Passives in Germanic Languages:
the case of Dutch and German

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1. Introduction

In this paper, we examine the syntactic behaviour of agentive and recipient passives in Dutch and German. Despite the fact that passives in Germanic languages have been discussed quite extensively in the literature (e.g., Haider (1984), Reis (1986)), no accounts exist that provide evidence which convincingly support the to-date predominant analyses of these phenomena as raising structures (Müller (2002; 2003)). Thus, in our effort to provide a uniform syntactic analysis of passives in Germanic languages, we are looking at equi structures, as well as raising phenomena, also in relation to case in Germanic languages, for as far as passivisation phenomena are concerned the challenge lies in the fact that recipient passives exhibit a change in the case value of arguments that maintain their case in agentive passives. The paper provides an elaborate discussion of all related phenomena, proposing as an outcome a well founded and motivated uniform raising syntactic analysis in Head-Driven Phrase Structure Grammar (henceforward HPSG, Pollard & Sag (1994)) for the agentive and the recipient passives in both Dutch and German.

2. The Data

2.1 Dutch Passives

The following are examples of the main passives in Dutch:[1][2]

(1) (a) Peter   kust   haar.
       Peter-SUBJ   kisses her-OBJ1
       'Peter kisses her.'
   (b) Zij   wordt gekust (door Peter).
       she-SUBJ is   kissed (by   Peter)
       'She is kissed (by Peter).'

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[1] In the glosses SUBJ = subject, OBJ1 = object1 (*primary object*), OBJ2 = object2 (*secondary object*).
[2] The *zijn* ('stative') passives in (2) above are beyond the scope of this paper.

(2) Het raam   is geopend.
    the window- SUBJ is opened
    'The window is open.'

There are also impersonal passives in Dutch:[3]

(3) (a) Peter   danst   in Amsterdam.
        Peter-SUBJ   dances   in Amsterdam
        'Peter is dancing in Amsterdam.'
    (b) In Amsterdam wordt gedanst.
        in Amsterdam is   danced
        'There is dancing in Amsterdam.'
(4) (a) Peter   arriveert in Amsterdam.
        Peter-SUBJ   arrives in Amsterdam
        'Peter arrives in Amsterdam.'
    (b) *In Amsterdam wordt gearriveerd.
         in Amsterdam is   arrived
         'There is arriving in Amsterdam.'

Dutch also exhibits a special kind of passives which are formed with the auxiliary *krijgen* ('to get'; henceforth, *krijgen* passive). The *krijgen* passive is formed from ditransitive verbs in Dutch, which subcategorise for a *primary* (obj1) and a *secondary* (obj2) object. The *secondary* object of the ditransitive verb surfaces as the subject of the *krijgen* passive:

(5) (a) Ik   stuur hem   het boek   toe.
        i-SUBJ send him-OBJ2 the book-OBJ1 to
        'I send him the book.'
    (b) Hij   krijgt het boek   toegestuurd.
        he-SUBJ gets   the book-OBJ1 sent-to
        'He gets the book sent.'
(6) (a) We   betalen hem   zijn salaris   door.
        we-SUBJ pay   him-OBJ2 his wages-OBJ1 through
        'We continue to pay him his wages.'
    (b) Hij   krijgt zijn salaris   doorbetaald.
         he-SUBJ gets   his wages-OBJ1 paid-through
         'He is being paid his wages.'

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[3] Impersonal passives are also beyond the scope of this paper.

In contrast, when the *primary* object of the ditransitive verb surfaces as the subject of the passive form of Dutch ditransitives, like the one in (5a), for instance, then this passive is formed with the auxiliary *worden*, like the passive form of regular transitive verbs in Dutch (see example (1) above):

(7) (a) Ik   stuur hem   het boek   toe.
     i-SUBJ send him-OBJ2 the book-OBJ1 to
     'I send him the book.'
  (b) Het boek   wordt hem   toegestuurd.
     the book-SUBJ is   him-OBJ2 sent-to
     'The book is sent to him.'
  (c) *Hij   wordt het boek   toegestuurd.
     he-SUBJ is   the book-OBJ1 sent-to
     'He is sent the book.'

As can be observed in examples (5) and (6) above, the *primary* objects of the active forms in (5a) and (6a) (*het boek* and *zijn salaris*, respectively) retain their grammatical function (obj1) in the passive sentences in (5b) and (6b). Actually, the absence of the *primary* object of the ditransitive active form from the corresponding *krijgen* passive renders the latter ungrammatical:

(8) *Hij   krijgt toegestuurd.
    he-SUBJ gets   sent-to
    '*He was sent.'

2.2 Some interesting exceptions

An exception in the passive patterns in Dutch presented in section 2.1 is observed with the verb *betalen* (to pay) and its derivatives (*doorbetalen* (to continue payment), *uitbetalen* (to pay out), *terugbetalen* (to pay back), etc.).

As shown from examples (7a)–(7c) above, in general *secondary* objects (obj2s) in Dutch ditransitives can never passivise with the auxiliary *worden*. That is, the *secondary* object of Dutch ditransitives, like *geven* and *betalen*, can never surface as the subject of a *worden* passive:

(9) *Hij   wordt het boek   gegeven.
    he-SUBJ is   the book-OBJ1 given
    'He is given the book.'
(10) *Hij   wordt zijn salaries   doorbetaald.
     he-SUBJ is   his wages-OBJ1 paid-through
     'He is being paid his wages.'

An exception to this pattern is observed in structures like the one in example (11) below. Moreover, when in active sentences headed by the verb *betalen* (to pay) the *primary* object (obj1) is not phonologically realised, then *krijgen* passive structures are also possible (see example (11b) below), in contrast to the behaviour of the rest of the Dutch ditransitives as presented in (8) in the previous section. This last pattern is also to be observed with the verb *uitkeren* (to pay out (benefits); see example (12)).

