# **Multiple Frontings in German**

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ABSTRACT. In this paper I discuss examples of multiple constituents before the finite verb in German. I will provide an analysis that uses an empty verbal head that takes the elements before the finite verb as arguments or adjuncts.

#### 9.1 The Phenomenon

German is assumed to be a verb second language, i.e., in a declarative clause the finite verb is in second position (Erdmann, 1886, Chapter 2.4; Paul, 1919, p. 69, p. 77).

The position infront of the finite verb—the so-called *Vorfeld*—can be occupied by an adjunct or by an argument. Verb second sentences are derived from verb first sentences by the extraction of one element (Thiersch, 1978). The example in (1) shows that the element in the *Vorfeld* may be an element that is not a direct dependent of the matrix verb.

(1) [Über dieses Thema]<sub>i</sub> [S hatte Fritz Peter  $_{-j}$  gebeten], [[einen Vortrag  $_{-i}$ ] zu about this topic had Fritz Peter asked a talk to halten]<sub>j</sub>. 1 hold

'Fritz asked Peter to give a talk about this topic.'

Therefore the positioning of one element in the *Vorfeld* is usually treated as a non-local dependency with some sort of percolation mechanism. While this actually accounts for the vast majority of German declarative clauses, there are certain exceptions to this rule that cannot be explained away. In what follows I will provide a detailed study of various cases of multiple frontings.

In (2) several adjunct PPs are positioned in the *Vorfeld*.

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<sup>1</sup>(Hinrichs and Nakazawa, 1989, p. 21)

(2) a. Im Hause am Bergsee zur Sommerzeit sei es freilich nur ein in the house at the mountain lake to the summer time be it admittedly only a Harmonicum.<sup>2</sup>

harmonica

- 'Admittedly it is only a harmonica in the house at the mountain lake during the summer time.'
- b. [Vor der Stadtmauer] [am Tor "Gegenüber der Sonne"] quirlt das Leben before the town.wall at.the gate Opposite the Sun swirls the life eines chinesischen Provinzmarktes: [...]<sup>3</sup>
  of.a Chinese provincial.market
  - 'In front of the town wall at the gate "Opposite the Sun", the life of a Chinese provincial market bubbles:'

am Bergsee may be a modifier of Hause, but zur Sommerzeit can neither modify Hause nor Bergsee. These phrases have to be analyzed as independent phrases. The same is true for vor der Stadtmauer and am Tor "Gegenüber der Sonne": The gate is in the city wall, the am-PP does not specify the location of the noun Stadtmauer. If one looks at the meaning the fronted PPs have in (2), it is clear that they modify the verb separately and that it does not make sense to assume that they form a complex PP. Approaches that nevertheless assume that the PPs form a constituent will be discussed in the next section. In the following I will list sentences with multiple fronted constituents of various syntactic categories and various semantic functions.

While in (2) PPs that specify a location are fronted, (3) contains an instrument PP and a directional PP.

- (3) a. [Mit Bällen und Stoppuhren], [durch den Nebeneingang],... kommen die with balls and stopwatches through the side.entrance come the Spieler auf den Sportplatz...4 players on the sport.place
  - 'With balls and stopwatches the players enter the sports field through the side entrance.'
- In (4) a depictive secondary predicate is fronted together with a local and a directional PP, respectively.<sup>5</sup>
- (4) a. Einsam auf dem kleinen Bahnhof im Moor blieb der lächelnde Junge alone on the small train.station in.the moor stayed the smiling boy zurück.<sup>6</sup>
  back

'The smiling boy was left behind alone at the train station in the moor.'

<sup>&</sup>lt;sup>2</sup>Thomas Mann, *Bekenntnisse des Hochstaplers Felix Krull*, Hamburg, 1957, p. 231, quoted from (Ulvestad, 1970, p. 191).

<sup>&</sup>lt;sup>3</sup>Spiegel, 16/2000, p. 202

<sup>&</sup>lt;sup>4</sup>(Hoberg, 1981, p. 182)

<sup>&</sup>lt;sup>5</sup>I did not bracket all constituents in the following examples since in some examples there are several alternative structures possible.

<sup>&</sup>lt;sup>6</sup>Heinrich Böll, *Irisches Tagebuch*, München, 1969. Quoted from (Beneš, 1971).

b. [Trocken] [durch die Stadt] kommt man am Wochenende auch mit der dry through the town comes one at the weekend also with the BVG.<sup>7</sup>
BVG

'The BVG (Berlin public transport system) will also get you about town on the weekend without getting wet.'

