

Passives of reflexive verbs: The repair of a Principle A violation*

Florian Schäfer
Universität Stuttgart
revised version 09.09.2011

1. Introduction

In most languages, reflexive and reciprocal verbs do not passivize. German (1) and Icelandic (2) do, however, allow the formation of *Passives of Reflexive/Reciprocal Verbs* (henceforth PoRs).¹

(1) Zuerst wird sich geküsst, später dann geheiratet
first becomes REFL kissed, later then married
'First people kiss each other, then they marry'

(2) Það var baðað sig á laugardögum
expl was bathed REFL.ACC on Saturdays
'People took a bath on Saturdays'

In order to identify the basic properties of PoRs and the theoretical questions that follow, consider the German active-passive pair in (3a, b) involving the reflexive use of the verb 'waschen' (to wash). As in ordinary passives, the lexical verb in (3b) appears as passive participle and the passive auxiliary *werden* (to become) is used.² The external argument disappears (but it can reappear in a *by*-phrase as will be shown later). The PoRs in (1), (2) and (3b) lack a (overt) nominative DP, i.e. PoRs are (typically) instances of 'impersonal passives'.^{3/4} Finally, the reflexive pronoun does not change its shape under passivization: it does not shift to nominative as referential objects would but it keeps its accusative. While this

I would like to thank the editors of the present volume and especially Andreas Pankau for his very helpful comments on an earlier version of this paper. All errors are mine. This work has been supported by a DFG (German Research Foundation) grant to the project B6, *Underspecification in Voice systems and the syntax-morphology interface*, as part of the Collaborative Research Center 732, *Incremental specification in context*, at the University of Stuttgart.

¹ One further language with PoRs not discussed in this paper is Lithuanian (see Geniušienė 1987, Wiemer 2006).

² Crucially, the reflexive element is not part of the passivization process itself. PoRs are, therefore, not "reflexive passives" of the Romance or Slavic type as discussed, for example, in Cinque (1988).

³ When no *by*-phrase is present, I paraphrase PoRs as active sentences with the subject 'people'. This is not the only possible interpretation for the implicit external argument of PoRs in that PoRs do not necessarily have a generic flavor. Furthermore, the possible interpretations of the implicit external argument of PoRs do not seem to differ from the interpretations of the implicit external argument in ordinary impersonal passives.

⁴ German, Icelandic, and Lithuanian have PoRs which are not impersonal (cf. (i, ii)). Such examples are unproblematic for Case Theory but not for Binding Theory. Since an integration of PoRs with nominative DP into the analysis proposed in section 6.2 is beyond the scope of the present paper, I will leave such examples aside and concentrate on the majority of PoRs, which are impersonal.

- (i) Da wurde wieder großer Unsinn von sich gegeben
there was again big nonsense.NOM from oneself given
'People uttered huge nonsense'
- (ii) Anschließend wurde sich ein Hamburger gekauft
Afterwards was REFL.DAT a.NOM hamburger bought
'People bought a hamburger'

is not easy to see in German, Icelandic, which has a case-inflected paradigm of reflexive pronouns, shows this clearly (cf. (2); see section 3 for a more detailed discussion).⁵

- (3) a. Hier haben die Römer **sich** gewaschen
 Here have the.NOM Romans REFL.ACC washed
 b. Hier wurde **sich** (von den Römern) gewaschen
 Here was REFL (by the Romans) washed
 ‘Here, the Romans washed’

PoRs immediately pose two questions concerning Binding Theory and Case Theory:

- (i) **Binding Theory:** How is Principle A of the Binding Theory satisfied in PoRs, i.e. what is the antecedent of the reflexive pronoun?
 (ii) **Case Theory:** How is accusative case on the reflexive pronoun licensed in PoRs? It stands in contradiction to *Burzio’s Generalization*, which predicts that passives, due to the absorption of the external argument, cannot license structural accusative case.

In the present paper, I will propose an answer to these questions. But before I turn to a more detailed theoretical investigation of PoRs, I am first going to show that the formation of PoRs is a productive phenomenon in German (on Icelandic, see section 3).

In fact, PoRs were often judged as ungrammatical in the theoretical literature on German (e.g. Reis 1982:20f, Haider 1985, Kiss 2003:fn 15, Bierwisch 2006). However, other authors recognized that this view is not generally correct, and, more concretely, acknowledged the formation of PoRs to be a productive option provided by the grammar of German. First examples and preliminary discussions of PoRs can be found in Wunderlich (1985:222), Abraham (1986), Fanselow (1987, 1991), Sells, Zaenen & Zec (1987), Grewendorf (1988), Frey (1993) or Müller & Sternefeld (1993). Plank (1993) and Vater (1995) investigate PoRs in more depth and show that PoRs are, in principle, accepted among speakers of German (see also Ágel 1997, Müller 1999 and Hundt 2007 for more detailed discussions of PoRs).

Three further observations suggest that PoRs are a common phenomenon in German. First, PoRs are clearly not substandard. The examples in (4) and (5) are from the evening news of the German public-law television (*Tagesschau, ARD*). Second, while PoRs are very frequent in spoken language, they are also found in written texts. The example in (6) is from the online version of a weekly German magazine (*Spiegel online*). Lastly, PoRs are not a recent invention. Behagel (1924, II:214) provides some Middle High German examples.

- (4) Während sich heute über Sonne gefreut werden konnte,
 while REFL today about sun rejoiced become could,
 muss morgen mit Regen gerechnet werden
 must tomorrow with rain calculated become
 ‘While today the sun could be enjoyed, rain is expected for tomorrow’
- (5) Bei der Kieler Koalitionskrise wird sich schon gar nicht mehr bemüht,
 at the Kieler.adj coalition-crisis becomes REFL already really no longer bestirred
 die taktischen Mätzchen zu verstecken
 the tactical tricks to hide

⁵ I concentrate on passives involving reflexive pronouns such as German ‘*sich*’, which can have a reflexive and a reciprocal reading. PoRs can also be found with reciprocal pronouns such as German ‘*einander*’ (each other). I have not investigated the latter cases in any detail.

‘Politicians involved in the coalition crisis in the regional capital Kiel do not even try any longer to hide the tactical tricks’

- (6) Bei der ARD wurde sich eiligst für den Fauxpas entschuldigt
at the ARD was REFL hastily for the faux-pas apologized
‘The people responsible at the ARD hastily apologized for the faux pas’

2. A semantic/conceptual restriction on the formation of PoRs

The last section showed that German allows the formation of PoRs. However, a closer examination shows that PoRs are restricted by a semantic or conceptual parameter. To illustrate this parameter, it is useful to make a short detour to the Dutch reflexive system. Dutch is a language with a so-called *two-form reflexive system*, i.e. it has two reflexive pronouns: the simple reflexive pronoun *zich* and the complex reflexive pronoun *zichzelf*. Furthermore, Dutch makes a morpho-syntactic distinction between three classes of reflexive verbs, i.e. verbs where the subject binds a reflexive element in object position. Crucially, the morphological distinction reflects a semantic or conceptual difference (see Kemmer (1993) and references there). The following verb-classes can be identified:

Inherently reflexive (or inherently reciprocal) verbs: The reflexive pronoun cannot be replaced by a referential DP. Only the simple reflexive is allowed:

- (7) Jan schaamt zich/*zichzelf/*Marie
John shames REFL/REFL-SELF/Mary
‘John is ashamed’

Naturally reflexive (or naturally reciprocal) verbs: The reflexive pronoun can be replaced by a referential DP. In out-of-the-blue contexts, the simple reflexive is strongly preferred. (The complex reflexive becomes acceptable under strong focus.)

- (8) a. Jan waste zich/??zichzelf/Marie
John washed REFL/ REFL.SELF/Mary
‘John washed (Mary)’
b. Jan scheerde zich/??zichzelf/Peter
John shaved REFL/REFL.SELF/Peter
‘John shaved (Peter)’

Naturally reflexive verbs come from a number of semantic subclasses which all represent events that carry “... *inherent in their meaning [...] the lack of expectation that the two semantic roles they make reference to will refer to distinct entities ...*” (Kemmer 1993:58). So-called “grooming verbs” such as ‘*shave*’, ‘*wash*’ or ‘*dress*’ form one main subgroup of naturally reflexive verbs. Naturally reciprocal verbs involve, for example, verbs of social (‘*meet*’) or affectionate (‘*kiss*’) events but also verbs of antagonistic events (‘*fight*’).

Naturally disjoint verbs (called *other directed verbs* in König & Vezzosi 2004): The reflexive pronoun can be replaced by a referential DP. The complex reflexive is strongly preferred. In opposition to naturally reflexive verbs, these verbs express events which carry the expectation that the two semantic roles they make reference to will refer to distinct entities (e.g. ‘*hate*’, ‘*accuse*’, ‘*kill*’, ...).

- (9) Zij haat ??zich/zichzelf/Peter
 She hates REFL/REFL-SELF/Peter
 ‘John hates himself/Peter’

German differs from Dutch in that the simple reflexive pronoun ‘*sich*’ can be used with all three of the verb classes above (10a-c). The addition of the intensifier ‘*selbst*’ (*self*), while often possible, is hardly ever obligatory in German. Therefore, German does not make a (obligatory) morphological distinction between inherently/naturally reflexive verbs and naturally disjoint verbs.