(11) (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.'
(12) (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.'

But whereas (11a) and (11b) have the same meaning, (12b) does not entail the same as the sentence in (12a). Specifically, *hij* is the secondary object in (11a), (11b) and (12a), whereas it is the primary object in (12b). We will return to examples (11)–(12) later.

3. Cross-linguistic evidence and previous analyses

German also exhibits similar passive structures to the Dutch one we have presented in the previous sections. Interesting for our purposes here are the passives of German ditransitives shown in the following examples (from Müller (2003)):

(13) (a) Der Mann hat den Ball dem Jungen geschenkt.
   the man-SUBJ has the ball-OBJ1 the boy- OBJ2 given
   'The man gave the ball to the boy.'
  (b) Der Ball wurde dem Jungen geschenkt.
   the ball-SUBJ was the boy- OBJ2 given
   'The ball was given to the boy.'
  (c) Der Junge bekam/kriegte den Ball geschenkt.
   the boy-SUBJ got   the ball-OBJ1 given
   'The boy got the ball as a present.'

  Müller (2002), adapting Heinz & Matiasek (1994)'s account of, among others, passivisation in German, proposes a raising analysis for the German *werden* passives

(see example (13b) above) and a control-like analysis for the German *bekommen/kriegen* passives, like the one in example (13c) above. The lexical entry for the auxiliary *bekommen* in (14) below is (slightly modified) from Müller (2002: 149) and captures the gist of his analysis for the dative *bekommen/kriegen* passives in German.

(14)   *bekomm-* (dative passive auxiliary)

$$
\begin{bmatrix}
\text{DA} \left\langle \boxed{1} \right\rangle \\[4pt]
\text{SUBCAT} \left\langle \boxed{1}\,\text{NP}\left[\textit{str}\,\boxed{2}\right] \right\rangle \oplus \boxed{3} \oplus \boxed{4} \\[10pt]
\text{XCOMP} \left\langle \text{V}
\begin{bmatrix}
\textit{ppp} \\
\text{LEX} \quad + \\
\text{SUBCAT} \quad \boxed{3} \oplus \left\langle \text{NP}\left[\textit{ldat}\,\boxed{2}\right]\right\rangle \oplus \boxed{4} \\
\text{XCOMP} \quad \langle\,\rangle
\end{bmatrix}
\right\rangle
\end{bmatrix}
$$

Before looking in detail at the analysis proposed in (14), we need to note that in general, in Müller's (2002) work, subjects are treated differently, as indicated in the following:

- In the subcat list, the first element with structural case is assigned nominative, while the rest of the elements accusative (cf., also Przepiórkowski (1999), Meurers (1999), Meurers (2000)).
- As far as infinitives are concerned, a lexical rule moves subjects from the subcat to the subj list.
- Finally, the feature DA (Designated Argument) represents a complement with subject properties and is introduced in order to distinguish unergatives and unaccusatives.

The control-like part of the account Müller (2000) proposes in (14) lies on the subject of the dative passive auxiliary being coindexed with the dative element of the embedded participle. As mentioned in Müller (2000: 149) 'all elements from the SUBCAT list of the embedded verb are raised to the SUBCAT list of *bekommen* except for the dative object'.

The analysis in (14) above for the German *bekommen/kriegen* passives is somewhat surprising given the fact that passive structures in German headed by *bekommen/kriegen* do not entail that somebody gets something, as the following examples from Müller (2000: 132) also aim at showing:

(15) Er   bekam zwei Zähne   ausgeschlagen.

he-SUBJ got   two   teeth-OBJ PART(out).knocked
'He got two teeth knocked out.'

(16) (a) Der Bub   bekommt/kriegt das Spielzeug weggenommen.
         the lad-SUBJ gets   the toy-OBJ   PART(away).taken
         'The boy has the toy taken away from him.'

   (b) Der Mann   bekommt/kriegt das Fahren   verboten.
       the man-SUBJ gets   the driving-OBJ   forbidden
       'The man is forbidden to drive.'

   (c) Der Betrunkene bekam/kriegte die Fahrererlaubnis   entzogen.
       the drunk-SUBJ got   the driving-allowance-OBJ withdrawn
       'The drunk had his driving license taken away.'

As Müller (2002: 132) also proposes 'the meaning of *bekommen* and *kriegen* is bleached in these constructions. Therefore it is not justified to assume that the subject in such dative passive constructions is a receiver and gets a thematic role from *bekommen/erhalten/kriegen*'. In other words, Müller (2002) also disfavours a control analysis for the German *bekommen/kriegen* so-called 'dative' passives.
The only reason imposing an analysis like the one presented in (14) we can think of is the realistic technical difficulty to have the lexically case marked as dative secondary object (NP[*ldat*]) of the SUBCAT list of the passive participle getting raised to the subject NP of the auxiliary *bekommen/kriegen*, which should bear a structural nominative case. Thus, the analysis in (14) only denotes an index sharing between the structurally case marked subject NP of the auxiliary *bekommen/kriegen* and the lexically case marked secondary object NP of the passive participle, in the spirit of a control analysis, instead of an entire synsem object sharing between these two NPs, which would have been expected under a raising analysis, as would have also, apparently, been favoured by Müller (2002).