In (5) an accusative object and a PP constitute the Vorfeld.

- (5) a. [Nichts] [mit derartigen Entstehungstheorien] hat es natürlich zu tun, wenn nothing with those.kinds.of creation.theories has it of.course to do when ... 8
   'Of course it has nothing to do with that kind of creation theory when
  - Or course it has nothing to do with that kind of creation theory when ....'
  - b. [Zum zweiten Mal] [die Weltmeisterschaft] errang Clark 1965 ... 9
     to the second time the world championship won Clark 1965
     'Clark won the world championships for the second time in 1965.'

The *nichts*) is a fusion of *nicht*nicht ('not') and *etwas*etwas ('something'). The *mit*-PP is a complement of *zu tun haben* and *zum zweiten Mal* is an adjunct PP.

In the middle construction in (6) the subject is fronted together with an adverb.

(6) [Alle Träume] [gleichzeitig] lassen sich nur selten verwirklichen. 10 all dreams simultaneously let self only rarely realize

'All dreams can seldom be realized at once.'

The sentence in (7) is another example where an accusative object is fronted together with an adjunct. For (7) it seems reasonable to assume three constituents in the *Vorfeld*, since the PP is rather an adjunct of *werben* than of *Mitglieder*.

(7) [Gezielt] [Mitglieder] [im Seniorenbereich] wollen die Kendoka allerdings targeted members in.the senior.citizens.sector want.to the Kendoka however nicht werben. 11
not recruit

'However, the Kendoka do not intend to target the senior citizens sector with their member recruitment strategy.'

The examples discussed so far demonstrate only a subset of multiple frontings that are attested in German. A broad empirical study has been carried out and the data showing other patterns and more examples of the kind discussed above will be made available. Due to space limitations this cannot be done in the current paper.

<sup>&</sup>lt;sup>7</sup>taz berlin, 10.07.1998, p. 22

<sup>&</sup>lt;sup>8</sup>K. Fleischmann, *Verbstellung und Relieftheorie*, München, 1973, p. 72. quoted from (van de Felde, 1978, p. 135).

<sup>&</sup>lt;sup>9</sup>(Beneš, 1971, p. 162)

<sup>&</sup>lt;sup>10</sup>Brochure from Berliner Sparkasse, 1/1999

<sup>&</sup>lt;sup>11</sup>taz, 07.07.1999, p. 18

However, the possibility of fronting multiple constituents is not unrestricted. For instance Fanselow (1993, p. 67) showed that fronted constituents have to belong to the same clause. The fronting of constituents that belong to different clauses is not possible:

- (8) a. Ich glaube dem Linguisten nicht, einen Nobelpreis gewonnen zu haben.

  I believe the linguist not a Nobel price won to have

  'I do not believe that the linguist has won the Nobel price.'
  - b. \* Dem Linguisten einen Nobelpreis glaube ich nicht gewonnen zu haben. 
    the linguist a Nobel.price believe I not won to have
  - c. Ich habe den Mann gebeten, den Brief in den Kasten zu werfen.

    I have the man asked the letter in the box to throw

    'I asked the man to throw the letter into the box.'
  - d. \* Den Mann in den Kasten habe ich gebeten den Brief zu werfen.

    the man in the box have I asked the letter to throw

The data is explained by the assumption that the elements in the *Vorfeld* depend on an empty verbal head or modify an empty verbal head, respectively. Fanselow (1993) and Hoberg (1997, p. 1634) made respective proposals, but did not formalize them in detail.

## 9.2 Previous Approaches

For sentences like (9) Wunderlich (1984, p. 79) suggest that the PPs form a complex PP in the *Vorfeld*. <sup>12</sup>

- (9) a. [PP [PP Zu ihren Eltern] [PP nach Stuttgart]] ist sie gefahren.

  to her parents to Stuttgart is she driven

  'She went to her parents in Stuttgart.'
  - b. [PP [PP Von München] [PP nach Hamburg]] sind es 900 km. from Munich to Hamburg are it 900 km 'It is 900 km from Munich to Hamburg.'
  - c. [PP [PP Durch den Park] [PP zum Bahnhof]] sind sie gefahren.

    through the park to the train station are they driven

    'They drove through the park to the train station.'

