

# On Gisbert Fanselow's (2001/2003) Approach to Scrambling. Prospects for Base-Generation

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## Abstract

In this paper we will evaluate Gisbert Fanselow's (2001/2003) base-generation approach to scrambling. We will first show that many arguments against base-generation are generally inconclusive w.r.t. the movement vs. base-generation debate. Then we will demonstrate that two of the strongest arguments for a movement approach (based on focus projection and the CED) do not constitute a problem for Fanselow (2003*a,b*). In the last part of the paper, we will discuss two pieces of data that represent serious challenges for a base-generation approach, viz., the immobility of DP-internal genitives and intervention effects with floating quantifiers, and conclude that they favor a movement approach after all.

## 1. Introduction

German is among the languages that display flexible word order. The focus of this paper is the treatment of word order flexibility in the so-called middle-field, the portion of the clause between C and V. For overview papers on scrambling that provide detailed background on all relevant aspects, see Abels (2015), Frey (2015), and Salzmann (to appear).

One of the fundamental questions concerning scrambling is how word order flexibility as in (1) comes about, where subject and object can occur in either order. Either the arguments can be merged in flexible order, viz., the two orders are base-generated, or, one is derived from the other via movement.

- (1) a. dass keiner            das Buch gelesen hat  
      that no.one.NOM the book read    has  
      b. dass das Buch keiner            gelesen hat  
      that the book no.one.NOM read    has  
      'that no one read the book'

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\*I am grateful to the audience at the workshop for helpful discussion, especially to Artemis Alexiadou, Daniel Hole, Gereon Müller, Andreas Pankau, and Thomas Weskott.

Both possibilities have been advocated in the literature, with base-generation representing the much less prominent position. Gisbert Fanselow's contributions in Fanselow (2001), Fanselow (2003*a,b*) represent almost the only and by far the most explicit base-generation approach within Chomskyan syntax (for base-generation approaches in non-derivational/declarative frameworks, see Abels 2015: 1424–1432). Base-generation approaches have not received much attention in the literature (as can, e.g., be seen in the marginal treatment in overview papers like Abels 2015, Frey 2015). They are often quickly set aside, albeit, in my view, on rather weak grounds.

The goal of this paper is to provide a thorough assessment of Gisbert Fanselow's base-generation approach to scrambling. We will see that many of the arguments that are usually presented against base-generation approaches are ultimately inconclusive when applied to the specific implementation in Gisbert Fanselow's works. There do remain two sets of data, though, that remain problematic for a base-generation approach, which entails that a movement approach is eventually superior. For more detailed discussion of the movement vs. base-generation issue, see Salzmann (to appear).

## **2. Base-Generation in Fanselow (2001), Fanselow (2003*a,b*)**

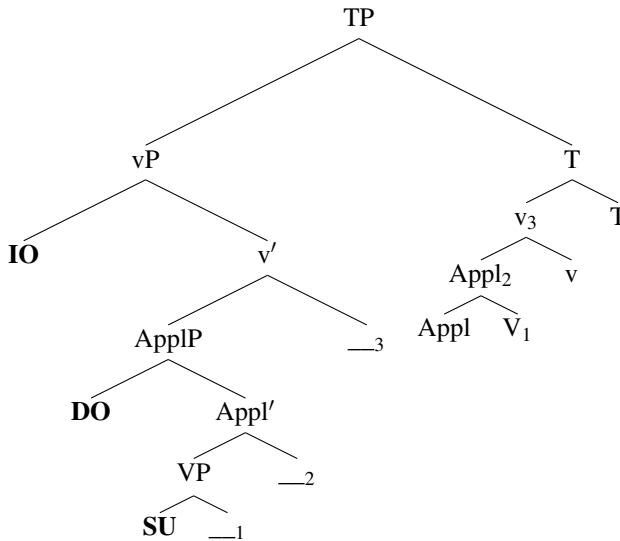
Gisbert Fanselow's approach is developed in three different papers. While they contain a common core, the later papers contain important modifications that will make a significant difference in the evaluation of the approach.

An assumption underlying all versions is that the checking of the selectional requirements of verbs and theta-role assignment can be delayed. In Fanselow (2001), V, Appl and v incorporate into T at LF: The checking is then initiated by the parts of the complex head in T (V, v or T), from where they c-command all arguments (which are in vP). Since by assumption checking is relativized to specific case values (nominative, accusative, dative), there are no intervention effects. Consequently, the arguments can be freely merged/generated within vP, as, e.g., in (2).

