

Control, Raising and Case: from the perspective of passives

Antske Fokkens and Valia Kordoni

Dept. of Computational Linguistics, Saarland University

P.O. Box 15 11 50

D-66041, Saarbrücken, Germany

{afokkens,kordoni}@coli.uni-sb.de

Proceedings of the HPSG06 Conference

Linguistic Modelling Laboratory

Institute for Parallel Processing

Bulgarian Academy of Sciences

Sofia

Held in Varna

Stefan Müller (Editor)

2006

CSLI Publications

<http://csli-publications.stanford.edu/>

Abstract

Since Pollard and Sag (1994) it has been assumed that raising involves full structure sharing, whereas a control verb merely shares content information of one of the lower verb's arguments. In this paper we discuss the difference between raising and control from the perspective of Dutch and German passives. It has already been shown by Van Noord and Kordoni (2005) that the secondary object passives in these languages are raising structures, in which the case of the raised argument changes. In this paper we provide additional evidence for the raising analysis, and we propose a new analysis, which allows for a uniform account of Dutch and German passives as raising structures. Przepiórkowski and Rosen (2004) show that control may exhibit case transmission; the data presented in this paper shows that raising may not. Therefore, we claim that the distinction between raising and control is found in theta-role assignment. Syntactically they tend to behave differently, but they may also behave in the exact same way.

1 Introduction

In this paper we examine the definitions of raising and control in relation to passives in German and Dutch. Both languages have two (non-stative)¹ passives; in German we distinguish the “agentive” passive with the auxiliary *werden* and the dative passive with the auxiliaries *erhalten*, *bekommen* and *kriegen*. Arguments in accusative case become the subject of an agentive passive, whereas arguments in the dative case become subject of a dative passive. In Dutch we distinguish an agentive passive with the auxiliary *worden* and a secondary object passive with the auxiliary *krijgen* (the *krijgen*-passive). Direct objects become subject of an agentive passive, secondary objects become subject of a *krijgen*-passive. The (Dutch) example in (1) reveals an active sentence in (a), its agentive passive in (b) and its *krijgen*-passive in (c).

- (1) a. Peter biedt hem een biertje aan.
 Peter.subj offers him.obj2 a beer.obj PART
 “Peter offers him a beer.”
 b. Hem wordt (door Peter) een biertje aangeboden.
 him.obj2 becomes (through Peter) a beer.subj offered
 “A beer is offered to him (by Peter).”

[†]Many warm thanks to Gertjan van Noord for making the CLEF corpus with search tools available to us, and for his useful remarks and feedback. We also thank Emilia Ellsiepen, Alexandros Poulis and an anonymous reviewer for their feedback on earlier versions of this paper, and the participants of the HPSG conference 2006 for comments and discussion during the presentation. Finally we would like to thank Stefan Müller for providing useful comments and criticism.

¹The stative passives in German and Dutch formed with *sein* (German) and *zijn* (Dutch) go beyond the scope of this paper and will not be discussed here.

- c. Hij krijgt (van Peter) een biertje aangeboden.
 he.subj gets (from Peter) a beer.obj offered
 “He is offered a beer (by Peter).”

In the first part of this paper, the Dutch *krijgen*-passive will be compared to the German dative passive (henceforth the dative passive and *krijgen*-passive will be referred to as *passive2*). It will be argued that both Dutch and German *passive2* differ from the English *get*-structure. Additional evidence supporting this claim for Dutch will be provided. In previous work on the German and Dutch *passive2* carried out by Müller (2002) (for German) and Van Noord and Kordoni (2005) (for Dutch), it has been shown that these passives are raising structures. The evidence provided by Van Noord and Kordoni (2005) will be presented briefly with new data from the CLEF-corpus.²

The second part of this paper will provide a description of the treatment of raising in HPSG. It will be shown that current assumptions concerning the syntax of raising in combination with the standard vision of structural case do not allow these passives to be analysed as pure raising structures. Different solutions to this problem which do not alter the treatment of raising have been proposed by Gunkel (2003) and Van Noord and Kordoni (2005). We will discuss these solutions, and in addition, provide an alternative that will reconsider the syntactic behaviour of raising.

The conclusion and outlook will present the advantages and disadvantages of proposals made in the previous part. We will argue that the Dutch and German data presented in this paper suggests that the syntax of raising needs to be reconsidered. However, additional research including more languages is necessary to see whether the treatment of raising in HPSG needs to be revised.

2 The syntax of *passive2*

2.1 The difference between Dutch and German second passives

The German dative passive takes dative arguments and turns them into subjects. The datives that become subjects can be part of a ditransitive, but this is not necessarily so as the example³ below reveals.

