On the Distribution of Dutch Reflexives

by

Fleur Veraart

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Abstract

This thesis discusses the distribution of the Dutch reflexives *zich* and *zichzelf*. It is shown that Reinhart & Reuland's (1993) analysis of this topic poses several problems. In the present study, a wide range of data is collected, which illustrate that the distribution of *zich* and *zichzelf* needs to be accounted for in terms of a variety of factors, rather than with a simple set of binding conditions.

It is argued that the distribution of *zich* and *zichzelf* is partly determined by the possibility of replacing the reflexive with a non-reflexive element. If it is not possible to have a non-reflexive instead of the reflexive, *zich* should be used. Otherwise, *zichzelf* is usually preferred. Also, contrastive focus is shown to play a role. On the one hand, if the reflexive is focused, it has to be *zichzelf*. On the other hand, if a constituent other than the reflexive is focused, *zich* may sometimes be used instead of *zichzelf*. Locality conditions play a role as well; *zich* can occur at a greater distance from its antecedent than *zichzelf*. Another factor that plays a role in the distribution of *zich* and *zichzelf* is the morphological nature of the predicate with which the reflexive occurs. In PPs, the factors mentioned here interact with the phonological *zelf*-deletion rule. This rule states that *zelf* is deleted from anaphora that occur in prepositional phrases whose preposition is non-contrastively stressed. More generally, the factors that determine whether *zich* or *zichzelf* should be used, interact with the fact that focus is realized by adding *zelf* or by stressing the element that is to be focused, and with the fact that *zich* cannot be stressed, but *zichzelf* can be. Further, it is argued that one needs to distinguish between opaque *zichzelf* and transparent *zichzelf*. The latter is made up of *zich* and the intensifier *zelf* which is also found as a modifier of full DPs.

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1 Introduction

In this paper, I will discuss the distribution of the Dutch reflexives *zich* and *zichzelf* (also known as a SE-anaphor and a SELF-anaphor respectively), as well as the distribution of Dutch reflexives versus pronouns, in reaction to Reinhart & Reuland's (1993) article Reflexivity on this topic. I would like to show that their analysis has some serious problems, and propose an alternative approach. The central claims in Reinhart & Reuland's proposal can be summarized as follows. There are two conditions that account for the distribution of SE- versus SELF-anaphors, namely conditions A & B. There are also two conditions, condition B and the Chain condition, that account for the distribution of reflexives versus pronouns. These three conditions are formulated as follows:

Condition A: A reflexive-marked syntactic predicate is reflexive.
Condition B: A reflexive semantic predicate is reflexive-marked.
Chain Condition: A maximal A-chain ($\alpha_1, \ldots, \alpha_n$) has
   a. exactly one link $-\alpha_i$, which is both $+R$ and marked for structural Case-
   b. exactly one $\Theta$-marked link.

"Reflexive-marked" means "either lexically reflexive (as for instance the verb to behave oneself is in English), or having a SELF-anaphor as one of its arguments". "Reflexive" means "having two coindexed arguments". Reflexives can occur in non-argument positions. In that case, none of the conditions apply and the reflexives are considered to be logophors. These assumptions and conditions account for e.g. the following examples (where, unless otherwise noted, the pronoun or reflexive is to be understood as coindexed with the subject):
(1a) Jan schaamt zich(*zelf)/*hem.
    Jan is-ashamed SE(LF)/him 
    Jan is ashamed.
    (Conditions A+B; Chain condition)

b Jan ziet zich*(zelf)/*hem.
    Jan sees SE(LF)
    Jan sees himself.
    (Condition B; Chain condition)

c Jan zegt dat Peterj *zich/zichzelf, i,j/ hemi,j bewondert.
    Jan says that Peter SE/SELF/him admires.
    Jan says that Peter admires himselfi,j/himi,j.
    (Conditions A+B; Chain condition)

d Jan zag jou achter zich/hem staan.
    Jan saw you behind SE/him stand
    Jan saw you standing behind him.
    (no conditions apply)

e De koningin nodigde Max en mijzelf/mij uit op de thee.
    the queen invited Max and (my)SELF/me PART for DET tea
    The queen invited Max and myself for tea.
    (no conditions apply)

However, although Reinhart & Reuland's analysis accommodates a wide range of data and overcomes some problems of the standard binding theory, there are several problems with their proposal. First of all, consider the following examples (Reinhart & Reuland's (21)):

---

1. The ungrammaticality of (i) does not follow from the conditions discussed so far:

(i) *Jan schaamt zichzelf.
    Jan is-ashamed-of SELF

Reinhart & Reuland discuss this problem in a footnote and suggest that an Economy principle which prevents a predicate from being doubly reflexive-marked, might account for this.
(2a) *Henk wees mij aan zich toe.
   Henk assigned me to SE (PART)

b Henk wees zichzelf aan zich toe.
   Henk assigned SELF to SE (PART)

c *Henk wees zich aan mij toe.
   Henk assigned SE to me (PART)

d Henk wees zich aan zichzelf toe.
   Henk assigned SE to SELF (PART)

e ?Henk wees zichzelf aan zichzelf toe.
   Henk assigned SELF to SELF (PART)

Condition B predicts that (2a,c) are ungrammatical: all the arguments of the predicate *toewijzen*, "assign", are coindexed, and given the fact that *toewijzen* is not lexically reflexive-marked, one of its arguments has to be a SELF-anaphor. Reinhart & Reuland claim that these examples are indeed ungrammatical. However, they're not. In fact, they are perfect, provided that a constituent other than *zich* is contrastively focused, as is exemplified in (3) (the focused constituent is boldfaced):

(3a) **Henk** wees mij aan zich toe, niet **Paul**.
   Henk assigned me to SE (PART), not Paul
   **Henk** assigned me to himself, not **Paul**.

b Henk wees mij aan zich **toe**, in plaats van ons uit
   elkaar te houden.
   Henk assigned me to SE (PART), instead of us apart-from each
   other to keep.
   Henk *assigned* me to himself, instead of keeping the two of us
   apart.

c Henk wees zich aan **mij** toe, niet aan **Paul**.
   Henk assigned SE to me (PART), not to Paul
   Henk assigned himself to **me**, not to **Paul**.

(2b,d) are also perfect, provided that a constituent other than
zung is contrastively focused. These examples are fine, for instance, when zichzelf is focused. These facts pose a serious problem for Reinhart & Reuland's analysis, because the examples in (2), with the judgements that they attributed to them, were crucial evidence for their proposal. They were supposed to show that zich as one of the arguments of toewijzen, "assign", is only allowed if another argument of that verb is zichzelf. In that case, the verb is properly reflexive-marked and condition B is met. The role of contrastive focus in the distribution of zich and zichzelf, will be examined in more detail in section 2.2.

Reinhart & Reuland's analysis also has a problem with reflexives as the subject of tenseless complement clauses (i.e. small clauses or infinitival clauses). First of all, they claim that in all those cases both zich and zichzelf are fine. Although this is often claimed in the literature, speakers do have a strong preference for one or the other, depending on the particular construction. For instance in (4a), speakers tend to prefer zichzelf over zich, whereas in (4b) zich is strongly preferred:

(4a) Jan ziet zichzelf/zich in de spiegel.
Jan sees SELF SE in the mirror.
Jan sees himself in the mirror.

b Jan werkt zichzelf/zich suf.
Jan works SELF SE silly
Jan works himself silly.

Reinhart & Reuland fail to mention these facts, and their analysis cannot account for them. In their analysis, the subject of the tenseless clause is a syntactic, but not a semantic argument of the matrix verb. Thus, zichzelf is predicted to be good in both cases, because it satisfies Condition A, and zich is predicted to be good in both cases, because no conditions apply to it (it is considered a logophor by Reinhart & Reuland).
Another problem has to do with Reinhart & Reuland's claim that pronouns cannot have a co-argument as their antecedent, (which follows from condition B and the Chain condition) and that reflexives on the other hand, unless they're logophors, need to have a co-argument as their antecedent. As argued by Reinhart & Reuland, this accounts for the following Dutch and English data:

(5)a Max bewondert zichzelf/*hem.
    Max admires himself/*him.
b Max spreekt met zichzelf/*hem.
    Max speaks with himself/*him.
c Lucie's grap over zichzelf/*haar.
    Lucie's joke about herself/*her.
d Max zag een slang naast zich/*hem.
    Max saw a snake next-to SE/him

However, this does not seem to seem to be entirely correct, as is illustrated in the following example:

(6) Jan spreekt namens zichzelf/*hem.
    Jan speaks on-behalf-of SELF/him
    Jan speaks on behalf of himself.

In this example, we get the opposite of what Reinhart & Reuland predict; the reflexive is permitted and the pronoun is not. The fact that a pronoun is ruled out in this sentence also indicates that we aren't dealing with logophoric use of the reflexive, i.e. a reflexive that is bound at long distance or outside the sentence.

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2. Logophors actually constitute a problem as well in Reinhart & Reuland's proposal. For them, any reflexive that shows up in a position where it is beyond the scope of conditions A & B - i.e. in a (semantically or syntactically) non-argument position- is a logophor. This is a negative way of stating what a logophor is, and doesn't provide us with any restrictions on when and where they can occur.

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Finally, there is a conceptual shortcoming of Reinhart & Reuland's proposal; there is a considerable overlap between condition B and the Chain condition and, in a different way, between conditions A and B. Thus, the ungrammaticality of (7a) is accounted for by both condition B and the Chain condition. In (7b) conditions A & B both apply:

(7a) *Jan₁ bewundert hem₁.
    Jan admires him
b Jan schaamt zich.
    Jan is ashamed SE

The overlap between conditions A and B is different in nature from the: between condition B and the Chain condition. Conditions A and B are so to speak formulated "in opposite directions". Condition A states that a certain lexical or syntactic property will yield a particular interpretation, whereas condition B states that if one wants to express an utterance with a particular interpretation, it has to be realized with a certain kind of lexical item or in a certain syntactic way. In a more informal way, condition A says: "if you find a predicate that looks like this, interpret it like this" and condition B says: "if you want your utterance to have this interpretation, make the predicate look like this". It is necessary for Reinhart & Reuland to state their conditions A & B in different ways because the two conditions refer to different types of predicates; condition A refers to syntactic predicates, and Condition B to semantic predicates. The question arises if it is desirable to have conditions in the theory that are opposite in this way and if not, which kind of condition do we need? Note that the traditional binding theory conditions A & B, though stated in one way, can also be stated in the opposite way. For instance, condition A "An anaphor is bound in its governing category" can also be put as follows: "If an NP is to be interpreted as bound by an NP in its governing category, it has to be an anaphor".
Given these problems with Reinhart & Reuland's proposal, I would like to propose an alternative account of the distribution of SE- and SELF-reflexives. It will turn out that their appearance in PPs is not regulated by exactly the same factors as their appearance in other types of constituents. These two topics will therefore be discussed in different sections. In section 2, I will discuss the constructions other than PPs in which SE-reflexives or SELF-reflexives may occur, and propose a way of covering those data which also takes focus into account. Section 3 will deal with reflexives and pronouns in PPs. In section 4, we'll take a closer look at the locality conditions for reflexives and pronouns. In section 5, logophors will be discussed and it will be argued that these do not actually involve reflexives.