Wunderlich assumes that the second PP modifies the first. This is said to be possible if the PPs fill the same semantic role. The PPs in (9a) are the goal of a movement. Wunderlich admits that the thematic roles of the PPs in (9b-c) are different (Source, Path, and Goal of a movement), but he subsumes these roles under one, namely the localization of a movement. This approach is not satisfying since it does not extend to the other cases in (2)-(7): What is the category of the invented projection in the *Vorfeld*? Why should semantic roles of various different constituents be collapsed?

 $<sup>^{12}</sup>$  See also Riemsdijk (1978, p. 62) and Dowty (1979, p. 217–218) for similar suggestions for Dutch and English.

Haider (1982, p. 17) formulates a constraint that is similar to that of Wunderlich, albeit more restrictive. The LF projection of the *Vorfeld* has to be an LF constituent. LF stands for Logical Form in GB theory. Haider's constraint admits the fronting of adverbs and the fronting of certain non-maximal projections. Haider explicitly mentions that his condition blocks the fronting of non-maximal projections that contain a dative object. Since there are a lot of examples of partial verb phrase fronting where a verb is fronted together with a dative (see (Thiersch, 1982, p. 91), (Uszkoreit, 1987, p. 159), (von Stechow and Sternefeld, 1988, p. 459), (Müller, 1999, p. 353–354)), Haider's condition is too restrictive and has to be dismissed.

### 9.3 The Analysis

The example (8) showed that in cases where multiple constituents are positioned in front of the finite verb, these constituents have to be dependents of the same head. Fanselow (1993, p. 66–70) and Hoberg (1997, p. 1634) suggested an empty head in fronted position which is combined with arguments and adjuncts of the verb which stays behind. In what follows I want to make this approach more precise and formalize the analysis. I follow Hoberg in analyzing the empty head as part of the predicate complex and in analyzing the fronting of the head parallel to partial fronting (Müller, 1997, 1999). I assume the following structure for the sentence (5b):

(10) [VP] [Zum zweiten Mal] [die Weltmeisterschaft]  $_{VP}$  ]<sub>i</sub> errang Clark 1965  $_{-i}$ .

Fanselow (1993, p. 69) argues against a fronting analysis in the framework of GB on the basis of the following examples with particle verbs:

- (11) a. \* Die Anette an sollte man lieber nicht mehr rufen.

  the Anette PART should one rather not more call

  'One should not call Anette.'
  - b. \* Mit dem Vortrag auf sollte er lieber hören.

    with the talk PART should he rather stop

    'He should rather end the talk.'

According to him these examples should be grammatical if multiple frontings of constituents involve a verbal trace. From the ungrammaticality of sentences like (11) he concludes that an analysis involving a verbal trace is inappropriate.

However, there are examples like those in (12) that show that particles can be fronted and that even fronting of particles together with other material is possible. <sup>13</sup>

(12) a. Gut *zurecht kommt* derjenige, der das Leben mit all seinen Überraschungen annimmt und dennoch verantwortungsvoll mit sich umgeht. <sup>14</sup>

'Those who accept life with all of its surprises and still behave respon-

<sup>&</sup>lt;sup>13</sup>On particle fronting see also (Müller, 2002).

<sup>&</sup>lt;sup>14</sup>Balance, Broschüre aus der TK-Schriftenreihe zur gesundheitsbewußten Lebensführung, Techniker Krankenkasse. 1995.

sibly towards themselves will cope without any problems.'

- b. vollständig ein rissen Bauarbeiter die Küche<sup>15</sup> fully PART (in) tore workers the kitchen
  - 'The workers tore the kitchen down completely.'
- c. Nicht *umhin konnte* Peter, auch noch einen Roman über das Erhabene zu not PART could Peter also still a novel about the sublime to schreiben. 16 write

'Peter couldn't help writing a novel about the sublime as well.'

- d. Los damit geht es schon am 15. April. 17

  PART there with goes it already at 15 April

  'It already starts at 15th of April.'
- e. Den Umschwung im Jahr 1933 stellt Nolte als "Volkserregung" und "Volksbewegung" dar. (...) Nicht *hinzu setzt* Nolte Zeugnisse republiktreuer Sozialdemokraten und Zentrumsleute, die im Januar 1933 von lähmendem Entsetzen befallen (...) waren. <sup>18</sup>
  - 'Nolte described the change in 1933 as "general excitement" and a "people's movement". Nolte does not take into account reports by social democrats and the center party who were dedicated to the republic and who were stricken with horror in January 1933.'