For scrambling from coherent infinitives and scrambling from NPs and PPs into (a superordinate) VP, Fanselow (2001: 417–422) proposes that V, P and N form an (abstract) complex predicate with the governing verb via LF-incorporation (implemented by means of feature movement at LF). An argument of P, N or a lower V can then be merged within the higher vP because it will be c-commanded by its predicate that forms part of the complex head in

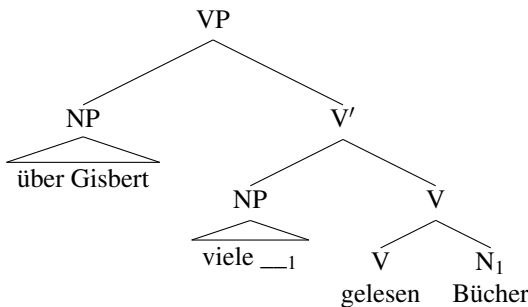
matrix T. PP-scrambling from NP as in (3-a) thus receives the analysis in (3-b) (LF-incorporation not indicated):

(2)



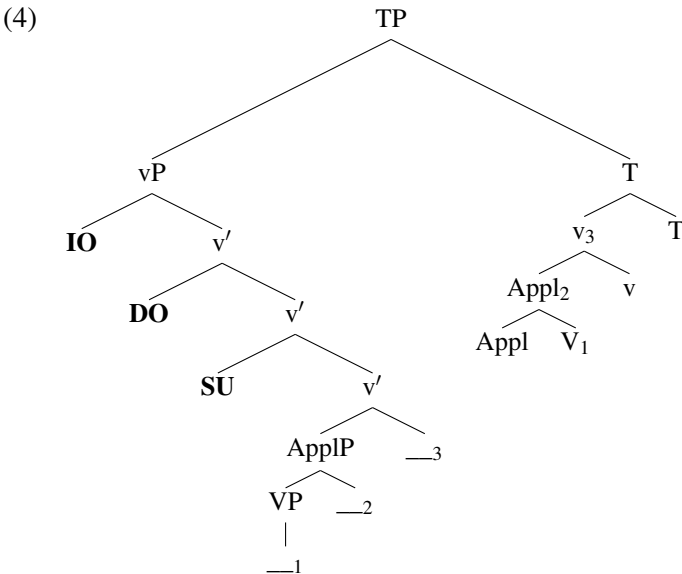
(3) a. dass ich [über Gisbert] viele Bücher gelesen habe  
 that I about Gisbert many books read have.1s  
 ‘that I read many books about Gisbert’

b.



Things are different in the slightly revised versions in Fanselow (2003a: 207–209, ex. 27), Fanselow (2003b: 16–18): It is proposed that an argument has to c-command the (possibly complex) predicate to receive a theta-role (thereby ruling out that an argument is base-generated too low, e.g., the argument of a matrix verb inside its complement VP, a possibility not ruled out in Fanselow 2001). Thus, arguments have to be merged within the projection

of their predicate or of a head into which their predicate has incorporated. This implies that the subject or the IO cannot be merged as a complement of V given that they are arguments of *v*/Appl, respectively. Scrambling thus arises if an argument is merged in a projection dominating the projection of its predicate. Thus, if the DO precedes the IO (but follows the SU), it is merged in Spec,ApplP; if it precedes the subject, it is merged in Spec,vP (or TP). The VP then remains without an argument at every point of the derivation as in (4), where both the IO and the DO are merged above the SU:



### 3. Arguments against Base-Generation

In this section, we will discuss different types of arguments against base-generation. We will first briefly address arguments against base-generation that turn out to be inconclusive for mostly empirical reasons. Then, we discuss an argument against base-generation that does not constitute a problem for the specific implementation in Fanselow (2003*a,b*). Finally, we discuss two sets of data that present true challenges for Gisbert Fanselow's base-generation approach.

### 3.1. Inconclusive/Controversial Diagnostics/Arguments

The first two inconclusive arguments relate to possible evidence for a trace, the third concerns consequences of scrambling for locality.

One prominent argument for movement comes from the observation that scrambling licenses what seem to be parasitic gaps, see, e.g., Fanselow (2001: 411). Given that parasitic gaps are only licensed by movement, this could potentially be a strong argument for a movement approach to scrambling. However, the analysis of parasitic gaps in German is very contested, and there is no consensus on whether they actually represent proper parasitic gaps, see Abels (2015: 1418–1421) for details. Given these uncertainties, I set the argument aside as inconclusive.