- (2) a. Viele haben ihm geholfen /gratuliert /applaudiert.
 many.nom have him.dat helped /congratulated /applauded
 “Many have helped/congratulated/applauded him.”

²The Dutch CLEF corpus was formed during the CLEF (Cross-Language Evaluation Forum) workshop in 2001. It consists of over 4 million sentences coming from newspaper articles (coming from NRC handelsblad and Algemeen Dagblad) published in 1994, 1995.

³Example (2b) comes from Wegener (1985) (p. 134). Several linguists that are native speakers of German (among others Gerdes (2002), and Müller (2002)) have shown examples where *helfen* is passivised in a dative passive, but not all German speakers accept them. We use this example, because it is relevant for the analysis suggested by Gunkel (2003).

- b. Er kriegte von vielen geholfen /gratuliert /applaudiert.
 he.nom got by many helped /congratulated /applauded
 “He was helped/congratulated/applauded by many.”
- (3) a. Ich sage dir wann es fertig sein soll.
 I.nom tell you.dat when it ready be must
 “I will tell you when it must be ready.”
- b. Du bekommst (von mir) gesagt wann es fertig sein soll.
 you.nom get by me told when it ready be must
 “You’ll be told (by me) when it must be ready.”

In general only nominative and accusative are marked in Dutch. Only the third person plural pronoun has three forms, the nominative form *zij* and the forms *hen* and *hun*. Officially, the pronoun *hun* is used for secondary objects and a small set of direct objects. For other direct objects and complements of prepositions *hen* should be used. Therefore, *hun* could be seen as a dative and *hen* as the accusative case. However, most Dutch speakers do not distinguish the two forms and it is often claimed that Dutch does not distinguish dative case. In the Dutch *krijgen*-passive, as was mentioned above, the subject of the sentence corresponds to the secondary object of the active counterpart. Transitive verbs in Dutch cannot occur as the verbal complement of a *krijgen*-passive, even if the direct object should (officially) occur with the ‘dative’ pronoun *hun*. Dutch examples which are similar to (2b) and (3b) are ungrammatical, as shown in (4b).

- (4) a. Peter heeft hun geantwoord.
 Peter.nom has them.dat answered
 “Peter has answered them.”
- b. *Zij krijgen geantwoord.
 they.nom get answered
 “They were answered.” (intended)
- (5) a. Ik zeg hun wanneer het af moet zijn.
 I.nom tell them.dat when it ready must be
 “I will tell them when it must be ready.”
- b. *Zij krijgen (door mij) gezegd wanneer het af moet zijn.
 they.nom get by me told when it ready must be
 “They will be told (by me) when it must be ready.”

Examples (2) and (4) show that the Dutch and German passive2 are different; in German the auxiliary selects an argument based on its case, whereas in Dutch the auxiliary selects the secondary object. Note that in neither language the passivisation is completely systematic. A detailed discussion goes beyond the scope of this paper, but we refer the reader to Müller (2002), who suggests that the possibility to use the dative passive is related to accusativity. Some German speakers do

not accept (2b). For these speakers the German dative passive may have the similar restrictions as the Dutch *krijgen*-passive.⁴

2.2 The Dutch *krijgen*-passive and the English *get*-structure

It has been argued that the German passive2 is not a real passive, and that it behaves like the English *get*-structure. The English *get*-structure allows for the introduction of a new argument, as shown by Woolford (2006). Her example is presented in (6) below.⁵

- (6) a. Pat got/had three papers accepted.
b. * They accepted Pat three papers.

The correspondence between a (possible) dative argument and the German dative passive and a secondary object and the Dutch *krijgen*-passive is obligatory. The German dative passive and the Dutch passive2 differ, thus, from the English *get*-structures. Additional evidence for the correspondence between a *krijgen*-passive in Dutch and the presence of a secondary object comes from Dutch causative-movement verbs. Verbs like *werpen* (throw), *schoppen* (kick) and *slaan* (hit) have two subcategorisation frames in Dutch. They are either transitive or they subcategorise for a subject, a direct object, a secondary object and a locative prepositional phrase. Ditransitive structures with these verbs are ungrammatical. As the examples below reveal, the locative is obligatory in case of a *krijgen*-passive as well.

- (7) a. * Ik werp hem de bal.
I throw him the ball

⁴Van Noord and Kordoni (2005) show that the Dutch *krijgen*-passive may also occur when the direct object is not overtly realised. They present the following examples with the verbs (*door*)*betalen* ((to continue) to pay) and *uitkeren* (to pay out (benefits)), which may form a dative passive, even when their direct object (*salaris* (salary)), for instance, in the case of (*door*)*betalen* is not syntactically overt:

- (1) a. Hij wordt doorbetaald.
he.subj is paid-through
“He is being paid.”
b. Hij krijgt doorbetaald.
he.subj gets paid-through
“He is getting paid.”
(2) a. Hij krijgt uitgekeerd.
he.subj gets paid-out
“He is getting paid out benefits.”
b. Hij wordt uitgekeerd.
he.subj is paid-out
“He is being paid out.”

