

Good neighbors or far friends¹

Matching and proximity effects in Dutch Right Node Raising

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Abstract

This paper investigates in which respect, and to what extent the targets of RNR constructions need to be identical in the respective conjuncts. Based on an empirical study, it is observed that RNR is constrained by a condition that requires its target to have an identical form. Violations of this condition are acceptable for some, but only if the realized form corresponds to the agreement requirements in the final conjunct. These observations are discussed in the perspective of different theories about RNR. I argue in favor of a multidominance approach to RNR, suggesting that multivalued items are allowed only if they correspond to a single form. The preference for final conjunct forms in violations of this condition is related to the linear order, and explained as a proximity principle of Spellout.

1. Introduction

Right Node Raising (RNR) is the *backwards* conjunction reduction of right-peripheral material that is associated with the conjuncts of the coordinated structure it targets. Consider the following pair:

- (1) a. Ben zei dat ANNA_ en Erik beweerde dat ROOS
Ben said that Anna and Erik claimed that Roos
een huis gekocht had.
a house bought had-SG
'Ben said that Anna bought a house but Erik claimed that Roos
bought a house.'
- b. *Ben zei dat ANNA_ en Erik beweerde dat ROOS
Ben said that Anna and Erik claimed that Roos
samen een huis gekocht hadden.
together a house bought had-PL

The interpretation of the predicate *een huis kopen* ('to buy a house') in (1) is obligatorily distributive, and the singular agreement on the verb is due to the number features on the respective subjects of the coordinated clauses. This is illustrated by the ungrammaticality of plural agreement in (1b), and the impossibility of a collective reading of the predicate (here triggered by *samen*). The case of RNR in (3) contrasts with (2); a coordinated subject triggers plural agreement on the verb and the predicate is ambiguous for a collective and a distributive reading:

- (2) a. [Anna en Roos] kochten een huis.
Anna and Roos bought-PL a house
'Anna and Roos bought a house.'

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- b. [Anna en Roos] kochten samen/ elk een huis.
 Anna and Roos bought-PL together each a house.
 ‘Anna and Roos bought a house together/each.’
- (3) ANNA __, én/ en ook ROOS **kochten*/ *kocht* een huis.
 Anna and also Roos bought-PL bought-SG a house
 ‘Anna bought a house and Roos bought a house.’

If agreement on the verb depends on the respective subjects in the conjoined clauses in RNR, the question arises what happens when those subjects do not have identical features, i.e. if there is a mismatch between the conjuncts with respect to the target of RNR. For Dutch, the relevant features for subject-verb agreement are person (PERS) and number (NUM). The following examples (without judgments) illustrate a mismatching RNR target:

- (4) a. JIJ __, en ook je vriendIN **bent**/ **is** erg populair.
 You, and also your friend be:2SG be:3SG very popular.
 ‘You are very popular and also your friend is very popular.’
- b. Ben zei dat ANNA __, en Erik beweerde dat haar
 Ben said that Anna and Erik claimed that her
 ZUSSEN een huis gekocht **had**/ **hadden**.
 sisters a house bought have-SG have-PL
 ‘Ben said that Anna bought a house and Erik claimed that her sisters
 bought a house.’

In (4a) the target of RNR contains the finite verb *zijn* (‘to be’). Agreement in the first conjunct would yield a 2SG value on the verb, leading to the form *bent*, the value 3SG in the second conjunct gives rise to the form *is*. Similarly, in (4b) there is a mismatch between the respective values for NUM. Intuitively, there is a contrast between matching and mismatching examples of RNR, the latter being more marked than the first. The question is then, to what extent RNR is constrained by an identity condition.

The empirical part of this study is concerned with the existence of an identity condition in Dutch RNR and focuses on two subquestions: 1. to what extent mismatching RNR is acceptable, and 2. if there is a principled preference for either of the two possible forms. This is investigated by means of a small survey in which native speakers of Dutch were asked to rate the acceptability of both matching and mismatching examples of RNR. The theoretical part of this study relates the observed patterns to theories of RNR and agreement, which will be extended to a discussion of agreement relations in ATB and disjunctive coordination. Ultimately, the role of identity in RNR is described as a morphological filter on RNR constructions.

To provide a better foundation for the conditions that are tested, I start out with a brief discussion of the properties of RNR constructions and the role of identity in section 2. Section 3 describes the empirical study and the results. It will be observed that RNR is acceptable as long as the material it targets corresponds to a single form in the respective conjuncts, but that mismatching RNR where agreement is in accordance with the second conjunct is more acceptable than it is with the first conjunct. The theoretical implications of this identity condition and the apparent ‘proximity effect’ are topic to section 4, where I evaluate the results in the scope of different theories about the RNR. In section 5, the results are discussed in a broader empirical setting of proximity effects in disjunctive coordination. Section 6 concludes the paper.

2. Right Node Raising: the basics

2.1 Properties and theories

Let me first clarify the notation used in the data throughout this paper. ‘_’ indicates the location where material is left out in a conjunct, *italics* represent the target of RNR, and CAPS indicate prosodic pitch accent (see 2.2).

As suggested by its name, Right Node Raising applies to the right-periphery of conjoined clauses. The pair in (5) shows that this is actually a restriction on RNR, that is, reduction of material that is not right-peripheral in the respective conjuncts is ungrammatical:

- (5) a. *Anna bought _ toDAY, and Rose sold _ YESTerday *books*.
b. Anna bought _ toDAY _, and Rose sold _ YESTerday *the complete works of Charles Dickens*.

The grammaticality of (5b) in this case is due to English Heavy NP Shift (HNPS) which allows prosodically heavy NPs to move to the right edge of the clause (see also Wilder 1997 and Bachrach & Katzir (2009); for more on the interaction between RNR and extraposition in general, see Kluck & De Vries 2009). The exact mechanism of the periphery condition lies outside the scope of this paper. Note that the periphery condition does not imply that RNR targets the right part of the complete clause, i.e. it is possible for RNR to target conjuncts that are part of a coordinated clausal subject, such as in (6):

- (6) Dat Anna een APpel_, en Roos een baNAAN eet is
that Anna a apple and Roos a banana eat-3SG is
heel vreemd.
very strange
‘That Anna eats an apple and Roos eats a banana, is very strange.’

Apart from the periphery condition, RNR appears to be a rather unconstrained operation. The examples (7) – (8) show that RNR is not sensitive to islands, and that its target need not be a constituent.

- (7) Anna kent een vrouw die vanDAAG_, en Roos een
Anna knows a woman who today and Roos a
man die MORgen een *marathonloopt*.
man who tomorrow a marathon runs
‘Anna knows a woman who runs a marathon today and Roos knows a man who runs a marathon tomorrow.’
- (8) Ik heb een gerecht MET_, en jij een gerecht
I have a dish with and you a dish
ZONder *paddestoelen bereid*.
without mushrooms prepared
‘I prepared a dish with mushrooms and you prepared a dish without mushrooms.’

The backwards reduction of part of the relative clause in example (7) is an apparent violation of a complex NP island. In (8), the target of RNR is the object of a PP in the respective conjuncts *paddestoelen*, and the participle *bereid*, which obviously do not form a constituent.

Importantly, RNR constructions are associated with a particular intonation pattern. This is due to the presence of contrastively focused elements in both

conjuncts: the focused elements receive a pitch accent in both conjuncts, in the first this is a rising pitch followed by a pause (it could be depicted as ‘/_’), in the second the pitch has a normal rise-fall contour (‘/\’). Furthermore, each conjunct in an RNR configuration, is an independent intonational phrase (see Hartmann 2000:98). Notice that the target of RNR always directly follows the focused elements. It has been suggested in the literature that contrastive focus is the licenser of RNR (cf. Hartmann 2000 and Ha 2008). For the present purposes, I assume that its presence is obligatory at both the semantic and the phonological interface. At the semantic level, the contrasted elements must have identical sets of alternatives (see Rooth 1992). This is illustrated in (9):

- (9) a. Anna wilde Gisteren __, en Roos wilde vandaag
 Anna wanted yesterday and Roos wanted today
hardlopen.
 run
 ‘Anna wanted to run yesterday and Roos wanted to run today.’
- b. Anna wilde op de LOOPband __, en Roos wilde in
 Anna wanted on the threadmill and Roos wanted in
 het BOS *hardlopen.*
 the forest run
 ‘Anna wanted to run on the threadmill and Roos wanted to run in the forest.’
- c. ??Anna wilde Gisteren __, en Roos wilde in het
 Anna wanted yesterday and Roos wanted in the
 BOS *hardlopen.*
 forest run
 ‘Anna wanted to run yesterday and Roos wanted to run in the forest.’

Example (9a), *gisteren* (‘yesterday’) is contrasted with *vandaag* (‘today’); in (9b) *op de loopband* (‘on the threadmill’) with *in het bos* (‘in the forest’). Arguably, those have identical sets of alternatives. This is not the case in (9b) where *gisteren* is contrasted with *in het bos* (‘in the forest’), as a result the RNR construction is highly marginal.

The prosodic aspect of contrastive focus in RNR is discussed in detail in Hartmann (2000) and Féry & Hartmann (2005) for German, and Selkirk (2002) for English RNR. What is relevant for the present purposes, is that the specific intonation pattern as was sketched above, distinguishes (a.) from (b.) in (10) and (11):

- (10) a. Anna bewondert een VROUW __, en Roos een MAN *die*
 Anna admires a woman and Roos a man who
prachtig cello speelt.
 beautifully cello plays.
 ‘Anna admires a woman who plays the cello beautifully and Roos admires a man who plays the cello beautifully.’
- b. [Anna bewondert een vrouw] en [Roos een man die
 Anna admires a woman and Roos a man who
prachtig cello speelt].
 beautifully cello plays.
 ‘Anna admires a woman and Roos admires a man who plays the cello beautifully.’

