Reflexivity and Dependency

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1 Introduction

The analyses of Pollard and Sag (1992, 1994) and Reinhart and Reuland (1993) answer why certain reflexive pronouns – so-called picture-NP-reflexives – behave anomalously in allowing co-reference with non-binding antecedents. These reflexives are exempt from Binding Theory’s Principle A because Principle A only requires binding if a potential antecedent is available in a given local domain. The reflexive *himself* in (1) does not find a local antecedent in the domain of the predicate *picture* and hence becomes exempt from an application of Binding Theory. Just like the co-indexation of the pronoun *him* with the subject *John*, the co-indexation of the reflexive is not an instance of binding, but an indication of co-reference.

(1) John1 believed that pictures of himself2/him2 were on sale.

With the problem of non-complementarity of reflexives and pronouns eliminated, it even looked as if Binding Theory as a research topic was ceasing. After closer scrutiny, however, it turns out that innovative answers lead to new problems. To begin with, picture-NP-reflexives occur in languages that do not show independent justification for the existence of exempt reflexives. A case at hand is German, as can be illustrated by the grammaticality distribution of the translation of (1) in (2).

(2) Ulrich1 glaubte, dass Bilder von *sich1/ihm1 zum Verkauf standen.

There is no ‘non-complementarity distribution of anaphors and pronouns’ in examples like (2). Yet German allows intrasentential binding with picture-NP-reflexives, as is illustrated in (3).

(3) a. Warum hat Claude Cahun, die Bilder von sich zurückgehalten?
why has Claude Cahun the pictures of himself withheld

*Why has Claude Cahun withheld the pictures of himself?*

b. Wenn Sie im Munzinger-Archiv einen Artikel über sich finden, dann ist Ihnen dieser vor der Erscheinung zur Kontrolle vorgelegt worden.
if you in Munzinger archive an article about yourself find, then is you this before the appearance for examination propounded was

*If you find an article about yourself in the Munzinger archive, it will have been propounded to you for examination before publication.*

c. Verständlich, dass er, keine konfusen Berichte über sich lesen mag.
it-stands-to-reason that he no confuse reports about himself read like

*It stands to reason that he does not like to read confuse articles about himself.*

As will be illustrated below, German fails each and every test for exempt reflexives, and yet allows picture-NP-reflexives. If picture-NP-reflexives exist in certain languages where exempt reflexives do not, severe doubt is cast on an analysis of the former in terms of the latter.2

In addition to this, we are faced with a conceptual problem. The co-indexation in (1) is not an instance of binding, but of co-reference. The proposals differ sharply from earlier analyses in this respect, where anaphors have been classified as referentially deficient, thus being in need of a binding antecedent to receive an interpretation. These earlier proposals tacitly assume that being an anaphor (or not being an anaphor) is

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1 This paper goes back to a series of talks I presented during early summer and winter 2004 in Mannheim (GGS 2004), Köln (Universität zu Köln), Seoul (LSK 2004), Leuven (HPSG 2004), and Leipzig (Universität Leipzig). For largely irrational reasons, I was unable to turn the talks into a paper, but Gereon Müller insisted on its production on a regular basis. So without Gereon, the paper would never have been written. I am deeply grateful that he proved his obstinacy on me. I would also like to thank the audiences in the talks in 2004 for their comments and suggestions, and in particular Ana Luis for discussing the Portuguese data with me.

2 This criticism does not only apply to the analysis of Pollard and Sag (1992, 1994), where the concept of an exempt reflexive follows directly from their Principle A (cf. definition (24) below), but also to the analysis of Reinhart and Reuland (1993). Reinhart and Reuland introduce the concept of a syntactic predicate, and exclude nominal heads that are not deverbal from this concept. For further discussion of Reinhart and Reuland’s analysis, cf. section 3.
basically a lexical property. With exemptness pertinent in (1), it cannot be maintained that anaphors are lexically analysed as referentially deficient.

The present paper tries to solve this problem by proposing a syntactic theory of anaphoric dependency, where syntactic theory should be understood in the sense of Borer (2004). It assumes that being a reflexive pronoun is indeed a lexical property. Anaphoric dependencies are not only resolved but also introduced in syntax. In a nutshell, the syntactic context may turn certain pronouns into dependent elements. Most syntactic theories assume – implicitly or explicitly – a closure on certain local domains, so that the local domain must not contain any open dependencies. Grammars do not derive sentences with missing arguments (unless they can be inferred and hence syntactically derived from the context) and by the same line of reasoning, they do not derive sentences that contain referential dependencies, which will explain why unbounded anaphors are excluded, while exempt reflexives are not.\(^3\)

The present analysis will focus on reflexive pronouns in subjects of object experiencer psych verbs as e.g. to worry, to annoy, or to make one’s day. Reflexive binding in object experiencer psych verbs (OE psych verbs for short) has been a benchmark for theories of OE psych verbs since their initial theoretical discussion in Belletti and Rizzi (1988). We will assume that what looks like anaphoric binding into the subject of an OE psych verb is in fact another case of an exempt reflexive being co-indexed, yet not bound. If reflexive binding into the subject of an OE psych verb is in fact a case of exemptness, we expect that the phenomenon can only be observed in languages that allow exempt reflexives in general.

In section 2, we will discuss properties of reflexive binding into the subject of OE psych verbs. It will be shown that the syntactic distribution of reflexive binding into OE psych verbs is not uniform across languages. While the initial discussion will focus on the differences between English and German, we will turn to the anaphoric system of Portuguese to further illustrate the divergent properties of picture-NP-reflexives. In section 3, we will turn to the concept anaphor itself and introduce the idea that reflexivity is a property of lexical classes, while anaphorici is a dependency, which is not only resolved in syntax, but also introduced by syntactic contexts. Sections 4 and 5 will present the analysis of the data presented in section 2, and a possible extension to subjects of NPs will be discussed in section 6.

2 Reflexives, Picture-NP-Reflexives and Psych Verbs

2.1 Variation in the Syntactic Distribution of Picture-NP-Reflexives

The analyses of Pollard and Sag (1992, 1994) and Reinhart and Reuland (1993) offer a variety of cases illustrating that English picture-NP-reflexives appear in syntactic contexts where ordinary binding cannot apply. In addition to the case already illustrated in (1), picture-NP-reflexives allow intersentential antecedents (4a), non-commanding antecedents (4b), and split antecedents (4c).