⁵Example from Woolford (2006) (examples (41) and (42), p.17).

- “I throw the ball at him.” (intended)
- b. * Hij krijgt de bal geworpen.
 he gets the ball thrown
 “The ball is thrown at him.” (intended)
- c. Ik werp hem de bal in de handen.
 I throw him the ball in the hands
 “I throw the ball in his hands.”
- d. Hij krijgt the ball in de handen geworpen.
 he gets the ball in the hands thrown
 “He receives the ball thrown in his hands.”

Examples (7a) and (7d) show that in Dutch the *krijgen*-passive can only occur if the passivised verb takes a secondary object. Additional evidence for this claim can be found in the evidence that the *krijgen*-passive is a raising construction, provided by Van Noord and Kordoni (2005). This evidence will be briefly presented in the next section.

2.3 Evidence for a raising analysis

Having established that the subjects of these passives correspond to arguments of the passivised verb, the question now rises whether the passive2 of German and Dutch are instances of raising or control. Müller (2002) provides evidence that in the German dative passive the subject is raised, Van Noord and Kordoni (2005) show that this is also the case for Dutch *krijgen*-passives. Due to lack of space, we will restrict ourselves to a brief representation of the evidence provided by Van Noord and Kordoni (2005).

Pollard and Sag (1994) discuss various differences between raising and control; the essential (and a well established) difference concerns theta-role assignment. A control verb assigns a theta-role to its controlled argument, whereas a raising verb does not, as stated in the raising principle. Throughout this paper, we will use this criterion to decide whether a construction is an instance of raising or control. The evidence provided by Van Noord and Kordoni (2005) supports the claim that the auxiliary *krijgen* does not assign a theta-role to its subject.

Raising structures — in contrast to control structures — do not allow for their verbal complement to be pronominalised. Van Noord and Kordoni (2005) show that the *krijgen*-passives behave in the same way as the raising verb *schijnen* (seem) in (8b)-(9b), and differently from a control verb such as *proberen* (try) in (8c)-(9c). Examples (8) and (9) reveal that *krijgen* behaves like a raising verb in matters of verb phrase pronominalisation (VPP).⁶

- (8) a. * Hij krijgt uitbetaald en Piet krijgt dat ook.
 he gets paid and Peter gets that too

⁶These examples were taken from Van Noord and Kordoni (2005), (examples (24)-(29) , p.418-419).

- “He gets paid and so does Peter. (intended)”
- b. * Ik schijn te winnen en mijn tegenstander schijnt dat ook.
I seem to win and my opponent seems it too
“I seem to win and so does my opponent. (intended)”
 - c. Ik probeer te winnen en mijn tegenstander probeert dat ook.
I try to win and my opponent tries that too
“I try to win and so does my opponent.”
- (9) a. * Uitbetalen bij ziekte? Nee, dat krijg ik niet.
PART-pay in case of illness? No, that get I not
“To pay in case of illness? No, that I don’t get.”
- b. * De wedstrijd winnen? Ja, dat schijn ik.
the match win? yes, that seem I
“To win the match? Yes, that is what I seem.”
 - c. De wedstrijd winnen? Ja, dat probeer ik.
the match win? yes, that try I
“To win the match? Yes, that is what I try.”

Additional evidence comes from the fact that *krijgen*-passives are found, in expressions where the direct object and the ditransitive verb form an idiom. Van Noord and Kordoni (2005) provide several examples of ‘more fixed primary objects’. We only present one example here: the passive comes from the CLEF-corpus, an active variant is presented in (10b).⁷

- (10) a. Weet je wel wat-ie allemaal naar z’n hoofd krijgt
know you well what.obj-he.subj all to his head gets
geslingerd?
PART-swing
“Do you have any idea how much he is insulted?”
- b. Weet je wel wat ze hem allemaal naar z’n
know you well what.obj they.subj him.obj2 all to his
hoofd slingeren?
head gets-swing
“Do you have any idea how much they insult him?”

Moreover, the main verb *krijgen* means “to receive”; in many examples of *krijgen*-passives, the subject clearly cannot have a role of a receiver:^{8,9}

⁷Example (10a) from the CLEF-corpus AD19940221-0098-702-11.

⁸Example (11) from the CLEF-corpus AD19940221-0098-702-11.

