2008), Russian (Abels 2001), and Gungbe (Aboh and Dyakonova 2009).

Note that these languages, like English, are SVO languages. What happens when the language is SOV? In an SOV language, V ends VP. Thus, CCD is satisfied when V is fronted, which means that V topicalization in an SOV language always results in the lower copy being deleted. We predict, then, the following typology.



The question then arises whether we can find a language that fills the slot occupied by X in (8). Such a language would constitute supporting evidence for my theory of Copy Deletion, as it confirms that the typology predicted by this theory. My claim is that German is X. We know that German VP is head-final, as evidenced in (9-a), and that German has "incomplete category fronting" (ICF), which shows a transitive verb in [Spec,C] as topic and a gap at the verb's base position. ICF is exemplified by (9-b).

- Hans wird das Buch lesen (9) a. Hans will the book read
 - Lesen wird Hans das Buch b. read will Hans the book

But here is the problem: it has been claimed that the possibility exists in German of "remnant VP movement". This is movement of VP which contains traces, i.e. deleted copies of constituents which have moved out of VP by way of either scrambling or extraposition (Thiersch 1985, den Besten and Webelhuth 1987, 1990, Webelhuth 1992, Kayne 1998, Müller 1998).

(10) VP remnant movement

- a. Step 1: vacate the VP
 - (i) Scrambling: $XP_1 \dots [VP \ t_1 \ V]$
 - (ii) Extraposition: $\begin{bmatrix} VP & t_1 & V \end{bmatrix} \dots XP_1$
- b. Step 2: move the "remnant" VP $\begin{bmatrix} VP & t_1 & V \end{bmatrix}_2 \dots t_2 \dots$

Since both scrambling and extraposition are independently attested in German, the argument that remnant VP movement is possible in this language can safely be considered sound. Does this mean that German is not X? The answer is no. To maintain that German is not X, we need to defend (11-a). To maintain that German is X, we need to defend the negation of (11-a) which is (11-b).

- (11) a. All cases of ICF involve VP remnant movement
 - b. Some cases of ICF do not involve VP remnant movement

It turns out that (11-b) is exactly what Gisbert argues for in Fanselow (2002). The main thrust of his argument is the following claim: stranded elements in ICF constructions can be elements of VP that have not scrambled or extraposed. Let us now turn to discuss this argument.

2. Gisbert's Argument

First, it should be noted that the title of Gisbert's paper, "Against remnant VP movement", is a bit misleading, as it gives the impression that he is arguing against the *possibility* of remnant VP movement in German. In reality, the argument is much less ambitious: it is one against the *necessity* of remnant VP movement in German. Gisbert presents a number of cases of ICF and shows

that what moves to [Spec,C] cannot be a remnant VP, but he stresses that the results of his investigation "should not be interpreted [...] as evidence against remnant movement as such, and not as evidence against the application of remnant movement in German in other contexts" (Fanselow 2002: 91). In other words, what he argues for is (11-b), as I mentioned above.

The argument, to repeat, consists in showing that elements of VP can be stranded in ICF which have not scrambled or extraposed. I will present this argument not in full but only in part, using the negative quantifier niemanden 'no one' and the wh-indefinite wen 'someone' as examples, and referring the reader to Fanselow (2002) for other facts which corroborate the same conclusion. Note, again, that even one case of ICF which does not involve remnant VP movement would suffice to verify (11-b), which is the claim we want to defend.

Let us start with *niemanden*, which can be observed to lack the ability to scramble. As the contrast in (12) shows, niemanden cannot move to the position between the subject and the complementizer dass, which is where scrambled elements land.

- dass der Fritz niemanden geküsst hat (12)that the Fritz no one kissed has
 - b. *dass niemanden der Fritz geküsst hat the Fritz kissed has that no one

However, (13) shows that *niemanden* can be stranded in an ICF construction.

(13)geküsst hat der Fritz niemanden kissed has the Fritz no one

The same holds for indefinite wen. The contrast in (14) shows that wen cannot scramble and (15) shows that it can be stranded in an ICF construction.

- geküsst hat (14)dass der Fritz wen that the Fritz someone kissed has
 - der Fritz geküsst hat b. *dass wen that someone the Fritz kissed has
- (15)geküsst hat er bestimmt schon wen kissed has he certainly already someone

But the fact that elements of VP which do not scramble can be stranded in an ICF construction is not yet conclusive argument against a remnant VP movement analysis for that ICF construction. There is another possible way to vacate the VP: extraposition. Thus, a proponent of remnant movement might still say that *niemanden* and *wen* have extraposed in (13) and (15). Having established that these expressions do not scramble, we now have to show that they can be stranded *in non-extraposed positions*. Let us now do just that. We know that extraposed constituents in German must be outside the "middle field", which is circumscribed by the base position of C and T. This is evidenced by the paradigm in (16).