- (11) a. Anna bewondert een VROUW __, en een MAN *die*
 Anna admires a woman and a man who
*muzikaal talent heeft/ *hebben.*
 musical talent have-3SG have-PL
 ‘Anna admires a woman who has musical talent and a man who has
 musical talent.’
- b. Anna bewondert [een vrouw en een man] *die*
 Anna admires a woman and a man who
*muzikaal talent *heeft/ hebben.*
 musical talent have-3SG have-PL
 ‘Anna admired a man and a woman who have musical talent.’

In the absence of pitch accents on *vrouw* and *man*, the antecedent associated with relative clause *die prachtig cello speelde* is just *een man*, and not both *een man* and *een vrouw* in (10b). In other words, only (10a) and (11a) involve RNR. Example (10b) is coordination at the sentence level and a relative clause that is only associated with the second conjunct object, and (11b) has a relative clause that is whose antecedent is a coordinated DP (hence triggering plural agreement on relativizer and the verb in the relative clause). These contrasts are crucial in the setup of the test described in section 3.

I close this introductory section by a short discussion of the different theories of RNR. In the literature, we can distinguish three kinds of approaches. The classic analysis is in terms of movement (a so-called *ex situ* approach), and is proposed in Ross (1967), Postal (1998) and more recently Sabbagh (2007). In this analysis, the target of RNR is moved in an across-the-board (ATB) fashion, and right-adjointed to the coordination. The grammaticality of (7) and (8) is an obvious obstacle for this type of approach: under standard assumptions on movement of a given α , α must be a constituent, and movement of α is constrained by islands. Like for leftward ATB movement, it is assumed that RNR does not violate the Coordinated Structure Constraint (CSC, see Ross 1967). That is, the fact that in this case movement takes place out of *both* conjuncts, is generally seen as an exception to this constraint (the ‘ATB-exception’ to the CSC). However, this also forces us to assume that we are moving two things, while we somehow end up with one at the surface. I return to this issue in 4.2.

The issues for the movement approach have led to two types of *in situ* analyses for RNR: ellipsis/PF-deletion and multidominance. Ha (2006/2007) argues that RNR has a lot of properties in common with ellipsis, such as lack of morphological identity, Vehicle Change effects and sloppy identity. In this proposal, RNR is licensed by an E-feature in the syntactic derivation, in the spirit of Merchant (2001). Hartmann (2000) proposes that RNR is PF-deletion under identity. There are two crucial differences between these approaches that will be relevant in the theoretical discussions later in this paper. The first concerns predictions with respect to identity of the elided/deleted material (no identity and strict identity), the second the level at which RNR is licensed (in syntax or at PF). The theories have in common the assumption that RNR is the reduction of material that is present in both conjuncts, i.e. in a case such as (10a), the relative clause *die prachtig cello speelt* is derived in two conjuncts, and reduced in the first.

By contrast, the multidominance approach to RNR assumes that the target of RNR is literally *shared* by the two conjuncts. Proponents for RNR in terms of multidominance are Wilder (1999/2008), De Vries (2005), Johnson (2007) and Bachrach & Katzir (2009). Under the assumption of sharing, the target of RNR is merged in one conjunct, and remerged in the second. For an example such as (10a), this means that there is only one relative clause, that is simultaneously part of the first and the second conjunct. It seems most plausible that an analysis in terms of

sharing implies a prediction of syntactic identity, but I discuss the possibility of ‘multivaluation’ in the context of multidominance in section 4.2.

To my knowledge, none of the theories makes explicit reference to an identity condition on the target of RNR, although it is obvious in some cases what their prediction would be. However, the possible conditions that are formulated in 2.3, do not *a priori* reflect a specific theory of RNR. The empirical test is set up to evaluate three possible conditions with respect to identity of the RNR target. How the theories could capture the results of the empirical study, is then topic to section 4.

2.2 Right Node Raising versus Gapping

Based on what has been discussed so far, we could say that RNR can target any α , where α can be a constituent or a non-constituent of any category(ies), as long as α is right-peripheral and immediately follows the contrastively focused constituents in the conjuncts. In this section, I put RNR on a par with a form of *forward* conjunction reduction that in the literature is known as *Gapping*.

Gapping is the forward reduction of the finite verb in a coordinated structure. I indicate forward reduction with ~~striketrough~~:

- (12) David at een peer en Kim ~~at~~ een banaan.
 David ate a pear and Kim ate a banana
 ‘Dave ate a pear and Kim ate a banana.’

Contrastive focus is also a characteristic of gapping, this is illustrated by (13):

- (13) a. DAVID at een PEER en KIM ~~at~~ een baNAAN.
 David ate a pear and Kim ate a banana
 ‘David ate a pear and Kim ate a banana.’
 b. David at THUIS en KIM ~~at~~ op SCHOOL.
 David ate at.home and Kim ate at school
 ‘David ate at home and Kim ate at school.’
 c. ??DAVID at THUIS en KIM ~~at~~ een baNAAN.
 David ate at.home and Kim ate a banana
 ‘David ate at home and Kim ate a banana.’

Also here, the conjuncts form independent intonational phrases. Notice that the intonation here is slightly different. Roughly speaking, in gapping, both focus elements can receive pitch accent with the ‘normal’ contour (‘/\’, see the previous section), although the rising pitch (‘/’) is possible as well.² Example (13c) shows that also in gapping, the focused elements must stand in a contrastive relation, i.e. have identical sets of alternatives.

Forward deletion (in general) is sensitive to what is known as the Head Condition; a condition that prohibits the deletion of material that is c-commanded by an overt head (see Fiengo 1974 and Wilder 1994/1997). Examples (14) – (15) show how this condition works, and moreover, that it does not apply to RNR:

- (14) a. Dave ate a pear and Kim ~~ate~~ a banana.
 b. *Dave loves bananas and Kim hates ~~bananas~~.

² Notice that a single gapping or RNR construction can express more than one contrastive relationship. For gapping, Hartmann (2000:165) proposes the *Maximal Contrast Principle*, that states that in a gapping construction, the number of contrasting remnant-correspondent pairs (the pairs that are not the target of deletion in gapping) must be maximized. In Kluck & De Vries (2009) it is briefly discussed what happens in RNR constructions with multiple foci, and suggested that the primary pitch accent is always on the rightmost constituent.

(15) Dave LOves _ and Kim HAtes *bananas*.

Importantly, for gapping it does not matter whether the conjuncts have identical or different feature specifications on their subjects. That is, (16a) is as good as (16b):

- (16) a. Roos at een appel en Anna ~~at~~ een banaan.
 Roos ate-SG a apple and Anna ate-SG a banana.
 b. Roos at een appel en haar ouders ~~aten~~ een
 Roos ate-SG a apple and her parents ate-PL a
 banaan.
 banana

The observation relevant for this paper, is that there is an intuitive contrast between the following examples: (17a) is perfectly fine, whereas (17b) seems more marginal:

- (17) a. ... dat Roos een APpel <at>, en Anna een baNAAN
 that Roos a apple ate-SG and Anna a banana
 at.
 ate-SG
 ‘... that Roos ate an apple and Anna ate a banana.’
 b. ... ??dat Roos een APpel <at> en haar ouders een
 that Roos a apple ate-SG and her parents a
 baNAAN ~~aten~~.
 banana ate-PL
 ‘... that Roos ate an apple and her parents ate a banana.’

Thus, as opposed to forward conjunction reduction, identity of the reduced material does seem to play some role in the case of backward conjunction reduction (RNR).

2.3 Identity in RNR

The question that this study seeks to answer is to what extent RNR is restricted to those cases in which the target is identical in the conjuncts, i.e. whether is there a condition on RNR of the form the following kind:

- (18) **Identity condition on RNR (preliminary)**
 In [COP [A ... α] Co [B ... α]], α can be the target of RNR in A and B, if α is identical in A and B.

This section discusses what *identity* could be and what it would entail if it was a condition on RNR. I propose three possible conditions on RNR that are related to identity, which form the basis for the test data to be discussed in section 3. To avoid confusion later on, the examples discussed here are not accompanied by any grammaticality judgments.

The first way of approaching identity as a condition on RNR is by postulating that RNR can only target material that carries the same syntactic features in the respective conjuncts. I take ‘syntactic’ features to include Case and ϕ -features, but since this study is limited to data of standard Dutch, a language with (almost) no overt Case marking, the term *features* here refers to ϕ -features. If this holds for RNR, we expect the mismatching examples of RNR as described in the introduction to this paper, to be ungrammatical. The examples are repeated from (4):

- (19) a. JIJ _, en ook je VRIEND bent/ is erg populair.
 You, and also your friend be:2SG be:3SG very popular.
 ‘You are very popular and also your friend is very popular.’

- b. Ben zei dat ANNA __, en Erik beweerde dat haar
 Ben said that Anna and Erik claimed that her
 ZUSSEN een huis gekocht had/ hadden.
 sisters a house bought have-SG have-PL
 'Ben said that Anna bought a house and Erik claimed that her sisters
 bought a house.'

In both cases, it is impossible for the finite verb to agree with both subjects, because these have different ϕ -features. A formulation of an identity condition based on syntactic features is then:

(20) **Identical Features**

In [COP [A ... α] Co [B ... α]], α can be the target of RNR in A and B if every [F] α is assigned the same value in A and in B.

The examples in (19) are then predicted to be ungrammatical, because the features that are assigned on α in the respective conjuncts, are not identical; RNR in such cases is simply illicit.

Consider now a case similar to (19) but with a different finite verb. The examples in (21) are both ruled out by *Identical Features*:

- (21) a. JIJ __, en ook je VRIEND kookt graag soep.
 2SG and also your friend cook-2SG/3SG gladly soup
 'You like to cook soup and also your friend likes to cook soup.'
 b. IK __, en ook mijn VRIEND kook/ kookt graag soep.
 1SG and also my friend cook-1SG cook-3SG gladly soup
 'I like to cook soup and also my friend likes to cook soup.'