2 Zich and zichzelf in Constructions other than PPs

Before we look at the differences in the distribution of zich and zichzelf, let us look at other, morphological, differences between these two reflexives. The major difference is that zich is claimed to be a clitic (see Everaert 1986), presumably in the determiner position of the noun phrase it projects, like pronouns. Typical clitic-like behavior of zich includes the impossibility of topicalizing or stressing it and the impossibility of conjoining prepositionally governed zich or object zich with another nominal expression. Zichzelf is a morphologically complex DP, which is assumed to have the following structure: zich is in determiner position and zelf is in N³. This difference has two important

3. The intensifier zelf is is also found as a modifier of full DPs, as in (i):

(i) Jan heeft het boek zelf gelezen.
Jan has the book ZELF read.
Jan has read the book himself/itself.
consequences. In the first place, since *zich* is a clitic which lacks a full specification of \( \phi \)-features, it presumably adjoins to the verb in AgrS at LF. Following Reinhart & Reuland (1991a,b), I will assume that this accounts for the fact that *zich* (but not *zichzelf*) is subject-oriented, picking up the features of the DP in Spec AgrS. The following examples show this subject-orientation of *zich*\(^4\):

(8) a Jan\(_i\) wijst Jaap\(_j\) aan zichzelf\(_i/j\) toe.
    Jan assigns Jaap to SELF (PART)

b Jan\(_i\) wijst Jaap\(_j\) aan zich\(_i/j\) toe, in plaats van uit z\'n buurt te blijven.
    Jan assigns Jaap to SE (PART) instead of away from his neighborhood to stay
    Jan assigns Jaap to himself, instead of staying away from him.

(9) Ik zag Marie zich dronken drinken.
    I saw Marie SE drunk drink
    I saw Mary drink herself drunk.

The antecedent of *zich* doesn't have to be the matrix subject of the sentence. In (9), the antecedent of *zich* is the subject of an infinitival clause. *Zich* here cannot be interpreted as coreferential with the matrix subject *ik*, because *zich* is not a first person form. Another consequence of *zich* but not *zichzelf* being a clitic, is that the latter but not the former can be stressed. With these facts in mind, let us now look at the distributional differences between the two reflexives.

\(^4\) (8) also shows that *zichzelf* is not necessarily bound by a subject, as was claimed by Faltz (1977), or by the closest available antecedent, as was claimed by Everaert (1991).
2.1 The Distinction between "Asserted" and "Presupposed"
Reflexivity

The intuitive idea about the distribution of \textbf{zich} and \textbf{zichzelf},
which has been mentioned in the literature by e.g. Vat (1980), is
that \textbf{zich} is used in those cases where the reflexive cannot be
replaced by a non-reflexive NP, and \textbf{zichzelf} in those where it
could be replaced by a non-reflexive NP. This is illustrated by the
list of possible constructions with reflexives below. They give the
preferred reflexive form and also show whether a non-reflexive is
possible. If we look at the contrast between (12) and (13),
structurally rather similar, we find that there is a preference for
\textbf{zichzelf} in (12), where we could also have a non-reflexive NP
instead of the reflexive, whereas in (13) this is not possible, and
\textbf{zich} is preferred:

(10)a Jan veracht zichzelf/Paul.
    Jan despises SELF/Paul
b Marie bedondert zichzelf/Paul.
    Marie fools SELF/Paul
c Jan wijst zichzelf/Paul aan mij toe.
    Jan assigns SELF/Paul to me (PART)

(11)a Jan geeft zichzelf/Paul een beloning.
    Jan gives SELF/Paul a reward
b Marie vertelt zichzelf/Paul een verhaal.
    Marie tells SELF/Paul a story

(12)a Jan hoort zichzelf/??zich/Paul een aria zingen (op de radio).
    Jan hears SELF SE Paul a aria sing (on the radio)
    Jan hears himself sing an aria (on the radio).
    Marie ziet zichzelf/??zich/Mieke op haar hoofd staan (op de
    foto).
    Marie sees SELF SE Mieke on her head stand (in
    the picture)
    Marie sees herself/Mieke stand on her head (in the picture).
(13)a Jan drinkt zich/?*zichzelf/*Paul dronken.
    Jan drinks SE SELF Paul drunk
    Jan drinks himself drunk.

b Marie werkt zich/?*zichzelf/*Mieke suf.
    Marie works SE SELF Mieke silly
    Marie works herself silly.

The following examples involve verbs which are lexically reflexive, i.e. they are listed in the lexicon with the reflexive, and cannot occur with a non-reflexive in the place of *zich. Notice that here as well, the impossibility of having a non-reflexive patterns with the choice of *zich rather than *zichzelf:

(14)a Jan schaamt zich/*Paul.
    Jan is-ashamed SE/Paul
    Jan is ashamed.

b Marie vergist zich/*Mieke.
    Marie mistakes SELF/Mieke
    Marie is mistaken.

(15)a Jan vraagt zich/*Paul af of taalkunde interessant is.
    Jan wonders SE Paul (PART) if linguistics interesting is.
    Jan wonders whether linguistics is interesting.

b Marie herinnert zich/*Paul die avond.
    Marie remember SE Paul that evening
    Marie remembers that evening.

(16) Hij is zich/*Paul bewust van zijn falen. (Everaert 1986:66)
    He is SE Paul aware of his failure
    He is aware of his failure.

(17) Jan voelde zich/*Paul ziek. (Everaert 1986:56)
    Jan felt SE Paul ill
    Jan was feeling ill.
(18) Hij irriteert zich/*Paul aan dat boek (Everaert 1986: 53)
    he irritates SE Paul at that book
    He is annoyed with that book.

(19) Hij verspreekt zich/*Paul. (Everaert 1986: 50)
    he mis-speaks SE Paul
    He makes a slip of the tongue.

(20) Het gerucht verspreidde zich/*Paul. (Everaert 1986: 52)
    the rumor spread SE Paul
    The rumor spread.

I will call the use of a reflexive in the examples where a non-reflexive is not possible presupposed reflexivity, and the use of a reflexive in the examples where a non-reflexive is possible asserted reflexivity. Thus, the examples above show that in the case of presupposed reflexivity there is a preference for zich and that zichzelf is preferred when reflexivity is asserted. This distinction may seem somewhat reminiscent of Reinhart & Reuland's lexical reflexive-markedness versus syntactic reflexive-markedness. However, I would like to argue that the choice between zich and zichzelf is not a purely lexical or syntactic matter:

(21)a Marie schaamt zich rot.
    Marie is-ashamed SE rotten
    Marie is terribly ashamed.

b Marie werkt zich suf.
    Marie works SE silly

c Marie drinkt zich dronken.
    Marie drinks SE drunk

d Marie drinkt zich arm.
    Marie drinks SE poor

e Marie drinkt haar ouders arm.
    Marie drinks her parents poor
All these sentences involve resultative small clauses. The predicate of the small clause expresses the result of the event, which affects the subject of the small clause. In (21a), we have a lexically reflexive verb. The examples in (21b-d) look like (21a), apart from the fact that they do not involve an inherently reflexive verb. However, there is an important difference. As illustrated in (21e), the subject of the small clause-complement of *drink* doesn't necessarily have to be coindexed with the drinker. (21e) simply presupposes that Marie's parents pay for her drinks. Similarly (21d) only makes sense if Marie pays for her drinks herself. If no context is given, the least marked presupposition is that she pays for her drinks herself. This is presupposed reflexivity and therefore we get *zich*. However, if it is given in the context that other people sometimes pay for Marie's drinks, we have to assert reflexivity, since it is possible to have a non-reflexive small clause subject:

(22) Vorig jaar dronk Marie haar ouders arm en tegenwoordig drinkt ze zichzelf/*zich arm.

Last year drank Marie her parents poor and these-days drinks she SELF/SE poor.

Last year, Marie drank her parents poor and these days she drinks herself poor.

So, although we need to explain why people prefer *zich* over *zichzelf* in sentences like (21b,c,d), we cannot do so by saying that the verb or the construction is inherently reflexive. Contrary to lexically reflexive predicates (like *zich schamen*, "to be ashamed"), this is not a predicate that doesn't allow a non-reflexive instead of the reflexive. Rather, it depends on the assumptions one makes, whether one considers (non-reflexive) alternatives or not. If one does, one uses *zichzelf*. If one doesn't, one uses *zich*. What kind of assumptions one makes, may in turn depend on how likely it is with the predicate in question that
the affected argument is reflexive or non-reflexive. For instance, in the case of **drink drunk** it is not very likely that someone other than the drinker gets drunk, i.e. one needs a lot of imagination to come up with a possible situation in which someone other than the drinker gets drunk. In the case of **drink poor** however, it is a little easier to imagine a situation in which someone other than the drinker gets poor as a result of the drinking. It is also important to know that in Dutch predicates of this kind are numerous and productive. They're clearly not a limited set of predicates which could be said to be lexical.

Reinhart & Reuland do not really discuss the fact that in certain small clause constructions with a reflexive subject, there is a preference for **zich** and in others there is a preference for **zichzelf**. Their analysis predicts that both are equally good. **Zichzelf** in that position obeys condition A, and condition B doesn't apply. **Zich** is also fine because no conditions apply to it in this position (except the chain condition but that doesn't affect the distribution of **zich** and **zichzelf**). The facts exemplified in (12) and (13) could only be accounted for in their analysis by assuming that the constructions in which **zich** is preferred, are lexically reflexive constructions. We have just seen that this claim is hard to maintain. Also, it would not explain why the contrast is not absolute, i.e. why **zich** in (12) is marginal rather than terribly bad. Reinhart & Reuland actually discuss this matter briefly in a footnote, with respect to the following examples (from their footnote 51):

(23)a Münchhausen trekt zich uit het moeras.
  Münchhausen pulls SE out-of the swamp
b Münchhausen trekt zichzelf uit het moeras.
  Münchhausen pulls SELF out-of the swamp

They note that the different small clause subjects in these examples bring about different readings; (23a) has the standard
reading, where Münchhausen is pulling on something, causing himself to get out of the swamp, whereas (23b) has the reading intended in the original story where Münchhausen is literally pulling on himself, causing himself to get out of the swamp. Reinhart & Reuland claim that this follows from the fact that in (23b) the verb and the preposition form a complex predicate but don't in (23a). Their point is that therefore sich in (23b) is a syntactic argument of the verb, but that in (23a) it isn't. However, this actually doesn't follow, because in (23a) as in (23b) the reflexive is assigned Case by the matrix verb and is thus (according to Reinhart & Reuland's own definition) a syntactic argument of the verb, even if the small clause predicate doesn't form a complex predicate with the verb. (Reinhart & Reuland need to formulate their definition of syntactic predicate in this way in order to account for other small clause constructions.) Furthermore, Reinhart & Reuland don't explain why (23b) is not ambiguous between the two readings, since in the non-complex predicate reading conditions A & B don't apply, hence both sich and sichzelf are expected to be good.

The distinction they make between the two kinds of predicate in (23) is more insightful in terms of assertion and presupposition of reflexivity. With the meaning the predicate has in (23b), reflexivity has to be asserted because this sense of "pull out-of" allows a non-reflexive NP. In fact, it takes some imagination to create a context in which sichzelf is possible when the predicate has this meaning, such as a Münchhausen-story, in which Münchhausen boasts about his (highly unrealistic) adventures. However, the meaning of the non-complex predicate doesn't allow a non-reflexive NP; reflexivity is presupposed. Again, presupposition here does not correspond to Reinhart & Reuland's lexical reflexivity. For them, sich is good in (23a), not because it's a lexically reflexive verb, but because it violates none of their conditions, given that conditions A and B simply don't apply.
We have seen that there seems to be a correlation between asserted reflexivity and \textit{zichzelf} and between presupposed reflexivity and \textit{zich}. We have also seen that presupposed reflexivity is not the same phenomenon as Reinhart & Reuland's lexical reflexive-markedness. Although lexically reflexive verbs presuppose reflexivity, there are also other instances of presupposed reflexivity, such as likelihood, as we have seen here and in the "drink-poorf" example above. From what we've seen so far, we can conclude that a proposal accounting for the distribution of \textit{zich} and \textit{zichzelf} in terms of presupposition versus assertion of reflexivity fares better in accounting for the facts, especially those exemplified in (12), (13) and (21) through (23), than Reinhart & Reuland's analysis.