- (16) a. [C dass] er von Maria geträumt [T hat] that he about Maria dreamt has
 - b. [C dass] er geträumt [T hat] von Maria that he dreamt has about Maria
 - c. *[C dass] er geträumt von Maria [T hat] that he dreamt about Maria has

The basic word order, where the object is to the left of the verb, is shown in (16-a). In (16-b), the object has extraposed out of the middle field, and the sentence is acceptable. In (16-c), the object has also extraposed but still stays within the middle field, and the sentence is deviant. Now, going back now to indefinite *niemanden* and *wen*, which we know do not scramble. We can observed that they can be stranded inside the middle field in German.

- (17) a. geküsst [$_{C}$ wird] er niemanden haben [$_{T}$ t_{wird}] kissed will he no one have
 - b. geküsst [C dürfte] er schon öfter wen haben [T $t_{\text{dürfte}}$] kissed might he already often someone have

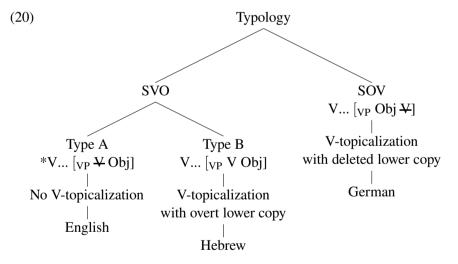
In (17-a) and (17-b), T has moved to C, so its base position is not phonologically realized. However, we can safely assume that the stranded elements are inside the middle field, since they are to the left of the auxiliary *haben*, which we can independently argue to be inside the middle field.

(18) [C] dass er sie geküsst haben [T] dürfte that he her kissed have might

Since the indefinites are stranded inside the middle field in (17), they cannot have extraposed, and since they do not scramble either, they must be inside VP. But this means that the topicalized verb in [Spec,C] cannot be a remnant VP, which in turn means that some ICF constructions in German must be instances of V topicalization. As German is SOV, we predict that the lower V copy has to be deleted. This prediction is borne out by the fact that doubling in German is excluded.

*geküsst [C] wird] er niemanden geküsst haben [T] t_{wird}] (19)will he no one kissed have kissed b. *geküsst [c dürfte] er wen geküsst haben $[T t_{dürfte}]$ might he someone kissed have kissed

We can thus safely assume that German exemplifies the type of languages that we have been looking for: an SOV language which requires Copy Deletion when V is fronted from VP.



3. Gisbert's Analysis

Gisbert has shown that some cases of ICF in German cannot be remnant VP movement. I take these cases to be V topicalization, and point out that my theory makes the correct prediction that Copy Deletion has to apply, given that VP is head-final in German. But V topicalization is, of course, not the only possible analysis of these cases. As we know, no analysis is logically necessary for any set of facts. Gisbert, as it turns out, does *not* take the sentences in (17) to exemplify V topicalization. In fact, he denies that V topicalization exists in German. He provides a different story for ICF. I will present it using the ICF construction in (21) as example.

(21) gelesen wird Hans das Buch haben

- a. wird Hans $[v_{P_{haben}}$ das Buch $[v_{P_{gelesen}}$ gelesen] haben]
- b. $[VP_{gelesen} \text{ gelesen }]_1 \text{ wird Hans } [VP_{haben} \text{ das Buch } t_1 \text{ haben }]$ $\rightarrow \text{Spell-Out}$
- **c.** wird Hans $[VP_{haben}]$ das Buch $[VP_{gelesen}]$ gelesen $[VP_{haben}]$
- d. wird Hans $[v_{P_{haben}}]$ das Buch $[v_{P_{gelesen}}]$ t_2 gelesen₂-haben t_2 θ -roles assignment at LF

Here is how the derivation of (21) goes, according to Gisbert. The sentence starts out as in (21-a), where *gelesen* is the complement of *haben* and projects its own VP. The object *das Buch* is merged as the *specifier* of *haben*. Then, the whole VP *gelesen* is fronted as regular XP movement. There is no V topicalization and no remnant VP movement. After this step, Spell-Out kicks in, resulting in the observed pronunciation with *gelesen* in [Spec,C] and a gap at its base position. The derivation then continues in the covert component, which is indicated by gray in (21). There is, first, reconstruction of *gelesen* back to its base position. This is the step in (21-c). Finally, there is incorporation of *gelesen* into the position of *haben*, creating the complex predicate *gelesen-haben* which assigns the correct θ -role to the specifier *das Buch*.

