

Partial VP-fronting structure in German complex predicate constructions

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1 Introduction

The syntactic structure of German sentences can be effectively analyzed in terms of the left and right sentence brackets, which delineate three distinct syntactic domains: the *Vorfeld* ‘pre-field’, positioned before the left bracket; the *Mittelfeld* ‘middle-field’, situated between the left and right brackets; and the *Nachfeld* ‘post-field’, which follows the right bracket. As illustrated in (1), the complementizer *dass* ‘that’ occupies the left bracket, while the verbal complex *gegessen hat* ‘has eaten’ appears in the right bracket.

- (1) *dass* Leo ein Stück Schokolade gegessen hat
that Leo a.ACC piece chocolate eaten has
‘that Leo ate a piece of chocolate’

In German declarative clauses, the finite verb typically appears in the second position (V2), preceded by exactly one constituent in the pre-field,¹ as illustrated in (2), where an adverbial occupies the pre-field. This constituent can, in principle, correspond to a wide range of syntactic categories, including subjects, objects, adverbials, and even larger phrasal units. The pre-field has therefore generally been characterized as a position with considerable syntactic flexibility.

- (2) *Gestern hat* Leo ein Stück Schokolade gegessen.
yesterday has Leo a.ACC piece chocolate eaten
‘Yesterday, Leo ate a piece of chocolate.’

In particular, the placement of partial VPs in the pre-field has often been claimed in the literature to constitute a case of topicalization (Hinrichs & Nakazawa 1994); however, it remains unclear whether such structures should indeed be analyzed in this way. While the pre-field is known to admit a wide range of constituent types, the distributional constraints on partial VPs in this position remain insufficiently understood, particularly with respect to the discourse contexts in which they are licensed, as illustrated by examples such as (3) (from Hinrichs & Nakazawa 1994, 2000: 17c). This study examines the information-structural status of the partially fronted VP, in particular whether it should be analyzed as a topic or as part of a focus-related interpretation. More specifically, the present study assumes that although partial VP-fronting is syntactically possible, its acceptability is constrained by discourse-pragmatic conditions.

- (3) Ein Märchen erzählen wird er seiner Tochter.
the.ACC fairy.tale tell will he his daughter
‘He will tell his daughter the fairy tale.’

This study addresses this issue by focusing on partial VP-fronting in complex predicate constructions in the pre-field (Hinrichs & Nakazawa 1994, 2000; Kiss 1995; Müller 1997, 2026: Chapter 14). Specifically, it investigates how the acceptability of such partial VPs is influenced by discourse conditions through an experimental study. Based on the experimental results, the study proposes an analysis of partial VP-fronting in complex predicate constructions within the framework of Head-driven Phrase Structure Grammar (HPSG; Pollard & Sag 1994; Müller et al. 2021), with particular attention to the discourse conditions under which such structures are licensed.

¹ However, this traditional assumption has been challenged by observations suggesting that the pre-field may, under certain conditions, contain more than one constituent—a phenomenon commonly referred to as *mehrfache Vorfeldbesetzung* ‘multiple occupation in the pre-field’ (see Müller 2003 for examples).

2 Previous Research

The distribution of constituents in the pre-field has been argued to be sensitive to discourse-pragmatic factors. In particular, elements in the pre-field are often associated with discourse-linking functions such as topic, contrast, or scene-setting (Speyer 2008: 273–282). Based on corpus evidence, Speyer (2008: 284–287) shows that marked pre-field configurations are typically dispreferred in neutral contexts, but become more acceptable when they can be linked to the preceding discourse. This suggests that the distribution of pre-field constituents is constrained not only by syntactic factors, but also by information-structural and discourse-related conditions.

Against this background, the occurrence of partial VPs in the pre-field constitutes a particularly marked case. In German complex predicate constructions, the VP, consisting of the embedded predicate and its arguments, can appear in the pre-field, as illustrated in (4) (from Hinrichs & Nakazawa 1994, 2000: 17d).

- (4) [Ein Märchen erzählen] wird er seiner Tochter müssen.
a.ACC fairy.tale tell will he her daughter must
'He will have to tell his daughter a fairy tale.'