Another important argument for movement comes from reconstruction effects. If they can be diagnosed with scrambling, they suggest the presence of a lower copy and thus movement. However, the empirical situation is rather complicated: w.r.t. binding (A/B/C, variable binding), scrambled constituents tend to be interpreted in their surface position; reconstruction for binding is partly possible with scrambling across the subject. The fact that scrambling leads to scope ambiguities is often taken to be a strong argument for movement (see Frey 2015, Haider 2017). However, there are various problems with the scope argument: First, the facts are contested, see Abels (2015: 1406, 1432–1434). Second, if both objects scramble across the subject but retain their unmarked order, only surface scope (between the objects) is possible, see Fanselow (2001: 415–416). This is unexpected under a movement account since it should be possible for one of the objects to be interpreted in its landing site and the other in its base-position.

Third, there is both recent corpus (Webelhuth 2022: 341–361) and experimental evidence (Fanselow et al. 2022) showing that inverse scope is to some extent available in the unmarked/non-scrambled order. Whatever the mechanism that is responsible for that (e.g., Quantifier Raising), it clearly opens up the possibility that the reconstructed/non-surface scope reading is not the result of reconstruction but of whatever allows the lower of two XPs to take scope over the higher one. Therefore, the scope argument is inconclusive.<sup>1</sup>

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<sup>1</sup>An arguably more robust argument for movement comes from the scrambling of idiom chunks, which is shown to be possible in Fanselow (2012: 272–277) and Wierzba et al. (2023). Under base-generation it not clear how the idiomatic meaning can obtain given that the parts of the idiom are not contiguous at any point of the derivation; under a movement approach, however, the idiomatic NP can reconstruct and then form a unit with the verb..

The third inconclusive argument comes from freezing effects: If scrambling involves movement, one expects the displaced XP to be opaque for further subextraction given some version of the Condition on Extraction Domains/the Freezing Principle. This prediction is borne out according to Müller (1998: 143–146). However, the facts are contested and one can find numerous counter-examples in the literature, see, e.g., De Kuthy and Meurers (2001: 151), Fanselow (2003*b*: 22), and Haider (2017: 51–53). Whatever may turn out to be the correct empirical generalization, it should be pointed out that both the classical CED and more recent implementations like Müller (2010) would also block subextraction if the scrambled-phrase is base-generated as a specifier (but see also Fanselow 2002: 107ff.). Thus, the freezing argument is also ill-suited to decide the movement vs. base-generation debate.

### 3.2. An Argument that does Not Argue against the Implementation in Fanselow (2003*a*): Focus Projection

Another prominent argument that is usually taken to favor movement accounts is based on an observation going back to Höhle (1982) that only non-scrambled orders allow for focus projection (see Frey 2015: 526–528 and Haider 2017: 16–18). More precisely, in an out-of-the-blue context, wide focus is only possible if the nuclear accent falls onto the structurally lowest XP, viz., the sister of the lexical verb (in which case it ‘projects’ to the whole clause/sentence). This is illustrated in the following paradigm:

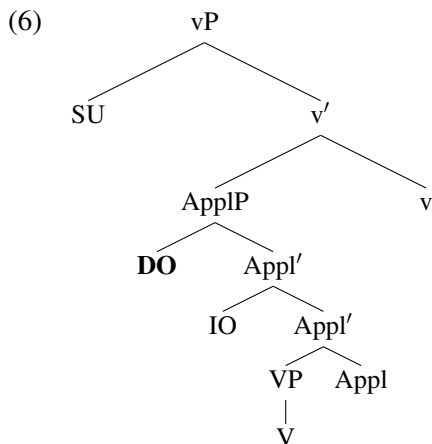
#### (5) What happened?

- a. Gerade hat Maria dem Milliardär das BILD  
just.now has Maria the billionaire.DAT the painting.ACC  
gezeigt.  
shown  
‘Just now Maria has shown the billionaire the painting.’
- b. #Gerade hat Maria dem MilliarDÄR das Bild gezeigt.
- c. #Gerade hat Maria das Bild dem MilliarDÄR gezeigt.
- d. #Gerade hat Maria das BILD dem Milliardär gezeigt.

The crucial example is (5-c), where the nuclear accent is on the verb-adjacent constituent, but focus projection is still not possible. The paradigm can be made sense of if it is assumed that the focus projection rule applies to the unmarked/base order. Given that in (5-c) the sister of the verb is a trace under a

movement account (the DO has scrambled over the IO), nuclear stress actually does not fall onto the lowest XP. The lack of focus projection is therefore correctly predicted.