(4) a. John\(_1\) was upset. A picture of himself\(_1\) in the museum had been mutilated.
   b. [John’s campaign] required that pictures of himself\(_1\) be placed all over town.\(^4\)
   c. John\(_1\) told Mary\(_2\) that pictures of themselves\(_{1+2}\) were on sale.

None of the phenomena illustrated in (4) are grammatical in German. This is in line with our observation that examples like (1) are not acceptable in German (cf. example (2)). The following examples show that German does not allow intersentential, non-commanding, or split antecedents:

(5) a. * Ulrich\(_1\) war sauer. Ein Bild von sich\(_1\) war beschädigt worden. Ulrich was upset. A picture of himself had mutilated been
   b. * [Schumachers\(_1\) Reklamevertrag] verlangte eine Nacktaufnahme von sich\(_1\). Schumacher’s promotion contract required a nude-picture of himself
   c. * Ulrich\(_1\) zeigte Klaus\(_2\) einigen Bilder von sich\(_{1+2}\). Ulrich showed Klaus some pictures of themselves

\(^3\) Pollard and Sag (1994:266ff.) call reflexive pronouns which are exempt from Principle A exempt anaphors. As will become clear shortly, the term exempt anaphor is not only a misnomer, but strictly speaking contradictory. For the same reason, I will use the term exempt reflexive throughout.

\(^4\) As a funny side effect, it should be noted that the grammar checker of my text processor suggests that himself be replaced by him in (4b).
Despite the obvious opposition against syntactic contexts that suggest a treatment of picture-NP-reflexives as exempt, German picture-NP-reflexives require medium-distance binding (cf. Büring 2005:243). By ‘medium-distance binding’, we mean that a reflexive contained in an NP requires a commanding antecedent within the same clause. It might be possible that a picture-NP-reflexive is realized inside a stack of NPs, yielding structures like \([\text{NP} \ldots \text{N} \ldots \text{N P refl}] \ldots \text{V}\), as e.g. illustrated in (6).

(6) Der geschnappte Einbrecher, in einem HL-Supermarkt in Großaiting bei Augsburg zog die eingeschnappte Krone aus der Tasche. The burglar who was caught in a HL supermarket in Großaiting close to Augsburg pulled [zwei “Krone”-Ausschnitte ] aus der Tasche. two “Krone” clippings with reports about himself out the pocket.

Given the contrasts between (4) and (5), one could give up the idea that reflexive binding can be defined across languages. Hence, two independent Principles A would be the result, one of which would turn picture-NP-reflexives into exempt reflexives, while the other renders these reflexives as anaphors. Such a move would allow a description of the basic facts in the languages in question, but it would be necessary to extend the analysis with every new language being analysed. Focussing on the individual formulations of Principle A, a disjunctive analysis of picture-NP-reflexives would be prone to miss structural similarities across languages.

### 2.2 Picture-NP-Reflexives and OE Psych Verbs

Languages typically include two different types of psych verbs. From the perspective of lexical conceptual structure, so-called subject experiencer psych verbs (SE psych verbs for short), as illustrated in (7), form a kind of norm, while OE psych verbs, as illustrated in (8) behave exceptionally. This exception is due to the assumption that the role \textit{experiencer} occupies a higher rank than the role \textit{theme}. This difference in rank is properly reflected in SE psych verbs, where the \textit{experiencer} is realized as the higher-ranking subject, while the \textit{theme} occupies the position of the object. In the case of OE psych verbs, we find the opposition situation: on the surface, the higher ranked thematic role is associated with the lower ranked grammatical function.

(7) John, fears [these pictures of himself].

(8) [s [These pictures of himself] [VP frighten John]].

Picture-NP-reflexives have been one of the benchmarks for any old theory of OE psych verbs. The problematic case is (8). If the linear appearance of \textit{theme} and \textit{experiencer} is mirrored in the configurational structure, the reflexive is not bound by its antecedent, as can be witnessed from the structure in (8). Starting with the analysis in Belletti and Rizzi (1988), this problem has been addressed by various means; in particular by assuming that the position of the subject in (8) is a derived one, and that the object experiencer at some syntactic level ordinarily binds the reflexive. This idea has been justified by assuming that the relevant predicates are unaccusative. Pesetsky (1995:21ff.) has already argued against this view by showing that OE psych verbs can be passivized, which should not be possible if they were unaccusative verbs.

(9) a. Ghosts frighten Bill.

b. Bill is frightened by ghosts.

What is more, Pollard and Sag (1992:278) provide examples of type (10) showing that even a reconstruction of the subject theme would not provide a configuration in which the antecedent were able to bind the reflexive contained in the theme for the simple lack of c-command.\(^5\) Pollard and Sag (1994:271) conclude that reflexives in OE psych verbs could be treated as exempt reflexives.

(10) [s [Nude pictures of himself in various newspapers] made [NP John’s day]].

It is a basic tenet of both Pollard and Sag's and Reinhart and Reuland’s proposals that local domains are responsible for determining whether a given reflexive has to be analysed as exempt or not. The pertinent local configuration in (7), (8), and (10) is the same: a reflexive embedded into an NP without referential

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\(^5\) It should be noted that examples like (10) become unacceptable if the antecedent is substituted by a quantified expression:

(i) * Pictures of himself made every man’s day.

The unacceptability of this example is expected, since the quantifier cannot bind the reflexive.
specifier. Hence, the analysis applied to (7) and (8) carries over to (10). Further evidence for treating picture-NP-reflexives in OE psych verb subjects as exempt reflexives comes from embedding psych verbs, as is illustrated in (11).

(11)  John1 said that pictures of himself1/2 annoyed Peter2.

If the reflexive in (11) were bound along the lines suggested in Belletti and Rizzi (1988), a co-indexation of the reflexive with the matrix subject should become impossible, counter to our observations. Such a co-indexation becomes available if the reflexive is analysed as exempt.