Although such structures are grammatically possible, they are typically dispreferred in neutral discourse contexts (Speyer 2008: 284–287). However, their acceptability improves when they can be linked to the preceding discourse. This suggests that the acceptability of partial VP-fronting may depend on how the fronted material relates to the discourse context. Despite these observations, the conditions under which partial VP-fronting is acceptable remain insufficiently understood. In addition, previous research has shown that VP-fronting cannot be analyzed as a straightforward case of topicalization, since topical material cannot be part of the constituent undergoing movement (Frey 2004: 28). This raises the question of how partial VP-fronting should be analyzed, particularly with respect to information structure, and under which discourse conditions such constructions become acceptable.

The present study addresses this issue by focusing on the acceptability of partial VP-fronting in complex predicate constructions. More specifically, it investigates the discourse environments in which such structures become more acceptable.

3 Testing: Acceptability judgments of partial VP-fronting in complex predicate constructions

Building on the discussions in Section 2, the present experiment was designed to examine under which discourse conditions partial VP-fronting in German complex predicate constructions is judged as acceptable by native speakers of German. To this end, a repeated-measures acceptability experiment was conducted using a 1–5 Likert scale, where 1 indicated *gar nicht akzeptabel* 'not acceptable at all' and 5 indicated *völlig akzeptabel* 'completely acceptable'. It specifically investigated whether the acceptability of partial VP-fronting varies depending on discourse configuration and the definiteness of the NP contained within the fronted VP. The experiment employed a 2x2 design with the factors: DISCOURSE CONDITION (*wh*-QUD vs. *topic-shift*) and NP DEFINITENESS (definite vs. indefinite). The dependent variable was the acceptability of partially VP-fronted responses in short dialogue contexts.

The first factor operationalized two types of Question under Discussion (QUD)-based discourse configurations, designed to manipulate how the partially fronted VP relates to the current QUD (Roberts 2012). The *wh*-QUD condition introduced an alternative set corresponding to possible values of the questioned argument, while the *topic-shift* condition established a referent as the aboutness topic of the subsequent proposition.² The second factor manipulated whether the NP contained within the fronted VP was definite or indefinite.³

² The question in the *topic-shift* condition, *Und was ist denn eigentlich mit dem Kollegen?* 'And what about the colleague, then?', was intended to promote an already discourse-accessible referent to the status of discourse topic rather than to request a new argument value. In other words, the goal was not to introduce a new referent, but to establish the referent that had already been introduced in the preceding context as the current aboutness topic.

³ Definiteness is often associated with discourse accessibility, and previous research has shown that indefinite NPs may also receive discourse-accessible interpretations in appropriate contexts (see Lambrecht 1994: Chapter 4–5). Therefore, the experiment included both definite and indefinite NP conditions to examine whether definiteness affects the acceptability of partial VP fronting. As illustrated in (i), the experiment also included target items in which the fronted phrase contained an indefinite NP.

Each target item consisted of a short dialogue including a contextual question followed by a response containing a partially fronted VP, as illustrated in (5) and (6). Example (5)⁴ represents the *wh*-QUD condition, in which the contextual question introduces an alternative set corresponding to possible values of the questioned argument. Example (6) represents the *topic-shift* condition, in which the contextual prompt establishes a referent as the aboutness topic of the subsequent proposition. This made it possible to examine whether the acceptability of partial VP-fronting differs systematically across discourse conditions and NP definiteness.

(5) *wh*-QUD condition

A: Der Forscher wird das Formular geben.
the.NOM researcher will the.ACC form give

‘The researcher will give the form.’

B: Wem genau wird er das Formular denn geben?
whom exactly will he the.ACC form PRT give

‘Who exactly will he give the form to?’

A: Dem Teilnehmer geben wird der Forscher das Formular.
the.DAT participant give will the.NOM researcher the.ACC form

‘The researcher will give the form to the participant.’

(6) *topic-shift* condition

A: Die Sekretärin wird dem Kollegen die Datei schicken.
the.NOM secretary will the.DAT colleague the.ACC file send

‘The secretary will send the file to the colleague.’

B: Und was ist denn eigentlich mit dem Kollegen?
and what is PRT actually with the.DAT colleague

‘And what about the colleague, then?’

A: Dem Kollegen schicken wird die Sekretärin die Datei.
the.DAT colleague send will the.NOM secretary the.ACC file

‘The secretary will send the file to the colleague.’

