

Object-to-Subject Raising: An Analysis of the Dutch Passive

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1 Introduction

This paper focuses on passive constructions in Dutch. Specifically, we focus on *worden*, as well as *krijgen* passives in Dutch, for which we propose a uniform, raising analysis in HPSG. We also show that such an analysis can be carried over to account for passives cross-linguistically. Specifically, we look at corresponding structures in German and show that there is no need for a dual raising and control analysis for the German “agentive” (*werden*) and the German “dative” (*kriegen*) passives, respectively, as has been proposed in Müller (2002) and Müller (2003).

2 The data

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).”
- (2) Het raam is geopend.
the window.subj is opened
“The window is open.”

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:

- (3) 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.”
- (4) 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.”

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 (3a), 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):

- (5) 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 (3) and (4) above, the *primary* objects of the active forms in (3a) and (4a) (*het boek* and *zijn salaris*, respectively) retain

¹The *zijn* (“stative”) passives in (2) above are beyond the scope of this paper.

²In the glosses subj = subject, obj1 = object1 (*primary object*), obj2 = object2 (*secondary object*).

their grammatical function (obj1) in the passive sentences in (3b) and (4b). Actually, the absence of the *primary* object of the ditransitive active form from the corresponding *krijgen* passive renders the latter ungrammatical:

- (6) *Hij krijgt toegestuurd.
 he.subj gets sent-to
 “*He was sent.”

2.1 Some interesting exceptions

The only exception in the passive patterns in Dutch presented in section 2 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 (5a)–(5c) 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:

- (7) *Hij wordt het boek gegeven.
 he.subj is the book.obj1 given
 “He is given the book.”
- (8) *Hij wordt zijn salaris 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 (9) 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 (9b) below), in contrast to the behaviour of the rest of the Dutch ditransitives as presented in (6) in the previous section. This last pattern is also to be observed with the verb *uitkeren* (to pay out benefits; see example (10)).

- (9) 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.”
- (10) 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 benefits.”

But whereas (9a) and (9b) have the same meaning, (10b) does not entail the same as the sentence in (10a). Specifically, *hij* is the secondary object in (9a), (9b) and (10a), whereas it is the primary object in (10b). We will return to examples (9)–(10) in section 5.

3 Cross-linguistic evidence and previous analyses

German also exhibits similar passive structures to the Dutch ones we have presented in section 2. Interesting for our purposes here are the passives of German ditransitives shown in the following examples (from Müller (2003)):

- (11) a. Der Mann hat den Ball dem Jungen
 the man.Nom has the ball.Acc the boy.Dat
 geschenkt.
 given
 “The man gave the ball to the boy.”
- b. Der Ball wurde dem Jungen geschenkt.
 the ball.Nom was the boy.Dat given
 “The ball was given to the boy.”
- c. Der Junge bekam/kriegte den Ball
 the boy.Nom got the ball.Acc
 geschenkt.
 given
 “The boy got the ball as a present.”

Müller (2002), adapting Heinz and Matiasek’s (1994) account of, among others, passivisation in German, proposes a raising analysis for the German *werden* passives (see example (11b) above) and a control-like analysis for the German *bekommen/kriegen* passives, like the one in example (11c) above. The lexical entry for the auxiliary *bekommen* in (12) below is (slightly modified) from Müller (2002, p. 149) and captures the gist of his analysis for the dative *bekommen/kriegen* passives in German.

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

$$\left[\begin{array}{l} \text{SUBCAT} \langle \text{NP}_{[str]} \rangle \oplus \text{③} \oplus \text{④} \\ \text{XCOMP} \langle \text{V} \left[\begin{array}{l} \text{PPP} \\ \text{LEX} \quad + \\ \text{SUBCAT} \quad \text{③} \oplus \langle \text{NP}_{[dat]} \rangle \oplus \text{④} \\ \text{XCOMP} \quad \langle \rangle \end{array} \right] \rangle \end{array} \right]$$