As picture-NP-reflexives in OE psych verb subjects are classified as exempt, we can derive the prediction that picture-NP-reflexives should only appear as subjects of OE psych verbs in languages allowing exempt reflexives. With regard to Italian – the language which first showcased picture-NP-reflexives as OE psych verb subjects – the existence of exempt reflexives has already been confirmed by Napoli (1979), as is illustrated in (12a) below.6

(12) a. Giorgio1 raccontò a Maria che la fotografia di sé1 stesso erano in vendita.
Giorgio told to Maria that the picture of reflexive was on sale
‘Giorgio told Maria that the picture of himself was on sale.’

b. Questi pettegolezzi su di sé, preoccupano Gianni1 più meglio di ogni altra cosa.
these rumours about reflexive concern Gianni1 much more the any other case
‘These rumours about himself concern Gianni much more than anything else.’ (Belletti/Rizzi 1988:312)

The opposite situation is given in German. German neither allows exempt reflexives nor picture-NP-reflexives as subjects of OE psych verbs. The ban on exempt reflexives was already illustrated in (5), the unacceptability of picture-NP-reflexives in OE psych verb subjects as can be witnessed in (13).7

(13) a.* Die Bilder von sich1 gefielen den Kindern.
the pictures of themselves pleased the children
b.* Den Kindern1 gefielen die Bilder von sich1,
the children1 pleased the pictures of themselves

c.* Ich glaube, dass die Bilder von sich1 den Kindern1 gefielen.
I believe that the pictures of themselves the children1 pleased

d.* Ich glaube, dass den Kindern1 die Bilder von sich1 gefielen.
I believe that the children1 the pictures of themselves pleased

In example (13a) the subject has been topicalized. In (13b), the object experiencer has been topicalized. Both examples are equally unacceptable. To reduce the possible influence of topicalization, examples (13c, d) employ subordinate clause structures. The examples remain unacceptable, irrespective of a possible scrambling of the object experiencer, which distinguishes (13c) from (13d). Example (14) further illustrates that OE psych verbs allow scrambling of the object experiencer over a theme that contains a co-indexed pronoun.

(14) Da ihm1 die Berichte über ihn1 in der Presse nicht gefallen, wendet sich Popinga1 schriftlich
because him the reports about him in the press not please appealed refl Popinga written
to the newspapers
‘Popinga wrote an appeal to the newspapers, because he did not like the reports about himself in the press.’

In summary, it is highly plausible to assume that OE psych verb subjects may contain reflexives just in case the language in question allows exempt reflexives. English and Italian allow exempt reflexives together with reflexives contained in OE psych verb subjects, German allows neither exempt reflexives nor reflexives contained in OE psych verb subjects. Further evidence comes from Serbo-Croatian, as illustrated in Büring (2005:242). Büring shows that Serbo-Croatian does not employ exemption (as illustrated by (15a), and just as expected, the use of a reflexive pronoun in a OE psych verb construction leads to ungrammaticality (15b):

6 It should be noted however that the reflexive used in (12a) is se stesso, while the morphologically simple se is used in (12b).
(15) a.* Ljutilo ga je da je ona pokusala napasti covjeka kao sebe1.
  anger him did that she try attack man like self
  ‘It angered him that she tried to attack a man like him.’

  b.* O na slika sebe1 u Glasu Slavonije je mucila Petra1 eji dan.
  that picture self in Voice Slavonia did torture Petra whole day
  ‘That picture of himself tortured Peter the whole day.’

The view that reflexives in OE psych verbs may be treated by assimilating them to exempt reflexives is further strengthened by data from Dutch. Everaert (n.d.) points out that there is a strong tendency to use the logophoric reflexive *zichzelf in Dutch OE psych verb constructions, as is illustrated in (16).

(16) De *beschrijving van hemzelf/*zichzelf als communist ergerde de Gaulle.
  the characterization of himself as communist annoyed de Gaulle
  ‘It annoyed de Gaulle that he was characterized as a communist.’

In addition to the pattern observed in (8), (11), and (13), the syntactic distribution of Portuguese *ele próprio illustrates a further instantiation of reflexive binding in OE psych verbs. The examples in (13) illustrate that a co-indexation is impossible. The examples in (8) and (11) show that a reflexive in an OE psych verb subject cannot only be co-indexed with the object experiencer in the lower clause but also with a subject in a higher clause. It would be a natural extension of this pattern to find a language where a reflexive in an OE psych verb subject can be co-indexed with the verb’s object in simple clauses, but is required to be co-indexed with a higher subject, if one is present. This language is Portuguese with the reflexive pronoun *ele próprio.

2.3 External reflexive binding in Portuguese

The Portuguese non-clitic reflexives *si próprio and *ele próprio are derived from dative and nominative pronouns, combined with *próprio. They may not occur freely, if a commanding antecedent is available, as is illustrated in (17) (cf. Branco and Marrafa 1999:171).

(17) A Rita1 destruiu o retrato *dele/ *próprio/dela/ *própria/de si1 *própria.
  The Rita1 destroyed the picture *of he self/ *of her self/ *of she self

In (17), *ele próprio cannot occur freely since a Rita is a commanding antecedent, yet cannot bind *ele próprio since the gender values of both phrases differ. A co-indexation of both *ela própria and *si própria is not only fine, but also required. The latter reflexive differs from the former, in that *ele próprio allows intrasentential non-local binding, while *si própria requires a local binding domain, as is further illustrated in (18). Following standard terminology, *ele próprio is a long-distance anaphor.

(18) O João1 disse que a Rita2 destruiu o retrato dele1/de si1/2 *próprio.
  The João1 said that the Rita destroyed the picture of he self/him self

Since *ele próprio will only require a binder if a commanding antecedent is available, it is free to occur as a matrix subject, and as part of the matrix subject.

(19) a. Ele *próprio1 pagou a conta.
  He self paid the bill

  b. O retrato dele1 próprio foi pintado pela Maria2.
  The picture of he self was painted by-the Maria

  c.* O retrato de si1 próprio foi pintado pela Maria2.
  The picture of him self was painted by-the Maria

As has been pointed out by Branco and Marrafa (1999:171), *ele próprio cannot be co-indexed with a non-commanding antecedent, if a commanding antecedent is present (20a), nor with split antecedents (20b).

(20) a.* [XP O jornalista [Res que viu a Ana1] disse ao Carlos que ela1 própria dançou na festa.
  the journalist who saw the Ana said to Carlos that she self danced at party

  b.* O João1 disse à Maria2 que viu fotografias dele1/2 próprios à venda.
  the João said to Maria that saw pictures of they selves at sale

Only *ele próprio may be realized in a OE-psych verb construction:

(21) a. Estas fotos dele1 próprio assustaram o Luís.
  These pictures of-he self frightened the Luis
b.* Estas fotos dele próprio assustaram o Luís.
The pictures of himself frightened the Luis

If, however, the OE psych verb construction is realized in embedded structures, only external antecedents become acceptable and a coindexation of *ele próprio* with the experiencer is blocked:

(22) a. O João disse que estas fotos dele1/2 próprio assustaram o Luís2.
The João said that these pictures of himself frightened the Luis

b.* A Ana disse que estas fotos dele próprios assustaram o Luís.
The Ana said that these pictures of himself frightened the Luis

Summing up, the following picture emerges: We have to distinguish between internal and external co-indexation of reflexives in OE psych verb constructions. German does neither allow internal (13), nor external co-indexation, as is further illustrated in (23).

