## A note on What for split\*

### Thomas Leu

### 1 Introduction

### 1.1 What for split: the phenomenon

The so-called *what for* construction, exemplified in (1), is widespread across Germanic.<sup>1</sup> It has the distribution of an interrogative noun phrase and consists of the counterparts of *what*, *for*, an indefinite noun phrase, and demonstrably an often silent functional nominal e.g. *SORT* (cf. Leu to appear).

One property of the *what for* phrase that has intrigued syntacticians since Den Besten (1981) is the fact that it can surface in a discontinuous fashion (1b), the phenomenon that is referred to as "*what for* split".

German

- (1) a. [Was für ein Buch] hast du gelesen? what for a book have you read 'What kind of / which book did you read?'
  - b. [Was] hast du [für ein Buch] gelesen? what have you for a book read

In the present paper I will discuss a range of phenomena (from West- and North-Germanic languages, with an emphasis on Swiss German) that bear on the analysis of *what for* split. The paper has two parts. In section 2 I will discuss the mechanism of *what for split*. In part following Abels (2003) and Leu (2003), I will propose that the split arises by leftward movement of [für ein Buch], extracting out of the larger constituent [was für ein Buch], followed by leftward movement of the remnant [was  $t_{fureinBuch}$ ], much in the spirit of proposals by Androutsopoulou (1997), Starke (2001), Abels (2003), and Leu (2005) for other split constructions in Greek, French, Slavic,

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<sup>&</sup>lt;sup>1</sup>It has been described for a variety of West Germanic and Scandinavian languages. Icelandic and English seem to lack it, but see Leu (to appear) footnote 15.

and Swiss German. For this to be possible, [für ein buch] has to be a constituent. I will argue that it is, only after DP-internal movement of was to the DP-left-periphery.

In section 3, I will argue that splitting can occur (A) in a low position, giving rise to the familiar mittelfeld stranded *for NP*, and (B) in the left periphery, giving rise to either a vacuous split or a right peripheral *for NP*, depending on whether or not clausal piedpiping occurs.

Among the advantages of the analysis proposed are: that it captures a number of parallels between left-peripheral and "right-extraposed" *for NPs* not previously observed (section 3); that it handles *for NP* extraposition without rightward movement (section 3); and that it provides a way to understand otherwise puzzling cases of Weak Island obviations (section 3.3).

### 1.2 The make-up of the Germanic *what for* phrase

The internal structure of the Germanic *what for* phrase I am assuming is essentially the one argued for in Leu (to appear).

The phrase is built out of two subcomponents: an indefinite noun phrase *a book*, and a modifier (forP) which sits in a specifier position. ForP contains a counterpart of *what*, *for*, and a functional nominal *SORT*, which in Swiss German and German is typically silent, but can be overt in Dutch, Swedish, and Norwegian.

t SORT

One important argument in favor of the structure in (2) is that the NP following for is assigned Case by an element to the left of for. In example (3a) for instance, mit assigns dative Case to the NP. Hence  $f\ddot{u}r$ , which is an accusative Case assigner, as witnessed in the non-what for example (3b), does not intervene in the Case-relation between mit and the NP  $einem\ Hund\ 'a_{dat}\ dog'$ .

(3) a. Mit was für ein-em Hund hast du gespielt? with what for a-DAT dog have you played 'What (kind of) dog did you play with?'

**Swiss** 

b. Für welch-en Kandidaten hast du gestimmt? for which-ACC candidate have you voted

This is captured straightforwardly if *für* does not c-command the NP.

In Swiss German, the forP can occur not only as in (2), exemplified in (4a), but also embedded in an adjectival structure, as in (4b) (see section 2.5).<sup>2</sup> In (4b),  $f\ddot{u}r$  is followed by the adjectivalizing morpheme -ig, which is in turn followed by adjectival inflection. In (4a), by contrast,  $f\ddot{u}r$  is followed by an indefinite article (in singular noun phrases).

- (4) a. Was für es velo hesch kauft? what for a bicycle have-you bought
  - b. Was für-ig-ä wi hesch kauft? what for-ADJ-AGRA wine have-you bought

Whether the forP is embedded in an adjectival structure or not does not affect its internal structure in any relevant way. The important point of (2), which is true for both (4a) and (4b), is that [what for (SORT)] forms a constituent excluding the NP [(a) book] at some point in the derivation (argued for in section 2.5). What then undergoes DP-internal movement (unless this is blocked) to the left periphery of the DP, with the effect that now [what for (SORT)] no longer forms a constituent, but instead there is a constituent [ $_{FP}$  for (SORT) a book]. This constituency will be argued to be the necessary configuration for splitting to be possible.

### 2 What for-split

In this section the basic mechanism of *what for* split will be discussed. I will propose that *what for* split is derived by extraction of the *for NP* to the left of *what* followed by movement of the remnant [what  $t_{FP}$ ] to the left of the for NP.

### 2.1 Splitting as *what* subextraction: the traditional view

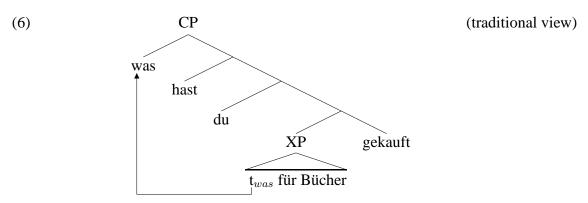
The traditional view on *what for* split, as represented in (6), has *what* extract out of the specifier of the *what for* phrase (Den Besten 1981, Bennis 1983, Den Besten 1985, Corver 1991, Pafel 1996).

(5) **Was** hast du **für Bücher** gekauft? what have you for books bought

German

<sup>&</sup>lt;sup>2</sup>AgrA in the glosses stands for strong adjectival agreement.