In the standard Dutch inflectional paradigm, the 2nd and 3rd person singular of regular verbs such as *koken* ('to cook'), have the same inflection: verb stem + affix – *t*). In other words, the form *kookt* in (21a) is *syncretic*: the syntactic person features differ, but the 'morphonological' properties are identical. What if for speakers of Dutch, there is no contrast between (21a) examples with identical features, but there is between (21a) and (21b)? The identity condition would then be one that has to do with the spellout of features on a given α , and not with feature assignment:

(22) **Identical Form**

In [COP [A ... α] Co [B ... α]], α can be the target of RNR in A and B if spellout (α) in A equals spellout (α) in B.

This condition will only rule out mismatches of the morphonological type, such as (21b). But also in these cases, we may wonder if there is a contrast in acceptability between the different options for inflection on the verb. Consider now (21b) as divided in (23):

- (23) a. IK __, en ook mijn VRIEND kookt graag soep.
 1SG and also my friend cook-3SG gladly soup
 'I like to cook soup and also my friend likes to cook soup.'
 b. IK __, en ook mijn VRIEND kook graag soep.
 1SG and also my friend cook-1SG gladly soup.
 'I like to cook soup and also my friend likes to cook soup.'

It could be that speakers of Dutch prefer (23a) over (23b) because the local requirements on the finite V are met in the position where the reduced V is spelled out (i.e. in the final conjunct). Thus, we can formulate a third possible condition on

RNR, which predicts that cases such as (23a) are perfectly fine. I will call this *Local Requirements*:

(24) **Local Requirements**

In [CoP [A ... α] Co [B ... α]], α can be the target of RNR in A and B if spell-out (α) is in the same domain where [F] α is valued.

Note that *Local Requirements* is in fact the lack of an identity condition on RNR. If this condition holds, RNR would be blind for identical features or syncretism of its target. That is, RNR of an α is licit regardless of identical morphonological properties, as long as the spellout of α is according to the agreement relations α is part of in the conjunct in which α is spelled out.

Clearly, more empirical data are needed to see if and how RNR is constrained with respect to identity of the reduced material. The data that are required for this concern the acceptability of mismatching cases of RNR (for features and/or form). Dutch, having OV order in embedded clauses, allows us to test mismatching ϕ -features on the reduced finite verb in RNR. In addition, the Dutch relative pronoun can be realized as *dat* or *die* depending on the gender features (neuter or non-neuter) of its antecedent. The sections to come are a description and discussion of a grammaticality judgment task in which Dutch data of the types illustrated above were tested.

3. (Un)acceptability of mismatching RNR in Dutch

3.1 The test

The acceptability test consisted of 28 examples. Out of those, 20 items were examples of RNR and 8 items were examples of Gapping. The latter were not strictly intended as fillers, but rather to confirm the claim made in the above, namely that gapping is not sensitive to any identity condition. All the examples were construed according to the variables [+/-m] (matching), [+/-s] (syncretism) and [1/2] (conjunct). Notice that [+m] (matching syntactic features) implies [+s] (matching form), and that [1/2] is only relevant in case of [-m] and [-s]. The relevant combinations are listed in (25), the corresponding examples in (26). For an overview of all test items, see the appendix.

- | | | |
|------|--|---------|
| (25) | a. matching | [+m] |
| | b. non-matching ϕ , syncretic | [-m+s] |
| | c. non-matching ϕ , non-syncretic, realized as 1st conjunct | [-m-s1] |
| | d. non-matching ϕ , non-syncretic, realized as 2nd conjunct | [-m-s2] |

- (26) a. Het verbaast me dat Els van KATten __, maar
it surprises me that Els[3SG] of cats but
Bert van HONden houdt.
Bert[3SG] of dogs hold-3SG
‘It surprises me that Els loves cats and Bert loves dogs.’
[+m]
- b. Wespreken dus af dat Pieter het BOEK __ en jij
Wespeak-PL so off that Pieter[3SG] the book and 2SG
het arTikel meeneemt naar college.
the article with.take-2/3SG to class
‘So, we agree that Peter takes the book to class, and you take the article to class.’
[-m+s]

- c. Albert zei dat PIETer __, maar ik vind dat JIJ *de*
 Albert said that Pieter[3SG] but I think that 2SG the
beste voetballer van het team bent.
 best football.player of the team be:2SG
 ‘Albert said that Pieter was the best football player of the team, but I
 think you are the best football player of the team.’
 [-m-s2]
- d. Joke zei dat WIJ __, maar Pieter dacht dat JIJ *de*
 Joke said that 1PL but Pieter thought that 2SG the
deur open hadden laten staan.
 door open had-PL let stand
 ‘Joke said that we left the door open, but Pieter thought that you left the
 door open.’
 [-m-s1]

In (26a), the reduced finite verb has identical syntactic features in the respective conjuncts. In (26b), the finite verb *meenemen* (‘to take along’) is syncretic for 2SG and 3SG. In (26c), the finite verb *zijn* (‘to be’) agrees with the subject of the second conjunct, but not with the subject of the first (this requires the form *is*). Finally in (26d), the finite verb (here the auxiliary *hebben*, ‘to have’) agrees with the first conjunct subject but not with the second (this requires the singular form *had*).

The items were presented to the participants along with a five-point Likert-scale. The participants were asked to judge each example on a scale from 1 to 5, where 1 stood for *bad*, 2 for *insufficient*, 3 for *mediocre*, 4 for *sufficient* and 5 for *good*.³ In the instruction it was explicitly stated to fill in ‘1’ or ‘5’ whenever a example seemed clearly bad or good. The intermediate ratings could be used when the acceptability of the example was more subtle. Note that acceptability of both gapping and RNR depends on intonation patterns, which is hard to capture in a test consisting of written sentences. Therefore, the participants were asked to read the sentences out loud for themselves and put emphasis on the parts of the examples that were written in capitals (see the Appendix). Finally, the subjects were explicitly told that there were no right or wrong answers to the test, and that they should set aside considerations related to what they learned in school about ‘correct’ grammar use.

The total of 28 participants consisted of 12 linguists and 16 higher-educated non-linguists. The expectation was that linguists and non-linguists would not rate the examples in different ways, but the possibility of differences due to theoretical or prescriptive bias could not be excluded (see also Schütze 1996). The aim of the test is to see which of the hypothetical conditions on RNR makes the correct prediction for what is found acceptable in Dutch. The expected ratings for the different possible conditions discussed in section 2.3 are represented in table 1 below:

Condition / Item	Identical Features	Identical Form	Local Requirements
<i>Gapping</i>	≥ 3.5	≥ 3.5	≥ 3.5
<i>RNR [+m]</i>	≥ 3.5	≥ 3.5	≥ 3.5
<i>RNR [-m+s]</i>	≤ 2.5	≥ 3.5	≥ 3.5
<i>RNR [-m-s2]</i>	≤ 2.5	≤ 2.5	≥ 3.5
<i>RNR [-m-s1]</i>	≤ 2.5	≤ 2.5	≤ 2.5

Table 1: Expected ratings of items according to different hypotheses

³ Cowart (1997) argues in favor of grammaticality scales over forced-choice or relative judgment tasks, but suggests that only the extreme ends of such a scale should be labeled to secure equidistant intervals between the points, which is relevant for (more advanced) statistical purposes. It is unclear to me though, how the *not* labeling of in-between points would guarantee this. The statistical methods used in section 3.2 of this paper are suitable for ordinal data and do not require equidistant intervals.

Since the ratings will be averaged per tested type of item, ratings higher than or equal to 3.5 will be considered a positive score (the example is considered to be acceptable). Likewise, ratings lower than 2.5 will be considered negative (the example is considered to be unacceptable). Mean ratings between 2.5 and 3.5 will be regarded as mediocre, i.e. not exactly unacceptable or acceptable.

3.2 Results and discussion

Let us first look at the mean scores of all participants for the different items have been tested. These are represented in Table 2 below:

Item	Mean rating (n=28)
<i>Gapping</i>	4.30
<i>RNR [+m]</i>	3.97
<i>RNR [-m+s]</i>	3.78
<i>RNR [-m-s2]</i>	3.23
<i>RNR [-m-s1]</i>	1.85

Table 2: Mean ratings per condition for all subjects

Both the gapping and RNR [+m] examples were generally considered as acceptable sentences. Although 16 subjects gave a lower mean rating to RNR [+m] than to the gapping examples, the difference is not significant ($p = 0.219$).⁴ The difference between the ratings for the examples RNR [+m] and examples of RNR [-m+s] was not found to be significant either ($p = 0.124$). The mean rating for RNR [-m-s1] is significantly lower than for RNR [+m] ($p < 0.001$). Also the mean rating for RNR [-m-s2] is significantly lower than for RNR [+m] ($p = 0.002$). In turn, RNR [-m-s2] is rated significantly higher than RNR [-m-s1] ($p < 0.001$).

Significant differences were also found between the two groups of participants.⁵ Table 3 is an overview of the mean ratings of the linguists and non-linguists respectively:

Item	Non-linguists (n=16)	Linguists (n=12)
<i>Gapping</i>	3.73	4.87
<i>RNR [+m]</i>	3.95	4.00
<i>RNR [-m+s]</i>	3.77	3.79
<i>RNR [-m-s2]</i>	2.84	3.61
<i>RNR [-m-s1]</i>	2.09	1.60

Table 3: Mean ratings of non-linguists and linguists

The first considerable difference is between the ratings for the gapping constructions of the two groups. This difference was found to be significant ($p < 0.001$). Since the mean ratings of both groups count as acceptable, this difference will not be part of the present discussion, but see also section 3.3 for a note on the difference between the groups of subjects.⁶ Of interest for the present purposes, is the difference in the

⁴ The significance of different ratings for the tested conditions were measured using the Wilcoxon test, where $\alpha = 0.05$.