The control-like part of the account he proposes lies on the subject of the dative passive auxiliary being coindexed with the dative element of the embedded participle. As mentioned in Müller (2002, p. 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 (12) 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 (2002, p. 132) also aim at showing:

- (13) Er bekam zwei Zähne ausgeschlagen.
he got two teeth PART(out).knocked
“He got two teeth knocked out.”
- (14) a. Der Bub bekommt/kriegt das Spielzeug
the lad gets the toy
weggenommen.
PART(away).taken
“The boy has the toy taken away from him.”
- b. Der Betrunkene bekam/kriegte
the drunk got
die Fahrerlaubnis entzogen.
the driving allowance withdrawn
“The drunk had his driving license taken away.”

As Müller (2002, p. 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* “dative” passives.

The only reason imposing an analysis like the one presented in (12) we can think of is the realistic technical difficulty to have the lexically case marked dative secondary object (NP $[_{dat}]$) 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 (12) 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).

4 Motivation for a raising analysis of passives in Dutch

The analysis we propose and formalise in the next section for the Dutch passives we have presented in section 2 is a uniform raising analysis. The motivation in favour of such an analysis, especially for the *krijgen* passives, in contrast to a control analysis like the one proposed in (12) in section 3, is based on the general treatment of raising and control phenomena presented in Pollard and Sag (1994).

Specifically, following Jacobson (1990), Pollard and Sag (1994, p. 141) show that whereas equi verbs allow NPs (or PPs) instead of their VP complement, this is never true for raising verbs (the examples are from Pollard and Sag (1994, pp. 141–142)):

- (15) Leslie tried/attempted/wants something/it/to win.
- (16) *Whitney seems/happens something/it.

Such contrasts between equi and raising verbs, Pollard and Sag (1994, p. 142) comment, “follow directly from the Raising Principle.³ Since the raising verbs in (16) assign no semantic role to their subject argument, there must be an unsaturated complement on the same SUBCAT list. But NPs like *something* or *it* are saturated, and hence the SUBCAT list required for examples like those in (16) is systematically excluded.”

krijgen-headed structures in Dutch behave in a similar way to raising structures like the one in example (16) above:

³Raising Principle (Pollard and Sag, 1994, p. 140): Let E be a lexical entry whose SUBCAT list L contains an element X not specified as expletive. Then X is lexically assigned no semantic role in the content of E if and only if L also contains a (nonsubject) Y $[_{SUBCAT} \langle X \rangle]$.

- (17) ?Hij krijgt het boek toegestuurd en zijn buurman
 he gets the book sent and his neighbour
 krijgt dat ook.
 gets that too
 “*He is sent the book and his neighbour is that too.”
- (18) *Hij krijgt uitbetaald en Piet krijgt dat ook.
 he gets paid and Peter gets that too
 “*He gets paid and Peter gets that too.”

krijgen does not introduce a semantic role (like the auxiliaries *worden* (passive) and *hebben* (perfect tenses)).

5 Formalisation of the analysis

Based on the motivation presented in section 4, we formalise our analysis for the Dutch *worden* passive in the lexical entry in (19) below and our analysis for the Dutch *krijgen* passive in the lexical entry in (20) below. Both lexical entries use the function *raise_to_nominative()* (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*.

As aimed at and expected, 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

(19) *worden* (passive auxiliary)

$$\left[\begin{array}{l} \text{SUBCAT} \left\langle \text{raise_to_nominative} \left(\begin{array}{l} \text{①} \end{array} \right) \oplus \text{②} \oplus \text{③} \right\rangle \\ \text{XCOMP} \left\langle \text{V} \left[\begin{array}{l} \text{PPP} \\ \text{LEX} \quad + \\ \text{SUBCAT} \quad \text{②} \oplus \left\langle \begin{array}{l} \text{①} \text{ NP} [\text{CASE} \quad \text{acc}] \end{array} \right\rangle \oplus \text{③} \\ \text{XCOMP} \quad \langle \rangle \end{array} \right] \right\rangle \end{array} \right]$$

(20) *krijgen* (dative passive auxiliary)

⁴There 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_nominative()* (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.