(23) * Die Kommentatoren2 meinten, dass dieses Bild von sich1/2 den Kanzler1 beeindruckte.
the commentators uttered that this picture of himself the chancellor impressed

English allows both internal and external co-indexation, while Portuguese *ele próprio* allows internal co-indexation if no external antecedent is available, but requires external co-indexation if an external antecedent is available.8 In the following section, we will reconcile the distribution of exempt reflexives, reflexives in OE psych verb constructions with the concept of *anaphor* itself. In particular, we will raise the question whether a concept of *anaphor* can be identified behind the reflexive variation just offered.

3 Reflexivity and Anaphoricity

As was already mentioned in the introduction, various concepts of *anaphor* come to mind. In a definition of Principle A, as e.g. provided in Pollard and Sag (1992, 1994), and given below in (24), the concept seems to be a hyponym for reflexives and reciprocal pronouns. A similar decision is made in Büring (2005). The definition in (24) thus turns Binding Theory into a categorical theory.

(24) Principle A (Pollard and Sag 1994):
Locally a-commanded anaphors must be locally a-bound.

In the model of Reinhart and Reuland (1993), reflexive pronouns do not bear the feature +R, which stands for ‘being fully referential’ (Büring 2005:236). This feature is employed in Reinhart and Reuland’s General Condition on A-Chains, as given in (25).

A maximal A-chain (α₁, …, αₙ) contains exactly one link – αᵢ – that is both +R and case-marked.

As a consequence of (25), A-chains that solely consist of reflexive pronouns are prohibited. Although the concept *anaphor* is not directly employed in Reinhart and Reuland’s analysis, the feature +R is crucial for the distinction between reflexive pronouns and non-reflexive NPs. Exemption is not covered by this feature itself but by the concept of a predicate – which turns Reinhart and Reuland’s analysis into a categorical one as well, where the pertinent category is a verbal one.

(26) Principle A (Reinhart and Reuland 1993):
A reflexive-marked syntactic predicate is reflexive.

According to this analysis, nominal heads are treated as reflexive-marked syntactic predicates,9 and hence do not require that a maximal A-chain is established which would lead to local reflexive binding. It should

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8 In fact, the distribution is not complete, as we could conceive a language where an external co-indexation is always required, i.e. reflexives contained in an OE psych verb were only acceptable if the predicate is embedded under another verb. The present analysis clearly predicts the existence of such a pattern (which would otherwise be quite surprising, as it seems that for the well-formedness of an element in a clause, the clause is actually required to be embedded).

9 Syntactic *predicates* in the strict sense of Reinhart and Reuland (1993:678) are predicates that realize an external argument, which is part of their lexical conceptual structure. The concept of a predicate employed in Reinhart and Reuland bears thus close resemblance to the trigger feature [+CPL], which will be introduced in section 4.
be noted that the condition in (25) excludes the occurrence of Portuguese *ele próprio* as subject of a matrix predicate, unless Reinhart and Reuland would assume that it bears the feature +R.

The very idea that anaphors are referentially deficient entities that require a binder as an amendment is also problematic from the perspective of compositionality. Phrases like *likes himself* have a clear compositional interpretation, and this interpretation does not include a concept of deficiency. So, anaphors should more plausibly be seen as entities whose reference is syntactically forced, and not as entities without reference. This perspective also conforms to the behaviour of exempt reflexives. It seems much more plausible to assume that anaphors are elements that are turned into dependent entities by Binding Theory itself. The dependency does not emerge because the reflexive pronoun bears certain properties, but because the reflexive pronoun is embedded in a local syntactic structure with a given set of properties. Hence, we will assume that the syntactic distribution of anaphoric pronouns is driven by syntactic contexts and not by lexical specifications of the pronouns involved. In this view, an anaphor is a strictly syntactic entity (with repercussions in the interpretative component), while the concept reflexive is restricted to a lexical form. Much confusion has arisen in Binding Theory because a lexical form (reflexivity) has been confounded with a syntactic dependency (anaphoricity). Reflexivity is obviously related to anaphoricity. We may assume that anaphoricity can only emerge if the language offers a designated form that can be employed to signal an anaphoric dependency, and this form is typically a reflexive pronoun.

From what I have said, it should be clear that the present analysis assumes that reflexivity is not a property of predicates, but a property of nominal lexemes (and possibly other entities that are used to signal their syntactic usage as possibly dependent elements). If reflexivity is viewed as a property of predicates, as in the analysis of Reinhart and Reuland (1993), a distinction has to be drawn between predicates that can be reflexive and that that cannot. This distinction is not only empirically problematic but also superfluous. As will become clear below, predicates of all kinds, be their heads verbal, nominal, or prepositional, may have complements (and specifiers) that introduce dependency. Reflexive predicates in the terminology of Reinhart and Reuland (1993) emerge, if a dependency is introduced and resolved in the local domain of the same lexical head.

As a corollary, the present analysis argues strictly against the idea that anaphoric dependencies should be dealt with in the lexicon. Anaphoricity is a syntactic concept and is dependent on syntactic contexts. Hence, the present analysis rejects implementations of Principle A that rely on lexical argument structure as an explicandum, such as Pollard and Sag (1992, 1994). The comparison of closely related languages like English and German in section 2.1 has already revealed that an analysis that relies on lexical argument structure must admit that binding can be confined to this lexical domain in English, but not in German.