⁵ Differences between the two groups (linguists and non-linguists) were measured using the Mann-Whitney test, where $\alpha = 0.05$.

⁶ On a side note, the total set of gapping examples got a significantly higher rating than the RNR [+m] examples in the group of linguists ($p = 0.008$), which was not the case in the group of non-linguists ($p = 0.649$). Within the set of gapping examples, there were 4 items that were mismatching (GAP [-m-s], 2 items that were syncretic for the verb form that is elided (GAP [-m+s], and 2 items that were matching in this respect (GAP [+m])). An unexpected significance turned up between the ratings of the last two groups and the mismatching examples. The

degree to which the subjects found examples of RNR[−m−s2] acceptable. The linguists rated these examples significantly higher than the non-linguists ($p = 0.045$). In addition, the differences between the ratings of RNR[−m−s2], and RNR[+m] and RNR[−m+s] respectively, were only significant in the group of non-linguists ($p = 0.006$ and $p = 0.021$). The difference between the same items was not found to be significant in the group of linguists ($p = 0.084$ and $p = 0.410$). However, note that in both groups, we can see a pattern of degradation from RNR[+m] down to RNR[−m−s1].

Let us now look at the percentages underlying the mean ratings. Table 4 represents the number of participants that rated a type of item as acceptable (higher or equal to 3.5), as unacceptable (lower or equal to 2.5) or in between:

Item	≥ 3.5 'acceptable'	≤ 2.5 'unacceptable'	$> 2.5 - < 3.5$ 'mediocre'
<i>Gapping</i>	82.1	14.3	3.6
<i>RNR [+m]</i>	78.6	7.1	14.3
<i>RNR [−m+s]</i>	71.4	14.3	14.3
<i>RNR [−m−s2]</i>	39.3	21.4	39.3
<i>RNR [−m−s1]</i>	3.6	78.6	17.8

Table 4: Percentages of participants per rating

We can see here that the participants generally agree where gapping, RNR [+m], RNR [−m+s] and RNR [−m−s1] are concerned. Interestingly, the participants have varying intuitions about RNR [−m−s2]. A relatively large percentage (39.3%) of the participants found RNR [−m−s2] acceptable. An equal number of participants rated the same examples in the range that is considered mediocre, rather than unacceptable. This division of participants is a problem if we are to generalize the results over the total group of participants. In the following, I look patterns underlying these varying results based on the conditions in 2.3.

It is interesting to see if participants rate the examples according to the predictions of a particular condition. For this, the individual participants are put in categories. Those categories are based on the predictions of the conditions in table 1 in section 3.1. Participants who do not fit in any of the categories are labeled 'unclear'. However, I distinguish those from the participants who systematically preferred examples of the type RNR[−m+s] over RNR[−m−s2] and who rated the latter in the range between acceptable and unacceptable (while not accepting RNR[−m−s1]). This is based on the observation made earlier, that RNR[−m−s2] I labeled this category of participants as *Identical Form > Local Requirements*. Table 5 represents a division of the participants based on the individual mean ratings per tested variable. In addition to the percentages of the total group of participants, the table shows the percentages of the respective groups of participants (linguists (L) and non-linguists (N)):

difference between the ratings for GAP [+m] (mean 4.3) and GAP [−m−s] (mean 4.0) was found significant ($p = 0.023$). The same holds for the ratings of GAP [−m+s] (mean 4.6) versus GAP [−m−s] ($p = 0.06$). The difference between GAP [+m] and GAP [−m+s] was not significant ($p = 0.411$). The subjects who gave lower rates to these examples are *all* non-linguists. Since all mean ratings still fall under 'acceptable', the claim that lack of identity (form or otherwise) does not affect the acceptability of gapping, can be maintained. But it is at least remarkable that the innocent speaker seems to *prefer* an identical form also in forward conjunction reduction. How general this is, however, cannot be inferred from this test, since the number of gapping items is too small for that. For the same reason, it is questionable how informative the statistics on this part of the test are.

Condition	ratings	% total	%L (n=12)	%N (n=16)
<i>Identical Features</i>	RNR [+m]	≥ 3.5	0	0
	RNR [-m+s]	≤ 2.5		
	RNR [-m-s1]	≤ 2.5		
	RNR [-m-s2]	≤ 2.5		
<i>Identical Form</i>	RNR [+m]	≥ 3.5	14.3	0
	RNR [-m+s]	≥ 3.5		25
	RNR [-m-s1]	≤ 2.5		
	RNR [-m-s2]	≤ 2.5		
<i>Identical Form > Local Requirements</i>	RNR [+m]	≥ 3.5	28.6	25
	RNR [-m+s]	≥ 3.5		31.25
	RNR [-m-s1]	≤ 2.5		
	RNR [-m-s2]	> 2.5 < 3.5		
<i>Local Requirements</i>	RNR [+m]	≥ 3.5	39.3	58.3
	RNR [-m+s]	≥ 3.5		25
	RNR [-m-s1]	≤ 2.5		
	RNR [-m-s2]	≥ 3.5		
<i>Unclear</i>		17.8	16.7	18.75

Table 5: Percentages of participants rating according to respective conditions

No participants rated the examples in accordance with *Identical Features*. A relatively large group of participants rated the examples according to the predictions of *Local Requirements*. A relatively small group of participants rejected examples that violated *Identical Form*. Interestingly, there is a considerable group of participants who do not strictly reject the examples that violate *Identical Form* (that is, as long as *Local Requirements* is respected), but who give higher ratings to the examples that *do* respect this condition. Thus, we have three clear groups of participants. Two of those groups apply *Identical Form* as a condition on RNR, but to different degrees. One group applies the condition strictly, the other group seems more accepting to violations. The end of this continuum is then formed by those speakers that do not seem to apply *Identical Form* on RNR at all, and only take *Local Requirements* into account when rating the examples.⁷

We can now turn back to the question to what extent RNR is constrained by some identity condition. The results suggest that what I formulated as *Identical Features* in section 2.3, is no condition on RNR. For the other two conditions, the results are divided. The ratings for the category RNR [-m-s1] reveal that in case of mismatching features and a non-syncretic form, the choice for the form that agrees with the first conjunct is generally found unacceptable. But does this mean that only *Local Requirements* holds for RNR? For a large subset (42.9%) of the participants, RNR is less acceptable or completely unacceptable if the target of RNR has different forms in the respective conjuncts. It seems that *Identical Form* is a condition on RNR, and that the acceptability of violations of this condition is subject to speaker variation. In case *Identical Form* cannot be obeyed, the choice for the form that is in accordance to

⁷ The ratio of linguists and non-linguists is particularly interesting here. Only 25% of the linguists belongs to the group that considers *Identical Form* as a condition, and none of those is strict. By contrast, 56.25% of the non-linguists belongs to this group, and 25% (of the total group of non-linguists) is strict. The uneven ratio explains the significant difference that was found between the respective mean ratings of RNR [-m-s2] of the two groups.

the second conjunct could be seen a sort of ‘repair’ strategy for otherwise impossible RNR constructions (those with mismatching features and non-syncrletic form of α). Following this reasoning, the preference RNR[-m-s2] over RNR[-m-s1] seems to be ‘proximity’ effect, i.e. in case no identical form for both conjuncts is available, the realized form of α has to agree with the conjunct *closest* to α . For 39.3% of the participants, this results in perfectly acceptable RNR constructions, for the other participants, the examples become at least more degraded.

In sum, based on the empirical test, we observe that for a large number of Dutch speakers, RNR is restricted to constructions that target identical forms. Those speakers that allow for mismatching RNR, only accept those cases in which the form is realized that belongs to the final conjunct. How these observations fit into a theory of RNR depends how the status of these conditions on RNR is to be defined, and what we assume RNR itself to be. The theoretical implications of the observed pattern are discussed in section 4 and 5. In section 4, I reconsider the conditions and evaluate different assumptions of the structure of RNR in the light of the test results. Also the notion *proximity effect* will be re-addressed in this section, and put in a broader empirical setting in section 5.

3.3 Concerns and considerations

The idea to put mismatching RNR data to the test was due to varying intuitions of randomly consulted speakers of Dutch, and contradicting claims in the literature concerning ‘identity’ of the material that is the target of RNR (see also section 4.1), and was set up as a small survey. In the process of carrying out the test and observing the results, a couple of flaws became clear that should be taken into consideration in future studies/experiments of these data.

First of all, the test did not include suitable fillers or pre-test items. The latter could have been especially important for the 17.8% of ‘unclear’ participants in table 4. A subset of this group were subjects whose answers were overall inconsistent per tested condition. Filler items that were ‘obviously’ wrong or right could have revealed if those participants understood the task. Pre-test items would in addition reveal if a subject would find the most basic and simple cases of gapping and RNR acceptable to begin with. Because this was lacking in the test, it was impossible to make good criteria for excluding particular subjects from the test, which is why no results have been discarded in the discussion above.

As is clear from the discussion in section 2, RNR and gapping constructions rely heavily on the presence of contrastive focus, which is prosodically marked by pitch accents. A possible confound of this test is that subjects were presented with written data rather than spoken data. Although the subjects were explicitly instructed to read the examples out loud, and stress the syllables in CAPS, it is probably better use auditive data in an experiment about constructions with such crucial intonation patterns. In addition, it is possible that non-linguists have more prescriptive bias towards elliptical data in a written test than in an auditive test.