⁵In our analysis, primary objects (obj1) bear accusative case, and secondary objects (obj2) dative case.

$$\left[\begin{array}{l} \text{SUBCAT} \left\langle \text{raise_to_nominative} \left(\begin{array}{l} \text{①} \end{array} \right) \oplus \text{②} \oplus \text{③} \right\rangle \\ \text{XCOMP} \left\langle \text{V} \left[\begin{array}{l} \text{PPP} \\ \text{LEX} \quad + \\ \text{SUBCAT} \quad \text{②} \oplus \left\langle \begin{array}{l} \text{①} \text{ NP} [\text{CASE} \quad \text{dat}] \end{array} \right\rangle \oplus \text{③} \\ \text{XCOMP} \quad \langle \rangle \end{array} \right] \right\rangle \end{array} \right]$$

The lexical entry in (19) accounts for the examples in (1b) and (5b) in section 2. In the case of example (1b) the value of ② in (19) is the empty list, since the verb *kussen* (to kiss) is transitive, and not ditransitive. ③ may contain PP denoting the logical subject (*door Peter* in example (1b)).

The lexical entry in (20) accounts for the examples in (3b) and (4b) in section 2, 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 (6) demonstrates the former: the primary object is missing, while in (3b) and (4b) it is present (i.e. ② in (20) is a list containing the primary object). In examples (9b) and (10a) on the other hand, ② is the empty list: the primary object is absent.

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

- (21) *Ik stuur hem toe.
 I.subj send him.obj2 to
 “*I send him.”
- (22) We betalen hem door.
 We.subj pay him.obj2 through
 “We continue to pay him.”
- (23) Ze keren het uit.
 they.subj pay it. out
 “They pay it out benefits.”

(21) is (3) without (compulsory) primary object, (22) (4a) without (optional) primary object, and (23) (10) also without (optional) primary object.

As far as example (9) 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:

- (24) a. Ik betaal de tuinman.
 I.subj pay the gardener.obj1
 b. De tuinman wordt betaald.
 the gardener.subj is paid

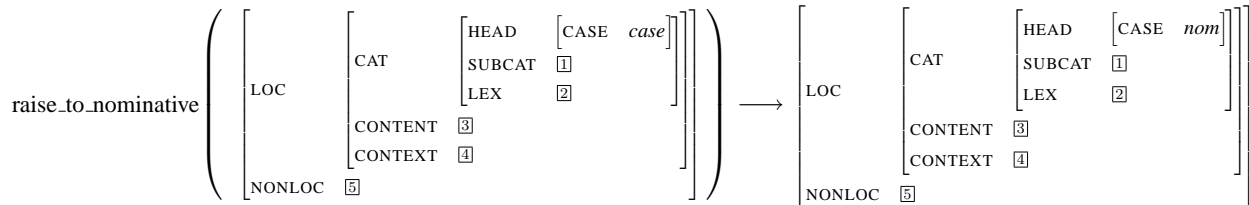


Figure 1: Definition of the function `raise_to_nominative()`

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 (19). Then the value of ② in (19) is the empty list, since the verb *betalen* (to pay) is considered to function as transitive, and not ditransitive.

6 Conclusion

We have motivated and formalised a uniform raising analysis for the *worden* and *krijgen* passives in Dutch. The analysis accounts for the Dutch data presented in section 2, without needing to find refuge to ad hoc theoretical and technical resorts, like the analysis of Müller (2002) (cf., the control-like analysis of the German *bekommen/kriegen* passives), as presented in section 3. The formalisation of the analysis in section 5 is essentially based on the fact that the information shared in raising constructions may leave out some paths from 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 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 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 2), but it can also offer a solution to the analysis presented in (12) 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 its INDEX speci-

fication, 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 also mentioned in section 3, structure-sharing only among indices points to a control analysis of passivisation in German, and not only. Thus, our analysis, which formally captures the fact that passivisation is based on structure-sharing of entire synsem objects, is the most straightforward analysis.

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