In the following analysis, we partition between designated forms – lexical entries such as reflexive pronouns – and syntactic contexts. An anaphoric dependency can be introduced into the syntactic structure by choosing a reflexive pronoun and embedding the lexical pronoun into an appropriate syntactic context. The context will immediately turn the pronoun into a dependent element, and as such, it has to be resolved in syntactic structure, i.e. by identifying a proper antecedent. This is the first, and perhaps the prototypical option, but it is not the only one. Two other options are possible: According to the second option, the reflexive is introduced into syntactic structure, but the context does not suggest that the reflexive should be handled as a dependent element. Still, the context will record – so to speak – that an element has been introduced that *may* be used to indicate a syntactic dependency. If this option is applied, reflexivity is carried through the syntactic structure until a local context has been identified in which reflexivity is turned into a syntactic dependency. As a syntactic dependency, it falls under the same conditions for resolution as the pronouns introduced under the first option. In the third and final option, a reflexive pronoun is introduced into a syntactic context that does not only suggest no dependency, but is also unable to keep track of the reflexivity of the pronoun, in fact rendering it syntactically invisible. Whether or not a context is syntactically visible, is a language-internal – and by and large arbitrary – decision. The three options are summarized in (27).
(27) Lexical reflexivity and syntactic dependency

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<thead>
<tr>
<th>Introduction</th>
<th>Pattern</th>
<th>Syntactic Projection</th>
<th>Resolution</th>
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<tbody>
<tr>
<td>Lexically reflexive marking (reflexive pronoun or other strategy)</td>
<td>given</td>
<td>Syntactic dependency is introduced in appropriate syntactic context and projection</td>
<td>Resolution of dependency in an appropriate context</td>
</tr>
<tr>
<td></td>
<td>not given</td>
<td>Reflexivity is syntactically present (gives rise to medium- and long-distance anaphors, after dependency has been introduced)</td>
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<tr>
<td></td>
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<td>Reflexivity is not syntactically present (exemption)</td>
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The first option in (27) can also be rendered as in (28).

(28) If pattern X is given, a reflexive pronoun introduces a syntactic dependency.

If the pattern X alluded to in (28) is not present, either the second or third option will be applied, as given below in (29).

(29) a. If pattern X is not given, the reflexive pronoun is syntactically visible, i.e. projected.

b. If pattern X is not given, the reflexive pronoun is not syntactically visible.

Being ‘syntactically visible’ means that the reflexivity may be transformed into an anaphoric dependency by a non-local context. The present analysis assumes the introduction of reflexive dependencies rests on (28) and (29), and that variation among languages corresponds to different choices of the trigger in (28) and the consequences of an absence of the trigger in (29). As will become clear below, if a language employs more than one reflexivization strategy, it may even chose more than one option from (28) and (29), i.e. more than one trigger, and possibly also more than one reaction to the absence of a trigger.

The three different patterns in (28) and (29) correspond to the well-known behaviour of reflexive pronouns: The pattern in (28) gives rise to the prototypical behaviour of reflexive anaphors. The anaphor is immediately introduced as a dependency. Medium-distance dependencies typically correspond to the introduction of a reflexive pronoun in a context, where a trigger is not given, but (29a) is applied. As the reflexivity is projected, it may be turned into a dependency at a later stage of the derivation. Finally, the pattern in (29b) gives rise to exemption. Here, the reflexive pronoun is treated as a non-dependent element, and its behaviour will be similar to the one of pronouns. We assume the resolution of anaphoric dependencies across the sentence boundary as a defining property of long-distance-anaphors. Consequently, they may be introduced by (28) and (29a) as well, but the resolution strategy will differ from the one employed for short- and medium-distance anaphors. The general scheme for the resolution of anaphoric dependencies is expressed in (30).

(30) If a daughter of a phrase introduces an anaphoric dependency, then the index of the dependent can be identified with the index of the other daughter of the phrase.\(^{10}\)

Any identified dependent index is resolved.\(^{11}\) As the condition in (30) stands, it does not require the identification of a dependent index. Intuitively, we would like to exclude a structure that contained a dependent

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\(^{10}\) This condition embodies e-command, as it is the index of the other daughter, and not an index contained in the other daughter, which can be identified with the dependent index. But this condition also meets binding of a PP by another governed PP if we assume (following Pollard and Sag 1994) that the index of a governed PP is identical to the index of the NP immediately dominated by the PP.

\(^{11}\) Note, however, that the identifier of a dependent index may introduce a dependency itself, which distinguishes the grammatical (i) from the ungrammatical (ii). The latter example is ungrammatical because the lower dependency (to himself) can be bound by the higher reflexive, but the dependency introduced by the higher reflexive remains unbound. With regard to (i), the formulation in (34) allows two options: Either the higher reflexive binds the dependency introduced by the lower reflexive, and the subject binds the dependency of the higher reflexive, or the subject binds both dependencies.

(i) In his schizophrenic phase, John\(_1\) introduced himself\(_1\) to himself\(_1\).

(ii) *Lola\(_2\) sold himself\(_1\) to himself\(_1\).
index, and such a condition can easily be formulated, but it is not specific to binding theory. Syntax in
general does not allow full structures that contain unresolved dependencies, be they missing categories,
unchecked features, or dependent indices. Hence, (30) should be understood in light of such a general
condition. If the condition in (30) and the more general ban on open dependencies were the only condi-
tions to apply to the resolution of anaphoric dependencies, we would expect that the behaviour of long-
distance anaphora is the prototype of an anaphoric dependency. Now, condition (30) lends itself to fur-
ther restrictions, which deal with short- and medium-distance anaphoric dependencies:

\[(31)\] If a daughter of a phrase introduces an anaphoric dependency, and the phrase indicates that the
arguments of its head have been fully discharged, then the index of the other daughter must be
identical to the dependent index.

Let us now illustrate the workings of the conditions introduced above in English and German.

4 Anaphoric Dependencies in English and German

Let us assume for the present purposes, that pronouns bearing the feature R are lexically reflexive. However,
lexically R-marked pronouns are the only entities that may be turned into dependent elements syn-
tactically. Syntactic contexts turn lexical R features into syntactic D features. The feature D indicates that a
constituent contains a dependency. As R stands for reflexivity, D stands for dependency. The value of R
is the index of the reflexive pronoun; the value of D is the index of a reflexive pronoun that has been
turned into a syntactically dependent element. In the simplest case, an element bearing the feature R lex-
cally will receive the feature D after introduction in the syntax. This feature requires a resolution, which
leads to anaphoric binding.