2.2 Other Factors that Play a Role in the Distribution of \textit{zich} and \textit{zichzelf}

We have not yet taken focus into consideration. However, as we have seen in example (2) in the introduction, focus seems to be relevant to the distribution of \textit{zich} and \textit{zichzelf}. Let us now go through the examples given above again, but this time assuming a particular contrastive focus. In the sentences that had \textit{zichzelf} in them as the preferred reflexive, we will focus a constituent other than the reflexive (ex. 24-27), because that seemed to be relevant in example (2) above. For the sentences that had \textit{zich} as the preferred reflexive, we will see what happens if we focus the reflexive (ex. 28-36).
(24)a ??Jan veracht zich, in plaats van zich graag te mogen.
   Jan despises SE instead of SE well to like
   Jan despises himself instead of liking himself.

b ??Marie bedondert zich niet, Jan bedondert zich.
   Marie fools SE not Jan fools SE
   Marie doesn't fool herself, Jan fools himself.

c Jan wees zich aan mij toe, in plaats van aan zijn vaste
danspartner.
   Jan assigned SE to me, instead of to his usual dance
   partner
   Jan assigned himself to me instead of to his usual dance
   partner.

Recall that the acceptability of (24c) cannot be explained in
Reinhart & Reuland's system, because the predicate is not
reflexive-marked. One might object that focus may affect the
argument structure of the predicate. However, that seems to be
unlikely, even if it is the verb itself that is contrastively
focused, and not one of its arguments, zich is fine. A question
that arises is why (24c) is so much better than (24a,b). It does
not have to do with the choice of the focused constituent, because
(24c) is fine no matter what constituent is focused, as long as
it's not the reflexive. We'll get back to this question. The
examples in (25) are as bad as those in (24a,b):

(25)a ??Jan geeft zich een beloning, in plaats van straf.
   Jan gives SE a reward instead of punishment

b ??Marie vertelt zich een verhaal, niet Jan.
   Marie tells SE a story not Jan

However, (26) and (27) below are not so bad:
(26)a Jan hoorde zich die aria niet *zingen* maar *neuriën*.
   Jan heard SE that aria not sing but hum
   Jan didn't hear himself sing that aria, he heard himself hum it.

b Marie zag zich op haar *hoofd* staan in plaats van op haar *handen*.
   Marie saw SE on her head stand instead of on her hands
   Marie saw herself standing on her head, instead of on her hands.

It seems that the matrix verbs in (27) attract some kind of focus because they're not used in their literal sense. (27c) shows that this use doesn't preclude a non-reflexive, so here too, it seems that the use of *zich* instead of *zichzelf* has to do with the focus:

(27)a Hij *hoort* het zich al zeggen...
   He hears it SE already say
   He can easily imagine himself saying it.

b Zij *ziet* zich nog niet lopen met die gekke hoed.
   She sees SE yet not walk with that crazy hat.
   She cannot easily imagine herself walking around with that crazy hat.

c Hij *hoort* het Jan al zeggen.
   He hears it Jan already say.
   He can easily imagine Jan saying it.

The examples in (24)-(27) show that when a constituent other than *zichzelf* is focused, *zichzelf* may, but doesn't have to, be replaced with *zich*, and that replacement with *zich* can be more or less successful. This will be discussed in more detail later in this section. In all the above examples *zichzelf* would still be fine, i.e. *zichzelf* doesn't need to be focused. Also, it could be
focused in these examples, forming a focused pair with the other focused element.

The following examples are examples which would have zich if the sentence were neutral with respect to focus. The reflexive has been contrastively focused:

(28)a Jan kan Wim niet dronken drinken, hij kan alleen zichzelf
dronken drinken.
Jan can Wim not drunk drink he can only SELF
drunk drink
b Marie kan Piet niet suf werken, ze kan alleen zichzelf
suf werken.
Marie can Piet not silly work, she can only SELF
silly work

(29)a Jan kan Piet niet schamen, hij kan alleen zichzelf
schamen.
Jan can Piet not be-ashamed he can only SELF
be-ashamed
b Marie kan Thea niet vergissen, ze kan alleen zichzelf
vergissen.
Marie can Thea not mistake she can only SELF
mistake

(28) and (29) are metalinguistic utterances. Their content is about the use of the verb in question, as for instance in the English sentence in (30):

(30) John cannot behave Mary, he can only behave himself.

This is the only way to focus a reflexive in the case of presupposed reflexivity. In normal sentences with these predicates, it is not possible to replace the reflexive with a non-reflexive NP.
Therefore, it is not possible to create a contrast (and with it, focus) involving the reflexive, except in the way in which it's done in (28) and (29). The same is true for (31)-(36):

(31) Jan kan **Marie** niet afvragen of taalkunde interessant is, hij kan alleen **zichzelf** dat afvragen.
Jan can Marie not wonder whether linguistics is interesting, he can only SELF that wonder.

(32) Hij kan **Jan** niet bewust zijn van zijn falen, hij kan alleen **zichzelf** bewust zijn van zijn falen.
he can Jan not aware be of his failure he can only SELF aware be of his failure

(33) Jan kan **Peter** niet ziek voelen, hij kan alleen **zichzelf** ziek voelen.
Jan can Peter not ill feel he can only SELF ill feel

(34) Jan kan **Peter** niet aan dat boek irriteren, hij kan alleen **zichzelf** aan dat boek irriteren.
Jan can Peter not at that book irritate, he can only SELF at that book irritate

(35) Hij kan **Jan** niet verspreken, hij kan alleen **zichzelf** verspreken.
he can Jan not mis-speak he can only SELF mis-speak

(36)a ??Het gerucht verspreidde **zichzelf**.
The rumor spread SELF cf.
b Het gerucht verpreidde zich vanzelf.
The rumor spread SELF by-itself
In the examples (28-36), which originally had *zich*, *zich* is now no longer possible and we find *zichzelf* instead. When a reflexive is focused, it has to be *zichzelf*, as these examples show. This can be explained by the fact that *zich* is a clitic, and can therefore not be stressed. However, it is important to note that when the reflexive is focused, reflexivity is by definition asserted, even if without that focus reflexivity would be presupposed\(^5\). When something is focused, it is contrasted with possible alternatives, which are necessarily non-reflexive.

However, we have seen that we cannot simply say that *zichzelf* asserts reflexivity and *zich* presupposes it. The examples in (24-27), with focus on a constituent other than the reflexive, show that *zich* is sometimes possible when reflexivity is asserted. The presence of *zich* there, instead of *zichzelf*, does not alter the assertion of reflexivity into presupposition. After all, not being focused does not mean that there is no assertion. We can now make the following generalizations: *zichzelf* asserts reflexivity, but asserted reflexivity is not always expressed by *zichzelf*. Presupposed reflexivity is always expressed by *zich*, but *zich* does not always express presupposed reflexivity.

This asymmetry between *zich* and *zichzelf* is reminiscent of the asymmetry, discussed earlier, between Reinhart & Reuland's Conditions A & B and it's probably the source of it. We've seen that in the case of Reinhart & Reuland's analysis, this asymmetry resulted in an overlap. In our case however, it rather results in a gap: we know what the relation is between *zich* and presupposition of reflexivity (namely: presupposition $\rightarrow$ *zich*) and what the

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\(^5\) This is actually why (36a) is problematic. The verb *verspreiden* has two alternants; one is the lexically reflexive verb *zich verspreiden*, which is inchoative. The other is its transitivized causative alternate *verspreiden*, which is not lexically reflexive. The latter variant requires a [+animate] agent. The use of *zichzelf* in (36a) implies that reflexivity is asserted, i.e. the reflexive is interpreted as opposed to possible non-reflexive direct objects. This possibility of having a non-reflexive direct object leads one to interpret *verspreiden* here as the causative alternate rather than as the inchoative alternate. The subject *het gerucht*, however, is [-animate], violating the semantic selection requirement of causative *verspreiden*. Therefore (36a) is bad.
relation is between \textit{zichzelf} and assertion of reflexivity (namely: \textit{zichzelf} $\rightarrow$ assertion). It follows that \textit{zichzelf} and presupposed reflexivity never go together. However, there is a relation between \textit{zich} and asserted reflexivity, but its nature doesn't follow from the generalizations formulated above. The remainder of this section will deal with \textit{zich} and asserted reflexivity. That is, it will try to state under what conditions the two go together. The gap will then have been filled and the asymmetry will no longer be theoretically problematic. In fact, once we have reached that point, it will be possible to state the generalizations about the distribution of \textit{zich} and \textit{zichzelf} in "both directions" (I: interpretation $\rightarrow$ expression and II: expression $\rightarrow$ interpretation), which is not possible in Reinhart & Reuland's analysis:

I. presupposition $\rightarrow$ \textit{zich}
   
   assertion $\rightarrow$ \textit{zich}, if X \\
   assertion $\rightarrow$ \textit{zichzelf}, if not X

II. \textit{zich} $\rightarrow$ presupposition if not X \\
    \textit{zich} $\rightarrow$ assertion if X \\
    \textit{zichzelf} $\rightarrow$ assertion

where X stands for the conditions under which asserted reflexivity calls for \textit{zich} rather than \textit{zichzelf}. Thus, in the present approach, the theoretical problem encountered in Reinhart & Reuland's analysis can be avoided.

From what we've seen so far, we can draw the following preliminary conclusion with respect to the distribution of \textit{zich} and \textit{zichzelf}:
If reflexivity is asserted:
- and the sentence is neutral with respect to focus, or focus is on the reflexive: \textit{zichzelf}
- and a constituent other than the reflexive is focused: \textit{zich} or \textit{zichzelf} (the choice between them depends on other factors, which will be discussed shortly)

If reflexivity is presupposed:
- we get \textit{zich}

A question that remains is why focus plays sometimes, but not always, a decisive role in the selection of \textit{zich} and \textit{zichzelf}. That is, why are (24a,b) and (25) not as good as (24c), (26) and (27)? (The examples are repeated here for convenience.)

(24)a ??Jan \textit{veracht} zich, in plaats van zich graag te \textit{mogen}.
    Jan despises SE instead of SE well to like
b ??\textit{Marie} bedondert zich niet, \textit{Jan} bedondert zich.
    Marie fools SE not Jan fools SE

(25)a ??Jan geeft zich een \textit{beloning}, in plaats van \textit{straf}.
    Jan gives SE a reward instead of punishment
b ??\textit{Marie} vertelt zich een verhaal, niet \textit{Jan}.
    Marie tells SE a story not Jan

\textit{versus}

(24)c Jan wees zich aan \textit{mij} toe, in plaats van aan zijn vaste \textit{danspartner}.
    Jan assigned SE to me, instead of to his usual dance partner
(26)a Jan hoorde zich die aria niet zingen maar neuriënen.
   Jan heard SE that aria not sing but hum
b Marie zag zich op haar hoofd staan in plaats van op haar handen.
   Marie saw SE on her head stand instead of on her hands

(27)a Hij hoort het zich al zeggen...
   He hears it SE already say
He can easily imagine himself saying it
b Zij ziet zich nog niet lopen met die gekke hoed.
   She sees SE yet not walk with that crazy hat.
   She cannot easily imagine herself walking around with that crazy hat.