- (10) a. Hans hasst sich/Maria (naturally disjoint)
 John hates REFL/Maria
 ‘John hates himself/Mary’
 b. Hans wäscht sich/Maria (naturally reflexive)
 John washes REFL/Maria
 ‘John washes himself/Mary’
 c. Hans schämt sich/*Maria (inherently reflexive)
 John shames REFL/Maria
 ‘John is ashamed/ashames Mary’

While German differs from Dutch in not making a morphological distinction between inherently/naturally reflexive verbs and naturally disjoint verbs, it turns out that the difference between these verb classes is, nevertheless, relevant in the grammar of German. The same lexical-semantic or conceptual aspects that determine the distribution of simple and complex reflexives in Dutch determine the formation of PoRs in German: PoRs are overwhelmingly formed with inherently and naturally reflexive verbs; naturally disjoint verbs are very rarely found in PoRs. Such a semantic restriction on the formation of PoRs has already been suggested in Abraham (1986), Sells & al. (1987), Fanselow (1991), Kaufmann (2001) and especially Ágel (1997), but was never empirically corroborated. Here, I briefly present the results of two empirical studies that I undertook.

First, I searched in *Google* for PoRs involving verbs of the three different verb classes. Inherently reflexive verbs and naturally reflexive verbs led to a number of hits involving PoRs. Naturally disjoint verbs hardly ever led to such hits.^{6/7} In order to backup these findings (which might be misleading due to a general difference in frequency between the three reflexive verb classes), I also ran a questionnaire study with students at the University of Stuttgart. This study contained 48 target sentences all of which had the reflexive pronoun *sich*

⁶ To identify naturally reflexive verbs, I used the classification in Kemmer (1993). She lists 13 semantically different subclasses of naturally reflexive verbs (verbs of body care, verbs of interlocation, verbs of antagonistic events, ...). For each class, I randomly selected one verb and tested it on *Google*. For each of these verbs I found a number of hits (ranging from less than 10 to more than 50) where the verb was used in a PoR. A possible search query for the verb ‘*waschen*’ (to wash) would be “*sich gewaschen wird*” (refl washed becomes) which brings about 10 hits (4.10.2010). Note that changes in the search string concerning word order or tense lead to many more hits. Note, furthermore, that although I used different word orders and time specifications when I tested naturally disjoint verbs, I hardly ever found a PoR with these verbs.

⁷ Hundt (2002) provides a list of 95 modern and 26 historical examples of PoRs. 7 of his examples involve verbs which might be best classified as naturally disjoint. Interestingly, such counterexamples to the above generalization very often contain the adverb *gegenseitig* (mutually) as in (i), which necessarily triggers a reciprocal interpretation. Other counterexamples turn out to be from specialized communities or to involve irony (as if the event were naturally reflexive).

(i) Hier wird sich nicht gegenseitig umgebracht
 Here becomes REFL not mutually killed
 ‘People do not kill each other here’

in the direct object position. 24 of the target sentences were reflexive active sentences, the other 24 sentences were the impersonal passive counterparts of these active sentences. The 24 active-passive pairs included four inherently reflexive verbs, four inherently reciprocal verbs, four naturally reflexive verbs and four naturally reciprocal verbs as well as eight naturally disjoint verbs, four of them used in a reflexive construal and four of them used in a reciprocal construal. The 48 target sentences were arranged in two questionnaires with 24 sentences each so that no verb occurred twice in one questionnaire (i.e., each verb occurred either in the active or in the passive in one questionnaire). Both questionnaires were filled with the same 48 distractors and were presented in two randomized orders. Each sentence was read by 24 speakers who judged the sentences on a scale from 1 (totally acceptable) to 7 (totally unacceptable). Table 1 below shows the results.^{8/9}

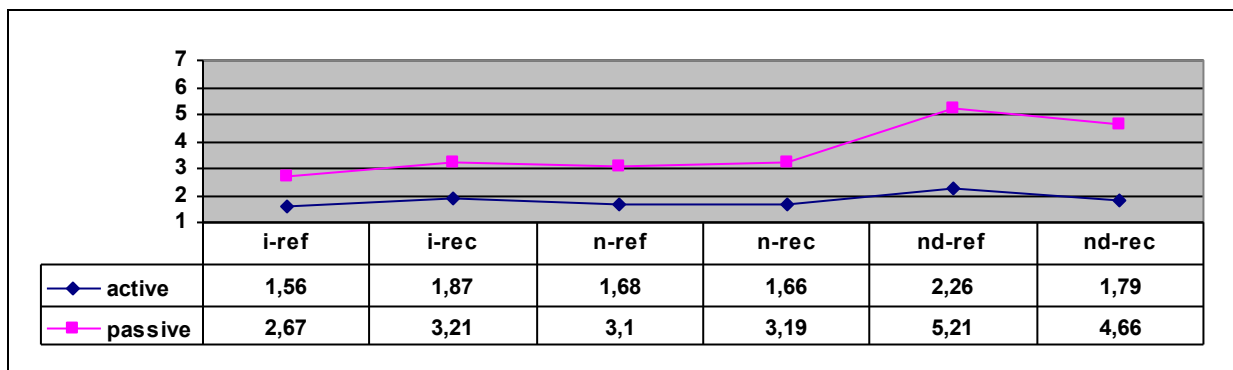


TABLE 1

The results in the above table lead to three conclusions:¹⁰ (i) In the active, the different verb classes were judged equally acceptable. That is, inherently reflexive/reciprocal verbs receive the same acceptance as naturally reflexive/reciprocal verbs and naturally disjoint verbs under a reflexive/reciprocal use. (ii) PoRs are generally less acceptable than the corresponding active counterparts. I take this result to be independent from reflexivization; it is well known that passive sentences are more marked than active sentences in an out-of-the-blue context. (iii) The most important observation for our purposes is that PoRs of naturally disjoint verbs are much less acceptable than PoRs involving inherently and naturally reflexive/reciprocal verbs. PoRs of the latter two verb classes, on the other hand, receive approximately the same acceptance. This confirms the results of the *Google* search presented above.

3. PoRs in Icelandic

Icelandic PoRs were first discussed by Sigurðsson (1989:355, fn. 60), who provides the active-passive pairs in (11) and (12). While Sigurðsson marks (11b) with one and (12b) with two question marks, Eythórsson (2008) judges these examples as totally acceptable (no question mark) and adds that most speakers he consulted agreed with him. Note that the verb in (11a, b) is inherently reflexive, and the verb in (12a, b) is naturally reflexive. Note furthermore, that Icelandic reflexive pronouns have a case-inflected paradigm (*sig*-ACC, *sér*-

⁸ The following abbreviations are used: i-ref = inherently reflexive, i-rec = inherently reciprocal, n-refl = naturally reflexive, n-rec = naturally reciprocal, nd-ref = naturally disjoint under a reflexive construal, nd-rec = naturally disjoint under a reciprocal construal.

⁹ The individual subjects showed variable behaviour. Some rejected most PoRs; some accepted most PoRs. Note that half of the distractor sentences were strongly ungrammatical (wrong agreement, case or word order). This explains why the PoRs of naturally disjoint verbs were not judged as totally deviant.

¹⁰ A further observation is that it does not matter for the acceptability of PoRs whether the reflexive pronoun gets a reflexive or a reciprocal interpretation.

DAT, *sín*-GEN), which proves that the reflexive pronoun in PoRs keeps the case that it has in the active. In (11b) this is a lexical dative, but in (12b) this is a structural accusative.¹¹

- (11) a. Börnin leika sér allan daginn
the.children play REFL.DAT all the.day
‘The children are playing all day’
b. (?)Það var leikið sér allan daginn
expl. was played REFL.DAT all the.day
- (12) a. Fólkið baðaði sig á laugardögum
the.people bathed REFL.ACC on Saturdays
‘The people took a bath on Saturdays.’
b. (??)Það var baðað sig á laugardögum
expl was bathed REFL.ACC on Saturdays

There is some indication that Icelandic PoRs are restricted by the same semantic/conceptual parameter that was identified for German PoRs. They are accepted best in inherently and naturally reflexive contexts but are typically rejected in naturally disjoint contexts. The relevant data that show this are taken from a questionnaire study by Maling & Sigurjónsdóttir (2002). Before we can take a closer look at this data, some comments are necessary. Maling & Sigurjónsdóttir are only indirectly concerned with PoRs but investigate a broader phenomenon of Icelandic syntax, the so-called ‘New Passive’ (also called ‘New Construction’), which is related to PoRs in a way that I cannot discuss here for reasons of space.¹² Since the acceptance of the ‘New Passive’ is subject to some speaker variation (concerning age and geographical origin), their questionnaire study differentiates between three classes of speakers. This is the reason why all the Icelandic examples that I will discuss below are followed by three acceptance rates for the three groups of speakers. I will not discuss any differences between these three groups of speakers (which clearly exist) but I will concentrate more on the question of whether or not the examples below show differences across all three groups of speakers.