⁹As was mentioned above, we limit ourselves to evidence that the Dutch *krijgen*-passive is raising. The point made with (11) has been made before for German. Classical examples can be found in Müller (2002), who refers to Reis (1976), Eroms (1978), Askedal (1984) and Wegener (1985) for discussion on this matter. For additional examples in Dutch see Van Noord and Kordoni (2005).

- (11) ... Later kreeg Raas in de donkere hal een pistool tegen het
 ... later got Raas.subj in the dark hall a pistol.obj1 against the
 hoofd gedrukt.
 head pressed
 “Later, in the dark hallway a pistole was pressed against Raas’ head.”

This can also be seen in the fact that we found *krijgen*-passives in our corpus with verbs such as *influisteren* (to whisper in), *lezen* (to read), *toeschreeuwen* (to shout at) and *vragen* (to ask). Taking this evidence in consideration, it is clear that the auxiliary *krijgen* should be considered a raising verb.

3 Raising and the Dutch and German passive2

3.1 The problem of the Dutch and German passive2

Although Müller (2002) provides—in our opinion—convincing evidence that the German passive2 is a raising structure, the analysis he proposes for the dative passive does not conform to the syntactic properties that raising has under current assumptions in HPSG. In this part we will discuss why the passive2 is problematic for the standard analysis of raising in HPSG.

As was mentioned above, raising and control are distinguished through theta-role assignment. Pollard and Sag (1994) also point out a syntactic difference between raising and control, mainly based on work on Icelandic by Sag et al. (1992). It is assumed that in the case of raising, the entire synsem of the raised argument is structure shared with an argument of the verbal complement, whereas in the case of control merely information from the NP’s content is token identical. However, as noted in Pollard and Sag (1994), this syntactic difference is not as well established as the semantic difference. Some Icelandic speakers for instance, accept sentences in which the controlled argument has kept the case assigned by the lower verb.¹⁰ We will maintain the idea that raising and control differ in theta-role assignment. The syntax of raising may differ from the syntax of control in the sense that it always entails full structure sharing, but this is still an open question.

The idea that raising involves structure sharing of the entire synsem, whereas control does not, has been generally adopted by researchers dealing with these phenomena in HPSG. Token identity of the synsem of an NP entails token-identity of the case it bears. Many languages have matrix verbs that trigger subject-to-object raising, where an argument normally bearing nominative case occurs in accusative case when it is raised. In order to account for these structures, the distinction between structural and lexical case previously used in theories such as *Government and Binding Theory* has been introduced in HPSG. An argument bearing a structural case may bear a different case when raised to a different syntactic position. If

¹⁰In the meantime, additional evidence from other languages has shown that control indeed may or may not exhibit case transmission, and thus can behave like raising on the syntactic level.

an argument bearing a lexical case is raised, its case will be preserved. Following Przepiórkowski (1999), we will assume that structural cases are assigned according to their position on the dependency list, and that raised arguments, marked [RAISED +] are exempt from this case assignment principle. This analysis allows for structural cases to change when an argument is raised. Lexical cases will be preserved, because they are not assigned by a case assignment principle.

Heinz and Matiassek (1994) show which cases in German are structural and which cases are lexical.¹¹ They show that accusative, nominative and genitive cases are generally structural, though both accusative and genitive may be lexical, as well. The dative is a lexical case in German. Under the definition of lexical case used in Heinz and Matiassek (1994), the analysis proposed in Van Noord and Kordoni (2005) may also be taken to assume that the Dutch secondary object could bear a lexical case, as well. If the German and Dutch passive2 are instances of raising, as has been proposed by Müller (2002) and Van Noord and Kordoni (2005), the raised argument should keep its lexically assigned case. However, as the examples in Section 2 have shown, the subjects of the Dutch and German passive2 bear a nominative case. It is therefore not possible to analyse these passives as true raising structures under standard assumptions of HPSG. The next section will present previously proposed solutions to this problem.

3.2 Three solutions to analyse German and Dutch passives as raising

There are several ways to analyse the passive2 as raising, despite the contradiction presented in the previous section which differ from a theoretical point of view. The origin of the problem lies in the combination of two assumptions: the assumption that the argument raised in a passive2 bears a lexical case, and the assumption that raising involves case transmission. One solution may be to maintain the assumptions concerning the syntax of raising as well as the definitions of structural and lexical case. In this case an additional mechanism must be introduced to allow for the passive2 to be analysed as a true raising structure. Such a mechanism has been proposed by Van Noord and Kordoni (2005).

Another solution, which has been pursued by Gunkel (2003) for German, maintains the syntactic analysis of raising, but changes the status of the dative case in German and the case of the secondary object in Dutch: if these cases are structural instead of lexical, they are expected to change into a nominative when the argument is raised to a subject position. A third way this problem may be solved would be to abandon the assumption that raising necessarily involves structure sharing of the complete synsem. To our knowledge this solution has not been proposed before, though if the analysis of the auxiliary *bekommen* proposed by Müller (2002) is to be taken as a true raising analysis, it has been adopted implicitly in Müller (2002).