What is the relevant factor that differentiates between these sets of examples? All of the examples in which focus influences the distribution of zich and zichzelf, contain syntactically complex verbal constructions; they are ditransitive verbs, verb-particle constructions or verbs with a small or infinitival clause complement. One could argue that what these constructions have in common is that they all involve a complex predicate, i.e. a syntactically derived predicate. However, it is not the case that focus is so decisive in the distribution of zich and zichzelf in all constructions that involve a complex predicate. The examples in (25) with the ditransitive verbs geven, "to give" and vertellen, "to tell" for instance, show that not all ditransitive verbs allow zich as well as toewijzen does.

One might think that the reason for this could lie in the fact that these examples differ from the example with toewijzen in (24c) that they involve ditransitive verbs that are morphologically simple, whereas toewijzen is made up of a verb and a particle (toe is a separable prefix). In other words, one might be lead to believe that in the case of ditransitive verbs, focus plays a crucial role
only in ditransitive verb-particle constructions. However, this hypothesis is not correct either. When one checks the few ditransitive verbs which have a separable prefix and which allow a direct object that is [+animate] (so that \textit{zich} is a possible direct object), one finds that not all of these verbs behave in the same way as \textit{toewijzen} (see (37-43)).

In general, \textit{zich} in these contexts of asserted reflexivity is somewhat better when some other constituent in the sentence is contrastively focused than when no particular constituent in the sentence is focused. But the improvement in most cases is not as considerable as in the case of \textit{toewijzen}:

\begin{tabular}{l}
(37)a ??Jan heeft zich aan Peter aanbevolen. \\
\quad Jan has SE to Peter recommended \\
\quad \begin{tabular}{l}
\quad b ?/??\textbf{Jan} heeft zich aan Peter aanbevolen, niet \textbf{Jaap}.
\quad Jan has SE to Peter recommended not Jaap
\end{tabular}
\end{tabular}

\begin{tabular}{l}
(38)a ?/?\textbf{Jan} heeft zich aan Peter aangekondigd. \\
\quad Jan has SE to Peter announced \\
\quad \begin{tabular}{l}
\quad b ?/??\textbf{Jan} heeft zich aan Peter aangekondigd, niet \textbf{Jaap}.
\quad Jan has SE to Peter announced not Jaap
\end{tabular}
\end{tabular}

\begin{tabular}{l}
(39)a ?/\textbf{Jan} heeft zich aan Peter aangeraden. \\
\quad Jan has SE to Peter recommended \\
\quad ??\textbf{Jan} heeft zich aan Peter aangeraden, niet \textbf{Jaap}.
\quad Jan has SE to Peter recommended not Jaap
\end{tabular}

\footnote{In the case of verbs with the prefix \textit{aan}, the examples will be given in the present perfect tense. In this tense it is not obvious that the prefix is separable from the verb. But the simple present or past tense, which do show this, yield the stylistically awkward sequence "... aan Peter aan.". Since the judgements for these sentences are already hard to give anyway, we want to avoid interference of this kind.}
(40)a *Jan heeft zich aan Peter aangewezen (op de foto).
    Jan has SE to Peter pointed out (in the picture)
    b ?/??Jan heeft zich aan Peter aangewezen (op de foto), niet
        Jaap.
    Jan has SE to Peter pointed out (in the picture) not
        Jaap

(41)a *Jan dacht zich aan Peter toe.
    Jan had-in-mind SE for Peter
    Jan had himself in mind for Peter.
    b ?/??Jan dacht zich aan Peter toe, niet Jaap.
    Jan had-in-mind SE for Peter not Jaap

(42)a ?//*Jan kende zich aan Peter toe.
    Jan assigned SE to Peter
    b ?/??Jan kende zich aan Peter toe, niet Jaap.
    Jan assigned SE to Peter not Jaap

(43)a *Jan zegde zich aan Peter toe.
    Jan promised SE to Peter
    b ??Jan zegde zich aan Peter toe, niet Jaap.
    Jan promised SE to Peter not Jaap

It needs to be said that it is extremely hard to give judgements
for these sentences. But they all seem to allow zich somewhat
better when the subject of the sentence (or any other constituent
distinct from zich) is contrastively focused. Thus the presence of
a separable prefix seems to be of some relevance. At the same time,
the presence of a separable prefix cannot be considered to be the
only relevant factor that determines the pertinence of contrastive
focus. If it were, one would expect the (b)-sentences in the
examples above to all show an equal degree of improvement compared
to the (a)-sentences. Also, the fact that the (a)-sentences, when
they don't have a special focus, do not all get the same judgements
indicates that there must be other factors that play a role in the acceptability of *zich* in cases of asserted reflexivity. It is not clear what the exact factors are that play a role, and how they interact.

It is very well possible that (some of) these other factors are non-syntactic in nature. There could be phonological factors involved, having to do with phrasal stress. Semantic factors could play a role as well. Some verbs seem to be better candidates for having a lexically reflexive variant than others, i.e. to be doubly listed in the lexicon, once as non-reflexive and once as reflexive, like the verb *wassen/zich wassen*, "to wash/to wash oneself". This might be related to the frequency of a verb's occurrence with a reflexive argument compared to the frequency of its occurrence with a non-reflexive argument. Also, pragmatic factors might be involved. It seems that there is a combination of factors at work, which might account for the fact that these sentences are so hard to judge. This might also explain why speakers' judgements diverge, since that could be due to different factors weighing more or less heavily for different speakers.

We have seen now that apart from assertion and presupposition of reflexivity, there are other factors that play a role in the distribution of *zich* and *zichzelf*. In principle, two scenarios are conceivable. One would be to say that if the verb is a simple predicate, i.e. if it is not syntactically derived, assertion and presupposition decide whether *zich* or *zichzelf* is the appropriate reflexive. In other words, this choice would be lexically determined. If the predicate is complex, however, it is not a lexical item as such, thus it cannot be stated in the lexicon whether *zich* or rather *zichzelf* should be used. This choice will then depend on other factors, one of which is focus, and one of

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7. There also exist transitive verbs with a separable prefix, such as *toejuichen*, "to cheer", *aankijken*, "to look in the eyes" and *aanmoedigen*, "to encourage". These verbs do not really allow *zich* as their direct object any better than simple transitive verbs do.
which still is assertion/presupposition of reflexivity, but this
time determined by e.g. pragmatics or (contextual) presupposition
as in the case of (22), repeated here, rather than in the lexicon⁸:

(22) Vorig jaar dronk Marie haar ouders arm en tegenwoordig
drinkt ze *zich/ÖK-zichzelf arm.

Last year drank Marie her parents poor and these-days drinks
she SELF/SE poor

Another possibility is to say that presupposition of reflexivity
is the primary factor that decides that zich is the appropriate
reflexive. In the case of asserted reflexivity then, there is a
combination of factors at work:
- preference for zichzelf in the case of asserted reflexivity
- contrastive focus on a constituent other than the reflexive
- +/- complex predicate
- other (phonological, semantic and/or pragmatic) factors.

These two scenarios are not necessarily incompatible; the
first could be a complement of the second. However, I would like
to argue that the first scenario, though interesting from a
theoretical point of view, might be hard to maintain. In the case
of simple transitive verbs (where reflexivity needs to be asserted)
zich is not always equally bad. It seems, for instance, that (44a,
cf.24a above) is slightly better than (44b,c):

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⁸. It was pointed out to me by Susi Wurmbbrand that in fact, there
is contrastive focus on the reflexive in this example. Thus, one
could argue that that is the reason why we get zichzelf here instead
of zich. However, I think that focus is not the only reason why we
find zichzelf in this example. Recall that in examples with
lexically presupposed reflexivity, focusing the reflexive was only
possible in a special kind of sentence, which I called
metalinguistic. In this example however, that is not the case. So
it seems that it is not focus alone that explains the
grammaticality of zichzelf here, but also the fact that with the
predicate drink poor, it is imaginable that someone other than
Marie ends up being poor because of Marie's drinking. Since it is
imaginable, speakers may actually assume this in certain situations
and then use zichzelf, because reflexivity needs to be asserted.
(44) a *Jan veracht zich.
    Jan despises SE
b *Jan slaat zich.
    Jan hits SE
c *Jan ziet zich.
    Jan sees SE

This is unexpected if we assume that the choice between *zich and *zichzelf with lexically simple verbs is determined in the lexicon. These facts are, however, certainly compatible with the second scenario. Reflexivity is asserted in these examples, so several factors play a role in the choice between *zich and *zichzelf, hence it is not surprising that *zich is better in some environments than in others.

Concluding, we can say that the distribution of *zich and *zichzelf in constructions other than PPs is mainly, but not solely determined by presupposition and assertion of reflexivity. In the case of presupposed reflexivity (whether lexical or pragmatic), *zich is the appropriate reflexive. In the case of asserted reflexivity, other factors also play a role in the choice between *zich and *zichzelf. Some of these factors have been identified, such as the complexity of the predicate and focus, but there are probably more factors, whose exact nature still needs to be determined. It is this interaction of different factors that might explain why it is difficult to obtain clear judgements about the relevant constructions and why, to the extent that clear judgements can be obtained, divergences can be found.
3  **Zich, zichzelf** and Pronouns in PPs

Anaphora in PPs constitute a problem for binding theory in many languages. For instance, in both Dutch and English, we find pronouns as well as reflexives in some PPs, while in others we only find reflexives. Yet, there is no clear difference between these constructions in terms of locality or the argumenthood of the PP. Further, **zich** is preferred in some PPs and **zichzelf** in others, and we will see that this cannot be accounted for in exactly the same way as their distribution in non-PPs, discussed in section 2. In this section, we will look at Reinhart & Reuland's analysis for the distribution of **zich**, **zichzelf** and pronouns in PPs, and at the problems that this analysis has. I will propose an alternative account which overcomes the problems of Reinhart & Reuland's approach, and which is in line with the analysis of reflexives presented in the previous section.

3.1  Reinhart & Reuland's Analysis of Reflexives and Pronouns in PPs

Consider the examples (45) and (46):

(45)a John$_i$ saw a snake next to him$_i/\text{*himself}_i$.  
    b Jan$_i$ zag een slang naast zich$_i$/hem$_i/\text{*zichzelf}_i$.  
    Jan saw a snake next-to SE/him/SELF

(46)a Mary$_i$ saw a picture of herself$_i$/her$_i$.  
    b Mary$_i$ took a picture of her$_i$/herself$_i/\text{*herself}_i$.  
    c Mary zag/nam een foto van zichzelf/\text{*zich/haar}.  
    Mary saw/took a picture of SELF SE her

(45) is an example where, in Dutch, reflexives and pronouns are not
in complementary distribution. There is no difference in interpretation between *zich* and *hem* in these constructions. In both English and Dutch, the SELF-anaphor is only allowed if contrastively focused. (46) is an example where, in English, pronouns and reflexives are both possible (though some speakers don’t find the pronoun very good here) but are claimed to yield different interpretations. In (46a), the picture taker may have been Mary or someone else. *Her* is supposed to be good only if somebody other than Mary took the picture. *Herself* is good only if Mary is the one who took the picture. In (46b) Mary is the one who took the picture and only *herself* is allowed to be coindexed with Mary. This has been accounted for by saying that *herself* in these sentences is bound by the agent of the nominal predicate *picture*, i.e. the "picture-taker". Williams (1987), (contra Chomsky (1986)) has argued that this agent cannot always be realized syntactically (as for instance PRO). This means that we need to allow reflexives to be bound by non-syntactic arguments. This analysis doesn’t apply to Dutch, where only the SELF-anaphor is good, no matter who the picture-taker is.