Concerning the test items, it should be noted that there were only 28 items, and 20 of those were relevant test items, in turn construed to test 3 variables. In other words, the number of test items is small relative to the number of conditions involved in the test. In addition, the test items included two examples of RNR with a mismatching relativizer.⁸ Dutch relativizers and their antecedents agree with respect to gender, Dutch subjects- verb agreement is on number and person. The judgments on these items did not differ particularly from those on other items in this test, but it cannot be excluded that they would in a more systematic test for differences between those variables.

⁸ The relevant examples are (4) and (21) of the test, see the Appendix to this paper. There are more examples in which RNR targets a relative clause, such as (9), but in those cases the relevant mismatch is on the finite verb in that relative clause.

Finally, it is intriguing as well as worrisome that there were significant differences between the two groups of subjects (linguists and non-linguists). In theoretical linguistics, it is common practice to make use of personal intuitions about linguistic data or those of colleagues, rather than to consult or test ‘naïve’ speakers. This was criticized as early as in the 70s in Spencer (1973), who found that non-linguists agreed with each other in 80% of the cases in a grammaticality judgment task, but only in only 50% of the cases with the linguists on the same sentences. Schütze (1996:119), making reference to Spencer’s findings, notes the following: “*What is needed is truly naïve subjects who nonetheless have been given a very good understanding of what is meant by grammaticality. (One might, however, question whether this is possible even in principle)*”. However, the majority of non-linguist judgments were systematic in one way or another (see table 5 in the previous section and fn. 7). An explanation of how these differences between linguists and the innocent speaker come about is (far) beyond the scope of this paper.

To conclude, the issues regarding the design and implementation of this experiment should be taken into account in a future study of this kind, for which the present study can be used as a pilot. Nevertheless, the results give rise to an interesting picture of the acceptability of (mis)matching RNR. This is worth further discussion about the conditions on RNR constructions, and what different theories of RNR predict in this regard.

4. Identity in Right Node Raising

4.1 The puzzle and basic assumptions

In this section, I discuss the identity condition on RNR in the light of the agreement relations that are part of the examples of Dutch RNR that targets (mis)matching finite verbs. This provides us with a set of issues that are relevant in the evaluation of different theories of RNR in 4.2. The present subsection is an overview of basic assumptions that I make in the theoretical discussion regarding agreement, the structure of Dutch subordinate clauses and the structure of coordination.

In accordance with Chomsky (2000, 2001) I assume that syntactic agreement is established by the relation Agree, which holds between a probe and a goal. In the case of subject-verb agreement, the finite verb is a probe and enters the derivation with unvalued ϕ -features. Subjects are usually nominals, and those enter the derivation with valued (or ‘interpretable’) features. The relation Agree is triggered by the presence of unvalued features on the probe, which looks for a suitable goal in its domain. Suitable goals are goals that are specified for the same type of features. The valuation process is generally assumed to take place in syntax. In accordance with the framework of Distributed Morphology (see Halle & Marantz 1993 a.o.), I consider the *realization* of inflectional properties of agreement relations to be part of the morphological component of grammar: during Spellout, feature bundles in the output of the syntactic component, are replaced by vocabulary items (Lexical Insertion).

Relevant to this study are subject-verb agreement relations; the majority RNR targets in the cases that were put to the test, were or included the finite verb. Following standard assumptions, I take the values of the finite verb depend on those on T. The latter obtains those values from the subject (before it presumably moves to SpecTP).

The Dutch SOV order in subordinate clauses was convenient to construe data in which V_{fin} was the target of RNR. For simplicity’s sake I assume that V in Dutch subordinate clauses stays in its base position. A simple subordinate clause (along with subject-verb agreement) then looks as follows:

‘Foc’ represents focused elements, ‘Co’ the coordinator, and ‘ α ’ the RNR target.

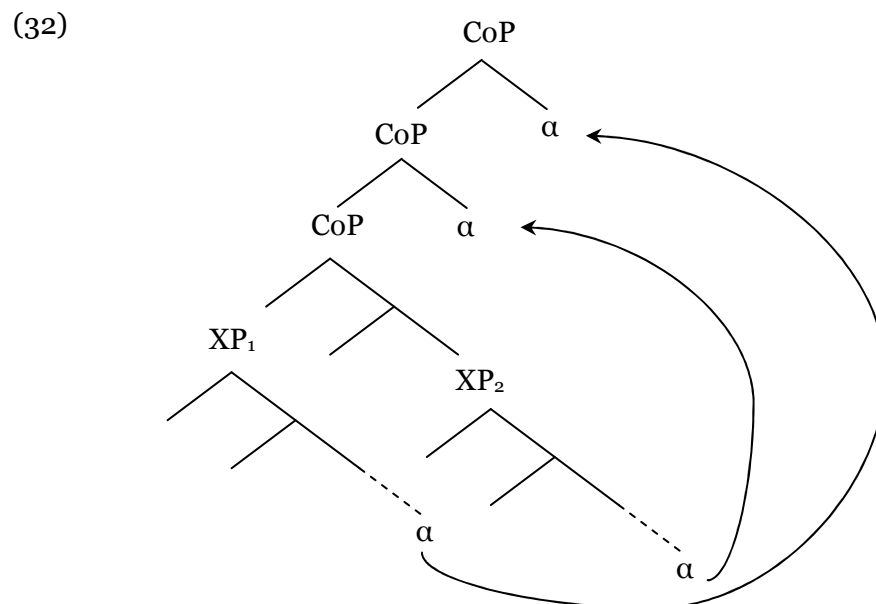
Let me start out with the *ex situ* account. This approach puts RNR on a par with so-called across-the-board *wh*-constructions (ATB), where the *wh*-element is associated with both conjuncts:

(30) *Who* did Kim hit $_\$ and David kiss $_\$?

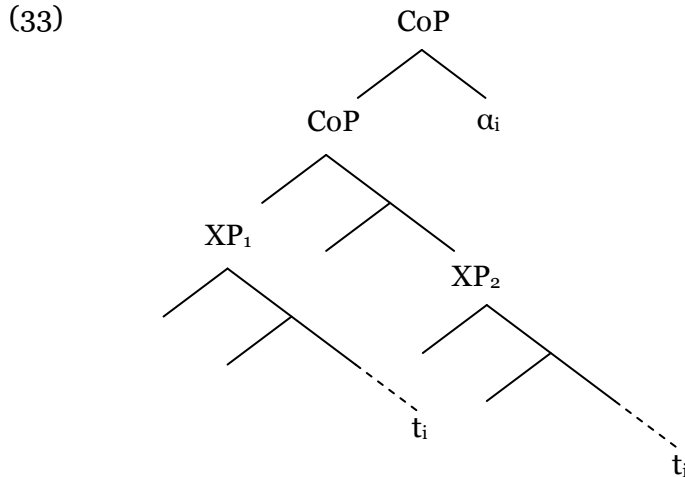
The relation between ATB and RNR is readdressed in 4.3, let us for now assume that in *ex situ* accounts, both ATB and RNR involve movement out of two conjuncts: to SpecCP and a right-adjunct of CP respectively. As discussed in the above, assuming that RNR is the result of rightward ATB movement faces two major problems: RNR (but not ATB *wh*-constructions) can target material that does not form a constituent and material that is part of an island for movement (see also Abels 2004 and Bachrach & Katzir 2009 for discussion). However, these objections are more or less independent of the issue at stake. The assumption that RNR is the result of rightward ATB movement of some α , creates another puzzle, namely how two things move, and end up spelled out once at the surface. That is, RNR nor ATB *wh*-movement ever has both moved elements present in the surface structure (here both represented as structures involving movement):

- (31) a. * Who_i who_j did Kim hit t_i and David kiss t_j ?
 b. *Kim hit t_i and David kissed t_j the principal $_i$ the principal $_j$.

For movement accounts of English ATB *wh*-movement, the inexistence of questions such as (31a) can be explained by a ban on multiple specifiers. However, Citko (2005) observes that languages that have multiple *wh*-fronting (such as Polish) do not have ATB *wh*-questions of this form either. In the absence of further assumptions, RNR in the *ex situ* account thus looks as follows:



This theory requires an additional rule to guarantee α is only spelled out once. In Sabbagh (2007), the most recent proposal of RNR in terms of movement, this issue is unfortunately ignored. The target of RNR is consistently referred to as ‘the shared constituent’, which are DPs in the derivations that illustrate the proposal. The proposed structure for RNR in Sabbagh (2007) is similar to the sketch in (33):



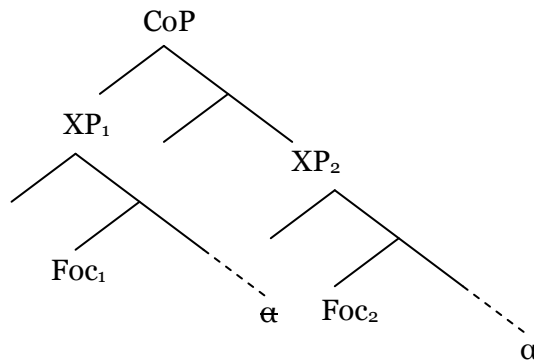
It remains a mystery how the double presence of α_i before movement leads to a single adjunct at the CoP. Interestingly, Citko (2005) circumvents this issue by proposing a multiple dominance account of ATB *wh*-movement, in which the target of ATB is *shared* before it is moved (this is the result of ‘parallel merge’, see the discussion of the multidominance account below). This then explains matching effects (see 4.3) and the fact that there are no ATB *wh*-questions with multiple fronted *wh*-pronouns. Reich (to appear) proposes that the target is present in both conjuncts, but moves only out of the first and is elided in the second. These two solutions are strikingly similar to proposals for RNR that assume that its target remains *in situ*. Therefore, it seems unnecessarily complicating to assume that there is movement to begin with, if we need additional assumptions of ellipsis/deletion or sharing to get rid of one of the moved elements. More importantly, because of this disappearing act of one of the α ’s in (33), it is hard to deduce predictions with regard to identity of α from this specific proposal. Based on (33) it is not clear if α_i must have identical features in XP_1 and XP_2 prior to moving out of the coordination, but this would be most in line with the transformation rules for ATB *wh*-constructions (for instance, Ross 1967 and Williams 1978).