German



This view would be a priori compatible with the internal structure of what for phrases that I am assuming. Note though that in (6) the constituency between was, für and NP is not as such significant for the availability of splitting.<sup>3</sup> This will be shown to be questionable. In section 2.2 examples of split what for PPs are discussed, which illustrate the need for a revision of the traditional approach to splitting. Section 2.5 contains a new argument that was has to undergo DP-internal movement in order for a split derivation to be possible, which falls out directly from the structure in (2) combined with the splitting mechanism argued for in the next section, but not from that in (6).

### 2.2 A remnant movement analysis of splitting

In the traditional *what*-subextraction approach to *what for* split, *what* undergoes Wh-movement, leaving the *for NP* behind. This predicts that Wh-movement of *what* under splitting is incapable of pied-piping any structure which the entire *what for* phrase is embedded in. This prediction however is wrong. In particular, there are examples of split *what for* PPs (Abels 2003), as in the examples (7a) and (7b) adapted from Abels's (290a) and (292a). Crucially, the NPs *Sachen* and *Leuten* are assigned Case by *über* and *mit* respectively, and hence they must be in the complement of that preposition at some point, as indicated by the trace after *was* in (7a).

- (7) a. [Über was t] der alles **für Sachen** Bescheid weiss! about what that all for things information knows "(It's amazing) how much the guy knows!"
  - b. [Mit was t] hast du denn **für Leuten** gerechnet? with what have you PRT for people-DAT reckoned

Many instances of *what for* PPs do not seem to allow splitting, and I have nothing insightful to say about these. But the fact that there are acceptable examples (in German and Swiss German) is crucial, because (7) cannot, under common assumptions, be derived by subextraction of *was*. The reason is that *über* and *was* in (7a), and *mit* and *was* in (7b) do not form a constituent at the

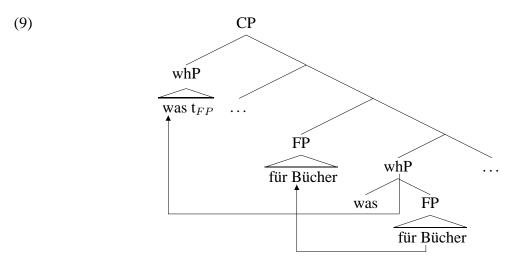
<sup>&</sup>lt;sup>3</sup>It plays a role only in terms of the ECP and subjacency in the traditional approach.

point where wh-movement applies, unless (alles) für Sachen and für Leuten, respectively, has first moved out from within the complement of über/mit.

(8) ..... [
$$_{PP}$$
 mit [ was [ $_{FP}$  für Leuten $_{DAT}$  ]]] ...

Therefore (7) constitutes a strong argument that a remnant movement analysis must be available for at least some instances of *what for* split.<sup>4</sup>

If a remnant movement approach can in principle handle all instances of *what for* split, and if in addition it must be assumed for some of the cases, it would be superfluous to entertain the possibility of an alternative derivation of *what for* split.<sup>5</sup> Therefore I propose, following Abels (2003) and Leu (2003), that all instances of *what for* split should be analyzed along the lines illustrated in (9).<sup>6</sup>



[FP] für NP subextracts out of the what for phrase. Subsequently the remnant [was  $t_{FP}$ ] undergoes movement to the left of [FP] für NP and wh-movement. The preposing step of the remnant [what  $t_{FP}$ ] and the wh-movement step may in some cases be identical.

i. \* Ik vraag me af [wiens geschiktheid 
$$t_j$$
]<sub>k</sub> hij  $t_k$  [voor dit werk]<sub>j</sub> betwijfelde. Dutch I wonder REFL PRT whose capability he of that work doubted

Note however that on the presently assumed internal syntax of *what for* (Leu to appear), *for NP*-extraction is not PP extraction out of the complement of an N. Hence the structures that Corver is comparing are not comparable.

<sup>&</sup>lt;sup>4</sup>Corver (1990:chapter 6, ft. 13) considers a kind of remnant movement analysis of *for NP* extraposition. The idea is that the *for NP* extracts to the right into an independently generated PP slot (to the left of the verb), and subsequently the *[what t\_{forNP}]* is moved to Spec,CP. Corver rejects this possibility, arguing that it would allow the derivation of ill-formed sentences involving (other) DP-internal PPs, such as (i).

<sup>&</sup>lt;sup>5</sup>The question of course remains of what it is about UG that rules out direct subextraction of what.

<sup>&</sup>lt;sup>6</sup>The proposals by den Besten and by Bennis involve reanalysis of the category of the stranded *for NP*. In the present proposal this effect is an automatic consequence of [FP] firenting.

Swedish

Aside from capturing the possibility of examples like (7), such an analysis unifies the splitting mechanism in *what for* split with analyses of other split constructions, such as French *combien de* split as analyzed by Starke (2001):<sup>7</sup>

(10) [À combien t] tu as parlé [de photographes]...[à combien [de photographes]]? French "How many photographers did you talk to?"

and the splitting in French and (Swiss) German of the interrogative counterpart of English *something pretty* Leu (2005):<sup>8,9</sup>

- (11) a. Du hast [etwas schönes] gekauft. German you have something pretty bought
  - b. [Was t] hast du [schönes]...[was [schönes]] gekauft?
    "What did you buy (that's pretty)?"