   The analysis discussed above is faithful to the insights of the passivisation analyses proposed in Kathol (1994) and Pollard (1994), which, thus, face the same problems as the ones mentioned above in relation to the analysis of Müller (2002).
Specifically, Kathol (1994), following Hinrichs & Nakazawa's (1989) approach to auxiliaries in German, proposes in short that passive auxiliaries in German cannot only 'absorb' the argument structure of their verbal complements, but also choose to raise only a subset of this argument structure, or to realise certain complements in a different way. This is captured in the lexical entry of the auxiliary *werden*, proposed in Kathol (1994: 246):

(17) *werden*

$$\begin{bmatrix} \text{SUBJ} & \left\langle \text{NP}[nom]_{\boxed{1}} \right\rangle \\ \\ \text{COMPS} & \boxed{2}\ \&\ \left\langle V \begin{bmatrix} \text{VFORM} & \textit{part ii} \\ \text{SUBJ} & \left\langle \text{NP} \right\rangle \\ \text{COMPS} & \left\langle \text{NP}\,[acc]_{\boxed{1}} \right\rangle \& \boxed{2} \end{bmatrix} \right\rangle \end{bmatrix}$$

In (17) above what is promoted to subject is not the entire NP, but only its index specification. To quote Kathol (1994: 246): 'Since indices do not contain a specification of CASE, they can belong to NPs with different *case* values without giving rise to conflict. Structure-sharing among indices then ensures that the case alternation does not affect the part of the linguistic information that remains constant, namely the role the argument plays in semantic interpretation.'
In the same spirit the following entry for the auxiliary *bekommen* below aims at capturing the gist of Kathol's analysis for the German dative *bekommen/kriegen* passives.

(18) *bekommen* (Kathol, 1994, p. 246)

$$\begin{bmatrix} \text{SUBJ} & \left\langle \text{NP}[nom]_{\boxed{3}} \right\rangle \\ \\ \text{COMPS} & \boxed{1}\ \&\ \boxed{2}\ \&\ \left\langle V \begin{bmatrix} \text{VFORM} & \textit{part ii} \\ \text{SUBJ} & \left\langle \text{NP} \right\rangle \\ \text{COMPS} & \boxed{1}\ \&\ \left\langle \text{NP}[dat]_{\boxed{3}} \right\rangle \& \boxed{2} \end{bmatrix} \right\rangle \end{bmatrix}$$

Finally, Pollard's (1994) analysis of the German *bekommen/kriegen* passives is very similar to that of Kathol (1994) briefly presented aboved and is captured in the following lexical entry for the passive auxiliary *bekommen*:

(19) passive auxiliary *bekommen* (Pollard, 1994, p. 291)

$$\begin{bmatrix} \text{HEAD} & V[bse] \\ \text{SUBJ} & \left\langle \text{NP}[str]_{\boxed{1}} \right\rangle \\ \\ \text{COMPS} & \boxed{2}\ \&\ \boxed{3}\ \&\ \left\langle \begin{bmatrix} \text{HEAD} & V[part] \\ \text{SUBJ} & \left\langle \text{NP}[str]_{ref} \right\rangle \\ \text{ERG} & \left\langle \boxed{2} \right\rangle \\ \text{COMPS} & \boxed{2}\ \&\ \left\langle \text{NP}[dat]_{\boxed{1}} \right\rangle \& \boxed{3} \end{bmatrix} \right\rangle \end{bmatrix}$$

[83]

Thus, in Pollard's (1994) analysis the NP [*dat*] is not attracted, but is coindexed with the matrix subject. This fact does not only point even more clearly to a control, rather than a raising analysis, but is in general the common background which underlies all the three analyses of Müller (2002), Kathol (1994) and Pollard (1994) presented in the previous.

An additional problem shared among Müller (2002), Kathol (1994) and Pollard (1994) lies in the fact that in their analyses it is in a way or another assumed that the nominative case on the value of the SUBJ feature is redundant as the value of SUBJ needs a finite realisation context (i.e., a finite auxiliary) which is associated with nominative case assignment. In situations, though, where the subject is realised with a different case specification, this actually leads to a complication in the analysis because the case specification has to be changed back into *accusative*. Thus, examples like the following in Dutch cannot be accounted for by the accounts of Müller (2002), Kathol (1994) and Pollard (1994):

(20) Ik   zie hem   gekust worden.
    I-SUBJ see him-OBJ kissed be
    'I see him being kissed.'

(21) Ik   zie hem   het boek toegestuurd krijgen.
    I-SUBJ see him-OBJ the book PART-sent   get
    'I see that he gets the book sent to him.'

4. Motivation for a raising analysis of passives in Dutch and German

The analysis we propose and formalise in the next section for passives in Germanic languages is a uniform raising analysis. The motivation in favour of such an analysis, especially for the Dutch *krijgen* and the German *kriegen* passives, in contrast to a control analysis like the one proposed, among others, in (14) in section 3, is based on the general treatment of raising and control phenomena cross-linguistically.

Specifically, in English control/equi structures allow for VP ellipsis, but raising verbs do not. Dutch does not exhibit VP ellipsis, but VP pronominalisation (henceforward VPP). In coordinated equi structures VPP is acceptable, but it is awkward in raising structures.

(22) (a) Ik   probeer te winnen en mijn tegenstander probeert dat ook.
        I-SUBJ try   to win   and my   opponent   tries   that too
        'I try to win and so does my opponent.'

   (b) *Ik   schijn te winnen en mijn tegenstander schijnt dat ook.
        I-SUBJ seem to win   and my opponent   tries   that too
        'I seem to win and so does my opponent. (intended)'

(23) (a) De wedstrijd winnen? Ja, dat probeer ik.
　　　　 the match　　 win-INF? yes, that try　　 I
　　　　 'To win the match? Yes, that is what I try.'
　　 (b) De wedstrijd winnen? Ja, dat schijn ik.
　　　　 the match　　 win-INF? yes, that seem I
　　　　 'To win the match? Yes, that is what I seem.'

As far as VPP is concerned, the recipient (*krijgen)* passive reveals similarity to raising structures: VPP structures are ungrammatical with the recipient passive.