Further to the features R and D, we assume a mostly theory-neutral (or, as one could say, theory-
compliant) set of features. The feature ±CPL (for COMPLETE) can be assigned to predicates that may real-
ize an external argument. It thus bears close resemblance to the concept of a COMPLETE FUNCTIONAL
COMPLEX introduced in Chomsky (1986). As a HEAD feature CPL follows the projection of a lexical head.
The feature ±LEX indicates whether the head of a phrase is lexical. LEX could be derived from the syntac-
tic context in various ways, and we employ it for illustrative purposes only. Nothing hinges on the exis-
tence of this feature as long as a distinction between lexical and phrasal heads can be made. The feature
±SUBJ indicates whether the valency of a predicate has already been fully discharged. Here, +SUBJ indi-
cates – perhaps somewhat counterintuitively – that the valency has not been fully discharged.

Since several cases of anaphoric binding may take place in parallel in a syntactic structure, R and D are
category-valued feature and their value is an index. An index contains the φ-features, i.e. PERSON, NUM-
BER, and GENDER. Since questions of feature architecture are orthogonal to our present purposes, we
represent the value of R and D by indicating the relevant index, e.g. R(1) means that the value for R of a
reflexive pronoun is the index of that pronoun, which is 1. D(1) means that the value of D for a given
phrase is the index 1. R features are introduced lexically, i.e. reflexive pronouns and reciprocals bear the
feature R, while other categories do not.

This set of features allows us to define the formal condition for introducing anaphoric dependencies in
English and German in (33).

\[(32)\] Reflexive Drop:
Given a phrase Y with daughters X and ZP, where ZP bears the value R(1). ZP bears the value
D(1), if and only if X is [+CPL].

\[(33)\] Reflexive-to-Dependency:
Given a phrase Y with daughters X and ZP, where ZP bears the value R(1). ZP bears the value
D(1), if X is [+CPL], and the value R(1) if X is −CPL.

The conditions for English and German receive mnemonic names to indicate their immediate effects. The
mnemonic names given, however, should not be construed as suggesting two independent and language-
specific constraints. The conditions in (32) and (33) make use of the same trigger ±CPL, but differ with
regard to the effects of the absence of the trigger. In the case of English in (32), an R feature is turned
into a D feature only if the head of the phrase is marked +CPL. If this condition is not met, the reflexivity
of the pronoun is not reflected in the syntactic structure, in other words, it becomes exempt from syntac-
tic binding. In the case of German in (33), an R feature is turned into a D feature in the presence of
+CPL, but it remains a syntactically visible R feature in the presence of −CPL. The feature is thus projected,
but will be subject to the same consideration at any node of projection. Once it appears in the context of a
+Cpl. head, it will be turned into a dependency and will be resolved. The resolution rule for English and German is the same, as rendered in (34).

(34) Local Resolution:
If a daughter of a phrase Y bears $D(n)$ and Y is specified as [-SUBJ], then the other daughter must bear index $n$, and if Y is specified as [+SUBJ], then the other daughter can bear index $n$.

The formulation allows or in fact requires an identification of the index of one of the daughters with the $D(n)$ emerging on the other daughter. Leaving aside the question of whether a daughter can or must identify its index with the $D$ value of the other daughter, resolution can also be formulated in terms of identification and projection:

(35) Resolution:
A $D$ value present on a daughter is also present on the mother, unless the index of the daughter not bearing the $D$ value is identical to the $D$ value.

Let us illustrate the working of the conditions in (32), (33), and (34) for three different patterns in English and German.

(36) a. Peter$_1$ likes himself$_{1/2}$.
   b. Peter$_1$ mag sich$_{1/2}$.

(37) a. Peter$_1$ believed that pictures of himself$_1$ were on sale.
   b.* Peter$_1$ glaubte, dass Bilder von sich$_1$ zum Verkauf standen.

(38) a. Peter$_1$ likes a picture of himself$_{1/2}$.
   b. Peter$_1$ bevorzugt ein Bild von sich$_{1/2}$.

With regard to simple transitive structures, as given in (36), English and German show the same pattern, which follows from the requirement that +Cpl.-heads form a trigger to turn $R$ into $D$. Neither verb second nor the base order of the verb plays a role here; hence we use the schematic structure in (39) for English and German. In both languages, the verbal head is [+CPL] and requires the $R$ introduced by the reflexive to be turned into a $D$ feature; hence not even English allows an exemption of the reflexive.

(39) Relevant structure of (36a, b)

Let us now turn to the treatment of picture-NP-reflexives in English, as illustrated by examples (37a) and (38a). Since English employs Reflexive Drop as formulated in (32), the larger structures in (37a) and (38a) do not actually play a role. It is sufficient to look at the local realisation of the reflexive in both (37a) and (38a), as given below in (40).

(40) Relevant structure of (37a) and (38a)

\begin{equation}
\text{N'}[-\text{CPL}] \\
\quad \text{N}[-\text{CPL}] \\
\quad \quad \text{PP}[-\text{CPL}] \\
\quad \quad \quad \text{P}[-\text{CPL}] \\
\quad \quad \quad \quad \text{NP}[-\text{CPL}] \\
\quad \quad \quad \quad \quad \text{pictures of himself} \\
\end{equation}
Given the respective grammaticality of (37a) and (38a) it seems puzzling that the German examples (37b) and (38b) do not pattern alike. Note, however, that German does not employ Reflexive Drop, but Reflexive-to-Dependency (33), i.e. reflexive pronouns can be turned into dependents if a local trigger is present but will be recorded to be present if a local trigger is absent. Eventually, the reflexive will be turned into a dependent in both (37b) and (38b), but it can only be bound in the latter due to Local Resolution. The relevant structures are given below.

(41) * Peter, glaubte, dass [Bilder von sich zum Verkauf standen].

The crucial difference between the English example (37a), as given in (40), and the German example (37b), given in (41) is the presence of the R feature in the NP Bilder von sich. It has to be turned into a D feature in the context of V[+CPL], and has to resolved, since it mother is marked as [-SUBJ], but it cannot be identified with any other index, for the simple reason that the other daughter does not offer one.

(42) Peter bevorzugt ein Bild von sich.

In the analysis of (38b) in (42), the R feature in the NP ein Bild von sich is turned into a D feature in the context of the verbal head. The structure differs in that the D feature can project to the VP (nothing blocks this move and it is actually required since resolution did not take place). In this position, it is identified with the index of the subject and thus resolved. It should be noted that the index of the subject is the only index that would allow an identification, i.e. even if NPs higher up in the structure would provide indices, they could not be used as the presence of the feature [-SUBJ] requires local resolution.