### 2.3 P-stranding and pied-piping

A comparison with Scandinavian is interesting. Swedish allows (12).<sup>10</sup>

- (12) a. Vad för en hund jagar han **med**? what for a dog hunts he with
  - or a dog hunts he with
  - b. Vad jagar han **med** för en hund? what hunts he with for a dog

Both are impossible in German and Swiss German. (12a) is simply an example of the more general difference, that Scandinavian languages allow P-stranding under wh-movement, whereas German, Swiss German, and Dutch do not.<sup>11</sup> More interesting is (12b). How are we to think of the possibility of *what for* split leaving the *for NP* in the complement of the preposition while extracting *what*? The traditional *what*-subextraction analysis would have a rather straightforward account; however, remember that it is essentially impossible to derive the acceptable (7) on the traditional approach (cf. section 2.2 above). Furthermore, the impossibility of (12b) in Swiss German and German would, on the traditional approach, be a priori surprising.

Let me at this point stipulate the assumption that P-stranding is allowed if the relation between P and the extracting wh-constituent is not too close, and disallowed if it is too close. Assume

<sup>&</sup>lt;sup>7</sup>See also Kayne and Pollock (2001), in particular note 42. There is some speaker variation with regard to the acceptability of (10), as pointed out to me by Lena Baunaz (p.c.).

<sup>&</sup>lt;sup>8</sup>See also Androutsopoulou (1997) for Greek and Abels (2003) for Slavic.

<sup>&</sup>lt;sup>9</sup>For interesting discussion of modified indefinite pronouns see Roehrs (2006).

<sup>&</sup>lt;sup>10</sup>Swedish (12) are from Börjars (1992), and (14) from Kersti Börjars (p.c.). Norwegian is parallel to Swedish with regard to the examples discussed in this section (Øystein Vangsnes p.c.).

<sup>&</sup>lt;sup>11</sup>With the exception of the cases involving R-pronouns (Van Riemsdijk 1978).

further that the syntactic correlate of such closeness is the number and kind of (potentially nonovert) projections intervening between overt P and the extracting category. 12

Given these assumptions it is possible that the specifier into which the for NP moves when extracting across what is lower than the overt preposition in Swedish. Hence splitting in (12b) proceeds exactly as it has been proposed to proceed in (9), but with the landing site of for NP fronting still within the complement of P.<sup>13</sup> Hence (12b) has the following partial derivation.

(13) ... jagar han 
$$[PP]$$
 med  $[PP]$  för en hund  $[PP]$  vad  $[PP]$  ?

In German and Swiss German, by contrast, the landing site of for NP fronting is always outside of the PP, i.e. above the overt preposition. The possibility of extraction of the for NP across a preposition seems highly constrained. When it succeeds, as it does in (7), subsequent wh-movement of the remnant *what*-phrase obligatorily piedpipes the preposition.

If the splitting mechanism proposed is indeed the only one available (at least for what for split), then the existence of (12b) in a given language predicts the unavailability in that language of the counterpart of German (7), repeated as (15), unless multiple positions into which the for NP can front are assumed. This is borne out, as witnessed by the impossibility in Swedish of (14b).

- (14)[**Med** vad för en hund] jagar han? with what for a dog hunts he
- Swedish
  - \* **Med** vad jagar han [för en hund]? with what hunts he for a dog
- (15)[Über was t] der alles für Sachen Bescheid German weiss! about what that all for things information knows "(It's amazing) how much the guy knows!"
  - [Mit was t] hast du denn für Leuten b. gerechnet? with what have you PRT for people-DAT reckoned

(14b), which is a counterpart of the only possible what for split PP structure in German (15) and Swiss German, is unacceptable in Swedish and Norwegian.

Thinking of P/PP as a sequence of functional heads/projections, along the lines of Koopman (1997) (also Noonan (2005)), where languages may differ with regard to which heads are overt and which ones are silent, the logic of the proposal can be represented as follows.<sup>14</sup>

<sup>&</sup>lt;sup>12</sup>See Abels (2003:p. 193) for discussion contrasting extraction of the complement of P and extraction out of the complement of P.

<sup>&</sup>lt;sup>13</sup>This is reminiscent of the claim in Bošković (2004) that languages that have Object Shift allow Q-float within PP. Bošković's PP-internal noun phrase movement, which strands the quantifier, may be similar to the for NP fronting argued for here, which also targets a position within PP in Swedish and Norwegian.

<sup>&</sup>lt;sup>14</sup>This highlights a point also raised by one reviewer, which is that for NP fronting can only take place provided that the remnant [what  $t_{FP}$ ] subsequently moves even further to the left. In other words, we never find the order \*  $\dots$  for NP ... what ... '. As of now I do not have an account for this.

**Swiss** 

(16) 
$$[P_{Ger} \text{ what } t_{FP}] \dots V2 \dots [P_{SWE} [[F_{FP} \text{ for } NP]] [P_{GER} [whP] \text{ what } [F_{FP} \text{ for } NP]]]]]$$

The *for NP* fronting step targets a position that is higher than  $P_{GER}$  (which is overt in German and silent in Swedish), but lower than  $P_{SWE}$  (which is overt in Swedish but silent in German). Subsequent *wh*-movement may pied-pipe the same projection in both languages, namely  $PP_{GER}$ , accounting for the patterns in (12) - (15).

### 2.4 Stranding site

The present analysis of what for split has a movement step (the movement of the for NP out of the what for phrase) which is absent in the traditional what-subextraction analysis. This movement can cross material above the projection hosting what, e.g. the preposition in (7). Thus, while in the traditional approach the stranded for NP sits in its original pre-split position, the present proposal predicts that the stranded for NP is in a higher position. If we make the (admittedly not innocuous) assumption that the pre-split position is the unmarked position of an indefinite noun phrase, we find independent evidence for the extra movement step in the following contrasts between the für NP and non-what for-indefinites.