The PF deletion and the ellipsis account of RNR have contrasting predictions with regard to identity of the RNR target. Hartmann (2000) proposes that RNR is post-focal deletion under identity in parallel conjuncts. Anything that follows the focused elements in the respective conjuncts, is deleted. This is regardless of structural position, which is a great benefit of this approach, since no additional machinery is needed to account for non-constituent RNR. A particularly difficult case of non-constituent RNR that is unproblematic for the PF-deletion approach, is the German example illustrated in (34) cited from Wilder (1997):

- (34) Ich habe einen Mann [der DREI ~~Katzen~~ besitzt] gekannt, und
 I have a man who three cats owns known and
 sie hat eine Frau [die VIER Katzen besitzt] gekannt.
 she has a woman who four cats owns known
 ‘I have known a man who owns three cats, and she has known a woman who
 owns four cats.’

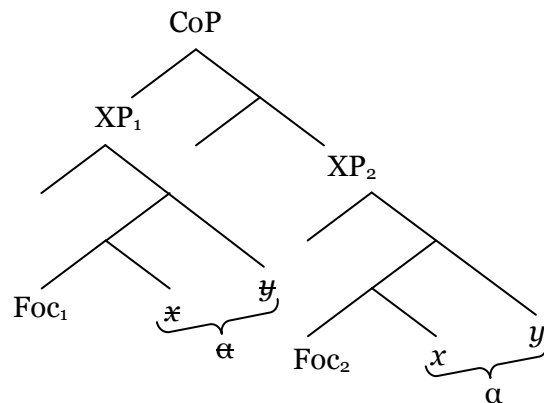
The target is merged in both conjuncts, and deletion occurs at PF (the target for deletion is here represented with strikethrough):

(35)



This theory predicts that the target of RNR is identical at PF, i.e. we predict phonological identity as a condition if RNR is post-focal deletion. With regard to our findings, this seems desirable. As argued above, non-constituent RNR such as (34) is not problematic in the PF-deletion account. An abstract representation of such an example is (36):

(36)



However, if we look more carefully at how PF operates on the string that is the output of the syntactic derivation of a RNR construction, we face a look-ahead problem that is not easily circumvented. That is, suppose that the two XPs in (35) contain a subject (SUB), a coordinator Co, and that the focused elements are the objects (OBJ_F). Spellout proceeds as follows:

(37) SUB → OBJ_F → α → Co → SUB → OBJ_F → α
 ↑
 deletion target

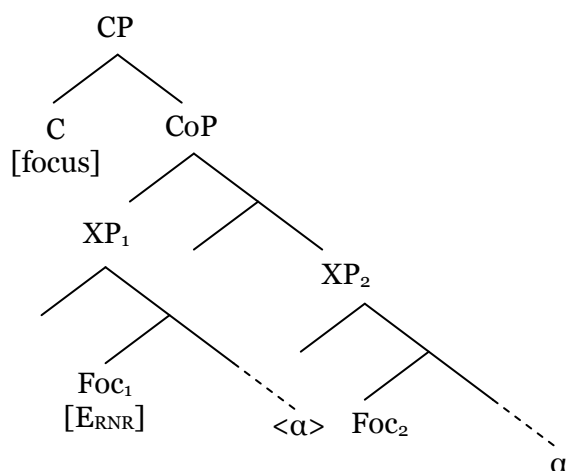
The first occurrence of the target of deletion is in the first conjunct. The question is how at that point, the other occurrence of α can be ‘seen’ (and in addition, evaluated with respect to identity). Basically, we would be deleting something before it is spelled out at any point. In addition, consider the following pair of Gapping (38a) and RNR (38b) in Dutch:

- (38) a. ... dat Roos een Appel at en Anna een baNAAN at.
 ... that Roos a apple ate and Anna a banana ate
 b. ... dat Roos een Appel at en Anna een baNAAN at.
 ... that Roos a apple ate and Anna a banana ate
 ‘...that Roos ate an apple and Anna ate a banana.’

If both RNR and Gapping are the result of prosodic deletion (as is argued in Hartmann 2000), the question raises how PF distinguishes between (38a) and (38b), where the input strings are identical. Summing up, the PF-deletion account would correctly predict that (phonological) identity plays a role in RNR, but it remains unclear how PF can decide if the deletion target in a non-initial conjunct corresponds to an identical part of the final conjunct.

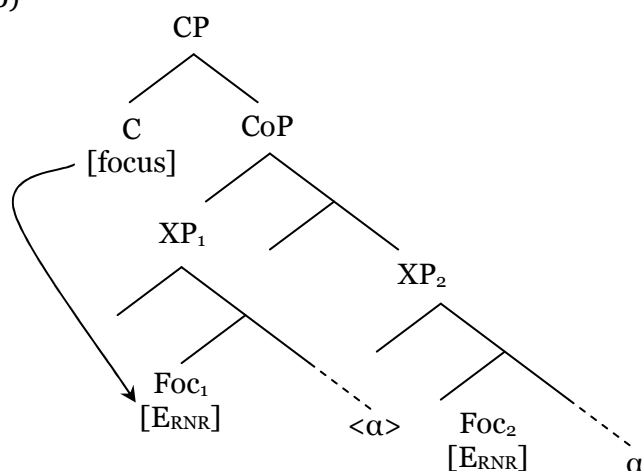
The ellipsis account of Ha (2006/2007) is based on the claim that RNR patterns with (forward) ellipsis in many respects. The assumed ‘lack of morphological identity’ in Ha (2007:2) is one of these. This is in contradiction with the results of the study described in section 3, where it was shown that mismatching RNR becomes more degraded for a considerable number of participants. Let us nevertheless have a look at the ellipsis account as proposed in Ha (2007), represented in (39):

(39)



E_{RNR} is an ellipsis feature that enters the derivation with a contrastively focused lexical item. This feature instructs the PF-interface to not pronounce the complement of the (functional) head that carries the feature. The structure in (39) would make it seem as if this feature only enters the derivation in the first conjunct, thereby stipulating that ellipsis takes place only in that conjunct. Recall that both conjuncts must have contrastive focus, so E_{RNR} could also be present on the focused element in the second conjunct, as is represented in (40):

(40)

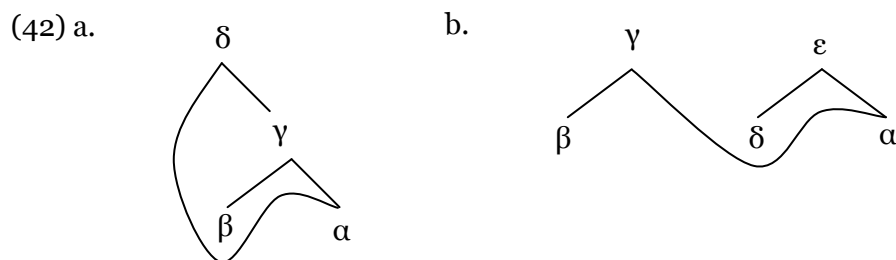


Based on *Closeness* (Chomsky 1995), (40) is argued to be ruled out because ‘*the E feature cannot be checked by the focus feature of C since there is always E_{RNR} in the first conjunct, which is closer to the C head, ...*’ (Ha 2007:8). There are two problems with this. First, it is not clear what the motivation is in assuming that the CoP coordinates TPs rather than CPs, and that the CoP is headed by CP, but this is a necessary step in the argument described above. Second, RNR can target coordinations of more than two conjuncts:

- (41) Roos beWONdert __, Anna aanBIDT __, en Kim verAFgoedt
 Roos admires Anna adores and Kim worships
motorrijders.
 motor.cyclists
 ‘Roos admires motor cyclists, Anna adores motor cyclists and Kim worships motor cyclists.’

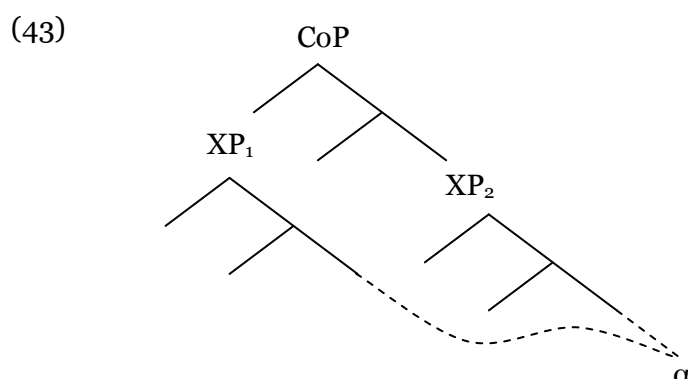
If E_{RNR} cannot be licensed in non-initial conjuncts, we predict examples such as (41) to be ungrammatical, contrary to fact. In sum, the ellipsis account yields the wrong prediction with respect to identity in RNR, and faces a number of independent issues related to the insertion and checking of the E_{RNR} -feature.