A total of nineteen native speakers of German (n=19) participated in the experiment. Figure 1 shows that the second factor, NP DEFINITENESS, did not have a noticeable impact on the acceptability of partially VP-fronted structures. As no clear difference was observed between definite and indefinite NPs, the factor DEFINITENESS was not included in the subsequent discussion. Figure 2 presents the distribution of acceptability ratings with respect to the first factor, DISCOURSE CONDITION. The results reveal a clear difference between the two conditions: responses containing partial VP-fronting in the *wh*-QUD condition received higher acceptability ratings (M=3.54) than those in the *topic-shift* condition (M=2.58). This difference was statistically significant, indicating a robust effect of discourse condition on the acceptability of partial VP-fronting.⁵⁶

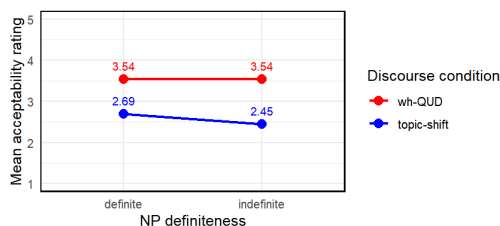


Figure 1: Acceptability of partial VP-Fronting across two factors

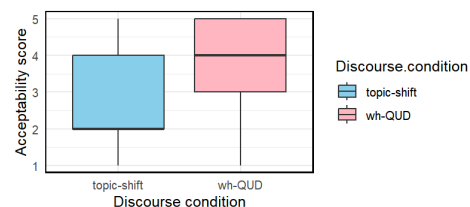


Figure 2: Frequency distribution of scores

- (i) Einem Benutzer senden wird der Techniker eine Nachricht.
a.DAT user send will the.NOM technician a.ACC message
‘The technician will send a message to a user.’

⁴ Here, focus projection refers to the possibility that the focus value associated with a constituent extends to a larger syntactic domain. While the focus value in the present examples is typically associated with the argument NP, projection may allow the event described by the predicate to form part of the focus domain, enabling an event-level interpretation (see Frey 2004: 28–29).

⁵ A Welch two-sample *t*-test confirmed that this difference was statistically significant ($t=9.02$, $p<.001$).

⁶ The data were additionally analyzed using linear mixed-effects models, and the effect remained significant after accounting for variation across participants and items.

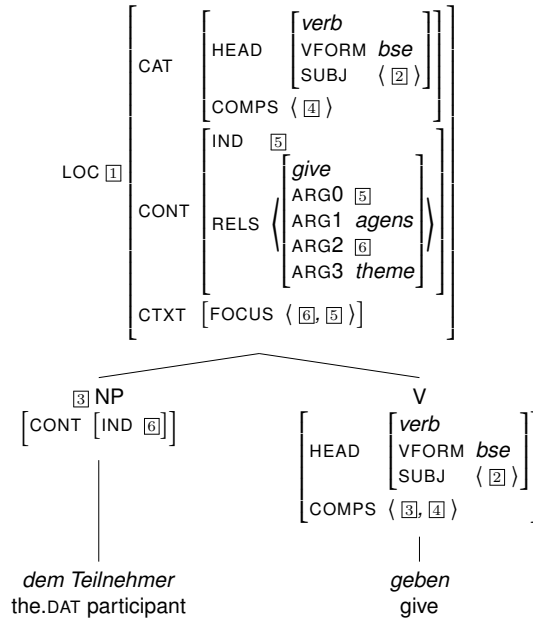


Figure 3: Analysis of the partially VP-fronted structure in a complex predicate construction

The results therefore suggest that partially VP-fronted responses are rated more acceptable in *wh*-QUD contexts than in *topic-shift* contexts. This indicates that partial VP-fronting is more compatible with discourse environments in which the argument NP functions as the focus value than with contexts primarily establishing an aboutness topic.

4 HPSG analysis: partial VP-fronting in German complex predicates

Based on the experimental results, we propose an analysis of the structure of partial VP-fronting in complex predicate constructions. Under this analysis, the fronted argument NP (e.g., *dem Teilnehmer* ‘the.DAT participant’) functions as the focus value, while the event expressed by the embedded predicate may be interpreted as part of the focus domain. Figure 3 illustrates the proposed analysis of partial VP fronting in complex predicate constructions.⁷

To account for the structure of the whole sentence, Figure 4 presents the analysis of the sentence *Dem Teilnehmer geben wird der Forscher das Formular* ‘The researcher will give the form to the participant’ (see Müller 2026: Chapter 14). The partially fronted VP, *Dem Teilnehmer geben* ‘the.DAT participant give’ is analyzed as a phrasal verbal constituent with LEX –,⁸ occupying the pre-field position as the filler in a long-distance dependency configuration. Its corresponding *gap* is licensed via the SLASH feature in the embedded clause (see Müller 2026: Chapter 9.2).