Swiss German displays an interesting kind of "doubling verb" (Lötscher 1993) when embedding an infinitival complement under gaa, choo, laa, afaa ('go, come, let, begin' respectively). The double marks a fixed position in the clause. While indefinites and bare noun complements of the infinitive like in (17) readily surface to the right of the double go, 15

- (17) a. Er gat morä **go** fläisch ichaufä.
  he goes tomorrow PC meat buy
  "He'll go and buy some meat tomorrow."
  - b. Er gat morä **go** es velo poschtä. he goes tomorrow PC a bicycle buy

the für NP cannot strand in this position but only outside the scope of go (18b) versus (18c).

- (18) a. Was [für fläisch] gasch morä **go** ichaufä? Swiss what for meat go-you tomorrow PC buy "What kind of meat are you going to buy tomorrow?"
  - b. Was gasch morä [für fläisch] **go** ichaufä?
  - c. ?\* Was gasch morä **go** [für fläisch] ichaufä?
  - d. ... gasch morä [ $_{FP}$  für fläisch] **go** [ $_{whP}$  was  $_{FP}$ ] ichaufä? = (18b)

This shows that in *what for* split the *for NP* must undergo a movement step (illustrated in (18d)) not necessary for otherwise comparable bare or indefinite noun phrases.

<sup>&</sup>lt;sup>15</sup>I am glossing *go* as a PC (Prepositional Complementizer). What exactly it is is orthogonal to the present discussion. See Schönenberger and Penner (1995), Van Riemsdijk (2002), Glaser and Frey (2006) for discussion.

#### 2.5 Pre-articles and DP-internal what movement

A cue to understanding the internal structure of *what for* phrases and one of the restrictions on the availability of splitting comes from a somewhat marginal phenomenon which previously has not, to my knowledge, been brought into the discussion of *what for*: the leftmost (overt) element of a *what for* phrase can be *what* or, in some cases, an indefinite article.

The discussion in this section will provide evidence that the proposals by Bennis (1983) and by Den Besten (1985), that *[what for...]* forms a constituent excluding the head noun at an early point in the derivation, is correct. However, I will also show that the split derivation necessitates a DP-internal movement step of *what*, which will allow a splittable configuration. <sup>16,17</sup>

Some speakers of Swiss German (including the author) allow (19a) where the *-ig* form of *what* for (i.e. the adjectival form) is (optionally 18) preceded by an indefinite article (which is sensitive to the gender features of the head noun (neuter in the case of *velo 'bicycle'*)). The variant with an overt indefinite article strongly resists splitting (19b). 19

- (19) a. (%es) was fürt-ig -s velo wotsch?

  (a) what for-ADJ -NEU bicycle want-you

  "What kind of bicycle do you want?"
  - b. (\*es) was wotsch fürt-ig -s velo?(a) what want-you for-ADJ -NEU bicycle

(19a) seems parallel to an ordinary modified indefinite noun phrase, where the adjective *farbig* 'colored' is the counterpart of was fürtig:

(19a), repeated as (21a), similarly has a demonstrative counterpart which also contains an overt adjectival suffix -ig (21b):

<sup>&</sup>lt;sup>16</sup>The theoretical counterpart of this movement step is Bennis's reanalysis, a mechanism by which multiple structural descriptions are simultaneously assigned to one linear string. For critical discussion of Bennis's proposal see Corver (1990:chapter 6).

<sup>&</sup>lt;sup>17</sup>DP-internal movement of *what* is also argued for in Bennis et al. (1998).

<sup>&</sup>lt;sup>18</sup>By "optionality" I simply mean that both the variant with and without are acceptable, not that they are identical in any interesting sense. In fact, the variant with a pre-article is more delicate, and seems restricted in ways that are presently not clear to me.

<sup>&</sup>lt;sup>19</sup>The contrast between (19a) and (19b) also holds for speakers who do not readily allow an initial indefinite article in (19a).

b. es sert-ig -s velo a such-ADJ -NEU bicycle "a bicycle like this"

That *sertig* is parallel to *fürtig* is suggested by the parallelism of morphophonetic variation that both items exhibit (as argued in Leu (to appear)).

(22) fürtig, fürig, fürnig, füttig sertig, serig, sernig, settig

**Swiss** 

**Swiss** 

A parallel picture obtains with the adverbial (i.e. the non-ig) form of what for. Here as well some speakers of Swiss German allow an (optional) initial overt indefinite article (in addition to the for NP internal indefinite article) (23a). Both indefinite articles overtly reflect sensitivity to the gender features of the head noun. Again, the initial indefinite article is strictly incompatible with splitting (23b,c).<sup>20</sup>

- (23) a. [ (%es) was für es velo ] hesch kauft?

  (a) what for a bicycle have-you bought
  "What kind of bicycle did you buy?"
  - b. [ (\*es) was ] hesch für es velo kauft?(a) what have-you for a bicycle bought
  - c. [ was ] hesch (\*es) für es velo kauft? what have-you (a) for a bicycle bought

The strong incompatibility of an overt initial indefinite article and splitting in both (19) and (23) suggests that we are dealing with the same phenomenon in the two examples.

(23a), repeated as (24a), also has a demonstrative counterpart (24b):<sup>21</sup>

(24)1 hesch **Swiss** [ (%es) [was für] velo kauft? es what for bicycle have-you bought (a) (ä/es)  $[so^n]$ velo b. es (a) such bicycle a "a bicycle like this"

Swiss

(see also Kallulli and Rothmayr (to appear) for Bavarian).

<sup>&</sup>lt;sup>20</sup>Judging from my informants, it seems that the initial indefinite article is more readily available in (19a) than in (23a).

<sup>&</sup>lt;sup>21</sup>Other examples of the kind where two indefinite articles are present in the presence of some sort of uninflected degree modifier include

i. es ganz es [Adj] schöns] velo an entirely a pretty bicycle 'a really beautiful bike'

(24a) is to (24b) like (21a) is to (21b) (repeated as (25a, b)).