The passive sentences in (13a-c) all involve inherently reflexive verbs with the simple reflexive pronoun *sig* in object position. The three groups of speakers show quite the same acceptance rate for each of the three sentences. (Sentence (13c) is, for some reason, slightly less acceptable than the other two examples.) Since all three examples are PoRs with inherently reflexive verbs, I take their acceptance rates as a baseline. The question is then how acceptable PoRs involving naturally reflexive and naturally disjoint verbs are.

¹¹ One might suspect that the accusative form of the Icelandic reflexive pronoun is actually ambiguous between a nominative and an accusative form. It has, however, been shown that - independently of Principle A (i.e. locality) considerations - Icelandic reflexive pronouns are incompatible with nominative positions (Everaert (1990); see Woolford (1999) on this so-called *anaphor agreement effect* in other languages).

¹² Most of the recent literature argued that the New Passive is a real passive in that the external argument is absorbed although the (even definite) internal argument remains in situ and keeps accusative (Eyþórsson 2008, Jónsson 2009, Sigurðsson (2011)), not an active impersonal (cf. Maling & Sigurjónsdóttir 2002). While there is arguably a relation between the New Passive and PoRs (in that the latter might have grounded the way for the development of the former), the recent literature further concluded that PoRs are *not* genuine instances of the New Passive. Eythórsson (2008:189) mentions that the PoR “seems to be an innovation of Modern Icelandic which is increasingly gaining ground and is accepted by many speakers who do not accept the NC [New Construction] with non-reflexive verbs”. This conclusion can already be drawn from the questionnaire study by Maling & Sigurjónsdóttir (2002) which shows that PoRs receive much better acceptance than New Passives with a referential internal argument.

- (13) a. Svo var bara drifið sig á ball
Then was just hurried REFL to the.dance
'People hurried to the dance'
(Elsewhere 78% | Inner Rvík 67% | Adults 40%)¹³
- b. Það var haldið sig innan dyra út af óveðrinu
it was kept REFL in doors due to bad.weather
'People remained in the house due to the bad weather'
(Elsewhere 82% | Inner Rvík 65% | Adults 37%)
- c. Það var skoðað sig um á svæðinu
it was looked REFL around in the.area
'People took a look-around in the area'
(Elsewhere 72% | Inner Rvík 43% | Adults 31%)

The examples in (14a, b) both involve a complex reflexive pronoun embedded in a prepositional phrase. Although both examples are syntactically identical, the first example receives much more acceptance than the second one in all three groups of speakers. I want to suggest that the reason for this difference is that the predicate “X looks at Y in the mirror” is naturally reflexive (i.e., there is a strong expectation that X=Y), while the predicate “X points at Y in the picture” is not naturally reflexive. Typically, people look at (a representation of) themselves when they look into a mirror. But there is no expectation that someone points at (a representation of) herself/himself when s/he points at a person in a picture. This conceptual difference is reflected by the acceptance rates of the two examples.

- (14) a. Það var horft á sjálfan sig í speglinum
it was looked at SELF REFL in the.mirror
'People looked at themselves in the mirror'
(Elsewhere 58% | Inner Rvík 48% | Adults 34%)
- b. Það var bent á sjálfan sig á myndinni
it was pointed to SELF REFL in the.picture
'People pointed at themselves in the picture'
(Elsewhere 19% | Inner Rvík 11% | Adults 13%)

The same conceptual parameter seems to be at play in the examples in (15a-c) involving possessive reflexive pronouns. These three examples show some syntactic differences. In (15a), the possessed noun phrase is embedded in a prepositional phrase selected by the verb, in (15b) the possessed noun phrase is the internal argument of the verb and in (15c), the possessed NP is embedded in a prepositional phrase modifying the internal argument of the verb.¹⁴ (15a) is accepted by many more speakers in all three groups than (15b, c). Once again, I suggest that the reason is that “X supports Y’s team” is naturally reflexive (people typically support their own team) while this is not the case in the other two examples. For example, it is not more natural to push one’s own sister off the bike than it is to push someone else’s sister off the bike.

- (15) a. Það var haldið með sínu liði
It was held with SELF's team
'People supported their own team'
(Elsewhere 63% | Inner Rvík 49% | Adults 36%)

¹³ ‘Inner Rvík’ stands for speakers that live in the center of Reykjavík.

¹⁴ A further difference is that the reflexive possessive in (15a) precedes the head noun while it follows the head noun in (15b, c).

- b. Í morgun var hrint systur sinni af hjólinu
 this morning was pushed sister SELF's off the.bike
 'People pushed their own sister from the bike'
 (Elsewhere 13% | Inner Rvík 7% | Adults 2%)
- c. Það var klippt hárið á dúkkunni sinni
 it was cut the.hair on doll SELF's
 'People cut the hair of their own doll'
 (Elsewhere 5% | Inner Rvík 2% | Adults 2%)

The examples in (15) make an important point about the nature of the concept ‘natural reflexivity’. I proposed that (15a) is acceptable because there holds a naturally reflexive relation between an argument of the verb (its implicit external argument) and the possessor of an NP embedded in a PP selected by the verb. If this explanation is correct, it follows that ‘natural reflexivity’ cannot always be determined within a verb’s co-argument domain. More concretely, since possessors are not part of a verb’s lexical representation, ‘natural reflexivity’ cannot (always) be established in the lexicon but must be computed at a conceptual level following syntactic computation.

To summarize this section, there is some indication that Icelandic PoRs are constrained by the same semantic/conceptual parameter as German PoRs. Inherently reflexive and naturally reflexive expressions allow the formation of PoRs while naturally disjoint expressions are largely rejected in PoRs. Furthermore, Icelandic shows that ‘natural reflexivity’ is not necessarily a relation between co-arguments of a verb. Finally, Icelandic provides clear evidence that the reflexive pronoun in PoRs indeed keeps the case it has in the corresponding active counterpart. That is, structural accusative can survive in PoRs.

4. PoRs in other languages: Dutch and Norwegian

As mentioned in the introduction, PoRs seem to be a rare phenomenon. In fact, German, Icelandic (and Lithuanian, see fn. 1) are the only languages with PoRs I know of. In this section, I exemplify the lack of PoRs in two other Germanic languages, Dutch and Norwegian.

As the Dutch example in (16) and the Norwegian examples in (17a, b) show, PoRs are judged as ungrammatical in both languages. Note that these examples are ungrammatical even though (16) involves a naturally reflexive verb and (17a) involves an inherently reflexive verb.¹⁵

- (16) *Er werd zich gewassen (Reinhart & Siloni 2004)
 There was REFL washed
 'People washed (themselves)'

- (17) a. *Det ble hygget seg (Maling & Sigurjónsdóttir 2002)
 It was amused REFL

¹⁵ The ungrammaticality of (16) was confirmed by Martin Everaert, Hans Kamp, and Jan-Wouter Zwart (p.c.). The ungrammaticality of (17a, b) was confirmed by Terje Lohndal, Torgim Solstad, and Kristi Kroch Christensen (p.c.). More empirical work is necessary on the availability of PoRs in these languages. For example, there is some preliminary indication that not all Norwegian speakers reject all PoRs to the same extent (p.c. Tor Afarli and Arild Hestvik). A further important question which is beyond the scope of this paper is whether impersonal and personal PoRs (see fn 4. for the latter) are both ungrammatical in Dutch and Norwegian. There is some very preliminary indication that PoRs with a nominative DP might be more acceptable than impersonal PoRs in Dutch and Norwegian.

- 'People amused (themselves)'
 b. *Det ble låst seg (selv) inne i fabrikk
 It was locked REFL (self) inside in the factory
 'People locked themselves in the factory'

Note that Dutch and Norwegian lack PoRs although they share two properties with German and Icelandic that might be preconditions for the availability of PoRs: First, Dutch and Norwegian have impersonal passives (recall that (most) PoRs in German and Icelandic are impersonal passives; see fn. 4). Second, the reflexive system in Dutch and Norwegian is relatively similar to the system in Icelandic and German. For example, both Dutch and Norwegian have a light reflexive pronoun like German *sich* and Icelandic *sig* (a SE-anaphor in the terminology of Reinhart & Reuland 1993) which is typically used in the context of inherently and naturally reflexive verbs.

5. Theoretical evaluation

A theoretical account of PoRs should be able to answer the following questions: question (i) and (ii) were already formulated in the introduction, questions (iii) and (iv) are the result of our investigation in the last three sections:

- (i) **Binding Theory:** How is Principle A of the Binding Theory satisfied in PoRs, i.e. what is the antecedent of the reflexive pronoun/anaphor?¹⁶
- (ii) **Case Theory:** How is the accusative case on the reflexive pronoun licensed in PoRs?
- (iii) **Verb Class Restriction:** Why are PoRs acceptable only with inherently/naturally reflexive verbs but not with naturally disjoint verbs? (Recall that in the active, the three verb classes behave the same.)
- (iv) **Language Restriction:** Why don't we find PoRs in other (Germanic) languages, especially, if they have impersonal passives and a similar anaphoric system involving SE-anaphors?

Before I propose answers to these four questions, I want to discuss a number of theoretical proposals from the literature – either specifically on PoRs or, more generally, on reflexivity – that turn out to be insufficient to answer these questions.