¹¹As was pointed out to us by Stefan Müller, the distinction proposed in Heinz and Matiassek (1994) goes back to Haider (1985). Not all linguists agree on the status of the dative (as can be seen for instance in the proposal made by Gunkel (2003)). Evidence has been provided by Haider (1985), and can also be found in Müller (2002).

This section will briefly present the first two solutions, the third solution will be presented in Section 3.3. Advantages and disadvantages of each proposal will be discussed. During the discussion we will respect the following assumptions: firstly, it depends on theta-role assignment whether a structure is an instance of raising or control. It is an empirical question whether they reveal different syntactic behaviour, as well. Secondly, we assume that the syntactic behaviour of raising may universally involve structure sharing of the entire synsem, but this may as well be a language specific property, or it may depend on the raising verb. Thirdly, if a verb has an argument which bears a lexical case, this case is maintained when a raised (or controlled) argument has a token-identical synsem. Furthermore, we assume that “agentive” passives and the passive2 ought to be analysed in a similar way.

Van Noord and Kordoni (2005) propose an object-to-subject raising function which allows for the case to change when raising occurs. Their function is presented in Figure 3.2 below.

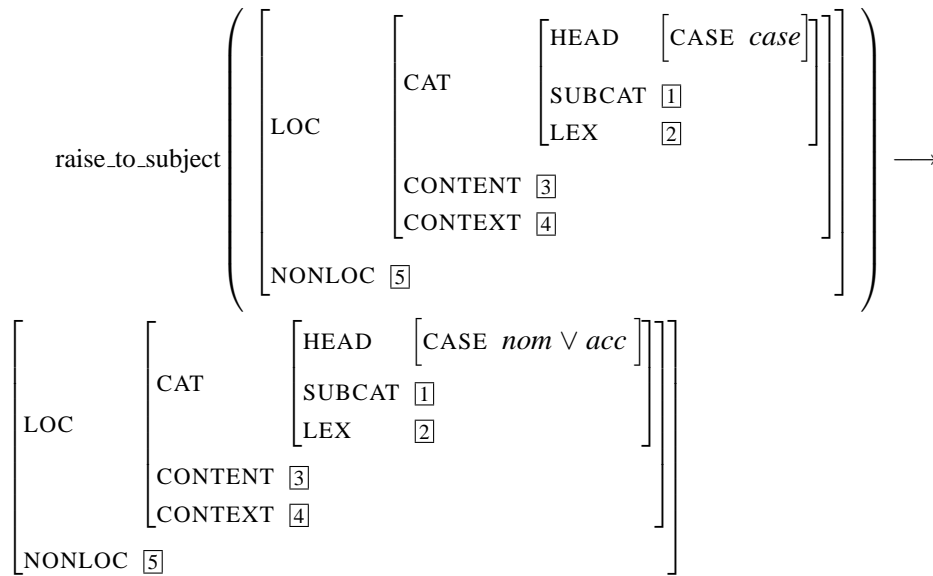


Figure 3.2: Definition of the function `raise_to_subject()`

When the raise-to-subject function applies, all features of the synsem are structure shared, except for the case value. Linguists who have criticised this analysis have argued that this analysis is a computational trick. This might be true, but it is the only way to analyse the German and Dutch passive2 as true raising structures under current HPSG assumptions. Moreover, if we want to maintain that the complete synsem is shared in raising, their analysis describes exactly what is going on: all values of the synsem are token-identical, but somehow the case value “slips through” this unification constraint and the case changes. On the other hand, the passive2 is a raising structure and the case of the raised argument is not main-

tained, contrary to the prediction made by full structure sharing. Therefore, this passive may indicate that either assumptions about raising, or assumptions about the case of the raised argument are not correct. The other proposal presented here, as well as the proposal made in the next section, assume that the passive2 provides evidence for one of these two claims.

Lutz Gunkel proposes an analysis that assumes that a dative in German may be structural. A difficulty with this assumption, when assigning structural case as proposed by Przepiórkowski (1999), is that structural case is assigned according to the position of the argument on the list of the dependents of the verb. In general, it would be possible to assume that the structural dative is assigned to the secondary object, but as example (2b) above has shown, a dative passive may also occur with a bivalent verb.