This shows that the pattern with the particle as part of the *Vorfeld* is possible in principle. Fanselows examples are ruled out because of additional constraints on particle fronting. See (Müller, 2002) for some discussion.

I therefore follow Hoberg in assuming the analysis in (10) together with a partial verb phrase fronting account. However, Hoberg suggests the analysis in (10) in a footnote remaining silent about the details of the analysis. In particular nothing is said about the licensing of the verbal trace in (10). In what follows I explain the analysis in some more detail. I start with a discussion of the sentences in (13).

- (13) a. daß Clark 1965 zum zweiten Mal die Weltmeisterschaft errungen hat.
  - b. [VP [Zum zweiten Mal] errungen]<sub>i</sub> hat Clark die Weltmeisterschaft 1965 <sub>-i</sub>.
  - c. [VP [Zum zweiten Mal] [die Weltmeisterschaft] errungen]<sub>i</sub> hat Clark 1965 <sub>-i</sub>.

For (13a) I assume an analysis along the lines suggested by Hinrichs and Nakazawa (1989): The auxiliary *hat* selects the participle *errungen* and forms a verbal complex with the participle. The arguments of the verbal complex may be permuted in the *Mittelfeld* (the region between the finite and the non-finite verbs in (13a)) and adjuncts may be realized between the complements.

In (13b) the auxiliary is in verb initial position. The verb that usually would be part of the predicate complex governed by *hat* is placed before the finite verb. The

<sup>&</sup>lt;sup>15</sup>Frankfurter Rundschau 14.07.1984, p. 11. Quoted from (Fehlisch, 1998, p. 234).

<sup>&</sup>lt;sup>16</sup>(Grewendorf, 1990, p. 90)

<sup>&</sup>lt;sup>17</sup>taz, 01.03.2002, p. 8

<sup>&</sup>lt;sup>18</sup>Die Zeit, 19.03.1993, p. 82. Quoted from (Hoberg, 1997, p. 1633)

trace has the same arguments as the verb in fronted position, namely *Clark* and *die Weltmeisterschaft*. *hat* forms a verbal complex with the trace. The verbal complex inherits both aruments and hence *Clark* and *die Weltmeisterschaft* can be realized in the *Mittelfeld*.

In (13c) the trace corresponds to the verb phrase *zum zweiten Mal die Welt-meisterschaft errungen*. No complement can be attracted when auxiliary and trace are combined since *die Weltmeisterschaft* has already been realized as complement of *errungen*. Hence only the subject of *errungen* is realized in the *Mittelfeld*.

(10) is explained by an empty verbal head in the *Vorfeld* which takes *die Weltmeisterschaft* as complement and *zum zweiten Mal* as adjunct. The properties of this empty head are determined by the remaining material in the main clause, i.e., the arguments of *errang* that appear in the *Mittelfeld* may not be realized in the *Vorfeld*. Adjuncts that are combined with the empty head in the *Vorfeld* have to be compatible with the semantic properties of *errang*. Sentences like (14) are ungrammatical:

- (14) a. \* Zum zweiten Mal die Weltmeisterschaft errang Clark 1965 die to the second time the world championship won Clark 1965 the Goldmedaille.

  gold medal
  - b. \* Drei Stunden lang die Weltmeisterschaft errang Clark 1965. three hours long the world.championship won Clark 1965

The only way to model this is to establish a connection between *erringen* and the trace  $_{-i}$  in (10). Therefore I suggest a lexical rule that licences an additional lexical entry for each verb. This additional entry selects for a verbal trace. The selected trace has the same valence properties as the input to the lexical rule and all arguments that are not realized together with the trace in the *Vorfeld* are attracted by the verb that is the output of the lexical rule. (15) shows a first approximation of this rule:<sup>19</sup>

(15) 
$$\left[ \begin{array}{c} \text{SYNSEM}|\text{LOC}|\text{CAT} & \left[ \begin{array}{c} \text{HEAD} & \textit{verb} \\ \text{VCOMP} & \langle \rangle \end{array} \right] \end{array} \right] \mapsto \\ \left[ \begin{array}{c} \text{SYNSEM}|\text{LOC}|\text{CAT} & \left[ \begin{array}{c} \text{HEAD} & \textit{verb} \\ \text{SUBCAT} \end{array} \right] \\ \text{VCOMP} & \left[ \begin{array}{c} \text{HEAD} & \textit{verb} \\ \text{SUBCAT} \end{array} \right] \end{array} \right] \right]$$

The entry for the empty verbal head  $_{-V}$  in (10) is absolutely underspecified:

(16) 
$$\begin{bmatrix} PHON & \langle \rangle \\ SYNSEM & [LOC|CAT|HEAD \ verb] \\ NONLOC|SLASH & \langle \rangle \end{bmatrix}$$

<sup>&</sup>lt;sup>19</sup>The mechanism used here is similar to the one suggested for verb movement by (Kiss and Wesche, 1991; Frank, 1994). On the feature VCOMP see (Müller, To Appear) and the references cited there.