Let us finally consider the multidominance account of RNR. In this type of approach, the target of RNR is merged in one conjunct, and remerged in the other. As a result, there is only one α in RNR, that is *simultaneously* part of the conjuncts, and α is dominated by both (thereby abandoning the Single Motherhood Condition). This goes back to Williams (1978), McCawley (1982/1987), Goodall (1987) and many others, in theories concerning parallel structures (such as ATB or RNR). The multidominance approach fits in the theory that the operation move can be reduced to merge (see Starke 2001, Gärtner 2002, Zhang 2004, De Vries 2007 a.o.). *Internal* remerge (move) of some α merges α with its root, external remerge merges α outside its root (with some β that is not included in the root that includes α , see De Vries (2007). External remerge is also known as ‘parallel merge’ (Citko 2005) or ‘grafting’ (Van Riemsdijk 1998/2006). The abstract representations in (42) represent internal and external remerge:



Two things must be noted here. First, the remerge of α with its root at some point of the derivation, can only apply if α is accessible from that position. That is, internal remerge is subject to known domain restrictions (islands). By contrast, external remerge of α applies directly after α is initially merged. Since this merger does not cross anything in the root α was initially merged in, we do not expect islands to apply here. Second, external remerge applies to α with some β that is outside the root of α *at that point of the derivation*. Multi-rooted representations such as (42b) should be banned for linearization purposes (but see Van Riemsdijk 1998/2006 for an alternative view). Structures like these should always be part of a single-rooted derivation, i.e. the roots in (42b) should be merged together at a later stage of the derivation.

In the case of RNR constructions, the multiple roots are conjuncts that are come together in a CoP. An abstract derivation of RNR in terms of multidominance then looks as follows:



A common objection to derivations involving multidominance, is that it is not clear how they can be linearized. That is, does α in (43) precede or follow lexical items that are part of XP_2 ? For this, several proposals have been made in the literature. Wilder (1999/2008), discusses linearization of multidominance structures in terms of the LCA. Bachrach & Katzir (2009) derive the order of multidominance structures based on cyclic linearization (Fox & Pesetsky 2005). However, both approaches (wrongly) predict that the target of RNR need only be right-peripheral in the *first* conjunct (see Kluck & De Vries 2009 for discussion). I will therefore assume a more intuitive solution to the linearization issue, namely that a shared α will only be linearized if both parents of α (here: XP_1 and XP_2) have been scanned (from the perspective of a tree traversal procedure). De Vries (2007:13) formulates this as follows:

- (44) The linearization of α (or β) in $[\gamma \alpha \beta]$ is omitted if (i) and (ii):
 (i) α has another parent γ' outside γ
 (ii) either γ' includes γ or γ' is not yet scanned.

The disjunction in (ii) is due to the difference between internal remerge (movement) and external remerge (sharing). If α is multidominated (by γ and γ'), there are two possibilities. If the second parent (γ') includes γ , spellout of α is omitted in γ . This applies to cases of internal remerge as illustrated in (42a). Here, spellout of α is omitted in γ because the other parent of γ , here δ , includes γ . Relevant for the present purposes is the second possibility. If α in γ has another parent (γ') that is not yet scanned, spellout of α is omitted in γ . This applies to external remerge, as illustrated in (42b), where γ and ε are the parents of α . Spellout of α is omitted in γ because there is another parent that has not been scanned yet. Paraphrased in terms of ‘occurrences’, (44) thus generalizes that an internally remerged α is spelled out at the first occurrence, and an externally remerged α at the last.

Suppose now again that (43) is a RNR configuration in which V is the RNR target. Linearization based on the principle described above gives us the following string:

- (45) SUB \rightarrow OBJ_F \rightarrow Co \rightarrow SUB \rightarrow OBJ_F \rightarrow α

The derivation of non-constituent RNR is also relatively unproblematic in this approach. In this case, remerge applies to more than one X(P). In addition, it is easy to derive RNR that targets more than one conjunct. In that case, the X(P) is remerged

more than once. Finally, since nothing moves, we do have to stipulate operations to re-order the remerged terminals.⁹

To illustrate that this is indeed a relatively easy way of deriving RNR, the structure in (47) represents an example of non-constituent RNR that is not sentence-final and that targets three conjuncts (46). Consider this the worst case of RNR that a theory should be able to account for:

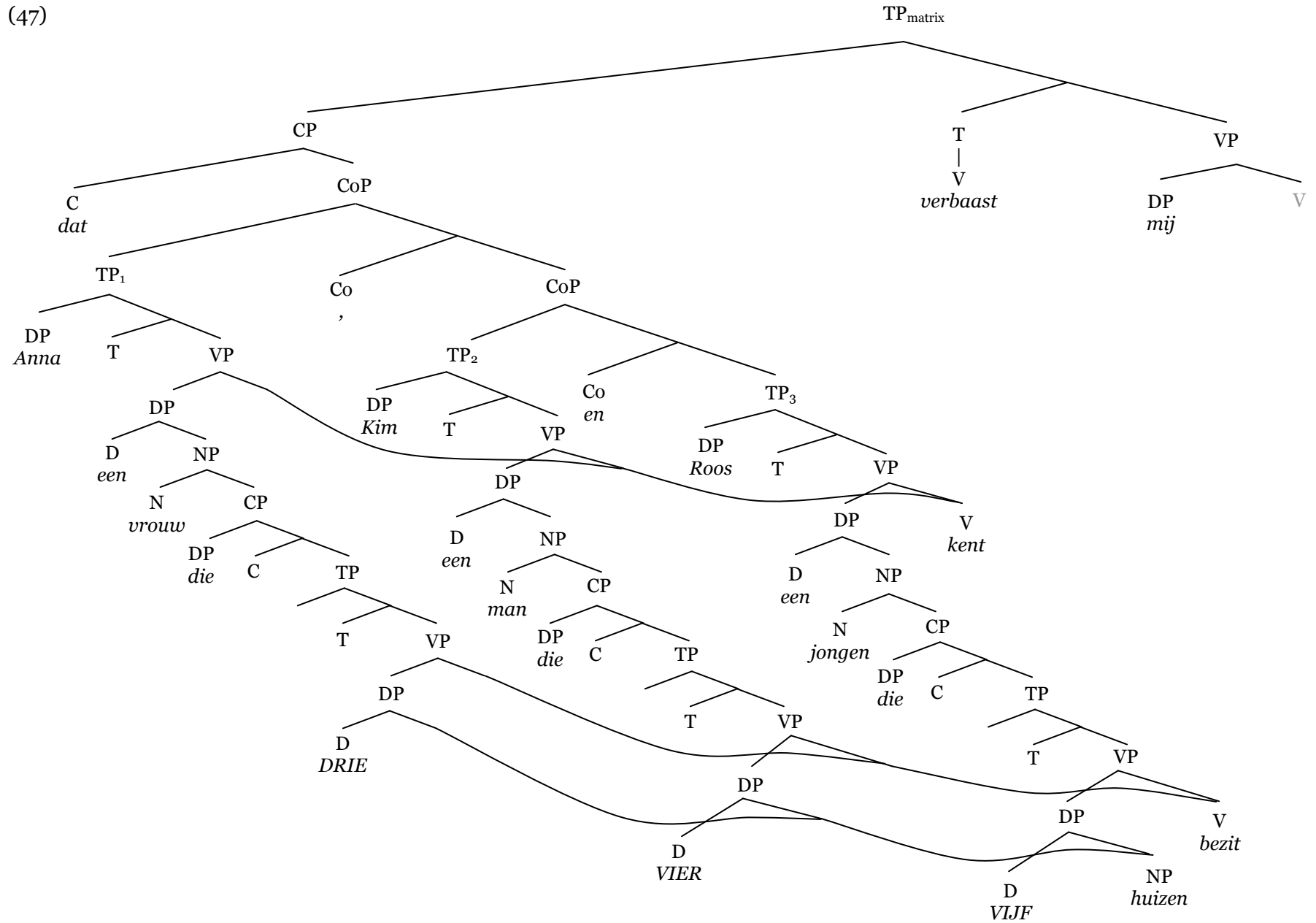
- (46) Dat Anna een vrouw die DRIE_, Kim een man die
 that Ann a woman who three Kim a man who
 VIER_, en Roos een jongen die VIJF *huizen bezit*
 four and Roos a boy who five houses owns
kent, verbaast mij.
 knows surprises me
 ‘That Anna knows a woman who owns three houses, Kim knows a man who
 owns four houses, and Roos knows a boy who owns five houses, surprises me.’

For ease of representation, I ignore the base-generated position of subjects in SpecVP, and T-to-C movement that is commonly assumed for Dutch main clauses. To keep the structure as simple as possible, I derive the coordinated clause that is the subject to this example as any other subject, and relative clauses as complements to the heads they modify. This is not intended to reflect specific commitments to theories about relative clauses or clausal subjects. To reduce the number of crossing branches, I do not represent movement in terms of internal remerge in this representation. Recall, finally, that I do not assume a particular order in which the conjuncts are derived. For ease of representation, the terminals that are shared (here NP *huizen*, V *bezit* and V *kent*) are represented in the final conjunct, because this is where they are eventually spelled out. In fact, the shared constituents are as local to their sisters within the first two conjuncts as they are to the third, and the conjuncts (here TPs) are ordered when they are related to each other at the level of CoP.

Let us now see what a complicated example such as (46) looks like in the multidominance approach in (47). Rmerge applies iteratively on N *huizen*, V *bezit* and V *kent*: after those are merged in the conjunct that is derived first, they are remerged in the second and third conjunct. The remerged elements together do not form a constituent; RNR in this case is the result of external remergers that are in fact independent of each other. However, recall that RNR is constrained by a periphery condition; it can only apply to material that is rightmost in each conjunct. I assume that this is a restriction that comes into play when the string is ordered, not when the structure is syntactically derived (see also Kluck and De Vries 2009). In other words, remerge is essentially unconstrained. This gives us the following representation:

⁹ This is necessary in the movement account described above, for examples of non-constituent RNR such as (34) and (46). Under the assumption of movement, the predicted order of the target *Katzen besitzt gekannt* in (34) would be *gekannt-besitzt-Katzen*. For this reason, Sabbagh (2007:397) is forced to allow for ‘tucking in’ in the derivation (based on Richards 2001): elements that move are tucked in under the element that was moved prior to that (i.e. countercyclic movement).