Note that none of the steps in (21) distinguishes between SOV and SVO languages. Thus, the question arises as to why ICF is not possible in English or French. Gisbert is aware of this question: "A satisfactory account of incomplete VP fronting must not only show how the construction arises in German, it must also offer a reason for why it is impossible in English, French and other SVO languages [...] [Müller (1998)] is certainly correct in stating that none of the previous non-remnant movement analyses of incomplete VP preposing had a good answer to the question of why there are no counterparts to this operation in SVO languages" (Fanselow 2002: 98).

The answer Gisbert gives for SVO languages is this: θ -roles assignment in these languages cannot wait until LF but must happen right away. Thus, English lacks ICF, because the steps in (21-c) and (21-d), which can take place in the covert component in German, must take place before any other

step. After the main verb has incorporated into the auxiliary and assigns a θ -role to the object, fronting it is not possible anymore due to the ban on excorporation.

4. Comments on Gisbert's Analysis

In my opinion, Gisbert's analysis raises two difficult questions. First, what does being an SVO language have to do with when θ -role is assigned? Headedness distinguishes between languages with respect to how things are pronounced. It is a property that describe the syntax-phonology mapping. The assignment of θ -role, in contrast, is intuitively part of the syntax-semantics mapping. It is hard, therefore, to imagine how the correlation proposed by Gisbert could be explained. The second question pertains to languages like Hebrew and Vietnamese. These are SVO languages that allows ICF, with the only difference from German being that the lower copy of the verb must be overt. We could, of course, extend Gisbert's account and say that SVO languages are divided into those which ban excorporation and those which allows it provided the lower copy is not deleted. But this is, obviously, not an illuminating account.

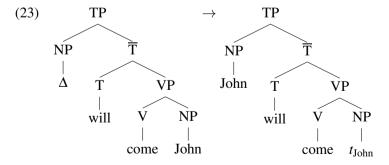
The third question I have about Gisbert's account has to do with semantics. The account, whatever its problems might be, does derive the correct pronunciation, which is considered the minimum requirement on any syntactic analysis. It is, however, true of the field that syntacticians' attitude towards semantic interpretation is often much more nonchalant. This is a strange fact, given the consensus that it is, after all, logical form that is derived by exclusively syntactic rules, while the path from Spell-Out to phonetic form is assumed to involve extra-syntactic processes. In my opinion, Gisbert's analysis of ICF suffers from the same shortcoming. It leaves unclear, for example, what the meaning of the complex predicate gelesen-haben is, and how this meaning can be derived from fusion of gelesen and haben, each of which should, presumably, have meaning on their own as independent lexical items. Intuitively, the auxiliary haben is a sentential operator. Its logical argument is the event of Hans reading the book. What the main verb gelesen expresses is intuitively a relation, in this case one which obtains between Hans and the book. If the output of syntax, i.e. logical form, is to be interpreted compositionally, it is hard to imagine how the get the right truth condition from the structure in (21-d).

In my view, what prevents Gisbert from accepting that German has V topicalization is his belief in the Chain Uniformity Principle (CUP).

(22) Chain Uniformity Principle (Chomsky 1995) Copies of a chain must have identical phrase structural status (either all are maximal or all are minimal).

Here is what he says in the paper: "The specifier position of CP is a landing site for maximal projections only. Therefore, analyses of incomplete category fronting [...] in which submaximal projections are moved [...] are not very attractive from a theoretical point of view [...]. If submaximal projections could be promoted to the status of a maximal projection after movement [...], the chain [...] would violate the Chain Uniformity Principle [...]" (Fanselow 2002: 93–94).

Here is how I would respond to Gisbert's concern about the CUP. First, note that the CUP is the modern incarnation of the Structure Preservation Hypothesis (SPH) which constrains the mapping from deep to surface structure (Emonds 1964). The idea is that transformations should only change grammatical functions, not grammatical categories. In other words, expressions may move from one place to another, but an N will not become an V, and a V will not become a VP, for example. It was postulated that deep structure and surface structure basically have the same "skeleton". What the "transformations" do is "substitute" the empty symbols Δ with expressions in the same structure, as illustrated by the A-movement of the internal argument of *come* from its base position to [Spec,T] in (23).



But the SPH makes no sense when there is no deep structure. In the current minimalist framework, all transformations are generalized transforma-

tion. There is no "substitution". Positions are "created" in each step of the derivation. Thus, the SPH cannot even be formulated. If the purpose of the CUP is to capture the SPH, we may ask whether the CUP makes sense. Furthermore, note that even if we assume that the CUP is valid, it is not obvious that V topicalization is a violation, given the relative definition of maximal and minimal projections (Chomsky 1995).