The analysis is shown in figure 9.1.

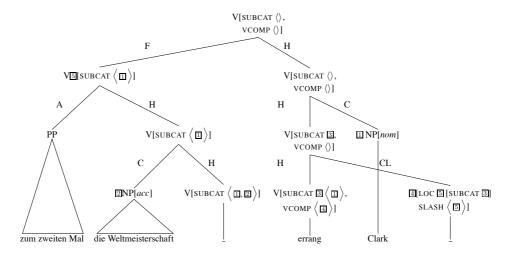


Figure 9.1: Analysis of multiple constituent fronting with an empty head

Since the valence properties and the semantic contribution of the trace (16) are not restricted, the trace can be combined with all elements in the *Vorfeld*. In the analysis of the phrase *zum zweiten Mal die Weltmeisterschaft* the noun phrase *die Weltmeisterschaft* is analyzed as an argument and *zum zweiten Mal* as adjunct of the trace. The complete phrase *zum zweiten Mal die Weltmeisterschaft* is the filler of a nonlocal dependency which was introduced by a second trace to the left of *Clark*. The local properties of the filler (5) are identical to the ones of the extraction trace. The arguments of the extraction trace (3) are attracted by the lexical entry for *errang* which was licenzed by the lexical rule (15). Therefore the SUBCAT list of *errang* + extraction trace contains exactly those elements that were not realized as arguments of the verbal trace in the *Vorfeld*, namely 1 in the analysis in figure 9.1.

There must be a connection between verb and the remainder of the clause as the discussion of (14) showed. Therefore I suggest using an additional feature (VF) for establishing this connection. The lexical rule and the verbal trace have to be modified as follows:

(17) 
$$\left[ \text{SYNSEM} | \text{LOC} \ \boxed{1} \left[ \text{CAT} \left[ \begin{array}{c} \text{HEAD} \quad \textit{verb} \\ \text{VCOMP} \ \langle \rangle \end{array} \right] \right] \right] \mapsto$$

$$\left[ \text{SYNSEM} | \text{LOC} | \text{CAT} \left[ \begin{array}{c} \text{HEAD} \quad \textit{verb} \\ \text{SUBCAT} \ \boxed{2} \\ \text{VCOMP} \ \langle \left[ \begin{array}{c} \text{CAT} \left[ \begin{array}{c} \text{HEAD} \left[ \begin{array}{c} \text{VF} \ \boxed{1} \\ \text{verb} \end{array} \right] \\ \text{SUBCAT} \ \boxed{2} \\ \text{VCOMP} \ \langle \rangle \end{array} \right] \right] \right] \right)$$

(18) 
$$\begin{bmatrix} PHON & \langle \rangle \\ SYNSEM & LOC|CAT \\ & SUBCAT \end{bmatrix} \\ NONLOC|SLASH  $\langle \rangle$  
$$\begin{bmatrix} VF & CAT|SUBCAT \end{bmatrix} \\ NONLOC|SLASH \langle \rangle \\ \end{bmatrix}$$$$

Figure 9.2 shows the analysis with this lexical rule and the more precise trace. The properties of the verb *errang* are represented under VF in the VCOMP value of

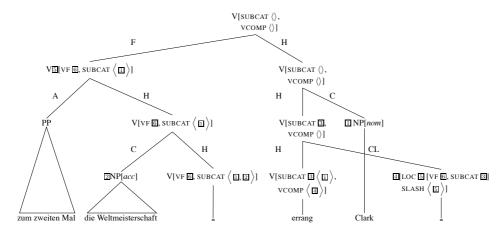


Figure 9.2: Representation of valence information

the lexical entry for *errang* that is licensed by the lexical rule (17). The VCOMP complement (4) is realized by an extraction trace. The LOCAL value of this trace (5) is identical to the LOCAL value of the filler in the *Vorfeld*. Since VF is a head feature and therefore part of the LOCAL value, the VF value of the VCOMP complement of *errang* is identical to the VF value of the phrase *zum zweiten Mal die Weltmeisterschaft*. Since VF is a head feature, it is ensured that the VF value in all projections of the verbal trace in the *Vorfeld* is identical. There is a coindexation of the SUBCAT values of the verbal trace with the SUBCAT value inside of VF in the lexical entry of the verbal trace (18). Therefore it is ensured that the verbal trace can realize exactly those arguments which are required by the original verb that served as input to the lexical rule (17).