If this is correct, it seems plausible that was für in (24a) and so in (24b) each form constituents (as indicated by the brackets), and similarly was für(t) in (25a) and ser(t) in (25b). If so, then the non-splitability of was and [für...] in these examples is immediately accounted for on the present proposal. In order for für and the DP-internal material following it to extract across was, they have to form a constituent excluding was. Hence was has to first move out of that constituent (forP in (2)), into the left periphery of the DP. Subsequent to this, for NP can extract across was, deriving the split.

The DP-internal movement of *what* seems to be incompatible with the overt initial indefinite marker, suggesting that the DP-internal movement of *what* targets a position higher than (or as high as) the indefinite article. Possibly they are competing for the same position/projection at some level. Merger of the initial indefinite article may be thought of as rendering DP-interal *what* movement unnecessary (and therefore impossible).<sup>22</sup> In (24a) and (25a) an indefinite article is merged, rendering extraction of *what* out of forP impossible, thereby forgoing a split derivation. Wh-movement then piedpipes the entire phrase, including the initial indefinite article, in a way comparable (though not identical) to the way *what* piedpipes the entire PP including P when embedded under a preposition.

### 2.6 Intermediate conclusion

In summary, the conclusion to draw from this section is that *what for* split proceeds in (at least) three steps. The first of these is DP internal movement of *what*, in which *what* moves out of the projection headed by for<sup>0</sup> and into a specifier of the extended projection of the head noun, Spec,whP. This step seems to be obligatory in most of the relevant languages (hence the rarity of the pre-article, just discussed), independently of whether *what* and the *for NP* will surface discontinuously or not. It is a pre-condition for splitting to be possible.

In a second step the [FP] for NP fronts to a position to the left of whP. And finally the remnant whP containing the trace of [FP] for NP moves to the left of that FP. This last step may coincide with wh-movement to ForceP. In section 3 the last two steps will be examined in more detail.

<sup>&</sup>lt;sup>22</sup>Another instance of essentially the same phenomenon may be the contrast in German between *einjeder 'an every'* (cf. Roehrs (2007)) and *jeder 'every'*, suggesting that *je* in *jeder* also undergoes a DP-internal movement step to the DP left periphery, and that this movement step as well is in complementary distribution with overt *ein*.

### 3 Low and high splitting and "extraposition"

Having established the mechanism responsible for splitting, I will now argue that splitting can occur at two positions: in the mittelfeld, giving rise to the familiar mittelfeld *for NP*, and within the left periphery, giving rise to either a vacuously split *what for* phrase or to *for NP* "extraposition," depending on whether the subsequent movement of *what* involves extraction or piedpiping.

The appearance of a right-peripheral *for NP* is analyzed as the result of leftward movement of that *for NP* to a left peripheral position followed by movement of a constituent containing everything that is to the right of the *for NP* even further to the left.

Such a derivation is (of course) by no means unique to Germanic *what for* split. Similar proposals have been made for other constructions where an element associated with a left-peripheral position surfaces at the right edge, e.g. for constituent questions in Nweh by Nkemnji (1995), for Dutch imperatives by Koopman (to appear), and for so-called stylistic inversion in French by Kayne and Pollock (2001).

### 3.1 Three surface positions for for NPs

In the previous sections we have distinguished split and non-split *what for* phrases (as in most of the literature). It is useful however to think of this surface difference not only in terms of splitting, but also in terms of the position of the *for NP*. In this section I will do this and hence refer to what we have been calling the non-split and the split variant as left-peripheral *for NP* and mittelfeld *for NP* respectively.

There are interpretive differences distinguishing left-peripheral (26a) and mittelfeld (26b) *for NP*s. Some speakers of Swiss German, German, and Dutch in addition allow "right-extraposed"<sup>23,24</sup> *for NP*s as schematized in (26c), which I will refer to as right-peripheral *for NP*s.<sup>25</sup>

(26) a. "What for NP 
$$V_{fin}$$
 ......?" versus: b. "What  $V_{fin}$  ........for NP .....?" versus: c. "What  $V_{fin}$  ...........for NP?"

A crucial question that arises is how right-peripheral *for NP*s pattern relative to left-peripheral and to mittelfeld stranded ones.

<sup>&</sup>lt;sup>23</sup>"Right-extraposition" is used as a purely descriptive term.

<sup>&</sup>lt;sup>24</sup>More precisely, there are speakers both of Swiss German and of Dutch that do and speakers that do not allow right-peripheral *for NP*s.

<sup>&</sup>lt;sup>25</sup>In German, Swiss German and Dutch, (26b) and (26c) are easy to tell apart in periphrastic tenses.

<sup>- (26</sup>b) has the order [for NP] (...)  $V_{non-finite}$ .

<sup>- (26</sup>c) has the order  $V_{non-finite}$  [for NP].

I will show that left-peripheral and right-peripheral *for NP*s pattern together and against mittelfeld *for NP*s in interesting respects. I will discuss three properties which involve topicalization of the *for NP*, and with respect to which (26a) and (26c) pattern together and against (26b): A) idiom/literal reading of N (exclamative/interrogative), in subsection 3.2; B) weak island sensitivity, in subsection 3.3; C) discourse-linking, in subsection 3.4. I will conclude that the right-peripheral *for NP* is in a left-peripheral position with only one constituent even further to its left, namely the entire clause from which it had been extracted. This unifies left- and right-peripheral *for NP*s by ascribing their shared properties to the fact that they share a position. It will simultaneously allow a simple account of certain Weak Island obviations in *what for* splits.