(24) (a) *Hij　　 krijgt uitbetaald en Piet krijgt dat ook.
　　　　　 he-SUBJ gets paid-PART and Peter gets that too
　　　　　 'He gets paid and so does Peter. (intended)'
　　 (b) *? Uitbetaald bij　　　 zietke? Nee, dat krijg ik niet.
　　　　　 paid-PART in case of illness? No, that get I not
　　　　　 'Paid in case of illness? No, I don't get that. (intended)'
(25) (a) *? Het wapen　　　 werd snel　 gevonden, maar de dader werd dat niet.
　　　　　 the weapon-SUBJ was quickly found,　　 but the culprit was that not
　　　　　 'The weapon was found quickly, but the culprit was not. (intended)
　　 (b) *? Snel　　 gevonden? Nee, dat wordt de dader niet.
　　　　　 quickly found?　　 No, that is　　 the culprit not
　　　　　 'Quickly found? No, the culprit won't be. (intended)'

For completeness, we should underline here that Dutch regular passive constructions, i.e., constructions headed by the auxiliary *worden*, also conform to regular raising structures in Dutch, like the ones in (22a)-(23b) above:

(26) *Ik　　 werd door hem geslagen en zij werd dat ook.
　　　 I-SUBJ was by　 him beaten and she was that too
　　　 'I was beaten by him and she was, too.'
(27) (a) *Kussen? Nee, dat werd ik nog nooit.
　　　　　 Kiss?　　 No, that was I yet never
　　　　　 'To kiss? No, I have never been that.'
　　 (b) *Mij kussen? Nee, dat   werd ik nog nooit.
　　　　　 me kiss?　　 No, that was I yet never
　　　　　 'To kiss me? No, I have never been that.'

On the level of semantics, it is observed that idiomatic meaning is preserved when the recipient (*krijgen)* passive occurs. Idiomatic meaning is also maintained in agentive passives.

(28) (a) Weet je   wel wat-ie　　　　　 allemaal naar z'n   hoofd krijgt geslingerd?

know you well what-OBJ -he-SUBJ all   to   his   head gets swing-PART
'Do you have any idea how much he is insulted?'

(b) Weet je   wel wat   er   allemaal naar z'n hoofd geslingerd wordt?
know you well what there-SUBJ all   to   his head swing-PART becomes
'Do you have any idea how much he is insulted?'

(c) Weet je   wel wat ze   hem   allemaal naar z'n hoofd slingeren?
know you   well what they- SUBJ him- OBJ2 all   to   his head gets-swing
'Do you have any idea how much they insult him?'

The raising analysis we propose for the Dutch constructions at hand, especially for the *krijgen* passives, finds more supporting evidence in data like the following:

(29) En   nu   krijgen wij het probleem onder de   neus gewreven.
     and   now get   we the problem   under our nose pushed
     'And now we are presented with the problem.'

(30) Later kreeg Raas   in de   donkere hal   een pistool tegen   het hoofd gedrukt.
     later got   Raas-SUBJ in the dark   hall a   pistol   against his head pressed
     'Later, in the dark hallway a pistole was pressed against Raas' head.'

Examples (29) and (30) illustrate the use of the *krijgen* passive with a subject that does not appear to bear the semantic role of 'receiver'. Consequently, the subjects of the aforementioned sentences are not arguments introduced by the auxiliary *krijgen*, but elements of the SUBCAT list of the embedded past participles (*gewreven, gedrukt*), which are raised to the subject function of the structures in (29) and (30). The observations mentioned above clearly relate Dutch passives to raising structures. The only observation that might be seen as evidence that Dutch passives would correspond to equi structures rather than raising is the fact that *krijgen* and *worden* can occur with NP complements, as in the examples below.

(31) (a) Hij   krijgt   iets.
      he-SUBJ receives something- OBJ
      'He receives something.'

 (b) Hij   wordt   dokter.
     he-SUBJ becomes doctor-OBJ
     'He will be doctor.'

In sentence (31a) *iets* must refer to an object. The main verb *krijgen* in this sentence does not stand in the same relation to the auxiliary *krijgen* (cf., the two usages of the verb *try* and how they relate to each other in *He tried to walk* and *He tried something*). The same holds for the example (31b), where the object must correspond to a profession or a state of being. In all examples of equi verbs with NP

complements, the NP should refer to an action. This is not the case in structures (31a) and (31b) above.

The object-to-subject raising analysis for the Dutch *krijgen* passives we advocate is at odds in spirit with the analyses of the corresponding *kriegen/bekommen* passives in German, like the ones of Haider (1984, 1985), which propose that the German *kriegen/bekommen* passives may look like ordinary passive or raising constructions, but are not, and consequently, that the subject of the passive auxiliary in sentences like the following

(32) ... dass er   ein Buch   geschenkt   kriegte
     ... that he-SUBJ a   book-OBJ as-a-present got
     '... that he got a book as a present' (Haider (1985: 98))

is an argument of the higher verb, *kriegen*, rather than of the lower passive participle. The idea in these analyses is that the recipient passive construction works something like the parallel English construction with *get* and *have* as the higher verb

(33) Pat got/had [three papers accepted].

in which the subject Pat is not an argument of *accept* because of the ungrammaticality of what would be the source sentence:

(34) *They accepted Pat three papers.