Gunkel (2003) proposes that German has two structural cases: the first, *struc1*, is either nominative or accusative, the second, *struc2* is either nominative or dative. Ditransitives, as well as transitive verbs, like *helfen*, select for an argument bearing a *struc2* case. When this argument is not raised, it will bear a dative case. When raised to the subject, it becomes the external argument of the structure and it will bear a nominative case. This analysis works, but it renders the perception of case more complicated. It seems that only dative passives support the claim concerning the existence of two structural cases. Unless there is supplementary evidence for these two different kinds of structural cases, an alternative analysis avoiding such a complication would be preferable.¹²

Both of the solutions presented above involve a complication of the grammar (by assuming a more elaborate case system in German or by an additional mechanism) in order to maintain the idea that a raising structure must involve structure sharing of the complete synsem. The next section will present a third solution, which provides a simple analysis for Dutch and German passives. This analysis consists in a revision of the syntactic behaviour of raising.

3.3 Bringing raising and control closer

As was mentioned above, the hypothesis that raising entails token-identical synsems is based on evidence coming from Icelandic quirky cases. In their discussion of this analysis, Pollard and Sag (1994) suggest that control may (sometimes) have the same properties as raising. In order to solve the problems with the German and Dutch analysis, we suggest to turn this idea around: raising may (sometimes) have the same properties as control. Looking at Dutch and German examples in this paper, it is not clear what can be gained by structure-sharing the complete synsem. It seems to introduce more problems than it solves. It is an empirical question whether the syntactic behaviour of raising in Icelandic is a universal property of raising.

¹²For a detailed critical discussion of Gunkel (2003)'s proposal, see Müller (2007).

Przepiórkowski and Rosen (2004) describe the behaviour of raising and control in Czech. Their paper shows that raising generally involves full structure sharing, whereas control may or may not share the complete synsem. However, it does not seem to be the case that raising necessarily involves full structure sharing. Przepiórkowski and Rosen (2004) observe the following:

“From this perspective, it is worrisome that (...) some speakers of Czech (about 12 percent) accepted the following raising construction without case transmission:

- (12) a. ??Bylo vidět dost lidí vracet se od okénka
 was seen enough.nom people.gen return from counter
 nespokojení.
 dissatisfied.nom
 “One could see quite a few people return from the counter dissatisfied.”

(Przepiórkowski and Rosen (2004) p.41)”

Apparently, not all raising structures entail structure sharing of the entire synsem. If this is the case, the problem presented in Section 3.1 could be solved by simplifying the analysis of raising and assume that raising — at least in Dutch and German — may involve structure sharing of content information only. This would mean that the analysis for the German dative passive remains as proposed by (among others) Müller (2002), but they will now be considered a “true” raising structure. In order to provide a uniform analysis of passives in Dutch and German without supplementary mechanisms, the analyses proposed for the German agentive passive and for the two Dutch passives are changed. To illustrate the analysis, a part of the lexical entry for the passive auxiliaries *krijgen* and *worden* are presented in (13) and (14), respectively.

- (13) *krijgen* (secondary object raising auxiliary)

$$\left[\begin{array}{l} \text{SUBCAT} \left\langle \left[\begin{array}{l} \text{CAT|HEAD } \textit{noun} [\text{CASE } \textit{nom}] \\ \text{CONTENT } \boxed{1} \end{array} \right] \right\rangle \oplus \boxed{2} \oplus \boxed{3} \\ \text{XCOMP} \left\langle \text{V} \left[\begin{array}{l} \text{LEX} + \\ \text{SUBCAT } \boxed{2} \oplus \left\langle \left[\begin{array}{l} \text{CAT|HEAD } \textit{noun} [\text{CASE } \textit{dat}] \\ \text{CONTENT } \boxed{1} \end{array} \right] \right\rangle \oplus \boxed{3} \\ \text{XCOMP } \langle \rangle \end{array} \right] \right\rangle \end{array} \right]$$

- (14) *worden* (object raising auxiliary)

$$\left[\begin{array}{l} \text{SUBCAT} \left\langle \left[\begin{array}{l} \text{CAT|HEAD } \textit{noun} [\text{CASE } \textit{nom}] \\ \text{CONTENT } [1] \end{array} \right] \right\rangle \oplus [2] \oplus [3] \\ \text{XCOMP} \left\langle \begin{array}{l} \text{V} \left[\begin{array}{l} \text{LEX} \quad + \\ \text{SUBCAT } [2] \oplus \left\langle \left[\begin{array}{l} \text{CAT|HEAD } \textit{noun} [\text{CASE } \textit{acc}] \\ \text{CONTENT } [1] \end{array} \right] \right\rangle \oplus [3] \end{array} \right] \\ \text{XCOMP } \langle \rangle \end{array} \right\rangle \end{array} \right]$$