#### 3.2 Idiomatic versus literal N

Splitting can have an impact on the range of interpretations the head noun allows. Compare the idiom/exclamative versus literal/interrogative pair:

- (27) a. **Was** bisch du **für en esel**?! (idiom) Swiss what are you for a donkey
  - b. # Was für en esel bisch du? (literal) what for a donkey are you

(27a) is most naturally interpreted as similar in spirit to "How can you be so dumb!?". (27b) in contrast most naturally has the rather odd reading in which the speaker asks the hearer about the subspecies of donkeys s/he (the hearer) belongs to.<sup>26</sup>

Compare left-peripheral, mittelfeld, and right-peripheral für en esel:

- (28) a. # Was für en esel bin ich nur gsi? (literal) Swiss what for a donkey am I only been
  - b. **Was** bin ich nur **für en esel** gsi?! (idiom) what am I only for a donkey been
  - c. # Was bin ich nur gsi für en esel? (literal) what am I only been for a donkey

The right-peripheral *für NP* (28c) patterns with the left-peripheral one (28a) and against the mittelfeld stranded one (28b). This crucially shows that the contrast in (27) is not a split/non-split

- i. Wat ben jij voor ezel? (ok idiomatic) what are you for donkey
- ii. Wat voor ezel ben jij? (literal) what for donkey are you

To the extent that in Dutch with a periphrastically tensed counterpart of this extraposition is available, it necessarily has the literal reading (Marjo Van Koppen (p.c.)), just as in Swiss German.

<sup>&</sup>lt;sup>26</sup>This similarly holds in Dutch (examples from Corver and Koppen (2005)):

**Swiss** 

contrast. Rather it is a contrast arising from *for NP* movement to a mittelfeld position as opposed to *for NP* movement to a left-peripheral position.

### 3.3 Weak Island sensitivity

The same point can be made with regard to Weak Island sensitivity. What for split is sensitive to Weak Islands (de Swart (1992), Vikner (1995), Beck (1996), Honcoop (1998), among others), i.e. a Weak Island inducer that intervenes between the mittelfeld stranded for NP and the left-peripheral what degrades the sentence rather strongly (29b), while in otherwise identical sentences movement of the entire what for NP across the Island inducer is at most slightly degraded (29a).

- (29) a. Was **für es buäch** hesch nu nid gläsä?
  what for a book have-you still not read
  "What book haven't you read yet?"
  - b. ?\* Was hesch nu nid **für es buäch** gläsä? what have-you yet not for a book read
  - c. Was hesch nu nid gläsä **für es buäch**? what have-you yet not read for a book

Interestingly, negation does not induce a Weak Island effect in (29c). This suggests that in (29c), contrary to (29b), negation does not structurally intervene between *what* and the *for NP*.<sup>27</sup> A parallel pattern emerges with Wh-Islands.

- (30) a. (?) Was **für es buäch** fragsch dich **öb** sellsch läsä? Swiss what for a book ask-you yourself whether should-you read
  - b. \* Was fragsch dich **öb** sellsch **für es buäch** läsä? what ask-you yourself whether should-you for a book read
  - c. (?) Was fragsch dich **öb** sellsch läsä **für es buäch**? what ask-you yourself whether should-you read for a book

The interrogative complementizer  $\ddot{o}b$  does not seem to be intervening between was and the right-peripheral for NP in (30c). In other words, the right-peripheral for NP and the left-peripheral for

Yiddish

b. Vad tömde du inte för flaska? what emptied you not for bottle

Swedish

Hence these are also instances of left-peripheral splitting, cf. section 3.5.

<sup>&</sup>lt;sup>27</sup>This is also observed in Yiddish ((ia), from Vikner (1995)) and Swedish (ib), where negation linearly intervenes between *what* and the stranded *for NP*.

i a. Vos hot Avrom nisht gekoyft far a bikher? what has Avrom not bought for a books

NP pattern together and against the mittelfeld stranded for NP, in the case of (30) even across a clause boundary.<sup>28</sup>

### 3.4 Discourse-linked interpretation

A third set of facts making the same point comes from D-linking. Mittelfeld and left-peripheral *for NP*s have been argued to differ with regard to D-linking (de Swart 1992, Diesing 1992, Beck 1996, Ijbema 1997). Let us construct a relevant example. Consider the following context:

<u>Context A:</u> Hans and I have a common friend, Pumuckl, who likes receiving postcards. Hans always sends him an original one when he travels. Hans goes on vacation to the Swiss Alps. When he comes back I ask him (31b) rather than (31a) or (31c):

- (31) a. # So, was für nä chartä hesch am Pumuckl gschickt? Swiss so, what for a postcard have-you to-the Pumuckl sent
  - b. So, was hesch am Pumuckl für nä chartä gschickt? so, what have-you to-the Pumuckl for a postcard sent
  - c. #So, was hesch am Pumuckl gschickt für nä chartä? so, what have-you to-the Pumuckl sent for a postcard

However, if we change the context only a little, the opposite preference results.

<u>Context B:</u> Same as above, plus: Hans calls me from his vacation and describes three postcards to me, undecided which one he should send to Pumuckl. We hang up before reaching a decision. When he comes back I ask him (31a) or (31c) rather than (31b).

Here again, the right-peripheral für NP patterns with the left-peripheral one.

### 3.5 Analysis

The patterning observed above suggests that left-peripheral for NPs and right-peripheral for NPs have a derivation similar in respects not shared by mittelfeld-stranded for NPs.

### 3.5.1 A previous proposal

The contrasts noted in sections 3.2-3.4 have not previously been considered. Corver (1990:p.127ff.), discussing Den Besten (1985), notes that, if after subextraction of *wat*, the constituent  $[t_{wat} \ voor \ boeken \ ]$  becomes [-V], as Den Besten proposes, it will be accessible to extraposition. This, Corver submits, explains why extraposition of *voor boeken* in (32) is fairly acceptable.