We have shown that although the pairs in (36) – (38) appear to be very similar superficially, their acceptability distribution is determined by the conditions (32) and (33). In the presence of the relevant trigger, reflexives are turned into dependents in English and German (36a, b). But in the absence of a trigger, English and German behave rather differently, as English employs Reflexive Drop, while German makes use of Reflexive-to-Dependency. Hence, the English cases (37a) and (38a) are no instances of binding. There is no dependency, while the German cases (37b) and (38b), the reflexive is projected through the R feature and eventually realized a D feature if the pertinent trigger is met. Local resolution leads to the differences between (37b) and (38b) on the one hand, and between (37a) and (37b), and (38a) and (38b), respectively, on the other hand. In this model, exemption corresponds to the non-applicability of Resolution due to the non-introduction of an anaphoric dependency.

5 Exemption and Reflexives in Object Experiencer Psych Verbs

Let us now turn to reflexives in OE psych verbs. We have introduced the relevant data in (8), (11), (13), (21), and (22), which will be repeated here for easier reference.

(43)a. These pictures of himself frighten John.
b. John said that pictures of himself annoyed Peter.

c.* Ich glaube, dass die Bilder von sich den Kindern gefiel.

d. Estas fotos dele próprio assustaram o Luís.
These pictures of he self frightened the Luís

e.* Estas fotos de si próprio assustaram o Luís.
These pictures of him self frightened the Luís

f.* Ana disse que estas fotos dele próprio assustaram o Luís.

Nothing more has to be said about the grammaticality of the English examples in (43a, b). The reflexive does not count as an anaphor in both cases, and the co-indexations in (43a, b) are direct consequences of the reflexive’s nature as syntactically non-dependent pronoun. The grammaticality distribution of (43a, b) should thus be very similar to the one of a personal pronoun in (44a, b). Minimal differences might be due to factors like logophoricity (cf. Sells 1987).

(44) a. [These pictures of him] [VP frighten John].

b. John said that pictures of himself annoyed Peter.

The ungrammaticality of the German example follows immediately from the discussion in the previous section: The reflexive does introduce a dependency, which cannot be resolved in the syntactic domain of the lower clause. This leaves us with the grammaticality distribution of Portuguese si próprio and ele próprio in (43c, d, e). As Portuguese employs more than one reflexivization strategy, we may also expect that the application of the conditions (28) and (29) in Portuguese may be dependent on the different reflexive pronouns. In addition, we must account for the fact that ele próprio differs from si próprio in allowing long-distance-anaphora, as was illustrated in (22b) repeated here as (45).

(45) O João disse que estas fotos dele próprio assustaram o Luis.

To analyse (43d, f) on a par with (45), we assume that the trigger for turning ele próprio into a dependent is the feature [+LEX], which cannot be resolved in the syntactic domain of the lower clause. This leaves us with the grammaticality distribution of Portuguese si próprio and ele próprio in (43c, d, e). As Portuguese employs more than one reflexivization strategy, we may also expect that the application of the conditions (28) and (29) in Portuguese may be dependent on the different reflexive pronouns. In addition, we must account for the fact that ele próprio differs from si próprio in allowing long-distance-anaphora, as was illustrated in (22b) repeated here as (45).

(46) Reflexive-to-Dependency (Portuguese, ele próprio):
Given a phrase Y with daughters X and ZP, where ZP bears the value R(1). ZP bears the value D(1), if X is [+CPL, +LEX], and the value R(1) otherwise.

(47) Resolution:
If a daughter of a phrase Y bears D(n), then the other daughter can bear index n.

Let us illustrate the workings of (46) and (47) with the derivation of (45) in (48).

(48) O João disse que estas fotos dele próprio assustaram o Luis.

In (48), only the matrix subject can serve as an antecedent for the reflexive pronoun, since the context of the lexical verb, the subject of which is the antecedent, turns the R value into a D value. As the analysis of
(43d) corresponds to the structure assigned to the lower clause in (48), we will not repeat it here, but the effect should be obvious: The \( R \) value introduced by \( \text{ele próprio} \) remains – so to speak – stuck as an \( R \) value in the lower clause, and thus allows free co-indexation. As the presence of an unresolved \( R \) feature in the \( S \) node of the clause in (43d) may vex readers, I would like to stress that \( R \) only indicates the presence of a reflexive in the clause, and not the presence of a dependency. Dangling reflexives are the result of a projection of an \( R \) feature through syntactic contexts that cannot turn this feature into a \( D \) feature. Consequently, they become exempt, but dangling dependencies yield ungrammaticality, as in the case of (43f). The structure of (43f) equals the structure given in (48) with the sole yet crucial difference that the \( \text{dependent index} \) cannot be identified with the index of the subject. An identification is blocked because of a mismatch of the \( \text{GENDER} \) feature. So the presence of the \( D \) value at the topmost \( S \) node in (43f) results in a maximal syntactic structure with an open dependency, and hence, ungrammaticality is predicted.

Let us now turn to (43e). Obviously, the syntactic distribution of \( \text{si próprio} \) must not be handled by (46), for in this case, its ungrammaticality would be without explanation. We have to repeat, however, that \( \text{si próprio} \) already differs from \( \text{ele próprio} \) in its lexical form: while the latter is made out of a fossilized nominative personal pronoun and the intensifier \( \text{próprio} \), the former consists of the intensifier and a fossilized dative personal pronoun. As the forms a different, we may very well assume that the syntactic conditions for the introduction of dependencies are different as well. Hence we assume that the syntactic distribution of \( \text{si próprio} \) is not handled by (46) and (47), but by (33) and (34). In general, we propose that if a language employs more than one reflexive pronoun, it may also employ more than one resolution strategy. If the reader has doubts about this conclusion, I would like to point out two well-known strategies to deal with reflexive pronouns, which built on the same insight: First, Chomsky (1981) did not only introduce Principle A for reflexives and reciprocals, but also Principle B for other pronouns. The principles are justified on the observation that the forms of the pronouns differ from one another, and also that their syntactic distribution is not identical. The same consideration applies to \( \text{ele próprio} \) and \( \text{si próprio} \). Second, languages that employ both long-distance and short-distance reflexives are typically dealt with by introducing different conditions on their distribution. The pronouns \( \text{ele próprio} \) and \( \text{si próprio} \) clearly differ in that the one can be a long-distance anaphor, while the other can only be a medium-distance anaphor, and once again, the usage of two different conditions seems appropriate. To implement this idea, it becomes necessary to relativize the features \( R \) and \( D \) to the different forms present in Portuguese, i.e. we do not only employ \( R(n) \) and \( D(n) \), but \( R(s, n) \) as well as \( D(e, n) \). In fact we can assume for the language discussed in the present paper that these features are always relativized to the form of the reflexive. As there is only one reflexive form in English and German, the relativization does not change the conditions given above.