In this analysis *krijgen* and *worden* are analysed in the same manner as *bekommen* is analysed by Müller (2002). The difference lies in the fact that under our analysis raising does not entail full structure sharing. Therefore, these structures are instances of raising, despite the fact that they do not exhibit case transmission. Another difference between the analysis for *bekommen* proposed by Müller (2002) and our analysis is that no distinction has been made between structural and lexical case. We have not used this distinction in our representation, for we are not convinced that structural and lexical case need to be distinguished in Dutch. A detailed discussion on this matter goes beyond the scope of this paper. If it would turn out to be linguistically motivated, the analysis can easily be adapted to use structural and lexical case.¹³

Van Noord and Kordoni (2005) note that the raised argument in a passive does not always bear a nominative case. If the passive occurs as the complement of the verb *zien* (see), it will bear the accusative case. This is demonstrated in the following example.¹⁴

- (15) Ik zie hem gekust worden.
I.nom see him.acc kissed be
“I see him being kissed.”
- (16) Ik zie hem het boek toegestuurd krijgen.
I.nom see him.acc the book PART-sent get
“I see that he gets the book sent to him.”

This data does not present a problem for the analysis proposed above: the verb *zien* in these examples assigns an accusative case to the subject of its complement. The passive auxiliaries behave thus in the same way as any other verb, as shown in example (17).

¹³Note that in our analysis, we assume the feature structure of the sign as presented in Pollard and Sag (1994); CONTENT contains person, number and gender. If one were to base the analysis on Sag et al. (2003), agreement information is a head feature, and will not be shared. However, this does not pose a problem in the case of passives because the raised argument need not agree with anything in the lower clause. If one does want to maintain agreement information and assume Sag et al. (2003), these passives can only be analysed with the *raise_to_subject* function proposed by Van Noord and Kordoni (2005).

¹⁴Example from Van Noord and Kordoni (2005) examples (20) and (21) p.417.

- (17) Ik zie hem lopen.
 I.nom see him.acc walk
 “I see him walking.”

A detailed analysis of the structure presented in examples (15), (16) and (17) goes beyond the scope of this paper. Following the analysis we propose for passives, a logical solution would be to suppose that *zien* (see) in these structures raises the subject of the verb in the lower clause without structure sharing the case value. The analysis presented in this section seems preferable to the analyses presented in Section 3.2, for it provides a simple uniform account for passives, without using an additional mechanism or a second structural case. It must be noted, though, that this analysis can only be used, if one abandons the assumption that raising involves full structure sharing. As mentioned in Section 3.2, if one wants to maintain the idea that full structure sharing — and thus case transmission — is a universal property of raising, a mechanism as proposed by Van Noord and Kordoni (2005) must be used to account for these passives.

4 Conclusion and Outlook

In this paper we have provided a description of Dutch and German passives and introduced corpus-based observations of the Dutch *krijgen*-passive. Following Müller (2002) and Van Noord and Kordoni (2005), we consider Dutch and German passives to be instances of raising. Evidence showing that the Dutch *krijgen*-passive is indeed a raising structure has been presented. Section 3.1 has shown that it is not possible to analyse these passives as true raising structures, if one wants to maintain the standard vision on the syntax of raising, the status of the German dative and the case of secondary objects in Dutch. Two solutions have been proposed: both maintain the syntactic description of raising given in Pollard and Sag (1994). The first solution requires the use of an additional mechanism, such as the *raise_to_subject* function proposed by Van Noord and Kordoni (2005). The second analysis changes the status of the German dative. It has been shown that this analysis results in a more complex case system for German.

The solution proposed by Van Noord and Kordoni (2005) is in our opinion preferable to the solution proposed by Gunkel (2003) for two reasons. Firstly, as mentioned above, there is hardly any evidence for the existence of two structural cases in German. Secondly, when raising must always (universally) entail structure sharing of the complete synsem, a mechanism similar to the object-to-subject-raising function proposed by Van Noord and Kordoni (2005) can be used to account for examples like (12a), which showed that some Czech speakers allow for the lexical case of a raised argument to change.

Section 3.3 has introduced a more radical solution, which would allow for a simple uniform analysis for the four passives. In this solution the syntactic difference between raising and control is abandoned. The advantage of the last solution

is that it provides a simpler and more straightforward account than the other two. If additional research would show that the syntactic behaviour of raising is not universal, we believe that the analysis given in Section 3.3 provides the best account for German and Dutch passives.

However, as we mentioned above, it is an empirical question whether raising syntactically differs from control. Dutch and German passives seem to indicate that raising and control can be syntactically similar and raised arguments may only share content. On the other hand, Icelandic provides evidence that the complete synsem must be structure shared in raising structures. It has been shown in this paper that, even though sharing of content only seems preferable, it is possible to share the complete synsem in Dutch and German raising with the analysis proposed by Van Noord and Kordoni (2005). Therefore, it is too early to completely abandon the hypothesis that the complete synsem should be structure shared.