This is a strong argument against base-generation as implemented in Fanselow (2001): The IO or the SU could be projected as sister of V and one would thus wrongly expect focus projection to be possible also in (5-c). Things are crucially different in Fanselow (2003a: 206–209), where the difference between marked and unmarked orders is captured configurationally. Recall that arguments have to be merged within the projection of their predicate P (or higher if P incorporates into a higher head). Under the assumption that all arguments are introduced by different heads, viz., V, Appl, and v, a marked order will be visible in that one of the heads will not have a complement/specifier. Thus, if the DO is not projected within VP, but, e.g., within ApplP as in (6), the DO is no longer the most deeply embedded constituent and hence cannot receive stress by the Nuclear Stress Rule; if it bears stress, focus projection is impossible:



Thus, contrary to many claims in the literature, the argument from focus projection is not decisive for the movement vs. base-generation debate.

### 3.3. True Challenges for Fanselow (2003a,b)

While many of the arguments against base-generation turn out to be inconclusive or do not argue against the specific implementation in Fanselow (2003a,b),

we will show in this subsection that there are two types of phenomena that turn out to favor a movement account after all.

### 3.3.1. *Scrambling of DP-Internal Genitives*

The first argument is based on the observation that scrambling itself seems to be subject to the same locality constraints as bona fide cases of movement, viz., cannot extract PPs from subjects, indirect objects and definite/specific DPs, and is only possible if verb and direct object form a natural predicate, see Müller (1995: 122–124). While several of the facts are disputed and counter-examples can be found in De Kuthy and Meurers (2001: 147–151), there remain empirically robust restrictions: Neither scrambling from indirect objects, (7-a), nor scrambling of DP-internal genitives, (7-b), is possible:

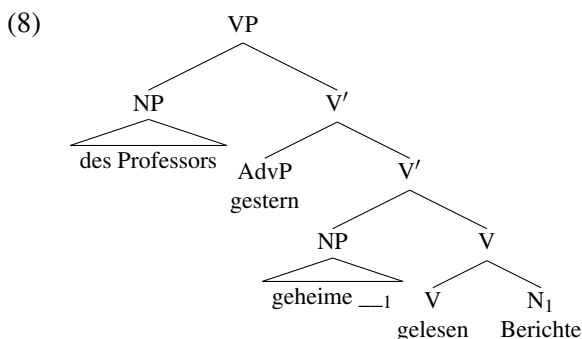
- (7) a. \*daß man [<sub>PP</sub> über die Liebe]<sub>1</sub> neulich einen Preis [<sub>NP</sub> einem  
 that one about the love lately a.ACC prize a.DAT  
 Film \_\_\_<sub>1</sub>] verliehen hat  
 movie awarded has  
 ‘that one lately awarded a prize to a movie about love’
- b. \*dass ich [<sub>NP</sub> des Professors]<sub>1</sub> gestern [<sub>NP</sub> geheime  
 that I.NOM the.GEN professor.GEN yesterday secret  
 Berichte \_\_\_<sub>1</sub>] gelesen habe  
 reports read have.1s  
 ‘that I read secret reports by the professor’

Recall that in Fanselow (2001, 2003*a,b*) scrambling of subconstituents of NP is the result of incorporation of N into V and merger of N’s argument within VP. Since incorporation is subject to c-command and the CED, this limits scrambling to target complements of V. However, in Fanselow (2001), where any argument can be merged as a complement, whatever is merged as a complement of V should be transparent, contrary to fact. Thus, scrambling from indirect objects is wrongly predicted to be possible under these assumptions (note that (7-a) is ungrammatical irrespective of the order between IO and DO). Things are different again in Fanselow (2003*a,b*), where a scrambled constituent is necessarily base-generated in a higher projection than its predicate and indirect objects and subjects are introduced in specifiers: incorporation will be limited to direct objects merged as complements of V; thus, the predictions are largely the same as those of the movement approach.



Since indirect objects are projected in Spec, ApplP, incorporation of N is not possible and scrambling from IOs as in (7-a) is thus correctly blocked.