As an answer to question (i) (Binding Theory), one could suggest that the implicit argument of passives can act as the antecedent of the anaphor (e.g. Fanselow 1987, Barðdal & Molnár 2003, Sternefeld 2006, Sigurðsson 2011; see also the so-called ‘smuggling’ approach to passives in Collins 2005). However, this proposal leaves questions (ii)-(iv) unanswered: it does not explain why the reflexive pronoun can have accusative case, it cannot explain why only inherently and naturally reflexive verbs can form PoRs and it cannot explain why only German and Icelandic form PoRs. It is worth noting in connection to the last point that the implicit argument of passives seems to have quite the same properties across languages otherwise (e.g. licensing of control, licensing of agentive adverbs, ...).

In order to answer both, question (i) about Binding Theory and question (ii) about Case Theory, one could also suggest that PoRs are hidden transitives with a covert external

¹⁶ Below, I will use the term 'reflexive (pronoun)' to refer to an element's reflexive morphology and the term 'anaphor' to refer to an element which is subject to Principle A of the Binding Theory.

argument (for example *pro*, cf. Maling & Sigurjónsdóttir 2002 for Icelandic). If PoRs have a syntactically projected external argument they should behave like active clauses concerning Binding Theory and Case Theory. The covert external argument would act as the antecedent of the anaphor and Burzio's Generalization would predict that accusative is available. However, this proposal cannot answer question (iii) either: Why should the covert external argument in PoRs be able to antecede an anaphor only if the verb is inherently or naturally reflexive but not if the verb is naturally disjoint? This is unexpected because in the active this difference does not exist (cf. Table 1). Furthermore, it remains unclear why only German and Icelandic can have this type of passive (question (iv)).

German provides a further counter-argument against the idea that the anaphor in PoRs has an antecedent in the syntax. German impersonal passives combine with agentive *by*-phrases which can even introduce 1st and 2nd person pronouns (18a, b).

- (18) a. Von mir wurde nicht gelacht
 by me was not laughed
 'I did not laugh'
 b. weil von dir zu viel gelabert wird
 because by you too much babbled becomes
 'because you babble too much'

1st and 2nd person *by*-phrases are possible with PoRs, too. However, their effect on a reflexive pronoun differs from the effect that a 1st or 2nd person subject in active clauses has. In the active, the bound element agrees with the subject-antecedent in person and number (19a). Crucially and unequivocally, no agreement between the *by*-phrase and the bound element is possible in PoRs (19b); instead, the 3rd person reflexive pronoun is obligatory (Plank 1993). I conclude from these data that the anaphor in PoRs does not have any argument as its syntactic antecedent at all. Instead, the anaphor gets default realization (as a 3rd person reflexive pronoun).¹⁷

- (19) a. Nur wir waschen uns / *sich hier täglich
 only we wash us.ACC / REFL here daily
 b. Nur von uns wird sich / *uns hier täglich gewaschen
 only by us is REFL / us.ACC here daily washed
 'Only we wash ourselves here everyday'

The existence of PoRs cannot be explained by approaches that treat reflexive verbs as being detransitivized, be it in the lexicon or in the syntax.¹⁸ A case in point is the so-called bundling-approach developed by Reinhart (2000) and Reinhart & Siloni (2005). These authors assume that reflexive verbs are derived by a process that bundles a verb's internal theta-role (<theme>) with its external theta-role (<agent>). As a result, only one argument with a complex theta-role (<agent, theme>) is merged in the external argument position.

¹⁷ An alternative, not implausible idea is that the existentially bound implicit argument of passives is always 3rd person (or impersonal) and that *by*-phrases do not have to match the implicit argument in ϕ -features. But this would leave unexplained why naturally disjoint verbs do not form PoRs.

¹⁸ I concentrate here on a version of the intransitivity-account to reflexive verbs that assumes that these verbs are unergative. Some researchers proposed that reflexive verbs are unaccusative (e.g. Grimshaw 1981). PoRs are problematic for such an account simply because unaccusatives are not expected to passivize. McGinnis (1998, 2000, 2004) and Embick (2004) propose that reflexive verbs are transitive but involve an unaccusative derivation. The reflexive pronoun is located in the external argument position and the internal argument moves across the external argument position to bind the reflexive pronoun. Such an account is incompatible with PoRs because the external argument (i.e. the reflexive pronoun) should be absorbed by the process of passivization.

Crucially then, the reflexive element is not an argument of the verb. It is either merged as a lexical sign that indicates that the bundling-operation has taken place or it acts as a case-reducer which absorbs the accusative case of the basically transitive verb.

Such an account could give the following answer to question (i) (Binding Theory): If the reflexive pronoun is not an argument of the verb, then it is not an anaphor either and therefore not subject to Binding Principle A.¹⁹

However, the bundling-approach fails to answer all other questions identified above. It cannot explain why the reflexive element can get accusative case. In fact, if the reflexive element is actually a case absorber (as proposed by Reinhart and Siloni (2005) for German *sich*), its presence in PoRs is totally unexpected. Since the passivization process should eliminate accusative case, there should be no need to insert a case absorber in PoRs. Furthermore, since the account does not make any difference between types of reflexive verbs (inherently and naturally reflexive vs. naturally disjoint) and since bundling is claimed to hold for all languages involving SE-anaphors, the question (iii) and (iv) remain open, too.

A further problem for the bundling approach is that the process of bundling, by definition, can only apply to co-arguments of a verb. However, we have seen that Icelandic PoRs can involve possessors. The relevant example is repeated in (20).

- (20) Það var haldið með sínu liði
 it was held with SELF's team
 'People supported their own team'

Doron & Rappaport Hovav (2007) (see also Labelle 2008) provide a general argument against the bundling approach that can be transferred to PoRs. These authors observe that the bundling approach predicts that it should be impossible to focus only one of the two θ -roles that are involved in the bundling process. Recall that the bundling approach proposes that a verb's internal θ -role (<theme>) is not assigned to the object position, but is bundled together with the verb's external θ -role (<agent>) to a complex role (<agent, theme>). This complex role is then assigned to the verb's external argument position. As a consequence, it should be impossible to focus only one of the two θ -roles independently of the other. But as the authors observe this is empirically not correct. Both, the agent and the theme can be focused independently in a reflexive context as their French example in (21) shows. The German example in (22) illustrates the same point.

- (21) Jean-Pierre s'est dénoncé lui-même
 Jean-Pierre REFL is denounced himself
 (i) 'Jean-Pierre denounced himself, it was not others who denounced him
 (ii) 'Jean-Pierre denounced himself, he did not denounce others

- (22) Morgens wäscht sie sich immer/erst mal selber
 at.morning washes she REFL always/first-of-all self
 (i) agent focus: She washes herself, no-one else washes her.
 (possible context: She is a disabled patient.)
 (ii) theme focus: She washes herself, she washes no-one else.
 (possible context: She is a nurse.)

¹⁹ Some authors explicitly argued that such an intransitivity approach to reflexive verbs (i.e., that reflexive verbs are unergative) would account for the binding problem that we identified for PoRs (e.g. Sells et al. 1987, Ágel 1997, Hundt 2002, Eythórsson 2008). The arguments that I present below are problematic for all of these proposals.

Doron & Rappaport-Hovav (2007) conclude that reflexive verbs are transitive and that the reflexive pronoun bears a θ -role, i.e. it is not just a marker of a bundling process or a case absorber but it is an anaphor in argument position.

Turning to PoRs, we observe that, once again, the agent role and the theme role can be focused independently.²⁰ This shows that the reflexive pronoun bears a θ -role in PoRs and, therefore, is an anaphor in argument position.

- (23) Morgens wird sich immer/erst mal selber gewaschen
 at.morning becomes REFL always/ first-of-all self washed
 (√ agent focus, √ theme focus)

In the next section, I will propose a theory about the licensing of reflexive pronouns and accusative case that tries to answer the four questions mentioned above. Before I go into the technical details of my proposal, I will first describe the general idea.

6. Towards an analysis of PoRs

I assume that reflexive elements like German *sich*, Icelandic *sig* or Dutch *zich* are always anaphors (SE-anaphors in the terminology of Reinhart & Reuland 1993). SE-anaphors can be either the (in-)direct object of a verb, the object of a preposition or the possessor of a DP.²¹ Being anaphors, they are subject to (some version of) Binding Principle A (Chomsky 1981), no matter whether they occur in an inherently reflexive, naturally reflexive or naturally disjoint context.²² Inherent and natural reflexivity and their counterpart, natural disjointness, are not lexically specified but are post-syntactic phenomena, which are determined at the Conceptual-Intentional interface. They are computed on the basis of conceptual information about the material inside vP/VoiceP, i.e. the verbal event and its arguments (cf. fn. 7; see also fn. 29).

Above I have claimed that the anaphor in PoRs has no syntactic antecedent. If the implicit external argument of the passive could act as syntactic antecedent, we could not explain why naturally disjoint verbs are excluded from PoRs. Furthermore, the agreement facts in (19b) would be problematic. As a consequence, this means that the traditional version of Principle A of the Binding Theory is not fulfilled in PoRs. To explain why PoRs are, nevertheless, available in some languages under some contexts, I make the following proposal:

- (24) Some languages can formally repair a violation of Principle A. However, the formally repaired structure is acceptable (i.e., easily interpretable) only if the underlying predicate/event is conceptualized as inherently or naturally reflexive.