We will not argue here against the essence of Haider's analysis as far as the German kriegen/bekommen passives are concerned. For this we are referring the reader to Müller (2002). We would like, though, to underline that the main idea of Haider's analysis, which suggests that the subject of the passive auxiliary in the parallel German construction with *kriegen* and *bekommen* is an argument of the higher verb, cannot be considered to hold in the case of the Dutch *krijgen* passive. Sentences like the following

(35) (a) Zij   wierpen hem   de oplossing   in de schoot.
         they-SUBJ threw   him-OBJ2 the solution-OBJ1 in the lap
         'They made the solution very easy for him.'
     (b) *Zij   wierpen de oplossing   in de schoot.
          they-SUBJ threw   the solution-OBJ1 in the lap
          'They made the solution very easy.'
     (c) Hij   krijgt de oplossing   in de   schoot geworpen.
         he-SUBJ made the solution-OBJ1 in the lap   thrown
         'He is offered the solution very easily.'

indicate that *hij* in (35c) is indeed an object (the secondary object (OBJ2)) of *werpen* (which has been raised to subject) and which is obligatory, as the ungrammaticality of the sentence in (35b) indicates (for the intended meaning). Therefore, in (35c) it must be *hij* that fulfils the requirement that the embedded passive participle has a secondary object (OBJ2).

Finally, we argue here that it is also wrong to assume, as Haider (1986), Heinz & Matiasek (1994) and Kathol (2000) do for the parallel German passive constructions with *kriegen* and *bekommen*, that both *krijgen* and the embedded participle assign the semantic role of 'theme" to the accusative primary object (OBJ1) of the Dutch *krijgen* passives. Consequently, as we show, and similarly to our treatment of the subject of the Dutch *krijgen* passives that we have presented above, the primary accusative objects of the constructions at hand are not selected by *krijgen*, either. Specifically, as we have already shown in (11b), for instance, which we repeat here for convenience

(36) Hij   krijgt doorbetaald.
    he-SUBJ gets   paid-through
    'He is getting paid.'

there are *krijgen* passive structures in Dutch where the accusative primary object (OBJ1) is not even phonologically realised.

Moreover, in amalgamated combinations of Dutch ditransitives with somewhat more predicted/*fixed* primary objects, such non-functionally controlled (OBJ1s) may also be realised as primary objects of the corresponding passives headed by *krijgen*:

(37) (a) ... dat hij   mij   een rad   voor   ogen draait
     ... that he-SUBJ me-OBJ2 a   wheel-OBJ1 in-front-of eyes rotates
     '... that he is misleading me'
   (b) ... dat ik een rad voor ogen krijg gedraaid
(38) (a) ... dat ik   hem   de huid   volscheld
     ... that I-SUBJ him-OBJ2 the skin-OBJ1 spray
     '... that I yell bad things at him / that I curse at him'
   (b) ... dat hij de huid krijgt volgescholden
(39) (a) ... dat ik   hem   een hart   onder de riem steek
     ... that I-SUBJ him-OBJ2 a   heart-OBJ1 under the belt put
     '... that I give him hope'
    (b) ... dat hij een hart onder de riem krijgt gestoken
(40) (a) ... dat ik   hem   zand   in de ogen strooi
     ... that I-SUBJ him-OBJ2 sand-OBJ1 in the eyes pour
     '... that I mislead him'
    (b) ... dat hij zand in de ogen krijgt gestrooid
(41) (a) ... dat ik   hem   de duimschroeven aandraai

   ... that I-SUBJ him-OBJ2 the screws-OBJ1   tighten-up
    '... that I put him under pressure'
  (b) ... dat hij de druimschroeven krijgt aangedraaid

In conclusion, based on the behaviour of *krijgen* in relation to the subject and the primary object of the Dutch passive constructions it heads that we have shown above we propose that the *passive krijgen* should be treated as a true auxiliary.

5. Formalisation of the analysis

Based on the motivation presented in the previous section, we formalise our analysis for the Dutch *worden* passive in the lexical entry in (42) below and our analysis for the Dutch *krijgen* passive in the lexical entry in (43) below. Both lexical entries use the function *raise_to_subject()* (Figure 1).[4]
This function takes a noun synsem, and preserves all values in the output, except for the CASE value, which is set to *nominative* or *accusative*.

In both lexical entries below all the elements of the SUBCAT list of the embedded participle are raised to the SUBCAT list of *worden* and *krijgen*, respectively. In the case of *worden*, the accusative primary object of the embedded participle surfaces as the nominative subject of the auxiliary after raising. In the case of *krijgen*, it is the dative secondary object which surfaces as the nominative subject of the auxiliary after raising.[5]

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[4] There are other ways in which the same effect can be obtained in a formalism. We chose a function because it is compact and easy to understand. Specifically, the function *raise_to_subject()* (Figure 1) is really only an abbreviatory device, since it only consists of simple unifications. The same effect could be obtained, more verbosely, without functions.