However, the fact that DP-internal genitives cannot scramble as in (7-b) constitutes a serious problem for both Fanselow (2001) and Fanselow (2003a,b). First, a base-generation approach fails to capture the general immobility of DP-internal genitives, viz., the fact that they also can neither be wh-moved, topicalized nor extraposed. Second, the specific implementation of base-generation in these works seems ill-equipped to block scrambling of DP-internal genitives: if they are arguments of N/n, incorporation of N/n into V should license the merger of genitives within VP as in (8):



There seems to be no straightforward way to allow scrambling of PP-complements of nouns and disallow scrambling of DP-internal genitives at the same time in this type of approach (the latter would in fact feed further A'-movement, leading to overgeneration). This consequently represents an argument for scrambling as movement after all.<sup>2</sup>

<sup>2</sup>Admittedly, the ban on extracting DP-internal genitives in German is also difficult to account for under a movement approach, not the least since such genitives can be extracted in other languages. Müller (1995: 49–50) proposes that the ban on extracting DP-internal genitives is not movement-related but follows from the fact that after incorporation of N into V, DP-internal genitives can no longer receive case. In Fanselow's base-generation approach, however, case-checking at LF by the various segments of the complex head in T (including P) is taken to be possible and thus should extend to checking of genitive through the incorporated N.

The so-called Müller-Takano generalization is often considered an argument for a movement approach to scrambling. According to this generalization, remnant movement must not involve the same movement type as was involved in the remnant-creating movement step. Thus, scrambling a VP from which DP-scrambling has taken place is ungrammatical:

3.3.2. *Intervention Effects*

The second true challenge for base-generation approaches to scrambling comes from facts discussed in Heck and Himmelreich (2017):

- (9) a. \*Wer<sub>2/i</sub> hat \_\_\_<sub>2</sub> [einen Professor]<sub>1</sub> alles<sub>i</sub> \_\_\_<sub>1</sub> vergöttert?  
 who.NOM has a professor.ACC all idolized  
 intended: ‘Who all idolized a professor?’
- b. \*Wem<sub>2/i</sub> hat sie \_\_\_<sub>2</sub> [einen Professor]<sub>1</sub> alles<sub>i</sub> \_\_\_<sub>2</sub> \_\_\_<sub>1</sub>  
 who.DAT has she a professor.ACC all  
 vorgestellt?  
 introduced  
 intended: ‘Who all did she introduce a professor to?’
- (10) a. Wen<sub>1/i</sub> hat [ein Professor] \_\_\_<sub>1</sub> alles<sub>i</sub> \_\_\_<sub>1</sub> beleidigt?  
 who.ACC has a professor.NOM all insulted  
 ‘Who all did a professor insult?’
- b. Wen<sub>1/i</sub> hat sie [einem Professor]<sub>2</sub> \_\_\_<sub>1</sub> alles<sub>i</sub> \_\_\_<sub>2</sub> \_\_\_<sub>1</sub>  
 who.ACC has she a professor.DAT all  
 vorgestellt?  
 introduced  
 ‘Who all did she introduce a professor to?’

The first pair suggests that an indefinite cannot occur between a wh-phrase and the floating quantifier it is associated with, pointing towards some kind of intervention effect. The pair in (10) shows that this cannot be a constraint applying to the surface structure. Heck and Himmelreich (2017) argue that the paradigm provides evidence for intermediate representations and, crucially, that scrambling involves movement. On their account, the generalization

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- (i) \*dass [\_\_\_ zu lesen] [das Buch] keiner versucht hat  
 that to read.INF the book no.one.NOM tried has  
 ‘that no one tried to read the book’

Müller (2015: 65)

There are good accounts of this generalization under derivational approaches (based on the A-over-A principle). According to Fanselow (2002: 117-118), the base-generation account can explain this effect as well: Given that the fronted VP is scrambled, it will be base-generated in the projection of the matrix V/auxiliary. Since it has not moved, it cannot reconstruct. Because of this, the head of the fronted VP, which is a non-complement, cannot incorporate into the matrix V/auxiliary and as a consequence, arguments of the fronted VP cannot be merged in the projection of the governing restructuring verb/auxiliary. Thus, (i) can be subsumed under the CED under base-generation.

covering the data in (9) and (10) is as follows (where the antecedent is the *wh*-phrase and the associate the floating quantifier):

(11) *Generalized intervention asymmetry*

An antecedent  $\alpha$  can establish a relation with an associate  $\beta$  in the presence of a co-argument  $\gamma$  that precedes  $\beta$ , if and only if  $\gamma$  is higher on the hierarchy *nom*>*dat*>*acc* than  $\alpha$ .

As the authors show, this presupposes that arguments are introduced in a fixed order (and objects need to scramble in parallel to vP), an assumption that is incompatible with both Fanselow (2001) and Fanselow (2003*a,b*); see Salzmann (to appear) for more details.