Now with (33) and (34) applying to (43e), its analysis corresponds to the analysis of the ungrammatical German example (43), the relevant parts of which are presented in the analysis of the ungrammaticality of (41).

6 Binding inside NPs

Büring (2005:234f.) discusses picture-NP-reflexives where the NP shows a subject (specifier). He observed the following distribution (cf. also Reinhart and Reuland 1993:681f.):

(49) a. The picture of himself that John saw in the post office was ugly.
    b.* Your picture of himself that John saw in the post office was ugly.
    c.* Mary’s letters to Sarah about himself obsessed him.

Following the analysis presented in sections 3 to 5, the data in (49) could be handled by assuming that the presence of a subject (specifier, which could be referential) on the argument structure of the nouns in (49b, c) does not only turn the nouns into \( [+\text{CPL}] \) predicates but also to predicates which signal the realization of the arguments with the alternation between \( [+\text{SUB}] \). Accordingly, the reflexives contained in the NP would introduce a \( D \) feature and would have to be resolved locally. Büring (2005:235) notes, however, that the distribution of reflexives in NPs with subject is not as simple as initially suggested by (49). The following data, mainly from literary British English, show that the presence of an NP-internal subject does not necessarily block an external co-indexation.\(^{12}\)

(50) a. C.B.’s father; resented his wife for \([_\text{OP her} \text{low opinion about himself}_2]\)

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12 Frey (1993:124f.) assumes that examples like (50) are ungrammatical throughout in German.
b. Even so, \[\text{NP his} \text{2} \text{remarks about herself} \]} were uncalled for.

c. Unfortunately, you have a tendency to allow \[\text{NP your} \text{2} \text{obviously muddled, rather juvenile feelings about myself} \]} to cloud your judgment.

Although much more empirical work is required to clarify the syntactic distribution of reflexives contained in NPs with referential specifiers, the present proposal can at least make some predictions about possible dependency patterns. For our present purposes, example (50b) is interesting, as it shows that the presence of an NP-internal subject of a deverbal noun does not block a logophoric reading of the NP-internal reflexive. Example (49b) shows that at least for certain speakers even a specifier of a noun like \text{picture} is sufficient to block an exemption.

For speakers whose grammar deems (49b) ungrammatical, the opposite move seems appropriate: Not only do deverbal nouns make use of a [+CPL] feature, but nouns in general may bear the feature [+CPL] if they realize a possibly referential specifier. As local resolution in (34) is triggered by the presence of [–SUBJ], we will also have to assume that in the same grammar, the realization of the specifier yields this value of the NP. With regard to example (50b), we may assume that deverbal nouns do not even introduce a [+CPL] feature if the external argument is present. Although this move seems somewhat counterintuitive, it would immediately account for the grammaticality of (50b). As I have already mentioned, the facts are not clear at the present stage. The consequences of the constraints introduced in sections 3 and 4 for NP-internal reflexives like (49) and (50), however, are as follows. They depend on a classification of the noun types (one, which e.g. distinguishes deverbal nouns from other nouns; or one which makes use of argument structure, along the lines of Grimshaw 1990), and on the presence of the features [CPL] and [SUBJ]. It does not matter how this distinction is drawn exactly, but it seems plausible to distinguish between relational nouns like \text{refusal}, and non-relational nouns like \text{picture}.

If the presence of a specifier triggers a [+CPL] feature, but its realization does not necessarily result in the NP being marked [–SUBJ], we predict that a dependency is introduced, and \text{can only be bound in the lowest clause that introduces the NP}. Hence, this setting leads to a distribution that is subtly different from the one observed above. Firstly, an occurrence in the subject of a clause would be impossible, cf. (51a). Second, it would be impossible to ‘jump across’ an intervening subject, as illustrated in (51b). In both cases, the lower clause introduces the [–SUBJ] value.

(51) a. * John; believed that \[s \text{NP Martha’s pictures of herself} \]} were on sale.

b. Martha; said that \[s \text{NP Mary liked [Paul’s picture of herself]} \]} .

A strictly local binding is required if the presence of the specifier triggers both [+CPL] and [–SUBJ]. These conditions may be applied uniformly to nouns, or depending on their status as relational or non-relational nouns. Finally, if not even a [+CPL] is triggered by a specifier, the resulting grammar would allow exemption even if an NP-internal specifier is present.

As long as the grammaticality distribution remains unclear both with regard to variation among speakers and dialects, the best we can do is to determine the alternatives offered by the grammar. We thus have a rare occasion to apply Chomsky’s suggestion (Chomsky 1957:14) that “[i]n many intermediate cases we shall be prepared to let the grammar itself decide, when the grammar is set up in the simplest way so that it includes the clear sentences and excludes the clear non-sentences.” I do in fact assume that the present analysis is the simplest way to account for the grammaticality distribution of the undisputed data discussed above, and hence a good starting point for an initial classification of the disputed data discussed in this section.

7 Conclusion

We have presented a syntactic treatment of anaphoric dependencies that builds on the insight that a distinction has to be drawn between reflexivity and anaphoricity. Reflexivity is a lexical property of certain noun classes (or more generally, a formal property of linguistic entities). In languages like English, German, Portuguese, and Serbo-Croatian, a reflexive pronoun is introduced into the syntax to signal an anchor for a possible anaphoric dependency. It depends on the syntactic environment of the reflexive whether or not a dependency will be established. An anaphoric dependency can be established directly, if a given trigger is met, or can be postponed until a given trigger is met. The latter case typically results in medium-distance anaphoric binding, which must be sharply distinguished from exempt reflexives. Exempt reflexives are the result from a combination of a syntactic environment which does not provide an appropriate trigger for an anaphoric dependency, and an introduction rule which forces immediate establish-
ment of an anaphoric dependency. Reflexives in OE psych verb constructions can be treated as a case of exemption, which results in the prediction that reflexives in OE psych verbs should only appear in languages allowing for exemption.

8 References


Everaert, Martin. no date. *Reflexives in Discourse*. Ms. Utrecht University/Nijmegen University.