The following picture illustrates this idea. In most languages, PoRs are formally ungrammatical because they violate Principle A of the Binding Theory (dark area). Some languages have a mechanism that allows repairing the Principle A violation that goes along with PoRs (grey area). However, only a subset of these formally rescued PoRs is judged as acceptable (white area). This is so because the repair mechanism is purely formal and does

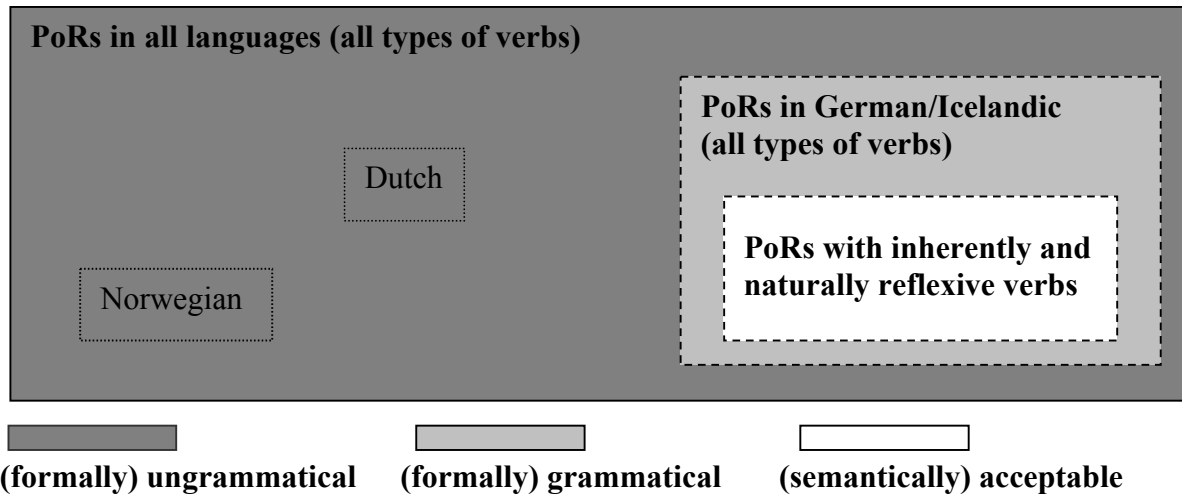
²⁰ See Hole (2006, 2008) on focusing the implicit argument of passives via an intensifier like German ‘*selber*’ (self).

²¹ I leave aside here the role of SE-anaphors in reflexive anticausatives and generic middles. In Schäfer (2008, to appear), I argued that the reflexive pronoun is located in the external argument position in these contexts.

²² Cf. Doron & Rappaport Hovav (2007), who propose that SE-anaphors are ambiguous between real anaphors and markers of reflexivization. In their conception, inherently reflexive verbs involve a marker of reflexivization, reflexive uses of naturally disjoint verbs involve an anaphor, and the reflexive element in reflexive uses of naturally reflexive verbs is ambiguous between the two options.

not, by itself, lead to a successful interpretation of the reflexive pronoun. A successful interpretation is only possible if conceptual knowledge supports it. This is the case in inherently and naturally reflexive contexts.

The distribution of PoRs (\approx The availability of Repair for Principle A violations)



6.1 Basic assumptions on anaphoric binding and structural case

In this section, I provide some background assumptions concerning Binding Theory and Case Theory (see also Schäfer (2008, to appear)). I will only discuss local binding of SE-anaphors and their pronominal 1st and 2nd person counterparts. I will not be concerned with non-local binding of pronouns, long-distance anaphors, or the licensing of SELF-anaphors.

I follow earlier proposals in assuming that anaphoric binding is grounded in a syntactic Agree-relation between a DP-antecedent and a variable (e.g. Fanselow 1991, Burzio 1991, 1998, Reuland 2005, Fischer 2004, 2006, Heinat 2006, Chomsky 2008, Kratzer 2009). I assume that a variable is totally underspecified for ϕ -features: it is a set of a categorial D-feature and unvalued ϕ -features $\{D, u\phi\}$. Therefore, it is referentially defective. Furthermore, a variable needs an antecedent to value its ϕ -features under syntactic Agree.

Since the variable has unvalued ϕ -features it is active, thereby qualifying as a probe (Chomsky 2001). The antecedent is a full DP which has valued ϕ -features and, therefore, can act as a goal. Specifically, I propose that the variable probes the tree upwards to get its features valued by a c-commanding antecedent (cf. Baker (2008), Wurmbrand (2010), or Zeijlstra (2010) for the option of upward-probing).

If Agree between the variable and a c-commanding antecedent has taken place, the structure is sent to the interfaces for interpretation. If Agree does not take place, the features of the variable remain unvalued and, as a consequence, the derivation will crash. Since syntactic Agree is local, this setup has an effect similar to Principle A of the standard Binding Theory (Chomsky 1981): A variable needs a local, c-commanding antecedent. However, rephrasing Principle A as an Agree-operation will allow me to implement a repair strategy for Principle A violations taking place in PoRs (see below).

At LF, the syntactic Agree-relation between the variable and the antecedent is evaluated semantically as a binding relation (as expressed via coindexation in earlier stages of the theory; see Reuland 2001, 2005 for discussion). At PF, the Agree relation is evaluated morpho-phonologically and the Spell Out of the variable is determined. The specific Spell Out, either as a SE-reflexive or as a (locally bound) pronoun, depends on the ϕ -features of the antecedent and language-dependent morpho-phonological economy conditions (see Halle &

Marantz 1993, Burzio 1998, Heinat 2006 for discussion).²³ In most Germanic languages the situation is as follows: If the variable is valued by a third-person antecedent, it gets spelled out as a SE-anaphor. If it is valued by a 1st or 2nd person antecedent, it is spelled out as a 1st or 2nd person object pronoun. However, some languages use the SE-anaphor for other than just 3rd person antecedents (e.g. Polish uses it for 1st, 2nd, and 3rd person antecedents) while other languages lack a SE-anaphor and always use a pronoun overtly matching the antecedent in ϕ -features (e.g. Frisian).

Full-fledged referential pronouns, on the other hand, are the combination of a D-feature and a set of valued ϕ -features {D, ϕ }; that is, they always spell out their inherent ϕ -features and, therefore, refer independently. Note that I must assume that the PF-interface can differentiate between an element that started the derivation with all features valued and an element that started the derivation with unvalued features and gets these features valued only during the derivation. Only in the latter case the element is a variable that can get spelled out as a SE-anaphor.

I follow recent proposals that morphological case is mainly a PF phenomenon (Marantz (2000), McFadden (2004), Sigurðsson (2000, 2003, 2005, 2006, 2009)). In accordance with these authors I assume that PF determines morphological case on the basis of syntactic information. Specifically, I propose that PF evaluates the syntactic Agree-relation involving T(ense) to determine structural case. T(ense) is equipped with unvalued ϕ -features and probes its c-command domain for the closest valued DP to agree with. At PF, this Agree-relation is evaluated to determine dependent case (accusative) and default case (nominative). I propose the following three principles to be at work:

- (25) a. Dependent case (ACC): A DP is realized at PF with dependent case if a different DP has valued local T via Agree.²⁴
 b. Default case (NOM): A DP which is not realized with dependent case appears with default case.
 c. Inherent/lexical case takes precedence over default and dependent case.

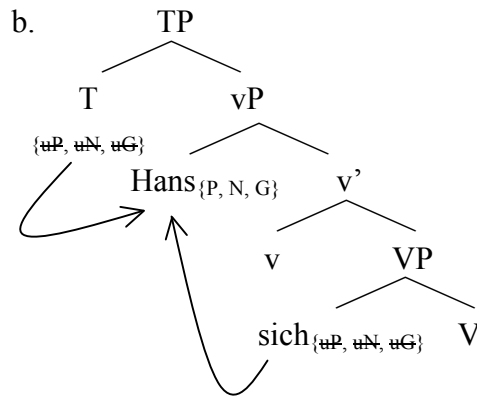
To illustrate the above assumptions, consider the derivation of the example in (26) involving a transitive verb with a subject-bound anaphor/variable in object position.²⁵

- (26) a. dass Hans sich mag
 that John.NOM REFL.ACC likes
 ‘that John likes himself’

²³ In the end, more has to be said about the technical aspects of this proposal. To make a binding relation and the Spell Out as a SE-anaphor possible, the information concerning which element has valued the variable must be available at both interfaces. Against standard minimalist assumptions, I have to assume, therefore, that the features of the variable, which get valued in the syntax are not deleted but remain available at both interfaces.

²⁴ In Schäfer (2008, to appear) I argue that this combination of an Agree-based with a dependent case approach is necessary to derive the ergative case-pattern of reflexive anticausatives and middles. I argue that reflexive anticausatives/middles involve a nominative theme in object position and an accusative reflexive pronoun in Spec,vP. Since the reflexive has unvalued ϕ -features, the theme values T (and, indirectly, the reflexive). Baker & Vinokurova (2010) also propose the combination of an Agree-based with a dependent case approach.