#### 4. Conclusion

The discussion in this paper has shown that robust arguments for either movement or base-generation in German scrambling are rather hard to come by. We discussed various prominent arguments against base-generation and showed that several of them are generally inconclusive w.r.t. the movement vs. base-generation debate (viz., parasitic gaps, reconstruction effects, freezing effects). Other arguments (focus projection, CED) constitute a problem for Fanselow (2001) but not for Fanselow (2003*a,b*). However, there remain at least two serious challenges for Fanselow (2003*a,b*), viz., the non-scrambleability of DP-internal genitives and intervention effects with floating quantifiers. Thus, while base-generation approaches fare significantly better than the literature may make one believe, movement approaches turn out to be superior after all.

#### References

- Abels, Klaus (2015): 40. Word Order. In: K. Tibor and A. Artemis, eds., *Syntax – Theory and Analysis. An international handbook. Volume 2*. De Gruyter Mouton, Berlin, pp. 1400–1448.
- De Kuthy, Kordula and Walt Meurers (2001): 'On Partial Constituent Fronting in German', *The Journal of Comparative Germanic Linguistics* 3(3), 143–205.
- Fanselow, Gisbert (2001): 'Features,  $\theta$ -Roles, and Free Constituent Order', *Linguistic Inquiry* 32(3), 405–437.
- Fanselow, Gisbert (2002): Against Remnant VP-Movement. In: A. Alexiadou, E. Anagnostopoulou, S. Barbiers and H.-M. Gärtner, eds., *Dimensions of Movement. From Features to Remnants*. John Benjamins, Amsterdam, pp. 91–125.

- Fanselow, Gisbert (2003a): 'Free Constituent Order: A Minimalist Interface Account', *Folia Linguistica* **37**(1-2), 191–232.
- Fanselow, Gisbert (2003b): 'Zur Generierung der Satzgliedabfolge im Deutschen', *Neuere Beiträge zur Germanistik* **112**, 3–47.
- Fanselow, Gisbert (2012): Scrambling as formal movement. In: A. Neeleman and I. Kučerová, eds., *Contrasts and Positions in Information Structure*. Cambridge University Press, Cambridge, pp. 267–295.
- Fanselow, Gisbert, Malte Zimmermann and Mareike Philipp (2022): 'Accessing the availability of inverse scope in German in the covered box paradigm', *Glossa: a journal of general linguistics* **7**(1).
- Frey, Werner (2015): 17. Word Order. In: K. Tibor and A. Artemis, eds., *Syntax – Theory and Analysis. An international handbook. Volume 1*. De Gruyter Mouton, Berlin, pp. 514–562.
- Haider, Hubert (2017): 'Mittelfeld' phenomena: Scrambling in Germanic. In: H. v. Riemsdijk and M. Everaert, eds., *The Wiley Blackwell Companion to Syntax. 2nd edition*. Wiley Blackwell, Oxford.
- Heck, Fabian and Anke Himmelreich (2017): 'Opaque Intervention', *Linguistic Inquiry* **48**(1), 47–97.
- Höhle, Tilman N. (1982): Explikationen für "normale Betonung" und "normale Wortstellung". In: W. Abraham, ed., *Satzglieder im Deutschen*. Gunter Narr, Tübingen, pp. 75–153.
- Müller, Gereon (1995): *A-bar syntax: A study in movement types*. Mouton de Gruyter, Berlin.
- Müller, Gereon (1998): *Incomplete category fronting: a derivational approach to Remnant movement in German*. Kluwer, Dordrecht.
- Müller, Gereon (2010): 'On Deriving CED Effects from the PIC', *Linguistic Inquiry* **41**(1), 35–82.
- Müller, Gereon (2015): Remnant movement in local derivational grammar. In: G. Grewendorf, ed., *Remnant Movement*. De Gruyter Mouton, Berlin, pp. 53–92.
- Salzmann, Martin (to appear): Word order in the German middle field – scrambling. In: K. Hartmann, J. Mursell and S. Wurmbrand, eds., *Handbook of Germanic Syntax*. De Gruyter, Berlin, available at <https://lingbuzz.net/lingbuzz/006866>.
- Webelhuth, Gert (2022): 'C-command constraints in German: A corpus-based investigation', *Zeitschrift für Sprachwissenschaft* **41**(2), 339–392.
- Wierzba, Marta, Jessica Brown and Gisbert Fanselow (2023): 'Sources of variability in the syntactic flexibility of idioms', *Glossa: a journal of general linguistics* **8**(1).