- (24)X is maximal iff X does not project a.
 - X is minimal iff X is not a projection of anything b.

Given (24), the topicalized V is both maximal and minimal. But if something is both maximal and minimal, it is, of course, minimal. The chain which results from moving V from VP to [Spec,C] would thus consist of two copies both of which can be said to be minimal. It is a trivial task to formulate the CUP to include such a case.

5. Conclusion

The theory of chain linearization proposed in Trinh (2009, 2010, 2011, 2019) consists of a Constraint on Copy Deletion (CCD) and a parameter with respect to whether doubling is possible. This theory predicts a typology in which German would fill a slot if it has V topicalization. One way to argue that German does have V topicalization is to show that some ICF constructions in this language do not involve remnant VP movement. This is what Gisbert Fanselow does in Fanselow (2002). However, Gisbert proposes an analyis which avoids the assumption that V topicalization is possible in German. I recount Gisbert's empirical argument and analysis, and make a case that the worries which motivate his analysis are unwarranted.

References

Abels, Klaus (2001): The predicate cleft construction in Russian. In: Annual Workshop on Formal Approaches to Slavic Linguistics: The Bloomington meeting, 2000. Univ of Michigan/Michigan Slavic, p. 1.

Aboh, Enoch Olad and Marina Dyakonova (2009): 'Predicate doubling and parallel chains', Lingua 119(7), 1035–1065.

Chomsky, Noam (1995): The Minimalist Program. MIT Press, Cambridge.

den Besten, Hans and Gert Webelhuth (1987): Adjunction and remnant topicalization in the Germanic SOV-languages. In: Proceedings of GLOW 42...

- den Besten, Hans and Gert Webelhuth (1990): Stranding. *In:* G. Grewendorf and W. Sternefeld, eds., *Scrambling and Barriers*. John Benjamins Publishing Company, Amsterdam, pp. 77–92.
- Emonds, Joseph (1964): Root and Structure Preserving Transformation. PhD thesis, MIT.
- Fanselow, Gisbert (2002): Against remnant VP-movement. *In:* A. Alexiadou, E. Anagnostopoulou, S. Barbiers and H.-M. Gaertner, eds., *Dimensions of movement: From features to remnants*. Benjamins, pp. 91–125.
- Hale, Ken and Samuel Jay Keyser (1993): On argument structure and the lexical expression of syntactic relations. MIT Press.
- Hale, Ken and Samuel Jay Keyser (2002): *Prolegomenon to a theory of argument structure*. MIT Press.
- Kandybowicz, J. (2007): Fusion and PF architecture. In: *Proceedings of the 30th Annual Penn Linguistics Colloquium*. Vol. 13, pp. 85–98.
- Kandybowicz, Jason (2006): On Fusion and Multiple Copy Spell-Out: The Case of Verb Repetition. *In:* J. Nunes and N. Corver, eds., *The Copy Theory of Movement on the PF Side*. Oxford University Press.
- Kandybowicz, Jason (2008): *The Grammar of Repetition: Nupe Grammar at the Syntax-Phonology Interface*. John Benjamins Publishing Co.
- Kayne, R. (1998): 'Overt versus covert movement', Syntax 1(2), 128–191.
- Koopman, Hilda (1984): The Syntax of Verbs: From Verb Movement Rules in the Kru Languages to Universal Grammar. Foris, Dordrecht.
- Koopman, Hilda (2000): Unifying predicate cleft constructions. In: The Syntax of Specifiers and Heads: Collected Essays of Hilda J. Koopman. Routledge, pp. 357–374.
- Landau, Idan (2006): 'Chain Resolution in Hebrew V(P)-fronting', *Syntax* **9**(1), 32–66.
- Landau, Idan (2007): 'Constraints on Partial VP-Fronting', Syntax 10(2), 127–164.
- Müller, Gereon (1998): Incomplete Category Fronting: A Derivational Approach to Remnant Movement in German. Kluwer.
- Thiersch, Craig (1985): *VP and Scrambling in the German Mittelfeld*. University of Tilburg.
- Trinh, Tue (2009): 'A constraint on copy deletion', *Theoretical Linguistics* **35**(2-3), 183–227.
- Trinh, Tue (2010): 'Edges and linearization: A reply', *Theoretical Linguistics* **36**(1), 93–110.
- Trinh, Tue (2011): Edges and Linearization An Investigation into the Pronunciation of Chains. PhD thesis, Massachusetts Institute of Technology.
- Trinh, Tue (2019): *The Edginess of Silence: A Study on Chain Linearization*. De Gruyter, Berlin.

Webelhuth, G. (1992): *Principles and parameters of syntactic saturation*. Oxford University Press, USA.