²⁵ I leave aspects of Phase Theory aside here (Chomsky 2001 et seq.). If vP/VoiceP is a phase, as standardly assumed, the system has to be reformulated in a way similar to Legate (2005) or Marantz (to appear). See Schäfer (2008) for a more detailed discussion of the present system that integrates Phase Theory and allows, thereby, also the integration of ECM-contexts.



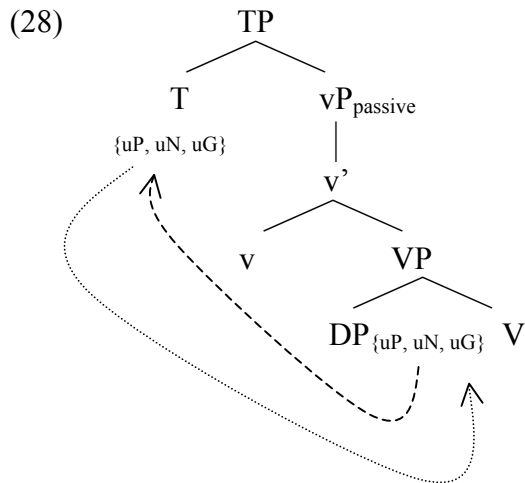
T enters the derivation with unvalued ϕ -features. The variable in object position enters the derivation with unvalued ϕ -features. The external argument is merged with a full set of valued ϕ -features. Two Agree-processes take place. One is started by T which probes its c-command domain. The closest element with valued ϕ -features is the external argument in Spec,vP, which therefore agrees with and values T. (I assume that German does not have obligatory movement to Spec,TP, but nothing hinges on this). The second Agree-process is started by the variable. It probes the tree upwards and also agrees with and gets valued by the subject. These two Agree-relations will be evaluated at the interfaces. At PF, the internal argument is marked with dependent ACC because there is a different DP (the subject) within the same clause which has valued the features on T via Agree (cf. 25a). The subject itself, on the other hand, gets default case as nothing more specific is said about its case (cf. 25b). Finally, the variable is spelled out according to the ϕ -features of its antecedent. Since the antecedent is 3rd person, the variable gets realized as a SE-anaphor. At LF, finally, the Agree-relation between the subject and the variable is interpreted as semantic binding. With this background, we can finally turn to a more technical discussion of PoRs.

6.2 Deriving PoRs

Consider the German PoR in (27). The tree in (28) illustrates how the system sketched in the previous subsection handles this and similar examples. The following derivational steps take place: Both, the variable and T enter the derivation with unvalued ϕ -features. T searches its c-command domain and the variable searches the tree upwards. Since PoRs are impersonal constructions,²⁶ there is no DP available that could value either T or the variable. But note that ‘Agree’ and ‘valuation’ are different processes if we assume with Frampton & Gutmann (2000) or Pesetsky & Torrego (2007) that Agree involves just *feature sharing*. Therefore, T and the variable agree with each other in (28), but since none of the two has valued features, no valuation can take place.

- (27) als sich gewaschen wurde
 when REFL washed became

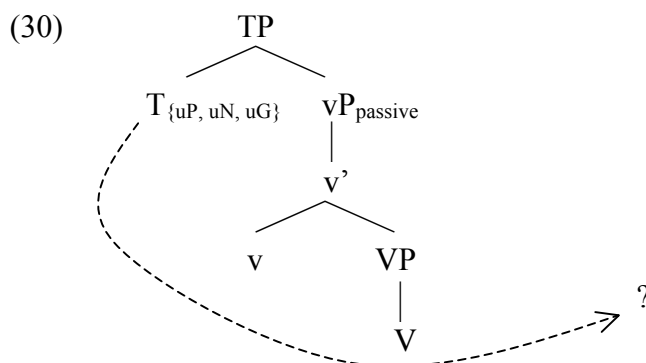
²⁶ But see fn. 4.



(28) involves an unvalued two-member agreement chain $\langle T - variable \rangle$. Therefore, the derivation should crash at the interfaces. This looks like the correct result for Dutch or Norwegian, but it isn't the correct prediction for German and Icelandic. Note, however, that German and Icelandic (but also Dutch and Norwegian) have a construction different from PoRs that provides a related problem, namely ordinary impersonal passives (or other impersonal constructions such as quirky intransitives in Icelandic) illustrated in (29a, b). As these examples show, German and Icelandic do not allow the insertion of an expletive in the context of impersonal passives.

- (29) a. weil (*es) hier gestern lange getanzt wurde (German)
 because expl. here yesterday long danced was
 'Yesterday people danced for a long time'
- b. Í dag hefur (*það) verið dansað (Icelandic)
 today has expl. been danced
 'Today, people danced'

The derivation of simple impersonal passives is sketched in (30). This time, only one element with unvalued φ -features is present, namely T. T probes its c-command domain but cannot find any other element that could value it. The derivation involves an unvalued one-member chain $\langle T \rangle$ which should lead to a crash at the PF-interface, contrary to fact.



Languages deal with impersonal passives in different ways. Some languages insert a nominal expletive with φ -features that can value T and check the EPP on T. In such languages, the problem depicted in (30) does not occur. Holmberg (2002) shows this to be the case for some Norwegian dialects where the expletive has a pronominal origin. But other languages lack expletives with nominal features and the problem depicted in (30) holds. The languages

discussed in this paper (German Icelandic, Dutch, Norwegian) are of this latter type.²⁷ I assume with Ruys (2010) that in the latter type of languages *default agreement* (DA) values T and saves the derivation of impersonal passives in (30). In a minimalist framework which involves the syntactic operation Agree and the concept of Full Interpretation (i.e. the idea that derivations crash at the interfaces if unvalued features remain unchecked), default agreement must be a process taking place in core syntax, i.e. before Transfer to the interfaces. I assume the following conception of Default Agreement (see also Ruys (2010)):

Default agreement (DA): In the absence of any appropriate nominal category, the φ -features on an unvalued probe undergo default valuation [3rd person, singular].

DA on T is a way to rescue impersonal constructions such as impersonal passives.²⁸ It is a *last resort* operation, i.e. a repair strategy that avoids that a derivation crashes for purely formal reasons at the interfaces. Furthermore, I assume that DA is a costly operation and, therefore, is not available in all languages. Languages lacking DA on T (as well as a nominal expletive) do not allow the formation of impersonal constructions. English is a case in point (cf. Ruys 2010). With this conception of DA at hand, I return to PoRs and provide answers to the questions (i)-(iv) formulated at the beginning of section 5.

Recall that I concluded that the anaphor in PoRs does not have an antecedent. Question (i) asks, therefore, why PoRs are not filtered out as a Principle A violation. I proposed that variables (often spelled out as SE-anaphors) are similar to T in that both enter the derivation with unvalued φ -features. In the case of ordinary binding, the unvalued features on the variable get valued by a DP-antecedent. In PoRs, T and the variable form an agreement chain $\langle T - variable \rangle$, which, however, remains unvalued (see the derivation in (28)). I argue that PoRs do not crash at the interfaces if this agreement chain $\langle T - variable \rangle$ can be valued by DA. That is, in PoRs, a violation of Principle A is formally precluded by DA: the variable gets its unvalued features valued although no c-commanding DP-antecedent is available. DA can, however, not provide any help concerning the interpretation of the variable in the absence of a DP-antecedent. The question of how to interpret the variable in PoRs will become relevant below.

The idea that DA is a costly operation can provide an answer to question (iv). Recall that PoRs are available only in few languages and, more specifically, only in a subset of the languages with impersonal passives. Following Ruys (2010), I proposed that impersonal passives are rescued if the one member agreement chain $\langle T \rangle$ is valued via DA. In order to rescue PoRs I proposed that the two-member agreement chain $\langle T - variable \rangle$ needs to be valued via DA. Arguably then, the DA-operation needed in simple impersonal passives is less complex than the DA-operation needed in PoRs. I propose, therefore, that languages differ in the complexity of the DA-operations they make available. Some languages lack DA. Other languages like Dutch or Norwegian make DA available only for heads of the extended verbal domain such as T. German and Icelandic, in addition, make DA available for non-homogeneous agreement-chains involving verbal heads and D-elements like variables/anaphors.

Next, I turn to question (iii) about the verb class restrictions. Above I argued that DA formally avoids that PoRs crash at the interfaces. The variable (as well as T) gets its features

²⁷ Holmberg (2002) shows that standard Norwegian uses an expletive in impersonal passives which has a locative origin and lacks nominal φ -features. The Dutch expletive *er* used in impersonal passives is of the same kind (see Ruys 2010). Such expletives check the EPP on T but cannot value T. I assume that German impersonal passives lack an expletive because German does not have an obligatory EPP-feature on T.