The example in (45) can also not be explained along these lines (see section 3.2 for a discussion). Reinhart & Reuland contrast this sentence with an example like (47):

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9. Another way in which interpretation may diverge depending on the choice between reflexives and pronouns has been observed by Kuno (1987). It is found in resultative small clauses with a prepositional predicate, as in (i) (Kuno’s ex. 9.17):

(i) a. John$_i$ hid the book behind himself$_i$.
   b. John$_i$ hid the book behind him$_i$.

According to Kuno, *John* is the target of the action in (ia), and there is physical contact between him and the book. In (ib) it is more likely that there is no physical contact between *John* and the book. Not all speakers share this intuition.
(47) a Max₁ speaks with himself₁/him₁/₁.
   b Max₁ praat met zichzelf₁/hem₁/₁.

Max speaks with SELF him

They conclude from examples like these that the generalization is
that pronouns cannot be bound by a (syntactic or semantic)
coargument, which is expressed by their condition B. Reinhart &
Reuland's claim is that their system predicts that examples like
(45-47) follow readily from condition B. A similar explanation,
i.e. in terms of coargumenthood, has been proposed earlier by e.g.
However, the situation seems to be more complicated. At the end of
their article, Reinhart & Reuland discuss a well-known problem for
binding theory, namely the contrast between (48a) and (48b)):

(48) a We talked with Lucie₁ about herself₁.
   b *We talked about Lucie₁ with herself₁.

They argue that this contrast follows straightforwardly in their
analysis, if one assumes that the with-PP is an argument of the
predicate, and the about-PP isn't, which also correctly predicts
that a pronoun is fine in (48a). This means that the object of about
and Lucie do not form a chain, so that the chain condition doesn't
apply. However, this cannot be right, because this analysis
incorrectly predicts that (49) is grammatical:

(49) *Lucie₁ often talks about her₁.

(50), in both Dutch and English, is also a counterexample
against the coargument hypothesis (as noted in Koster 1987):

10. It seems to me that the Dutch equivalents of these sentences do
not pose a problem, because in Dutch only a pronoun is allowed in
either sentence. This can be accounted for by the fact that binding
is usually defined in terms of c-command. Hence, an antecedent
embedded in a PP doesn't bind an anaphor outside that PP.
(50) Jan₁ spreekt namens zichzelf/*hem₁.
    Jan speaks on-behalf-of SELF/him
    Jan speaks on behalf of himself/*him.

In this example **zichzelf/himself** is not bound by a co-argument. The 
**namens-PP** is an adjunct which functions as a sentential adverb. 
This is illustrated by the fact that this PP can show up in 
postverbal position (in sentences where the verb hasn't moved to 
second position) in which argument PPs cannot appear, but adjunct 
PPs can

(51a) (?)Jan heeft gesproken namens zichzelf/in de tuin.
    Jan has spoken on-behalf-of SELF/in the garden
    Jan has spoken on behalf of himself/in the garden.

b *Jan heeft het boek gelegd op de tafel.
    Jan has the book put on the table

The fact that the pronoun in (50) above is ungrammatical, shows 
that we cannot say that **zichzelf** there is a logophor, which is how 
it would be analyzed in Reinhart & Reuland's framework. Also, the 
ungrammaticality of the pronoun is mysterious under Reinhart & 
Reuland's account. Since it is not bound by a syntactic or semantic 
co-argument, it should be fine in their system.

Furthermore, there is a difference between Dutch and English. 
In English, it seems that in the unmarked case, pronouns are 
preferred over reflexives in sentences like (45a). **Himself** is good 
in this sentence if it is contrastively focused, but in that case 
**stressed him is fine too (and strongly preferred by some speakers). 
In Dutch however, **zich** is the preferred anaphor, in the sense that 
it is fine for all speakers, whereas **hem** is only good for some 
speakers**. **Zichzelf** is like English **himself; it is only good if

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11. (51a) is not totally perfect, but the point is that it is a lot 
better than (51b) and that the PP **namens zichzelf** gets the same 
judgement here as the PP **in de tuin**.
focused. However, here too, speakers who allow the pronoun tend to have a preference for stressed hem and may reject zichzelf. Reinhart & Reuland do not discuss this difference between English and Dutch and it cannot readily be explained in their analysis without adding new conditions. In their analysis as it is, the only condition that applies to pronouns is the Chain Condition. One could change the Chain Condition in such a way that there are two versions of the definition of a chain, one for each group of speakers. Then for those who don't accept hem in (45b), the Chain Condition actually applies there, i.e. hem and Jan form a chain. For the other speakers, and for the English speakers, hem and Jan would not form a chain in that sentence, so that the Chain Condition doesn't apply and the pronoun is fine. Having various definitions of a chain is not only conceptually unattractive, it is also not supported by the facts. If for the speakers who reject pronouns in this environment, hem and Jan do form a chain, one would expect them to find (45b) with hem as bad as (47b) with hem, which is not the case (the examples are repeated here). (45b) is marginal for these speakers, while (47b) is absolutely out for them:

(45b) ??Jan₁ ziet een slang naast hem₁.

Jan sees a snake next-to him

12. This split between speakers needs further investigation. The judgements I got for (i)-(iii) vary from perfect to bad for each example:

(i) Jan₁ zag een man achter hem₁ staan.

Jan saw a man behind him stand

(ii) Jaap₁ duwde de kar voor hem₁ uit.

Jaap pushed the cart before him out

(iii) Egbert₁ legde het boek naast hem₁.

Egbert laid the book next-to him.

Also, for most speakers, both sentences (i) and (ii), but not (iii) are greatly improved if one uses the clitic 'm instead of the full pronoun.
(47b) *Max$_i$ praat met hem$_i$.
            Max speaks with him

We can conclude that Reinhart & Reuland's theory doesn't seem to handle the data involving PPs that are problematic for binding theory in a satisfactory way.

3.2 An Alternative Analysis of Dutch Reflexives and Pronouns in PPs

Let us first look at zich and zichzelf in PPs. In most PPs, reflexivity is asserted, that is, a non-reflexive is possible instead of the reflexive. Thus, the data in (52) and (53) are as expected:

(52)a Jan wijst me aan Leonie toe.
       Jan assigns me to Leonie (PART)

b Jan$_i$ wijst me aan zichzelf$_i$/??zich$_i$ toe.
       Jan assigns me to SELF SE (PART)

(53)a Jan spreekt namens de vereniging/zichzelf/*zich.
       Jan speaks on behalf of the association/SELF/SE

b Marie zag iedereen behalve Peter/zichzelf/*zich.
       Marie saw everybody except Peter/SELF SE

However, the facts in (54) are unexpected:

(54)a Jan legt het boek naast mij/zich/?*zichzelf.
       Jan lays the book next-to me/SE/SELF

b Marie verstopte de fles achter jou/zich/?*zichzelf.
       Marie hid the bottle behind you/SE/SELF

In (54) a non-reflexive is possible as the object of the
preposition, but nonetheless *zichzelf* is not good (unless it is contrastively focused), and *zich* is. Furthermore, if we now look at the examples in (52-54) with respect to focus, it turns out that not all examples behave as expected. The data in (55) are not surprising. However, in (56), the use of *zich* is, unexpectedly, not improved by focusing a constituent other than the reflexive:

(55)a  **Jan** wijst me aan *zich_1_* toe, niet *Wim_13_*.  
Jan assigns me to SE (PART) not Wim
Jan assigns me to himself, not Wim.

b Jan wijst me aan zich *toe, in plaats van ons uit* *elkaar* 
te houden.
Jan assigns me to SE (PART) instead of us from each other to keep
Jan assigns me to himself, instead of keeping the two of us apart.

(56)a  *Jan* spreekt namens zich, niet *Wim_3_*.  
Jan speaks on-behalf-of SE not Wim

b  *Marie* zag iedereen behalve zich, niet *Joke_3_*.  
Marie saw everybody except SE not Joke

The facts in (57), like those in (55), are as expected:

---

13. In (55a) *Wim* cannot be interpreted as contrasting with *me* because *me* is a weak pronoun which cannot be focused.
(57)a Jan legt het boek naast **zichzelf**, niet naast zijn **teddybeer**.
Jan lays the book next-to SELF not next-to his teddybear

b Marie verstopte de fles achter **zichzelf**, in plaats van achter de **piano**.
Marie hid the bottle behind SELF instead of behind the piano

In (56) we would expect **zich** to be good, or at least better than in (53), given that a constituent other than the reflexive is contrastively focused. However, **zich** in (56) is just as bad as it is in (53).

Besides the problems that we have seen in the examples above, there is another problem with anaphora in PPs. Sentences like (54), also known as "snake"-sentences, exemplify this problem. As we have seen in the previous section, some speakers find pronouns acceptable in this environment:

(58)a Jan legt het boek naast **zich/hem**. (certain dialects)
Jan puts the book next-to SE/him

b Mieke ziet een slang achter **zich/haar**. (certain dialects)
Mieke sees a snake next-to SE/her

These dialects thus seem to be like English in that respect. In standard Dutch, pronouns are more or less strongly rejected in this position:

(59)a Jan legt het boek naast **zich/??hem**. (standard Dutch)
Jan puts the book next-to SE/him

b Mieke ziet een slang achter **zich/??haar**. (standard Dutch)
Mieke sees a snake behind SE her
The problem is that reflexives and pronouns are usually considered to be in complementary distribution, reflexives being the appropriate choice when the antecedent is local and pronouns when the antecedent is farther away.

To summarize what we have discussed so far, we have three problems:

1. Why is the distribution of *zich* and *zichzelf* not the same in *naast*-type PPs as in other PPs?
2. Why is *zich* still extremely bad in the examples with prepositions of the *namens*-type, where a constituent other than the reflexive is focused?
3a. How is it possible that reflexives and pronouns occur in the same position in constructions with *naast*-type prepositions (at least for some speakers)?
3b. Why do those speakers not accept both pronouns and reflexives in the structurally similar position in *namens*-type PPs?

The answer to the first question seems to have to do with non-contrastive sentential stress, i.e. the natural intonation of a sentence without a particular focus (see Gussenhoven (1984) for more background on sentential stress, or Rullmann (1988) for a summary). It turns out that, if we compare the stress patterns of sentences containing *naast*-type PPs (this type includes all locative/ directional PPs) to those of sentences containing other PPs, we find a difference:

(60)a Jan denkt aan MIJ.
    Jan thinks about ME
b Jan spreekt namens MIJ.
    Jan speaks on-behalf-of ME
c Jan legt het boek NAAST mij.
    Jan puts the book NEXT to me
d Jan legt het boek naast de KLOK.
    Jan puts the book next to the CLOCK
The point is that locative/directional prepositions, but not the other prepositions, get non-contrastive stress if they're followed by an anaphor, but not if they're followed by a full noun. This has also been noted by Koster (1987) and Rullmann (1988). Koster (1987) proposed a *zelf*-deletion rule, applying at PF, for reflexives that follow a locative/directional preposition. I will adopt this rule, given in (61):

(61) P-pro **self** → P-pro where P is non-contrastively stressed

This rule states that if the object of a non-contrastively stressed preposition is a pronominal form with **zelf**, **zelf** has to be deleted at PF.