The Czech data presented by Przepiórkowski and Rosen (2004) seems to be the best evidence for the behaviour of raising at this point: a raising verb tends to raise the complete synsem of the raised argument, but, just like control sometimes behaves like raising and shares the entire synsem, raising sometimes behaves like control and does not exhibit case transmission. Raising generally entails structure sharing of the complete synsem, but this property may either be universal, or language specific. It might also depend on the raising verb or even on the speaker. We therefore suggest that the syntactic behaviour of raising should be re-investigated. Further research will expand the data and look for cross-linguistic evidence to clarify the syntactic behaviour of raising.

At this point, Dutch and German passives can either be analysed using the *raise.to.subject* function proposed by Van Noord and Kordoni (2005), or according to the analysis proposed in Section 3.3. Regardless of the analysis used to account for this data, German and Dutch passives show that it is not possible to maintain that raising always involves case transmission. This observation, in combination with the survey presented by Przepiórkowski and Rosen (2004), which shows that control can exhibit case transmission, leads to the conclusion that the syntactic differences between raising and control must be considered as tendencies and are not properties of the phenomena themselves.

References

- Askedal, John Ole. 1984. Grammatikalisierung und Auxialisierung im sogenannten „bekommen/kriegen/erhalten-Passiv“ des Deutschen. *Kopenhagener Beiträge zur germanistischen Linguistik* 22, 5 – 47.
- Eroms, Hans-Werner. 1978. Zur Konversion der Dativphrasen. *Sprachwissenschaft* 3, 357 – 405.
- Gerdes, Kim. 2002. *Topologie et grammaires formelles de l'allemand*. Ph. D.thesis, University of Paris 7.

- Gunkel, Lutz. 2003. *Infinitheit, Passiv und Kausativekonstruktion im Deutschen*. Studien zur deutschen Grammatik, No. 67, Tübingen: Stauffenburg Verlag.
- Haider, Hubert. 1985. The Case of German. In Jindrich Toman (ed.), *Studies in German Grammar*, pages 65–101, Dordrecht: Foris.
- Heinz, Wolfgang and Matiasek, Johannes. 1994. Argument structure and case assignment in German. In John Nerbonne, Klaus Netter and Carl Pollard (eds.), *German in Head-Driven Phrase Structure Grammar*, pages 199–236, CSLI Publications, no. 46 in CSLI Lecture Notes.
- Müller, Stefan. 2002. *Complex Predicates: Verbal Complexes, Resultative Constructions, and Particle Verbs in German*. Studies in Constraint-Based Lexicalism, No. 13, Stanford: Center for the Study of Language and Information.
- Müller, Stefan. 2007. *Head-Driven Phrase Structure Grammar: Eine Einführung*. Stauffenburg Einführungen, Tübingen: Stauffenburg Verlag, to appear.
- Pollard, Carl and Sag, Ivan A. 1994. *Head-Driven Phrase Structure Grammar*. University of Chicago Press.
- Przepiórkowski, Adam. 1999. *Case Assignment and the Complement-Adjunct Dichotomy: A Non-Configurational Constraint-Based Approach*. Ph.D.thesis, Universität Tübingen, Germany.
- Przepiórkowski, Adam and Rosen, Alexandr. 2004. Czech and Polish Raising/Control with or without Structure Sharing. *Language and Research* 3 pages 33–66.
- Reis, Marga. 1976. Zum grammatischen Status der Hilfsverben. *Beiträge zur Geschichte der Deutschen Sprache und Literatur* 98, 64 – 82.
- Sag, Ivan, Karttunen, Lauri and Goldberg, Jeffrey. 1992. A lexical analysis of Icelandic Case. In Ivan Sag and Anna Szabolcsi (eds.), *Lexical Matters*, CSLI Lecture Notes no.24, CSLI Publications.
- Sag, Ivan A., Wasow, Thomas and Bender, Emily E. 2003. *Syntactic Theory : a formal introduction*. CSLI Lecture notes, Nr. 152, CSLI Publications.
- van Noord, Gertjan and Kordoni, Valia. 2005. A Raising Analysis of the Dutch Passive. In Stefan Müller (ed.), *The Proceedings of the 12th International Conference on Head-Driven Phrase Structure Grammar*, pages 410 – 426, CSLI Publications.
- Wegener, Heide. 1985. „Er bekommt widersprochen” - Argumente für die Existenz eines Dativpassivs im Deutschen. *Linguistische Berichte* 96, 127 – 139.
- Woolford, Ellen. 2006. Lexical Case, Inherent Case, and Argument Structure. *Linguistic Inquiry* 37.1.