²⁸ As said, I leave Phase Theory aside. If passive vPs are phases (e.g. Legate 2005), impersonal passives would involve DA on the phase head v.

valued as if it had a DP-antecedent. But crucially, no DP-antecedent is available that could semantically bind the variable at LF, i.e. the derivation provides no clue how to interpret the variable. At this point, I argue that conceptual knowledge about the verbal event expressed by the PoR enters the picture. The output of the syntactic derivation involving DA on a variable is comprehensible at the CI-interface only if conceptual knowledge provides some information about how to interpret the variable. With inherently reflexive verbs, it is conceptually clear that no further referent besides the external argument can be involved. Naturally reflexive events carry the strong conceptual expectation that the argument position realized by the semantically unbound reflexive pronoun denotes the same entity that acts as the external argument of the same event (see the discussion around example (8)). That is, in inherently and naturally reflexive contexts, the semantic coindexation that is usually computed from syntactic binding/Agree between a DP-antecedent and a variable can be reconstructed on conceptual grounds beyond any doubt. Naturally disjoint verbs or contexts do not provide any such conceptual clue about how to interpret the variable, and this is the reason, I argue, why they typically do not enter the formation of PoRs.²⁹

This leaves question (ii) about accusative case to be accounted for. Note that there is no reason to assume that the accusative case on the reflexive pronoun in PoRs is in any way different than ordinary structural accusative case. Furthermore, there is no reason to assume that the case system active in PoRs is different from the general case system of the languages under consideration. That is, it does not make sense to stipulate that only PoRs but not other passives can assign structural accusative case. The availability of structural accusative in PoRs should, therefore, follow from an interplay between the general theory of structural accusative case and some property present only in PoRs but not in ordinary passives. Arguably, this property must somehow be related to the presence of the reflexive pronoun. I argue, therefore, that the availability of accusative case in PoRs depends on one formal property of reflexive pronouns, namely their *φ-features deficiency*. In the previous section, I formulated the post-syntactic algorithm for object case (ACC) repeated in (31) that builds crucially on a syntactic Agree-relation between T and a DP. In order to derive accusative on the reflexive pronoun in PoRs, we need to update the mechanism that determines dependent case (31) slightly as in (32) so that any kind of Agree-relation, either Agree with a DP or DA, is relevant for the determination of dependent case.³⁰

(31) **Dependent case (ACC) (old version):**

A DP is realized at PF with dependent case if a different DP has valued T via Agree.

(32) **Dependent case (ACC) (updated version):**

A DP is realized at PF with dependent case if something else (either a different DP or DA) has valued T via (default) Agree.

7. Conclusions

This paper discussed Passives of Reflexive Verbs that exist in a subset of the languages with impersonal passive and SE-reflexive, namely German and Icelandic. I showed that even in

²⁹ Note that I assume that PoRs involving naturally disjoint verbs are formally grammatical in German and Icelandic because DA values the variable. They are however, unacceptable, due to the interpretative problems described in the text. I predict, however, that PoRs involving naturally disjoint verbs become more acceptable, if the bigger context (i.e. the context beyond the bare passive vP) provides some expectation about how to interpret the variable (see. fn. 7 for some exemplification).

³⁰ Both versions of the dependent case approach free Burzio's Generalization from any relation to theta-roles (see e.g. Sigurðsson (2006) and already Abraham (1986) for motivation). Both versions predict, furthermore, well-restricted, but slightly different, sets of counterexamples to the original version of Burzio's Generalization.

these languages the formation of PoRs is conceptually restricted to inherently and naturally reflexive contexts. I showed, furthermore, that lexical theories of reflexivity cannot account for the availability of PoRs because the reflexive pronoun in PoRs behaves like a syntactic and semantic argument and the reflexive relation found in PoRs is not confined to the verbal co-argument domain. However, a standard version of Principle A of the Binding Theory also cannot account for PoRs either because a closer inspection of PoRs showed that the implicit argument of the passive is not the formal, i.e. syntactic, antecedent of the reflexive pronoun.

I proposed that the reflexive element in PoRs is an ordinary anaphor/a variable and should, therefore, be subject to some version of Principle A of the Binding Theory. However, PoRs argue in favor of a reformulation of the traditional Principle A in terms of a syntactic Agree-relation between the anaphor/variable and an antecedent. Since in PoRs the anaphor cannot find a c-commanding DP-antecedent, PoRs lead to a Principle A violation in most languages. In German and Icelandic, however, a formal violation of Principle A can be avoided because Default Agreement (DA), a last resort repair operation, can formally value the ϕ -features of the variable. DA only avoids a formal crash of PoRs at the interfaces but does not lead to a semantic interpretation of the variable. Therefore, a successful interpretation of PoRs depends on an inherently or naturally reflexive context. Finally, I proposed an Agree-based version of a dependent case approach which allows the application of Default Agreement to trigger structural accusative on the reflexive pronoun in PoRs.

References

- Abraham, W. 1986. Unaccusatives in German. *Groninger Arbeiten zur germanistischen Linguistik (GAGL)* 28, 1–72.
- Ágel, V. 1997. Reflexiv-Passiv, das (im Deutschen) keines ist. Überlegungen zu Reflexivität, Medialität, Passiv und Subjekt. In *Sprache im Fokus. Festschrift für Heinz Vater zum 65. Geburtstag*, Ch. v. Dürscheid, K. H. Ramers & M. Schwarz (Eds), 147–187. Tübingen: Niemeyer.
- Baker, M. 2008. *The Syntax of Agreement and Concord*. Cambridge: Cambridge University Press.
- Baker, M & N. Vinokurova 2010. Two modalities of case assignment: case in Sakha. *Natural Language and Linguistic Theory* 28: 593–642.
- Barðdal, J. & Molnár, V. 2003. Passive in Icelandic – compared to Mainland Scandinavian. In *Structures of Focus and Grammatical Relations*, J. Hetland & V. Molnár (Eds), 231–260. Tübingen: Niemeyer.
- Behagel, O. 1924. *Deutsche Syntax. Eine geschichtliche Darstellung*. Volume II. Heidelberg: Winter.
- Bierwisch, M. 2006. German Reflexives as Proper and Improper Arguments. In *Form, Structure, and Grammar : A Festschrift Presented to Günther Grewendorf on Occasion of his 60th Birthday*, P. Brandt & E. Fuß (Eds), 15–36. Berlin: Akademie-Verlag.
- Burzio, L. 1991. The morphological basis of anaphora. *Journal of Linguistics* 27, 81–105.
- Burzio, L. 1998. Anaphora and Soft Constraints. In *Is the Best Good Enough? Optimality and Competition in Syntax*, P. Barbosa, D. Fox, P. Hagstrom, M. McGinnis & D. Pesetsky (Eds), 93–114. Cambridge MA: MIT Press.
- Cinque, G. 1988. On *Si* constructions and the theory of *Arb*. *Linguistic Inquiry* 19: 521–581.
- Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, N. 2001. Derivation by phase. *Ken Hale: A Life in Language*, Michael Kenstowicz (Ed.), 1–52. Cambridge MA: MIT Press.
- Chomsky, N. 2008. On Phases. In *Foundational Issues in Linguistic Theory. Essays in Honor of Jean-Roger Vergnaud*, R. Freidin, C. P. Otero & M. L. Zubizarreta (Eds), 133–166. Cambridge MA: MIT Press.

- Collins, C. 2005. A smuggling approach to the passive in English. *Syntax* 8: 81–120.
- Doron, E. & M. Rappaport Hovav 2007. Towards a Uniform Theory of Valence-changing Operations. *Proceedings of IATL 23*.
- Embick, D. 2004. Unaccusative Syntax and Verbal Alternations. In *The unaccusativity puzzle: explorations of the syntax-lexicon interface*, A. Alexiadou, E. Anagnostopoulou & M. Everaert (Eds), 137–158. Oxford: Oxford University Press.
- Everaert, M. 1990. Nominative Anaphors in Icelandic: Morphology or Syntax? In *Germanic Syntax Workshop*, W. Abraham & E. Reuland (Eds), 277–307. Amsterdam: John Benjamins.
- Eythórsson, T. 2008. The New Passive in Icelandic really is a passive. In *Grammatical Change and Linguistic Theory: The Rosendal Papers*, T. Eythórsson (Ed.), 173–219. Amsterdam & Philadelphia: Benjamins.
- Fanselow, G. 1987. *Konfigurationsalität*, Tübingen: Narr.
- Fanselow, G. 1991. *Minimale Syntax*. Habilitationsschrift, University of Passau. Groninger Arbeiten zur germanistischen Linguistik 32.
- Fischer, S. 2004. *Towards an Optimal Theory of Reflexivization*. PhD thesis, University of Tübingen.
- Fischer, S. 2006. Matrix Unloaded: Binding in a Local Derivational Approach. *Linguistics* 44: 913–935.
- Frampton, J. & S. Gutmann 2000. *Agreement is Feature Sharing*. Ms., Northeastern University.
- Frey, W. 1993. *Syntaktische Bedingungen für die semantische Interpretation. Über Bindung, implizite Argumente und Skopus*. Berlin: Akademie-Verlag.
- Geniušienė, E. 1987. *The typology of reflexives*. Berlin: Mouton de Gruyter.
- Grewendorf, G. 1988. *Aspekte der deutschen Syntax*. Tübingen: Narr.
- Grimshaw, J. 1981. On the lexical representation of Romance reflexive clitics. In *The Mental Representation of Grammatical Relations*, J. Bresnan (Ed.), 87–148. Cambridge MA: MIT Press.
- Haider, H. 1985. Von sein oder nicht sein: Zur Grammatik des Pronomens „sich“. In *Erklärende Syntax des Deutschen*, W. Abraham (Ed.), 223–254. Tübingen: Narr.
- Halle, M. & A. Marantz 1993. Distributed Morphology and the Pieces of Inflection. *A View From Building 20*, K. Hale & S. J. Keyser (Eds), 111–176. Cambridge MA: The MIT Press.
- Heinat, F. 2006. *Probes, pronouns, and binding in the Minimalist Program*. PhD thesis, Lund University.
- Hole, D. 2006. *Agentive selbst and other instantiations of the identity function in German*. Ms., University of München.
- Hole, D. 2008. Focus on identity – The dark side of *ziji*?. *The Linguistic Review* 25: 267–295.
- Holmberg, A. 2002. Expletives and Agreement in Scandinavian Passives. *Journal of Comparative Germanic Linguistics* 4: 85–128.
- Hundt, M. 2002. Formen und Funktionen des Reflexivpassivs im Deutschen. In *Deutsche Sprache* 30: 124–166.
- Jónsson, J. G. 2009. The new impersonal as a true passive. In *Advances in Comparative Germanic Syntax*, A. Alexiadou, J. Hankamer, T. McFadden, J. Nuger & F. Schäfer (Eds), 281–306. Amsterdam: John Benjamins.
- Kaufmann, I. 2001. *Medium: Eine Studie zur Verbsemantik*. Habilitationsschrift, University of Düsseldorf.
- Kemmer, S. 1993. *The middle voice*. Amsterdam: John Benjamins.
- Kiss, T. 2003. Die Genese der Ausnahmeanapher. In *Arbeiten zur Reflexivierung*, L. Gunkel, G. Müller, & Zifonun, G. (Eds), 157–188. Tübingen: Narr.