[5] In our analysis, primary objects (OBJ1) bear accusative case, and secondary objects (OBJ2) bear dative case.
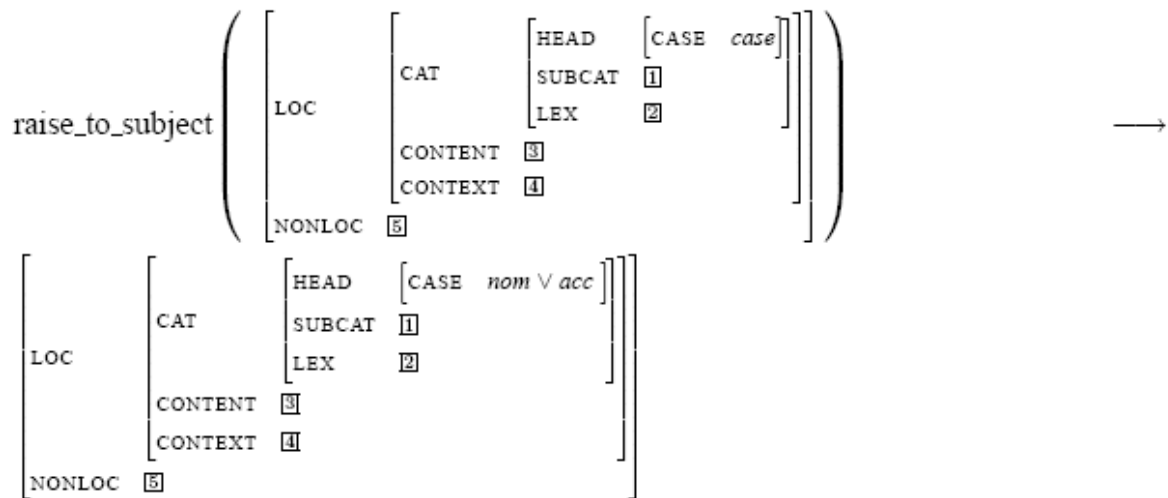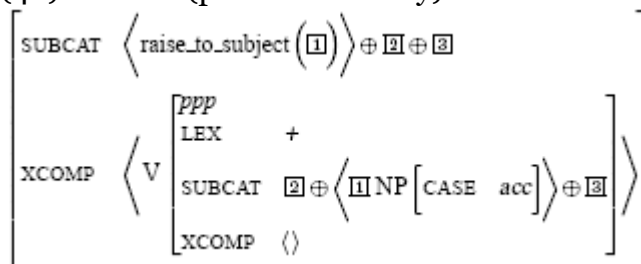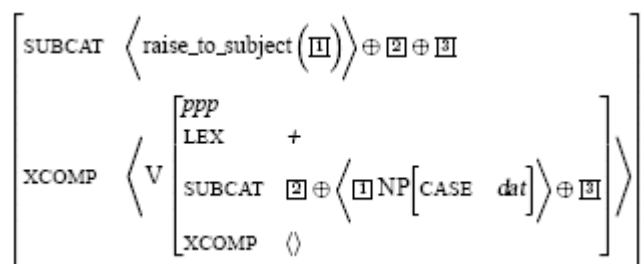
$$
\text{raise\_to\_subject}\left(\left[\begin{array}{l} \text{LOC} \left[\begin{array}{ll} \text{CAT} & \left[\begin{array}{ll} \text{HEAD} & [\text{CASE}\ \textit{case}] \\ \text{SUBCAT} & \boxed{1} \\ \text{LEX} & \boxed{2} \end{array}\right] \\ \text{CONTENT} & \boxed{3} \\ \text{CONTEXT} & \boxed{4} \end{array}\right] \\ \text{NONLOC} \quad \boxed{5} \end{array}\right]\right) \longrightarrow
$$

$$
\left[\begin{array}{l} \text{LOC} \left[\begin{array}{ll} \text{CAT} & \left[\begin{array}{ll} \text{HEAD} & [\text{CASE}\ \textit{nom} \vee \textit{acc}] \\ \text{SUBCAT} & \boxed{1} \\ \text{LEX} & \boxed{2} \end{array}\right] \\ \text{CONTENT} & \boxed{3} \\ \text{CONTEXT} & \boxed{4} \end{array}\right] \\ \text{NONLOC} \quad \boxed{5} \end{array}\right]
$$

Figure 1: Definition of the function raise_to_subject()

(42) *worden* (passive auxiliary)

$$
\left[\begin{array}{ll} \text{SUBCAT} & \left\langle \text{raise\_to\_subject}\left(\boxed{1}\right) \right\rangle \oplus \boxed{2} \oplus \boxed{3} \\ \text{XCOMP} & \left\langle V \left[\begin{array}{ll} \textit{ppp} & \\ \text{LEX} & + \\ \text{SUBCAT} & \boxed{2} \oplus \left\langle \boxed{1} \text{NP} \left[\text{CASE}\ \textit{acc}\right] \right\rangle \oplus \boxed{3} \\ \text{XCOMP} & \langle\rangle \end{array}\right] \right\rangle \end{array}\right]
$$

(43) *krijgen* (passive auxiliary)

$$
\left[\begin{array}{ll} \text{SUBCAT} & \left\langle \text{raise\_to\_subject}\left(\boxed{1}\right) \right\rangle \oplus \boxed{2} \oplus \boxed{3} \\ \text{XCOMP} & \left\langle V \left[\begin{array}{ll} \textit{ppp} & \\ \text{LEX} & + \\ \text{SUBCAT} & \boxed{2} \oplus \left\langle \boxed{1} \text{NP} \left[\text{CASE}\ \textit{dat}\right] \right\rangle \oplus \boxed{3} \\ \text{XCOMP} & \langle\rangle \end{array}\right] \right\rangle \end{array}\right]
$$

The lexical entry in (42) accounts for the examples in (1b) and (7b) in section 1. In the case of example (1b) the value of $\boxed{2}$ in (42) is the empty list, since the verb

kussen (to kiss) is transitive, and not ditransitive. ③ may contain a PP denoting the logical subject (*door Peter* in example (1b)).

The lexical entry in (43) accounts for the examples in (5b) and (6b) in section 1, where the ditransitive verbs have a primary object. For most ditransitive verbs, the primary object is compulsory, while for *uitkeren* and the *betalen*-family, it is optional. Example (8) demonstrates the former: the primary object is missing, while in (5b) and (6b) it is present (i.e., ② in (43) is a list containing the primary object). In examples (11b) and (12a) on the other hand, ② is the empty list: the primary object is absent.

The variation is a lexical property of the verbs, and not limited to the passive mood, as the following examples show.

(44) *Ik   stuur hem   toe.
     I-SUBJ send him-OBJ2 to
     '*I send him.'

(45) We   betalen hem   door.
     we-SUBJ pay   him-OBJ2 through
     'We continue to pay him.'