<sup>&</sup>lt;sup>28</sup>The Weak Island examples show that the right-peripheral *for NP* cannot be sitting in a low position, neither a low complement position nor a low Topic position of the type discussed in Cecchetto (1999) for Italian. Instead it must be in a position higher than the Island inducer.

# (32) Wat heeft Jan gekocht voor boeken? what has Jan bought for books

Dutch

However, this kind of analysis of apparent extraposition does not explain the commonalities of right-peripheral and left-peripheral *for NP*s observed in sections 3.2-3.4. Especially the fact that both left- and right-peripheral *for NP*s are much less sensitive to Weak Islands than mittelfeld stranded *for NP*s is entirely unexpected under such a view.

### 3.5.2 Present proposal

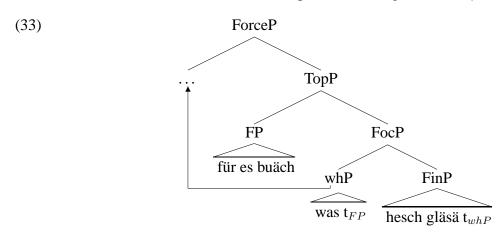
Let me therefore propose an alternative analysis and suggest that the derivation of left- and right-peripheral *for NP*s differ from the derivation of mittelfeld stranded *for NP*s in involving a certain movement step not shared by the latter. The interpretive correlate of this movement step is that the set of (kinds of) donkeys/books/postcards etc. is not treated as discourse given.

Syntactically, the movement must cross the Island inducers in (29) and (30), which in the case of (30) marks a clause boundary. Hence making the assumption that the extra movement step involved in the derivation of left-peripheral *for NP*s and of right-peripheral *for NP*s is the same, it is most natural to think that the landing site of this movement step is a specifier in the left periphery of the (matrix) clause (compatible with Kayne (1994)).

Assuming a left periphery along the lines of Rizzi (1997), I am proposing the following possible (partial) derivation for left-peripheral splitting, represented in (33):

Partial derivation proposed for left-peripheral splitting:

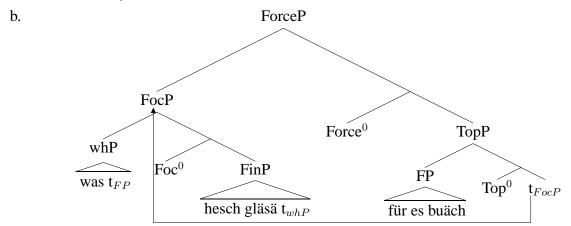
- 1. what for NP moves to the left periphery (to Spec,FocusP).
- 2. [FP for NP] extracts out of the what for phrase (to a Topic position).
- 3. The remnant what  $t_{FP}$  moves across the position hosting the FP  $f_{FP}$  for NP  $f_{FP}$  (to Spec, ForceP).



Extraposition of the *for NP* as in (34a) is derived in exactly the same way except that movement of the remnant [what  $t_{FP}$ ] piedpipes the entire clause, more precisely FocP, to a position to the left of the topicalized for NP. This is represented in (34b) and proceeds as follows:<sup>29</sup>

Partial derivation proposed for right-peripheral for NP:

- 1. what for NP moves to the left periphery (to Spec,FocusP).
- 2. [FP for NP] extracts out of the what for phrase (to a Topic position).
- 3. The remnant what  $t_{FP}$  moves across the position hosting the FP [FP] for NP (to Spec, ForceP), piedpiping FocusP.
- (34) a. Was hesch gläsä [für es buäch]? what have-you read for a book



Grammars/languages may differ with regard to the availability and (seeming) optionality of such piedpiping.

### 4 Conclusion

I have discussed *what for* split drawing on a range of North- and West-Germanic languages, with particular emphasis on Swiss German. I have argued that the basic mechanism for splitting must

- i. Was **für gleser** sind abäghit? what for glasses are down-fallen
- ii. Was sind für gleser abäghit?
- iii. (?\*) Was sind abäghit für gleser? (unstable judgment)

<sup>&</sup>lt;sup>29</sup>There are restrictions on *für NP* extraposition which I don't understand. For example plural subjects do not readily extrapose:

consist of a fronting step of the *for NP* (i.e. the material which will end up stranded) across the *what*, followed by Wh-movement of the remnant [what  $t_{FP}$ ]. I have then shown that in order for for NP fronting to be possible, the what first has to make a DP-internal leftward movement step. This further supports the claim in Leu (to appear) that at an earlier stage what and for form a constituent that excludes the NP. I then proceeded to comparing left-peripheral, mittelfeld, and right-peripheral for NPs with regard to a number of properties, and showed that left-peripheral and right-peripheral for NPs pattern together and against mittelfeld for NPs. I concluded that what for split sometimes occurs (string-vacuously) even within the left periphery, and that "right-extraposition" of the for NP involves left peripheral splitting and heavy pied-piping by the remnant [what  $t_{FP}$ ] of the entire clause around the for NP.

### References

Abels, Klaus. 2003. Adposition stranding and Universal Grammar. Doctoral Dissertation, University of Connecticut.

Androutsopoulou, Antonia. 1997. On remnant DP movement. M.A. thesis UCLA.

Beck, Sigrid. 1996. Wh-constructions and transparent Logical Form. Doctoral Dissertation, Tübingen.

Bennis, Hans. 1983. A case of restructuring. In *Linguistics in the Netherlands*, ed. H. Bennis and W.U.S van Lessen Kloeke, 9–19. Foris.