I would like to come back now to the verbs with a separable (prepositional) prefix, discussed in section 2.2, because it seems that the presence of such a prefix interacts with the **zelf**-deletion rule. Recall that when a constituent other than the reflexive is focused, those verbs seem to allow asserted **zich** as a direct object a little more easily than verbs that do not have a separable prefix. If we consider asserted reflexivity in prepositional objects of verbs with a separable prefix, we see that **zich** is somewhat better there than in prepositional objects of verbs that don't have such a prefix (even without a special focus):

14. This last group of prepositions, the **namens**-type prepositions, is also characterized by the fact that they cannot select a so-called "R-pronoun" (a [- human] pronoun which precedes the preposition), which the other two groups of prepositions can (cf. van Riemsdijk 1978):

(i) Jan legt het boek naast de klok. Hij legt het boek ernaast. Jan puts the book next-to the clock he puts it R-next-to Jan puts the book next to the clock. He puts it next to it.

(ii) Jan denkt aan de vereniging. Hij denkt eraan. Jan thinks about the association he thinks R-about

(iii) Jan spreekt namens de vereniging. *Hij spreekt ernamens. Jan speaks on-behalf-of the association He speaks R-on-behalf-of
(62)a Jan stuurde een brochure aan zichzelf/*zich.
    Jan sent a pamphlet to SELF SE
b Jan stuurde een brochure aan zichzelf/??zich toe.
    Jan sent a pamphlet to SELF SE (PART)

The verbs *sturen and *toesturen are practically synonymous in these examples, so the difference in the acceptability of *zich in these sentences really seems to have to do with the presence or absence of the prefix. We can also find examples with non-goal prepositional objects, in which we obtain the same results:

(63)a Jan viel in tijden van nood op zijn ouders/zichzelf terug.
    Jan fell in times of emergencies on his parents/SELF back
b ??Jan viel op zich terug.
    Jan fell on SE back
    Jan fell back on himself.

(64)a Mieke geeft hoog van haar vader/zichzelf op.
    Mieke gives highly of her father/SELF (PART)
    Mieke speaks highly of her father/herself.
b ?Mieke geeft hoog van zich op.
    Mieke gives highly of SE (PART)
    Mieke speaks highly of herself.

*zich in (62b), (63b) and (64b) is not perfect; zichzelf is better. But these examples are more acceptable than examples with the same prepositions but without a particle following *zich (cf. also (62a)):

(65)a Jan moppert op zichzelf/*zich.
    Jan grumbles against SELF/SE
b Mieke houdt van zichzelf/*zich.
    Mieke holds of SELF/SE
    Mieke loves herself.
One might be led to believe that these facts can be explained by saying that sentence-final elements must be stressed in Dutch. This would preclude *zich*, but not *zichzelf*, in sentence-final position. However, the examples in (66) falsify such a claim:

(66)a *Jan heeft op zich gemopperd.
    Jan has on SE grumbled
    Jan has grumbled against himself.

b *Jan heeft een brochure aan zich gestuurd.
    Jan has a pamphlet to SE sent
    Jan has sent a pamphlet to himself.

Verbal prefixes can be non-contrastively stressed. Thus, the fact that *zich* is slightly better when the verb has a separable prefix, can be accounted for if we assume that the separable prefix is reanalyzed as part of the PP. It then forms a complex preposition or, more accurately, circumposition, with the preposition selected by the verb. As such, it might trigger application of the *zelf*-deletion rule. So, in the case of the verb *toesturen*, the initial structure, given in (67a), is reanalyzed as the structure in (67b), and then *zelf*-deletion applies as in (67c)(only the relevant categories are given):

(67)a Jan [\textsubscript{v}stuur\textsubscript{t\textsubscript{1}}] een boek [\textsubscript{pp}aan zichzelf] [\textsubscript{v}toe t\textsubscript{1}]
    b Jan [\textsubscript{v}stuur\textsubscript{t\textsubscript{1}}] een boek [\textsubscript{pp}aan zichzelf toe\textsubscript{j}] [\textsubscript{v} t\textsubscript{j} t\textsubscript{1}]
    c Jan [\textsubscript{v}stuur\textsubscript{t\textsubscript{1}}] een boek [\textsubscript{ppp}aan zich toe\textsubscript{j}] [\textsubscript{v} t\textsubscript{j} t\textsubscript{1}]

There is, however, a problem. Contrary to what we expect, *zich* is not perfect in these examples. *Zich* in locative/directional PPs, which has undergone *zelf*-deletion, is perfect. However, *zich* is not nearly as good in the cases of *zelf*-deletion after reanalysis, as in (62b) and (67b). I would like to argue that this does not have to do with the fact that in these cases there has been reanalysis. Rather, it seems that it has to do with the fact that the non-
contrastive stress is on the postposition and not on the preposition. Consider these examples:

(68)a Jan kijkt om zich heen.
    Jan looks around SE away
    Jan looks around him.

b Jan sleept een zware tas achter zich/?*zichzelf aan.
    Jan drags a heavy bag behind SE SELF to
    Jan drags a heavy bag after him.

c Jan heeft een koe achter zich/?*zichzelf aan.
    Jan has a cow after SE SELF to
    Jan has a cow (running) after him.

In this example, we find genuine circumpositions, i.e. circumpositions that are not formed by reanalysis (e.g., heenkijken and aanhebben do not exist as verbs). The examples in (68) suggest that zelf-deletion applies here just as with simple locative/directional prepositions. As expected, zichzelf is only good in those sentences if contrastively focused. It needs to be said that in the case of circumpositions, non-contrastive stress is typically on the postposition, not on the preposition. So it seems that there is nothing special about zelf-deletion triggered by a non-contrastively stressed postposition. As in the case of non-contrastively stressed prepositions, zich is perfect and zichzelf is only good if contrastively focused. However, this is not generally true, as is illustrated in (69):

(69) Jan stuurde iemand achter ??zich/’om’zichzelf aan.
    Jan sent someone behind SE SELF to
    Jan sent someone after himself.

In (69), we find the same circumposition as in (68b,c), but used with a different verb. The crucial difference between (68) and (69) is that, in fact, reflexivity in (68) is presupposed, i.e. the
reflexive cannot be replaced by a non-reflexive. Hence, \textit{zich} is expected to be perfect and \textit{zichzelf} is expected to only be good if contrastively focused (in which case reflexivity is actually asserted). No \textit{self}-deletion applies when reflexivity is presupposed, because there we don't have \textit{zichzelf} in the first place. In (69), reflexivity is asserted, i.e. a non-reflexive is possible in the PP there. \textit{Zich} here is marginal, just like \textit{zich} in the reanalyzed PP \textit{aan zich toe}. \textit{Zichzelf} is perfect in this context, again just as in the reanalyzed PP \textit{aan zichzelf toe}. So, it seems that, for some reason that is not clear to me, the \textit{self}-deletion rule doesn't apply so well if it is triggered by a non-contrastively stressed postposition, and may even fail to apply altogether (which accounts for the possibility of \textit{zichzelf}).

Returning to the three questions addressed above, we can see that the answer to the first question contains the answer to the second question. In PPs, either the preposition or its object has to be non-contrastively stressed. Prepositions of the \textit{namens}-type cannot be non-contrastively stressed, and neither can \textit{zich}. Therefore, prepositions of the \textit{namens}-type can not occur with \textit{zich}, or for that matter, with any pronominal element that cannot be non-contrastively stressed. One might expect that \textit{zich} as the object of \textit{namens} gets better if the verb has a separable prefix. In that case, this prefix, reanalyzed as part of the PP, could take the stress. This turns out not to be true:

(70)a Jan sprak ons namens zichzelf/*zich toe.
   Jan spoke us on-behalf-of SELF/SE (PART)
   Jan spoke to us on behalf of himself
b Mieke juichte iedereen behalve zichzelf/*zich toe.
   Mieke cheered everyone except SELF/SE (PART)
   Mieke cheered at everyone except herself.

However, this is not really a problem, because studies of reanalysis seem to show that reanalysis does generally not occur
with adjuncts. Hence, stressable *toe* is not reanalyzed as part of the PP, and the badness of *zich* in the examples in (70) is expected. So, in answer to the second question, we can conclude that the rule which states that, in a PP, either the preposition or its object needs to be stressed, weighs heavier than the influence of focus on the acceptability of *zich* when reflexivity is asserted.

Let us now turn to the last question. Why, in certain dialects, can both pronouns and reflexives occur in the object position of some prepositions, with an antecedent within the same CP but outside the PP? And why is this not possible in all PPs? In fact, there are other constructions in Dutch where *zich* and pronouns are not in complementary distribution:

(71)a Jan hoorde mij hem/?zich uitlachen.
   Jan heard me him SE ridicule
   Jan heard me ridicule him.
   b Jan hoorde mij om hem/zich lachen.
   Jan heard me at him SE laugh
   Jan heard me laugh at him

In section 4, it will be argued that in the case of these constructions the bound element and its antecedent are at "medium" distance of each other, and that both *zich* and pronouns can be bound by an antecedent that is at medium distance. At first sight, one might be tempted to say that in "snake"-sentences, the binder and the bindee are also at medium-distance. However, this is hard to maintain, for two reasons. In the first place, there are other prepositions which do not allow pronouns as their object when these are bound inside the same CP. It is hard to see why the binding relations in (72) would be local and those in (73) medium distance:
(72)a Jan houdt een toespraak namens zichzelf/*zich/*/hem.
   Jan holds a speech on-behalf-of SELF/SE/him
   b Jan praat over zichzelf/*zich/*/hem.
   Jan talks about SELF/SE/him

(73)a Jaap ziet een slang naast zich/hem.
   Jaap sees a snake next-to SE/him
   b Jaap kijkt achter zich/hem.
   Jaap looks behind SE/him

Notice that a Small Clause analysis for (73a), which would make it possible to say that the distance between the binder and the bindee is longer in (73a) than in (72), doesn't work. Depending on how it is defined, it is either not feasible for (73b), or it also applies to (72b). In either case, it wouldn't solve the problem. The second reason for not saying that (73) is an instance of medium distance, and (72) of local binding relations, is that not all speakers of Dutch accept the pronouns in (73). In the case of medium distance binding, however, all speakers accept pronouns. As far as speakers have a problem at all with medium distance binding, it always involves the reflexive and not the pronoun.

How can we account for the facts in (72) and (73) without saying that there is some difference in distance between the binder and the bindee? Koster (1987, see also Rullmann 1988) proposes an interesting solution. He argues that certain dialects of Dutch have a third reflexive besides zich and zichzelf, namely hemzelf (or any other pronoun + zelf). This reflexive looks the same as the intensified pronoun (cf. the section on logophors) and that's why it is hard to identify this reflexive. However, speakers who accept pronouns in "snake"-sentences also accept sentences like (74):

(74) Jan spreekt namens hemzelf.
   Jan speaks on-behalf-of himself
Hemzelf here is not the intensified pronoun hem, because nobody accepts (75), not even when the pronoun is stressed:

(75) *Jan\textsubscript{i} spreekt namens hem\textsubscript{i}.

In the dialects that have it, the occurrence of reflexive hemzelf is more restricted than that of zichzelf. Roughly, we can say that it occurs mostly in adjunct PPs and as the argument of non-verbal predicates. Like zichzelf, hemzelf has to be locally bound. I will not discuss this reflexive as such any further here, but see Koster (1987) for more details.