The rule (17) licenses an additional entry for *errang*. Without additional restrictions this would cause spurious ambiguities for the sentence (13a). In addition to the normal analysis one could use the verbal trace together with the lexical entry for *errang* that is licensed by the lexical rule (17) and would get for instance the following structure:

(19) daß Clark 1965 [[[zum zweiten Mal die Weltmeisterschaft \_V] errungen] hat].

Such spurious ambiguities can be avoided in the same way they were avoided in partial verb phrase fronting, namely by using a binary feature (LEX) that ensures

that only lexical elements take part in verbal complex formation, making an exception just in case the verbal dependent is fronted.<sup>20</sup> The feature ensures that the verbal complex is formed before the verbs are combined with any nonverbal arguments. For our example this means that *errungen* and *hat* are combined first and then the result is combined with the NPs and PPs. The structure in (19) can be ruled out in the same vain. However, there remains the following analysis which is absolutely parallel to the analysis of the verbal complex and therefore cannot be excluded by using the LEX feature.

(20) daß Clark 1965 zum zweiten Mal die Weltmeisterschaft [[\_V errungen] hat].

This analysis can be excluded by reformulating the lexical rule so that verbs are licensed the verbal complement of which is extracted, i.e., the verbal complement is not selected via VCOMP, but is directly represented as element of the SLASH list:

$$(21) \quad \left[ \text{SYNSEM} \middle| \text{LOC} \ \boxed{ } \left[ \text{CAT} \ \begin{bmatrix} \text{HEAD} & \textit{verb} \\ \text{VCOMP} \ \langle \rangle \ \end{bmatrix} \right] \right] \mapsto \\ \\ \left[ \begin{array}{c} \text{LOC} \middle| \text{CAT} \ \begin{bmatrix} \text{HEAD} & \textit{verb} \\ \text{SUBCAT} \ \boxed{2} \\ \text{VCOMP} \ \langle \rangle \ \end{bmatrix} \right] \\ \\ \text{NONLOC} \middle| \text{SLASH} \ \left\langle \begin{array}{c} \text{HEAD} \ \begin{bmatrix} \text{VF} \ \boxed{1} \\ \textit{verb} \ \end{bmatrix} \\ \\ \text{SUBCAT} \ \boxed{2} \\ \text{VCOMP} \ \langle \rangle \ \end{array} \right] \right\rangle \\ \\ \end{array}$$

Finaly it has to be explained why the following structure is excluded:

(22) \* daß Clark 1965 zum zweiten Mal die Weltmeisterschaft [\_v hat].

Without any further restrictions the empty verbal head could be combined with the auxiliary *hat* and could replace the verb *errungen*. The structure in (22) can be excluded by stipulating that all verbs that select another verb via VCOMP require a verb with the VF value *none*. Therefore it is ensured that the empty verbal head cannot be combined with verbs like *hat*. Only lexical entries that are licensed by the lexical rule in (21) which explicetly select a verbal element with a *synsem* object as VF value can be combined with the empty verbal head.

#### 9.4 Summary and Future Work

In this paper I discussed a variety of examples where more than one constituent is fronted. This phenomenon is not as rare as it is usually assumed in the literature. From the broad empirical study that has been carried out it is clear that there are certain patterns and regularities in fronting examples with more than one fronted

<sup>&</sup>lt;sup>20</sup>See (Müller, 1997; Meurers, 1999) for details. Hinrichs and Nakazawa (1989) used a similar feature to avoid spurious ambiguities.

constituent. The paper provides a general analysis of multiple constituents in the *Vorfeld*, but the regularities in the fronting patterns have to be studied further. An explanation for the unacceptability of sentences like (23) has to be provided.

(23) \* Maria Peter stellt Max vor.

Maria Peter introduces Max PART

Intended: 'Max introduces Maria to Peter.'

Such sentences can be excluded by additional restrictions regarding the Information Structure of utterances. The exact details of this will be the subject of further research.

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