Bennis, Hans, Norbert Corver, and Marcel den Dikken. 1998. Predication in nominal phrases. *Journal of Comparative Germanic Linguistics* 1:85–117.

Den Besten, Hans. 1981. Government, syntaktische Struktur und Kasus. In *Akten des 15. Linguistischen Kolloquiums, Münster 1980*, ed. Manfred Kohrt and Jürgen Lenerz, volume Band 1, 97–101. Tübingen.

Den Besten, Hans. 1985. The ergative hypothesis and free word order in Dutch and German. In *Studies in German Grammar*, ed. J. Toman, 23–65. Dordrecht.

Börjars, Kersti. 1992. *D* selecting a *PP* complement in Germanic languages. In *Papers from the Workshop on the Scandinavian Noun Phrase*, ed. Anders Holmberg, volume Report 32, 1–19. Department of General Linguistics, Umea.

Bošković, Željko. 2004. Be Careful Where You Float Your Quantifiers. *Natural Language and Linguistic Theory* 22:681–742.

Cecchetto, Carlos. 1999. A comparative analysis of left and right dislocation in Romance. *Studia Linguistica* 53:40–67.

Corver, Norbert. 1990. The Syntax of the Left Branch Extraction. Doctoral Dissertation, Tilburg. Corver, Norbert. 1991. The internal syntax and movement behavior of the Dutch 'wat voor'-construction. *Linguistische Berichte* 133:190–228.

Corver, Norbert, and Marjo Van Koppen. 2005. Microvariation and ellipsis in the *wat voor*-construction. Talk handout, *Sounds of Silence* workshop, Tilburg.

Diesing, Molly. 1992. Indefinites. MIT Press.

Glaser, Elvira, and Natascha Frey. 2006. Doubling phenomena in Swiss German dialects. In *Proceedings of the European Dialects Workshop on Doubling, Amsterdam*. http://www.meertens.knaw.nl/projecten/edisyn/.

Honcoop, Martin. 1998. Dynamic Excursions on Weak Islands. The Hague.

Ijbema, Aniek. 1997. Die *was für*-Konstruktion und Extraktion aus Nominalphrasen. Ms. Rijksuniversiteit Groningen.

Kallulli, Dalina, and Antonia Rothmayr. to appear. Determiner doubling in Bavarian German. *Journal of Comparative Germanic Linguistics*.

Kayne, Richard S. 1994. The antisymmetry of syntax. Cambridge, MA: MIT Press.

Kayne, Richard S., and Jean-Yves Pollock. 2001. New Thoughts on Stylistic Inversion. In *Inversion in Romance*, ed. A. Hulk and Jean-Yves Pollock, 107–162. New York: Oxford University Press.

Koopman, Hilda. 1997. Prepositions, postpositions, circumpositions and particles: The structure of Dutch PPs. Ms. UCLA.

Koopman, Hilda. to appear. Topics in imperatives. In *Imperative clauses in generative grammar. studies offered to Frits Beukema*, ed. Wim van der Wurff. Philadelphia: John Benjamins.

Leu, Thomas. 2003. What moves where and *what for*: an account of Swiss German *was für*. Ms. NYU.

Leu, Thomas. 2005. Something invisible in English. In *Penn Working Papers in Linguistics: Proceedings of PLC 28*, ed. Sudha Arunachalam, Tatjana Scheffler, Sandhya Sundaresan, and Joshua Tauberer, volume 11, 143–154.

Leu, Thomas. to appear. 'What for' internally. Syntax.

Lötscher, Andreas. 1993. Zur Genese der Verdoppelung bei *gaa*, *choo*, *laa*, *aafaa* (gehen, kommen, lassen, anfangen) im Schweizerdeutschen. In *Dialektsyntax. linguistische Berichte, Sonderheft* 5, 180–200. Opladen: Westdeutscher Verlag.

Nkemnji, Michael. 1995. Heavy pied-piping in Nweh. Doctoral Dissertation, UCLA.

Noonan, Máire. 2005. Spotlight on spatial PPs: evidence from German shadows. Ms. McGill (draft).

Pafel, Jürgen. 1996. Die synaktische und semantische Struktur von was für Phrasen. Linguistische Berichte 161:37–67.

Van Riemsdijk, Henk. 1978. A Case Study in Syntactic Markedness. Dordrecht: Foris.

Van Riemsdijk, Henk. 2002. The unbearable lightness of *Going*. The Projection Parameter as a Pure Parameter governing the distribution of elliptic motion verbs in Germanic. *Journal of Comparative Germanic Linguistics* 5:143–196.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In *Elements of grammar*, ed. L. Haegeman, 281–337. Dordrecht: Kluwer.

Roehrs, Dorian. 2006. Something post-pre-nominal. Ms. University of North Texas.

Roehrs, Dorian. 2007. Complex determiners: A case study of German ein jeder. Handout 81<sup>st</sup> Annual Meeting of the LSA; Anaheim, CA.

Schönenberger, Manuela, and Zvi Penner. 1995. Cross-Dialectal Variation in Swiss German: Dou-

bling Verbs, Verb Projection Raising, Barrierhood, and LF-Movement. In *Studies in Comparative Germanic Syntax*, ed. Hubert Haider, Susan Olsen, and Sten Vikner, 285–305. Dordrecht: Kluwer.

Starke, Michal. 2001. Move dissolves into Merge: a theory of locality. Doctoral Dissertation, Université de Genève.

de Swart, Henriëtte. 1992. Intervention effects, monotonicity and scope. In SALT II. Proceedings of the second conference on Semantics and Linguistic Theory (OSUWPL 40), 387–406.

Vikner, Sten. 1995. Verb movement and expletive subjects in the Germanic languages. Oxford University Press.

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