Now, the occurrence of hem in "snake"-sentences like (73) is straightforward. It is not the pronoun hem, but the reflexive hemzelf, which has undergone zelf-deletion, just like zich in those sentences is underlyingly zichzelf. In PPs where the preposition cannot be non-contrastively stressed, zelf-deletion does not apply and we expect the full reflexive hemzelf. This prediction is borne out, as illustrated in (74) above. This answers question (3b) about the impossibility of (what looks like) a pronoun in some PPs. Another prediction is that we find hemzelf in these dialects when the reflexive is focused. This is correct; speakers of these dialects will either use hemzelf or stressed hem in order to focus hem in "snake"-sentences\textsuperscript{15}. As expected, the speakers of standard Dutch, who do not accept hem in these constructions do also not accept the stressed hem or emphatic hemzelf. Under this account then, we can maintain that the binding relation in these sentences are local. The fact that not all speakers accept hem in these sentences follows from the fact that only some dialects have the reflexive hemzelf. Koster's analysis might also account for English

\textsuperscript{15} Notice that this implies that the zelf-deletion rule applies before focus-assignment. I will assume that focus-assignment in Dutch can be realized in two ways; either be stressing the focused element, or by adding zelf to it. We then need to say also that zichzelf cannot get another zelf added to it and has to be stressed if focused, or that zichzelf + zelf = zichzelf.
"snake"-sentences. Thus, *him* in these sentences is actually *himself* which has undergone *self*-deletion. It can then be explained why some prepositions select *himself* and others *him*, because it turns out that just like in Dutch, the former group of prepositions cannot be non-contrastively focused, while the latter can.

All three questions above, concerning reflexives and pronouns in PPs, have now been answered. We have seen that if we assume the *self*-deletion rule and the existence of the reflexive *hemzelf* in certain dialects of Dutch, the analysis proposed in section 2 for the distribution of *zich* and *zichzelf* can be maintained for reflexives in PPs.

4 Locality Conditions and the Distribution of *zich* and *zichzelf*

So far, we have discussed the distribution of *zich* and *zichzelf* in positions where they are bound by a local antecedent. However, reflexives do sometimes occur in positions where they are bound by a non-local antecedent. If we look at the data, we find three situations: constructions in which only reflexives are grammatical; constructions in which both reflexives and pronouns are grammatical; and constructions in which only pronouns are grammatical. Therefore, I would like to propose that three levels of distance need to be distinguished in order to account for the distribution of reflexives and pronouns in Dutch: local, medium distance and long distance. This idea is not new, although in the literature one often only finds the distinction between local and long distance binding relations\(^{16}\). Koster & Reuland (1991) also mentioned that in the case of many languages it is necessary to divide what is called "long distance" into "medium distance" and "(truly) long distance". The following examples illustrate this tripartition:
(76)a Jan lacht zichzelf/*zich/*/hem uit.  
Jan ridicules SELF/SE/him (PART)  
Jan ridicules himself.  

b Jan lacht om zichzelf/*zich/*/hem.  
Jan laughs at SELF/SE/him  
Jan laughs at himself.  

c Jan hoorde zichzelf/*zich/*/hem lachen.  
Jan heard SELF/SE/him laugh  
Jan heard himself laugh.  

d Jan hoorde mij /*zichzelf/*zich/*hem uitlachen.  
Jan heard me SELF/SE/him ridicule  
Jan heard me ridicule him.  

e Jan hoorde mij om /*zichzelf/*zich/*hem lachen.  
Jan heard me at SELS/SE/him laugh  
Jan heard me laugh at him.  

f Jan hoorde dat ik /*zichzelf/*zich/*hem uitlachte.  
Jan heard that I SELF/SE/him ridiculed  
Jan heard that I ridiculed him.  

g Jan hoorde dat ik om /*zichzelf/*zich/*hem lachte.  
Jan heard that I at SELF/SE/him laughed  
Jan heard that I laughed at him.  

We know from section 2 that zich in (76a-c) is not excluded for locality reasons, but because reflexivity is asserted. Further, as discussed in section 3, *snake*-sentences are not instances of medium distance binding. (77) illustrates this. The crucial difference between (77a) and (77b) is that (77a) is only perfect in certain dialects, whereas (77b) is perfect for everyone:

16. For instance, the distinction I make between medium distance and long distance binding relations doesn't exist in Reinhart & Reuland's analysis. For them, all those cases are instances of long distance, and involve logophors. We'll see in this section, though, that their logophors do not at all form a homogeneous set, and that a more fine-grained locality system is needed in order to capture the distinction between logophors and non-logophoric elements that are not locally bound.
(77a) Jan₁ ziet een slang naast ?hem₁.
    Jan sees a snake next to him.

(77b) Jan₁ ziet een slang naast hem₁ liggen.
    Jan sees a snake next to him lie.
    Jan sees a snake lying next to him.

This suggests that the occurrence of hem in (77a) and (77b) cannot be accounted for in the same way and that we are dealing with two distinct phenomena here. It also shows that the presence of the infinitive plays a role in distinguishing between these two phenomena. The examples in (78), from Koster (1987:337) show that other tenseless clauses, such as small clauses with a nominal or adjectival predicate, are not environments for medium distance binding relations, because they only allow pronouns:

(78a) Jan₁ betreurde het schot op *zich₁/hem₁.
    Jan regretted the shot at SE him
    Jan regretted the shot at him.

(78b) Jan₁ achtte Marie verliefd op *zich₁/hem₁.
    Jan considered Marie in love with SE/him
    Jan considered Marie in love with him.

Compare (78a) with (79):

(79) Jan₁ liet Peter op zich₁/hem₁ schieten.
    Jan let Peter at SE him shoot
    Jan let Peter shoot at him.

We have seen three cases: sentences in which only reflexives can occur; sentences in which reflexives and pronouns can occur; and sentences in which only pronouns can occur. Thus, we can now define the three levels of distance:
the relation between a binder X and its bindee Y is local if
i. X and Y are in the same CP and
ii. if Y is in a tenseless\textsuperscript{17} clause Z and X isn't in Z, Y is the
subject of Z

a binder X and its bindee Y are in a medium distance relation if

Y is in an infinitival clause Z, X isn't in Z and Y is not the
subject of Z.

a binder X and its bindee Y are in a long distance relation if

i. there is an intervening CP between X and Y, or
ii. Y is in a small clause Z, X isn't in Z and Y is not the subject
of Z

According to these definitions, the distances between the following
binder-bindee pairs are as follows (only the relevant projections
are given):

\text{(81)} ...P...[\text{cp}...Q...R...[\text{ic} S [...]...T...]]

...P...[\text{cp}...Q...R...[\text{sc} U [...]...V...]]

<table>
<thead>
<tr>
<th>binder</th>
<th>bindee</th>
<th>relation</th>
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<tbody>
<tr>
<td>Q</td>
<td>R,S,U</td>
<td>local</td>
</tr>
<tr>
<td>R</td>
<td>S,U</td>
<td>local</td>
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<tr>
<td>S</td>
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<td>local</td>
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<tr>
<td>U</td>
<td>V</td>
<td>local</td>
</tr>
<tr>
<td>Q,R</td>
<td>T</td>
<td>medium distance</td>
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<tr>
<td>Q,R</td>
<td>V</td>
<td>long distance</td>
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<tr>
<td>P</td>
<td>Q,R,S,T,U,V</td>
<td>long distance</td>
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\textsuperscript{17}. Tenseless clauses include both infinitival clauses and small clauses.
The question that arises now is whether the distribution of *zich* and *zichzelf* works in the same way when these reflexives are bound at medium distance as when they're bound locally. This doesn't seem to be the case. When bound at medium distance, *zichzelf* is only possible if the reflexive is focused, although many speakers prefer to use the stressed pronoun in that case. Otherwise, only *zich* is a possible reflexive. (It must be said, though, that some speakers strongly prefer to use the pronoun.) Still, reflexivity is asserted in these cases because it is possible to have a non-reflexive instead of the reflexive:

(82)a Jan hoorde mij Marie uitlachen.
   Jan heard me Marie ridicule
   Jan heard me ridicule Marie.

b Jan hoorde mij om Peter lachen.
   Jan heard me at Peter laugh
   Jan heard me laugh at Peter.

It seems that basically, only *zich* is allowed in medium distance relations, and that *zichzelf* only comes in as a contrastively focused version of *zich*. The following example shows that *zichzelf* is not allowed in the case of non-contrastive stress:

(83) Janₐ liet mij namens zichₐ spreken.
    Jan let me on-behalf-of SE speak
    Jan let me speak on behalf of him.

In fact, in this example stress is forced upon *namens*. This shows that the rule against non-focused *zichzelf* in medium distance environments weighs heavier than the rule that prevents *namens*-type prepositions from being non-contrastively stressed. I will assume that *zichzelf* in medium distance binding environments is actually *zich* + the intensifier *zelf* (which we also find with other nominals, such as full DPs, cf. footnote 3). Otherwise, it is hard
to explain why *zichzelf* is only allowed in medium distance environments when it is contrastively focused\(^\text{18}\). If we say that *zich*, but not *zichzelf*, can be bound at medium distance, we can account for the fact that most of the factors that play a role in the distribution of *zich* and *zichzelf* when they're locally bound (assertion/preusupposition of reflexivity, +/- complex predicate, etc.), don't seem to play a role here. A reason why *zich* can be bound at a longer distance than *zichzelf* might be that *zich* is necessarily bound by the subject of the verb. In other words, its antecedent is more easily recoverable than that of *zichzelf*, which might therefore need to be closer to its antecedent. Neither *zich* nor *zichzelf* is ever bound at long distance, i.e. beyond an intervening CP (cf. section 5).

We can now summarize the distribution of *zich* and *zichzelf* as follows:

I. If the antecedent of the reflexive is local, the distribution of *zich* and *zichzelf* is strongly, but not solely determined by presupposition and assertion of reflexivity. In the case of presupposed reflexivity (whether lexical or pragmatic), *zich* is the appropriate reflexive. In the case of asserted reflexivity, other factors also play a role in the choice between *zich* and *zichzelf*, and the *zelf*-deletion rule changes *zichzelf* into *zich* in certain environments.

II. If the antecedent of the reflexive is at medium distance, *zich* is the appropriate reflexive, to which the emphatic-marker *zelf* is added in case the reflexive needs to be contrastively stressed. In the next section, we will look at long distance binding relations.