The semantic representation distinguishes the higher event associated with the auxiliary verb *wird* ‘will’ (IND [8]) from the embedded event (IND [9]) introduced by the embedded predicate *geben* ‘give’. The higher event is introduced by the auxiliary verb and relates to the embedded event introduced by the embedded predicate. The dative object NP *dem Teilnehmer* ‘the.DAT participant’ is represented by the semantic index [11], which functions as ARG2 of the *geben* relation. Crucially, the contextual feature encodes both the discourse environment licensing the construction and the focus structure associated with it. The feature QUD specifies the type of discourse context in which the partial VP fronting construction can felicitously occur. In particular, the feature VAR identifies the discourse variable introduced by the preceding *wh*-question. Within the FOCUS specification, the feature VALUE identifies the constituent that saturates this variable and functions as the focus value, whereas the feature DOMAIN

⁷ Figure 3 is a simplified local representation of the partially fronted VP, whereas Figure 4 provides the corresponding full clausal analysis at the level of the full sentence, enriched with discourse-related information (e.g., QUD) to capture the discourse configuration investigated in the experiment.

⁸ This study adopts Müller’s assumption that the value LEX is represented outside LOCAL, allowing phrasal verbal constituents (LEX –) to serve as fillers while their corresponding traces may remain specified as LEX + in long-distance dependency constructions.

References

- Frey, Werner. 2004. A medial topic position for german. *Linguistische Berichte* (198). 1–40.
- Hinrichs, Erhard & Tsuneko Nakazawa. 1994. Partial VP and split NP topicalization in German: An HPSG analysis. In Erhard Hinrichs, Walt Detmar Meurers & Tsuneko Nakazawa (eds.), *Partial-VP and split-NP topicalization in German—an HPSG analysis and its implementation*, vol. 58 (Arbeitspapiere des SFB 340). Tübingen: Universität Tübingen.
- Hinrichs, Erhard W. & Tsuneko Nakazawa. 2000. Partial vp and split np topicalization in german: An hpsg analysis. eng. In *Studies in contemporary phrase structure grammar*, 275–332. Cambridge University Press.
- Kiss, Tibor. 1995. Infinite komplementation, vol. 333 (Linguistische Arbeiten). Tübingen: Max Niemeyer Verlag.
- Lambrecht, Knud. 1994. Information structure and sentence form: Topic, focus, and the mental representations of discourse referents, vol. 71 (Cambridge Studies in Linguistics). Cambridge: Cambridge University Press.
- Müller, Stefan. 1997. *Yet another paper about partial verb phrase fronting in german*. Research Report RR-97-07. A shorter version appeared in Proceedings of COLING 1996, pp. 800–805. Saarbrücken: Deutsches Forschungszentrum für Künstliche Intelligenz.
- Müller, Stefan. 2003. Mehrfache Vorfeldbesetzung. *Deutsche Sprache* 31(1). <https://hpsg.hu-berlin.de/~stefan/Pub/mehr-vf-ds.html>, 29–62.
- Müller, Stefan. 2026. Head-Driven Phrase Structure Grammar: Eine Einführung. 4th edn. (Textbooks in Language Sciences). Berlin: Language Science Press.
- Müller, Stefan, Anne Abeillé, Robert D. Borsley & Jean-Pierre Koenig (eds.). 2021. Superseded: Head-Driven Phrase Structure Grammar: The handbook (Empirically Oriented Theoretical Morphology and Syntax 9). Berlin: Language Science Press.
- Pollard, Carl & Ivan A. Sag. 1994. Head-Driven Phrase Structure Grammar (Studies in Contemporary Linguistics 4). Chicago, IL: The University of Chicago Press.
- Roberts, Craige. 2012. Information structure in discourse: Towards an integrated formal theory of pragmatics. *Semantics and Pragmatics* 5. 1–69.
- Speyer, Augustin. 2008. German vorfeld-filling as constraint interaction. In Anton Benz & Peter Kühnlein (eds.), *Constraints in discourse*, vol. 172 (Pragmatics & Beyond New Series), 267–290. Amsterdam; Philadelphia: John Benjamins Publishing Company.