- Koenig, E., Vezzosi, L., 2004. The role of predicate meaning in the development of reflexivity. In *What makes Grammaticalization? A Look from its Fringes and its Components*, Wiemer, B., Bisang, W., Himmelmann, N. (Eds), 213–244. Berlin: Mouton de Gruyter.
- Kratzer, A. 2009. Making a Pronoun: Fake Indexicals as Windows into the Properties of Pronouns. *Linguistic Inquiry* 40: 187–237.
- Labelle, M. 2008. The French Reflexive and Reciprocal se. *Natural Language and Linguistic Theory* 26: 833–876.
- Legate, J. A. 2005. Phases and Cyclic Agreement. In *MITWPL 49: Perspectives on Phases*, M. McGinnis & N. Richards (Eds). Cambridge MA: The MIT Press.
- Maling, J. & S. Sigurjónsdóttir 2002. The new impersonal construction in Icelandic. *The Journal of Comparative Germanic Linguistics* 5: 97–142.
- Marantz, A. 2000. Case and Licensing. In *Arguments and case: explaining Burzio's Generalization*, E. Reuland (Ed.), 11–30. Amsterdam: John Benjamins.
- Marantz A. to appear. *Phases and Words*. MS, NYU.
- McFadden, T. 2004. *The Position of Morphological Case in the Derivation: a study on the syntax-morphology interface*. PhD thesis. University of Pennsylvania.
- McGinnis, M. 1998. Reflexive external arguments and lethal ambiguity. In *Proceedings of WCCFL 16*, E. Curtis, J. Lyle & G. Webster (Eds), 303–317. Stanford: CSLI.
- McGinnis, M. 2000. Reflexive clitics and the specifiers of vP. In *Papers from the UPenn/MIT Round Table on the Lexicon*, L. Pylkkänen, H. Harley & van Hout, A. (Eds), 137–160. MITWPL 35. MIT Working Papers in Linguistics.
- McGinnis, M. 2004. Lethal Ambiguity. *Linguistic Inquiry* 35: 47–95.
- Müller, S. 1999. *Deutsche Syntax deklarativ. Head Driven Phrase Structure Grammar für das Deutsche*. Tübingen: Niemeyer.
- Müller G. & W. Sternefeld 1993. Scrambling as A-bar movement. In *Studies on Scrambling. Movement and Non-Movement Approaches to Free Word Order Phenomena*, N. Corver & H. van Riemsdijk (Eds), 331–385. Berlin: Mouton de Gruyter.
- Pestsky, D. & E. Torrego 2007. The Syntax of Valuation and the Interpretability of Features. *Phrasal and Clausal Architecture: Syntactic Derivation and Interpretation*, S. Karimi, V. Samiian and W. Wilkins (Eds), 262–294. Amsterdam: John Benjamins.
- Plank, F. 1993. Peculiarities of Passives of Reflexives in German. *Studies in Language* 17: 135–167.
- Reinhart, T. & E. Reuland 1993. Reflexivity. *Linguistic Inquiry* 24: 657–720.
- Reinhart, T. & T. Sioni 2004. Against the Unaccusative Analysis of Reflexives. In *The Unaccusativity Puzzle*, A. Alexiadou, E. Anagnostopoulou & M. Everaert (Eds), 288–331. Oxford: Oxford University Press.
- Reinhart, T. & T. Sioni. 2005. The Lexicon-Syntax Parameter: Reflexivization and Other Arity Operations. *Linguistic Inquiry* 36: 389–436.
- Reis, M. 1982. Reflexivierung im Deutschen. In *Actes du Colloque du Centre de Recherches Germaniques de l'Université de Nancy & Journée Annuelle des Linguistes de l'Association des Germanistes de l'Enseignement Supérieur 12*, E. Faucher (Ed.), 1–40. Nancy.
- Reuland, E. 2001. Primitives of Binding. *Linguistic Inquiry* 32: 439–492.
- Reuland E. 2005. Agreeing to bind. In *Organizing Grammar: Linguistic Studies in Honor of Henk van Riemsdijk*, H. Broekhuis et al. (Eds), 505–513, Berlin: Mouton de Gruyter.
- Ruys, E. 2010. Expletive selection and CP arguments in Dutch. *Journal of Comparative Germanic Linguistics* 13: 141–178.
- Schäfer, F. 2008. *The Syntax of (Anti-)Causatives. External arguments in change-of-state contexts*. Amsterdam: John Benjamins.

- Schäfer, F. to appear. Local Case, Cyclic Agree and the Syntax of truly Ergative Verbs. In *Local Modelling of Non-Local Dependencies in Syntax*, A. Alexiadou, T. Kiss & G. Müller (Eds). Tübingen: Niemeyer.
- Sells, P., A. Zaenen & D. Zec 1987. Reflexivization variation: Relations between syntax, semantics, and lexical structure. In *Working Papers in Grammatical Theory and Discourse Structure: Interactions of Morphology, Syntax, and Discourse*, M. Iida, S. Wechsler & D. Zec (Eds), 169–238. Stanford: CSLI Publications.
- Sigurðsson, H. A. 1989. *Verbal Syntax and Case in Icelandic*. Doctoral dissertation, University of Lund.
- Sigurðsson, H. A. 2000. The locus of case and agreement. The locus of case and agreement. *Working Papers in Scandinavian Syntax* 65: 65–108.
- Sigurðsson, H. A. 2003. Case: abstract vs. morphological. In *New Perspectives on Case Theory*, E. Brandner & H. Zinsmeister (Eds), 223–268. Stanford: CSLI.
- Sigurðsson, H. A. 2005. Accusative and the Nom/Acc alternation in Germanic. *Working Papers in Scandinavian Syntax* 76: 93–133.
- Sigurðsson, H. A. 2006. The nominative puzzle and the low nominative hypothesis. *Linguistic Inquiry* 37: 289–308.
- Sigurðsson, H. A. 2009. The No Case generalization. In *Advances in Comparative Germanic Syntax*, A. Alexiadou, J. Hankamer, T. McFadden, J. Nuger & F. Schäfer (Eds), 249–280. Amsterdam & Philadelphia: John Benjamins.
- Sigurðsson, H. A. 2011. On the new passive. *Syntax* 14: 148–178.
- Sternefeld, W. 2006. *Syntax. Eine morphologisch motivierte generative Beschreibung des Deutschen*. Stauffenberg.
- Vater, H. 1995. Zum Reflexiv-Passiv im Deutschen. In *Deutsch als Fremdsprache: an den Quellen eines Faches. Festschrift für Gerhard Helbig zum 65. Geburtstag*, H. Popp (Ed.), 185–192. München: Iudicium.
- Wiemer, B. 2006. Relations between Actor-demoting devices in Lithuanian. In *Passivization and Typology (Form and Function)*, Abraham, W., Leisiö, L. (Eds), 274–309. Amsterdam, Philadelphia: Benjamins.
- Woolford, E. 1999. More on the Anaphor-Agreement Effect. *Linguistic Inquiry* 30: 257–287.
- Wunderlich, D. 1985. Über die Argumente des Verbs. *Linguistische Berichte* 97: 183–227.
- Wurmbrand, S. 2010. *Parasitic morphology in Germanic: Consequences for the theory of feature checking*. Talk at the guest lecture series of the SFB 732 ‘Incremental Specification in Context’, Universität Stuttgart.
- Zeijlstra, H. 2010. *There is only one way to agree*. Talk at GLOW 33, Wrocław, Poland.