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\(^{18}\) I will assume that more generally, *zichzelf* is in fact *zich* + the intensifier *zelf* in all cases where *zichzelf* is only allowed when contrastively focused. This includes *zichzelf* in the "metalinguistic" sentences where presupposed reflexivity has been forced into asserted reflexivity by contrastively focusing the reflexive, and *zichzelf* in locative/directional PPs. In the latter case, we could say that one starts out with "normal" *zichzelf* because reflexivity is asserted, then we get *zich* because the *zelf*-deletion rule applies, and then *zichzelf* because the intensifier *zelf* is added.
Any theory of binding states in some way or other that only pronouns can be bound at long distance. However, it is also acknowledged that there seems to be an exception to that rule, namely logophors. It is hard to give an accurate definition of logophors, because the term has been used for various phenomena, some of which are not well-defined themselves. In binding theory, logophors are usually considered to be (truly) long distance or free reflexives that can occur in certain environments to express a particular point of view, or focus. They can typically be replaced by pronouns. Logophors pose a serious problem for theories of binding, because most of these include some variant of Condition A in standard binding theory (Chomsky 1981), which states that reflexives need to be bound locally. An example of a logophor is given in (84):

(84) Physicists like yourself are a godsend. (Ross 1970)

We have seen that one of the problems in Reinhart & Reuland's analysis is that they are forced to say that reflexives in non-argument PPs, as in "snake"-sentences, are logophors, by virtue of the fact that in that case neither Condition A nor Condition B applies. The same is true of *zich* as the subject of a tenseless clause, which is especially surprising because they do not consider *zichzelf* in that position to be a logophor (cf. the Münchhausen-examples in (23), section 2). This is a problem because it is usually assumed that Dutch only allows SELF-logophors. And, contrary to "traditional" logophors, replacement by a pronoun is not perfect in the tenseless clause cases, and not perfect for all speakers in the "snake"-sentences. In fact, what Reinhart & Reuland call logophors include locally bound and medium distance bound reflexives. In this section, I will examine what truly long
distance anaphora can be found in Dutch and how they behave with respect to locality conditions on binding.

5.1 Logophors in Dutch

In this section, I would like to argue, following v.d.Leea (1980) that, at least in Dutch, logophors are in fact emphasized pronouns, and not SELF-reflexives. Hence, they constitute no problem for the condition of binding theory which requires that pronouns be bound non-locally. Dutch differs from e.g. English, in that Dutch third person pronouns emphasized by the intensifier zelf look different from third person SELF-reflexives:

(85) 3d person pronoun masc. (acc.)  hem
3d person pronoun fem. (acc.)  haar
3d person emphasized pronoun masc. (acc.)  hemzelf
3d person emphasized pronoun fem. (acc.)  haarzelf
3d person SELF-reflexive masc./fem. (acc.)  zichzelf

The morphology of English and many other languages is misleading because the SELF-reflexive and the intensified pronoun take the same morphological form\(^\text{19}\). This can hardly be a coincidence in all those languages, but the issue here is that we need to distinguish between emphasized pronouns and reflexives. In (86) below, various English constructions involving third person logophors are given. In (87) I give the corresponding Dutch sentences. The Dutch examples show that in all these cases, the reflexive zichzelf (or zich) is not allowed; one has to use the emphasized pronoun:

\(^\text{19}\) This is also true of the first and second person SELF-reflexives and intensified pronouns in Dutch. This is probably the reason why the evidence from Dutch that logophors are not reflexives hasn't caught many people's attention. Many examples of logophors, especially those where there is no antecedent in the sentence at all, involve first or second person anaphora.
(86)a The queen said that Max had invited the prince and herself.
  b Joe didn't know whether the woman meant Alex or himself.
  c Paul thinks that Bill is smarter than himself.
  d Jerry claimed that the letter concerned only himself.
  e Laura claimed that it concerned both Jerry and herself.
  f It wasn't that they wanted her to go, but it would be better for herself.

(87)a De koningin zei dat Max de prins en haarzelf/*zichzelf had uitgenodigd.
  the queen said that Max the prince and her-self/SELF had invited
  b Joe wist niet of de vrouw Alex of hemzelf/*zichzelf bedoelde.
  Joe knew not whether the woman Alex or him-self/SELF meant
  c Paul denkt dat Bill slimmer is dan hijzelf/*zichzelf.
  Paul thinks that Bill smarter is than he-self/SELF
  d Jerry beweerde dat de brief alleen hemzelf/*zichzelf aanging.
  Jerry claimed that the letter only him-self/SELF concerned
  e Laura beweerde dat het zowel Jerry als haarzelf/*zichzelf aanging.
  Laura claimed that it as much Jerry as her-self/SELF concerned
  f Het was niet omdat zij wilden dat ze wegging, maar het was beter voor haarzelf/*zichzelf.
  it was not because they wanted that she left but it was better for her-self/SELF

The intensifier self/zelf that is marked on the pronouns can show up in for instance conjunctions and disjunctions, comparatives, after quantifiers like only, both. What these environments have in
common, is that they all trigger some kind of emphasis. Sometimes, logophors express a certain point of view, as in (88), with the corresponding Dutch sentences in (89):

(88)a It angered John that Mary should have the egotism to try to attract a man like himself. (ex. from Zribi-Hertz 1989)  
b It was unlikely, he thought, that she would betray himself as well.

(89)a Het maakte John boos dat Mary het egotisme had om een man als hijzelf/*zichzelf te proberen te verleiden. it made John angry that Mary the egotism had to a man as he-self/SELF to try to seduce  
b Het was onwaarschijnlijk, dacht hij, dat zij hemzelf/*zichzelf ook zou verraden. it was improbable thought he that she him-self/SELF also would betray

(89) also shows that these sentences involve pronouns and that they are not special in any sense other than triggering emphasis or insisting on a certain point of view. In fact, if we look at constructions similar to those exemplified in (86)/(87), but with the antecedent closer to the anaphor, we do get zichzelf in Dutch and pronouns can no longer appear in this position\(^\text{20}\):

(90)a The queen invited the prince and herself.  
b Did Joe mean Alex or himself?  
c Paul considers Bill smarter than himself.  
d She found it better for herself to leave.

\(^{20}\). In fact, in the Dutch examples, hemzelf/haarzelf is not bad for all speakers. This is as expected, since this is true of the speakers of the dialects discussed earlier, which have a reflexive that has the form of a pronoun + zelf. These dialects are as misleading as English when it comes to distinguishing intensified pronouns from reflexives.
(91)a De koningin nodigde de prins en zichzelf/*haarzelf uit.
   the queen invited the prince and SELF/ her-self (PART)
   b Bedoelde Joe Alex of zichzelf/*hemzelf?
      meant Joe Alex or SELF him-self
   c Paul acht Bill slimmer dan zichzelf/*hemzelf.
      Paul considers Bill smarter than SELF/him-self
   d Zij vond het beter voor zichzelf/*haarzelf om weg te gaan.
      She found it better for SELF/her-self to away to go

In this section we have seen that evidence from Dutch suggests
that so-called long-distance reflexives are actually intensified
pronouns. Therefore, they do not pose a problem for binding theory
conditions which state that reflexives should be bound locally or
at medium distance and that pronouns should be bound non-locally.
Their occurrence is limited to positions where the pronoun is
intensified or otherwise special in the discourse, as in the case
of so-called point-of-view logophors.

Languages that have SE-logophors, like Icelandic (cf.
Thráinsson 1976a,b and Maling 1982), are problematic for this
account, but in these languages the behavior of SE-anaphors is
different from that of their counterparts in other languages anyway
(e.g. even locally bound SE-anaphors in Icelandic are not always
in complementary distribution with pronouns). These languages need
to be looked at in more detail, but do not necessarily pose a
problem for the present proposal.

Is it a coincidence that in many languages, the intensified
pronoun has the same form as the SELF-anaphor? In fact, this is not
so surprising in languages that lack a SE-anaphor. Many languages
form the SELF-anaphor with a pronoun and an element like zelf or
with a SE-anaphor and an element like zelf (see Reuland & Koster
1991 for an overview). In languages that simply lack a SE-anaphor,
the SELF-reflexive will have to be based on the pronoun, so the
SELF-reflexive will have the same form as the intensified pronoun.
6 Conclusion

In this paper, I have shown that there are some serious problems with Reinhart & Reuland's analysis of reflexivity. I have tried to overcome these problems by accounting for the data in a different way. We have seen that binding conditions based on locality are necessary, but not sufficient. In the case of local reflexivity, it is important to make a distinction between asserted and presupposed reflexivity. However, it has become clear that the distribution of locally bound \textit{zich} and \textit{zichzelf} cannot be accounted for in terms of a simple parameter. Rather, it is determined by the interaction of various factors. In the last section, I have shown that truly long distance reflexives do not exist in Dutch and might not exist in other languages either. The following table gives a rough overview of how the distribution of \textit{zich} and \textit{zichzelf} works:

(92) 1. what kind of binding relation do we have?

- \textbf{local}:
  - if presupposed: \textit{zich}
  - if asserted: \textit{zichzelf}, but \textit{zich} may be more or less acceptable if another constituent is focused; if the predicate is complex; under certain semantic, phonological and pragmatic conditions (cf. section 2.2)

- \textbf{medium}: \textit{zich} or pronoun

- \textbf{long}: pronoun

2. relevant phonological rules:
   - focus is realized by stressing the element (unless it cannot be stressed, as in the case of \textit{zich}) or by adding \textit{zelf} (and \textit{zelf} added to \textit{zichzelf} yields \textit{zichzelf})
   - \textit{zelf}-deletion is triggered when a reflexive occurs in a PP with a non-contrastively stressed \textit{preposition}
It is worth recalling that *zelf* is an emphatic marker that also exists by itself, which is used to emphasize an DP:

(93)a Ik heb de man zelf gezien.
   I have the man ZELF seen
   I have seen the man myself/I have seen the man himself
b Ik heb hem zelf gezien.
   I have him ZELF gezien
   I have seen him myself/I have seen him himself

These sentences can be disambiguated by raising *zelf* to a higher position, such that only one DP precedes it (*zelf* can only intensify DPs that precede it) or, in written language, by writing *zelf* together with the pronoun it modifies:

(94)a Ik heb zelf de man gezien.
   I have ZELF the man seen
   I have seen the man myself/*himself.

b Ikzelf heb hem gezien.
   I ZELF have him seen.
   I have seen him myself/*himself

c Ik heb hemzelf gezien
   I have himZELF seen
   I have seen him *myself/*himself

There also exists an emphatic adverb *zelfs*, meaning "even".

It is quite surprising to see that in Dutch dictionaries, *zichzelf* is not an entry. According to the dictionaries, *zichzelf* is only well-formed in a few idiomatic expressions, and otherwise one should use *zichzelf*. This doesn't reflect practice at all, but it suggests that, historically, *zichzelf* has evolved from the reflexive *zich* with the emphatic-marker *zelf*. It would be interesting to see if in an earlier stage of Dutch, sentences as in (95a) below can be found, with a SE-reflexive asserting reflexivity. If so, it is possible that *zichzelf* evolved from combined uses of *zich* and *zelf* as in (95b).

66
(95)a De man bewondert zich.
   the man admires SE
b De man bewondert zich zelf.
   the man admires SE SELF

A question that arises, is whether English had a SE-anaphor that was lost before it could form a stronger variant was with self, or whether it never had a SE-anapor at all. In middle English, pronouns could actually be bound locally:

(96) He₁ cladde hym₁. (the example is from Koster 1987: 326)
   He dressed himself

It seems probable then that English SELF-reflexives are originally intensified pronouns, which lost their intensified meaning, and blocked the use of the simple pronoun, in local binding environments. Another question that arises is why English self can only be combined with acc./dat. case (the English default case) and not with nominative and genitive. (Dutch doesn't allow zelf with the genitive either; both languages have another form to express an intensified genitive):

(97)a Hijzelf had een goed idee.
   *Heself/₀He himself had a good idea.
b *Zijnzelf/₀Zijn eigen idee was beter.
   *Hisself/₀His own idea was better.

Many questions concerning reflexivity remain unanswered in this paper and are topics for future research. We have just seen that it might be very revealing to look at reflexivity more closely from a historical perspective. Another important question is what the semantics of zelf looks like, and what its relation is to possible alternatives (cf. asserted reflexivity) and focus.

Finally, it would be very interesting to see to what extent the analysis proposed here carries over to other languages.
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