(46) Ze   keren het   uit.
     they-SUBJ pay   it-OBJ1 out
     'They pay it out benefits.'

(44) is (5) without (compulsory) primary object, (45) is (6a) without (optional) primary object, and (46) is (12) also without (optional) primary object.

As far as example (11) is concerned, we assume that the verb *betalen* (to pay), as well as its derivatives *doorbetalen*, *uitbetalen*, *terugbetalen*, etc., may also have a purely transitive use:

(47) (a) Ik   betaal de tuinman.
         I-SUBJ pay   the gardenet-OBJ1
     (b) De tuinman   wordt betaald.
         the gardener-SUBJ is   paid

In such cases, the sole object of the active form of the *betalen*-family verbs is considered to be their primary object, which may, therefore, be accounted for by the auxiliary *worden* in (42). Then the value of ② in (42) is the empty list, since the verb *betalen* (to pay) is considered to function as transitive, and not ditransitive.

Finally, the analysis we propose here can also account straightforwardly for the structures in (20) and (21) of section 3, repeated here for convenience:

(48) Ik   zie hem   gekust worden.

     I-SUBJ see him-OBJ kissed be
     'I see him being kissed.'
(49) Ik   zie hem   het boek toegestuurd krijgen.
     I-SUBJ see him-OBJ the book PART-sent   get
     'I see that he gets the book sent to him.'

We have motivated and formalised a uniform analysis for the *worden* and *krijgen* passives in Dutch. The analysis accounts for the Dutch data presented in section 1, without needing to find refuge to ad hoc theoretical and technical resorts. The formalisation of the analysis is essentially based on the fact that the information shared in raising constructions may leave out some paths for the SYNSEM information, while still remaining a raising analysis. In the case at hand, the SYNSEM value of the primary object of the embedded participle of the *worden* passive, as well as the SYNSEM value of the secondary object of the embedded participle of the *krijgen* passive, are raised to the subject of their respective auxiliaries, with only their CASE value changing to the (nominative or accusative) case required by the subject. Such a formalisation does not only account in a straightforward way for the behaviour of the Dutch data at hand (see section 1), but it can also offer a solution to the analysis presented in (14) in section 3 for the German *bekommen/kriegen* passives. Finally, such a formalisation also amends naturally the shortcomings of the intended raising analyses of German passives proposed in Kathol (1994) and Pollard (1994), which suggest that what should be raised to the subject of the *werden* and *bekommen/kriegen* passives is not the entire argument NP, but only the INDEX specification, since indices do not contain a specification for CASE, and they can, thus, belong to NPs with *different* case values without giving rise to a conflict. But as was also mentioned in section 3, structure sharing only among indices points to a control analysis of passivisation in German. Thus, our analysis, which formally captures the fact that passivisation is based on structure-sharing of entire synsem objects, is the most straightforward analysis.

6. Discussion

Müller (2002) proposes an analysis for passives in German in which the case value is simply not shared. The differences between the analysis of Müller (2002) and the analysis presented here (cf. also van Noord & Kordoni (2005)) are subtle, but distinct. Namely, full structure sharing which is presupposed in the function-based change of case in the analysis we have presented here versus the explicit sharing of other grammatical properties denoted in the SYNSEM but case. Which ones, though, these other grammatical properties should exactly be in the case of the recipient (*kriegen/bekommen/krijgen*) passives remains open in the analysis of Müller (2002).

Fokkens & Kordoni (2006) follow Müller's approach in their account for Dutch, but differentiate themselves in two ways. First, they clearly state that syntactic properties are not shared. Second, they propose that syntactic properties are not shared in either of the two passives: in Müller's analysis, agentive passives do exhibit full structure sharing. Agentive passives and recipient passives would thus reveal radically different syntactic behaviour according to his account.

Fokkens & Kordoni draw the conclusion that raising structures can show syntactic behaviour that is usually observed in equi structures. They support this claim by referring to the fact that equi structures sometimes do exhibit case transmission, and they pose the logical question that since equi can behave like raising, why can raising not behave like equi. Some additional evidence comes from an example in Czech, judged to be grammatical by 12% of speakers in a survey, where a case changes in a raising structure (Przepiórkowski & Rosen (2004)).

Fokkens & Kordoni are right when they state that an analysis for passives should respect what the data shows. However, they fail to present convincing evidence that this conclusion must be that raising structures can behave as equi. First, it is less controversial when equi structures behave like raising than the other way around. After all, in equi structures the argument receives a θ-role from the verbal complement. If the lexical case assigned by this predicate can override the structural case assigned by the equi verb, the claim that case assignment coincides with θ-role assignment is not contradicted: both assign their syntactic properties to the argument, the ones assigned by the lower verb happen to appear at the surface. A raising verb that does not take up the grammatical properties from the lower verb, on the other hand, challenges the assumption of the link between θ-role and maintenance of grammatical properties: the case is assigned without there being a θ-role.

Second, one single example judged grammatical by 12% of inquired native speakers is unconvincing when talking about a universal property, but it can hardly be called solid evidence. After all, most speakers rejected the specific sentence. More elaborate research would be required to see if Czech indeed has acceptable raising structures that do not exhibit case transmission. To our knowledge, no clear, generally accepted example of a raising structure not exhibiting case transmission has been attested.

The two observations presented in Fokkens & Kordoni are valid points, but they do not provide solid evidence that raising does not necessarily entail full structure sharing. The main problem with the analysis with their analysis is that Dutch and German passives would be the only passives that do not fully share properties of the raised argument.

Therefore, the analysis of passives in Dutch and German we have presented in section 5 provides a serious alternative.

7. Outlook: open issues

The analysis of the Dutch passives we have presented in section 5 accounts, as we have shown, straightforwardly for structures like the following:

(50) Hij   krijgt het boek   opgestuurd.
      he-SUBJ gets the book-OBJ1 PART-sent
      'He gets the book sent to him.'
(51) Hij   krijgt uitbetaald.
      he-SUBJ gets   PART-paid
      'He gets paid.'

Such an account, though, fails to make predictions for structures like the one in (52a), where the passive structure is headed by *worden*, instead of the expected *krijgen*, as is shown in (52b):

(52) (a) Kleine kinderen   moeten worden voorgelezen.
      small children-SUBJ must   be   PART-read
      'Small children must be read to.'
   (b) Dan krijgen ze   voorgelezen uit   krant   of tijdschrift.
      then get   they-SUBJ PART-read   from newspaper or journal
      'Then they get read to from a newspaper or magazine.'

The analysis we have proposed in section 5 also fails to make predictions for structures like the ones in (53a) and (54a), in which the secondary (indirect) objects (OBJ1s) are raised to the subject of the passive structures headed in both cases by *worden*. The predicted structures are the ones in (53b) and (54b), respectively.

(53) (a) Reizigers   worden verzocht   uit   te stappen.
      passengers-SUBJ are   requested PART to step
      'Passengers are requested to leave.'
   (b) Reizigers   wordt verzocht   uit   te stappen.
      passengers-OBJ2 is   requested PART to step
      'One is requesting the passengers to leave.'
(54) (a) Een tijd geleden werd hij   gevraagd te koken voor Tony Blair.
      a   while ago   was he-SUBJ asked   to cook   for Tony Blair
      'A while ago he was asked to cook for Tony Blair.'
   (b) Twee maanden geleden werd hem   gevraagd terug te komen.
      two months   ago   was he-SUBJ asked   PART to come
      'He was asked two months ago to come back.'

Structures like the ones in (53a) and (54a), for instance, show that unergatives in Dutch in which the direct object is not phonologically realised tend to treat the

indirect object of their SUBCAT list as a direct one at the process of passivisation. This tendency is yet to be accounted for.

References

Fokkens, Antske & Valia Kordoni. 2006. Control, raising and case: from the perspective of passives. In Stefan Müller (ed.), *The Proceedings of the 13th International Conference on Head-Driven Phrase Structure Grammar*, 158–173. Stanford: CSLI Publications.

Haider, Hubert. 1984. Mona Lisa lächelt stumm – über das sogenannte deutsche 'Rezipientenpassiv'. *Linguistische Berichte* 89, 32–42.

Haider, Hubert. 1985. The Case of German. In Jindrich Toman (ed.), *Studies in German Grammar*, 65–101. Dordrecht: Foris.

Haider, Hubert. 1986. Fehlende Argumente: vom Passiv zu kohärenten Infinitiven. *Linguistische Berichte* 101, 3–33.

Heinz, Wolfgang & Johannes Matiasek. 1994. Argument structure and case assignment in German. In John Nerbonne, Klaus Netter & Carl Pollard (eds.), *German in Head-Driven Phrase Structure Grammar*, 199–236. CSLI Lecture Notes no. 46. Stanford: CSLI Publications.

Hinrichs, Erhard & Tsuneko Nakazawa. 1989. Subcategorization and VP Structure in German. In *Proceedings of the Third Symposium on Germanic Linguistics*.

Kathol, Andreas. 1994. Passives without lexical rules. In John Nerbonne, Klaus Netter & Carl Pollard (eds.), *German in Head-Driven Phrase Structure Grammar*, 237–272. CSLI Lecture Notes no. 46. Stanford: CSLI Publications.

Kathol, Andreas. 2000. *Linear Syntax*. New York, Oxford: Oxford University Press.

Meurers, Detmar. 1999. Raising spirits (and assigning them case). In vol. 43: *Groninger Arbeiten zur Germanistischen Linguistik (GAGL)*, 173–226.

Meurers, Detmar. 2000. Lexical generalizations in the syntax of German non-finite constructions. *Arbeitspapiere des SFB 340, No. 145*, Tübingen: Eberhard-Karls-Universität.

Müller, Stefan. 2002. *Complex predicates: Verbal complexes, resultative constructions, and particle verbs in German*. Number 13 in Studies in Constraint-based Lexicalism. Stanford: CSLI Publications.

Müller, Stefan. 2003. Object-to-Subject-Raising and Lexical Rules: An Analysis of the German Passive. In Stefan Müller (ed.), *Proceedings of the HPSG-2003 Conference*, Michigan State University, East Lansing, 278–297. Stanford: CSLI Publications.

Pollard, Carl. 1994. Toward a Unified Account of Passive in German. In John Nerbonne, Klaus Netter & Carl Pollard (eds.), *German in Head-Driven Phrase Structure Grammar*, 273–296. CSLI Lecture Notes no. 46. Stanford: CSLI Publications.

Pollard, Carl & Ivan A. Sag. 1994. *Head-Driven Phrase Structure Grammar*. University of Chicago Press.

Przepiórkowski, Adam. 1999. On case assignment and 'adjuncts as complements'. In Gert Webelhuth, Jean-Pierre Koenig & Andreas Kathol (eds.), *Lexical and Constructional Aspects of Linguistic Explanation*. Number 1 in Constraint-based Lexicalism. Stanford: CSLI Publications.

Przepiórkowski, Adam & Alexandr Rosen. 2004. Czech and Polish raising/control with or without structure sharing. *Language and Research* 3, 33–66.

Reis, Marga. 1986. Mona Lisa kriegt zuviel – vom sogenannten 'Rezipientenpassiv' im Deutschen. *Linguistische Berichte* 96, 140–155.

Van Noord, Gertjan & Valia Kordoni. 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*, 410–426. Stanford: CSLI Publications.