(47)



A big advantage of this approach is that it relies on the basic operation merge that is already available in the system, and that with a relatively simple rule for the linearization, we can predict the correct order of RNR constructions. Notice also that in this approach, the choice to not spellout α at the first occurrence, is related to the structural positions of α , instead of deletion of one instance of α based on the presence of another α later in the string (the PF look-ahead problem).

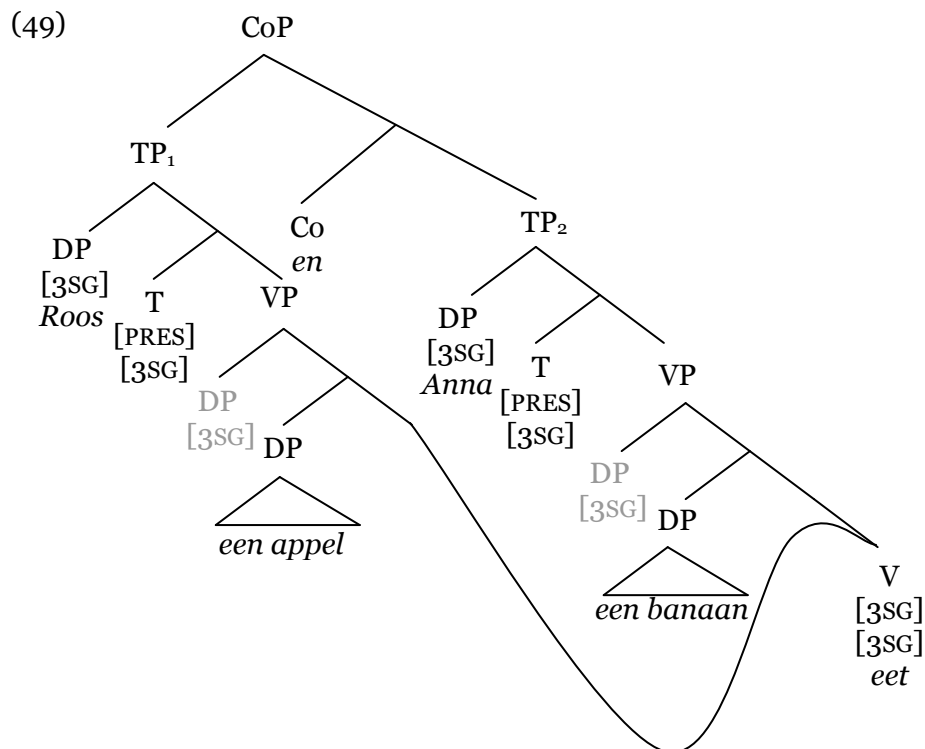
The question is now, how *Identical Form* as a condition on RNR would follow from a the multidominance approach. To my knowledge, little has been said about the consequences of multidominance of α if α is part of an agreement relationship. In the following, I argue that multidominance implies multivaluation, and discuss *Identical Form* based on this idea.

4.3 Multidominance, multivaluation and identity in RNR

Suppose that RNR targets a constituent α that is the goal for some probe in the respective conjuncts. If RNR is explained as the multidominance of α , it follows that α can be the goal for probes in both (or all) conjuncts it is dominated by. The examples that are relevant to this study involve a shared finite verb (V_{fin}). Under the present assumptions, V is merged and remerged in the conjuncts of a RNR construction, and V can be part of agreement relationships in the respective conjuncts. Let us first consider a derivation of RNR that targets V_{fin} , where both subjects have the value [3SG]:

- (48) ... dat Roos een appel en Anna een banaan eet.
 ... that Roos a apple and Anna a banana eat-3SG
 ‘... that Roos eats an apple and Anna eats a banana.’

The representation of (48) in a multidominance framework looks as follows:

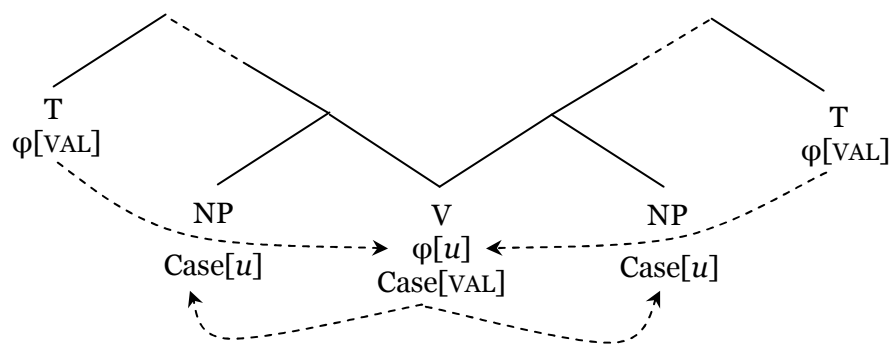


To avoid crossing branches and to facilitate reading of this representation, V is positioned in a more conventional manner in the second conjunct, because this is

where it is spelled out. Structurally, it is simultaneously part of both conjuncts (see (50) below for a schematic representation). The derivation proceeds as follows: V *eten* merges with object DP *een appel* and consequently with object DP *een banaan* (the order of these steps is irrelevant). Both mergers result in a projection of V, that is the input for the derivation of two VPs, as a result of merger with the subject NPs *Roos* and *Anna* respectively. Finally, merger with T and the internal remerge (here represented as conventional movement) of the subjects results in two TPs that share V. One of the TPs (here TP₂) merges with coordinator *en*, the projection of Co merges with TP₁, resulting in CoP.

Importantly, the shared V_{fin} receives values from T in TP₁ and from T in TP₂ in (49). These are PERS/NUM features that T obtained from the subject, and tense features (here left out, for ease of representation). The relevant agreement relations are schematically represented in (50). Notice that in addition to being a goal, V_{fin} is also a probe for accusative case (mostly covert in Dutch), that is valued on both of the objects V is merged with:

(50)



From this representation, it is clear that multidominance gives rise to *multivaluation*: the shared V values both NPs it is merged with for Case, and receives values for ϕ -features from the two Ts it is dominated by. This is in line with the proposal in Citko (2005) for ATB *wh*-movement, which I discuss at the end of this section. For discussion related to multiple agreement, see also Bejar & Massam (1999) and Hiraiwa (2001) for multiple Case in raising constructions, and Van Koppen (2005) for agreement in Dutch dialects. In (49), the respective Ts both have the value [3SG], but nothing rules out that V obtains different values from the Ts it agrees with. We look at cases with different values below.

Let us now consider the ordering and spellout of (49). Taking into account the linearization principle as in (44), the ordering of (49) gives us the following string, along with the forms that belong to the entries based on their feature-specifications:

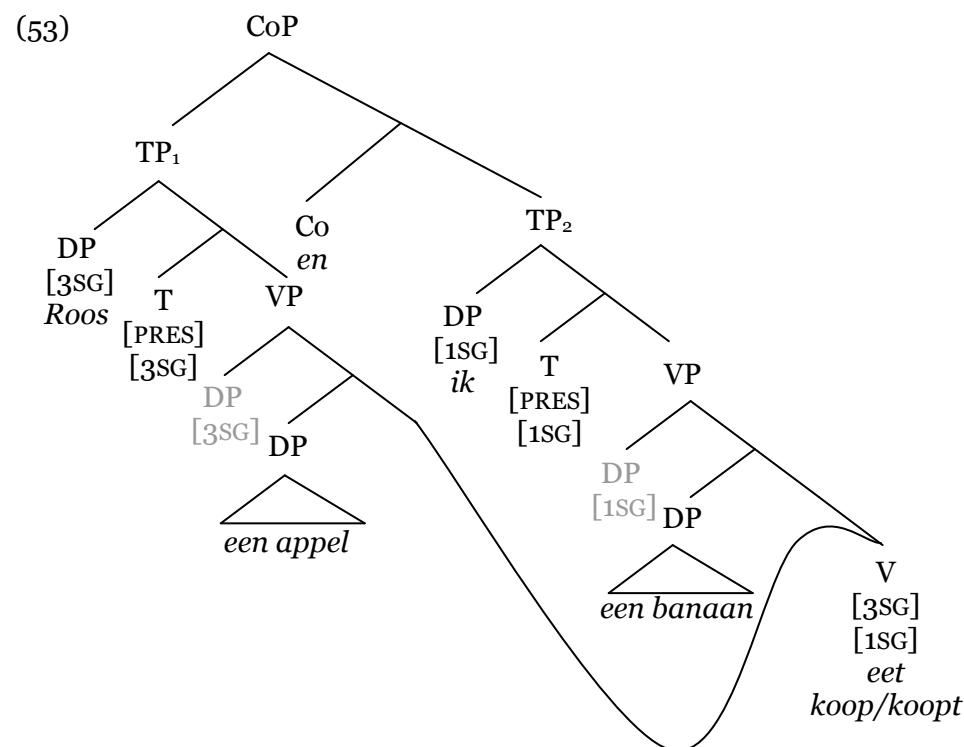
- (51) DP DP Co DP DP V [3SG]
Roos een appel en Anna een banaan eet
[3SG]

The first occurrence of V *eet* is after DP *een appel* in the first conjunct, but at that point of the derivation, there is another parent of V that has not been scanned yet, therefore V is omitted at this point. Thus, the second conjunct is linearized, with a second occurrence of V *eet*. In this case, there is no other parent, so V *eet* is ordered after DP *een banaan* in the second conjunct. In case of RNR that targets three conjuncts, such as example (46), linearization of the shared element(s) would also be omitted in the second conjunct. The two values on V correspond to each other, and consequently to a single inflectional form (*eet*). In other words, at the point of lexical

insertion, the two values on V do not lead to different forms. Consider now a case in which we have two different values on V:

- (52) a. ... dat Roos een APpel __, en ik een baNAAN eet.
 ... that Roos a apple and 1SG a banana eat-SG
 '... that Roos eats an apple and I eat a banana.'
 b. ... dat Roos een APpel __, en ik een baNAAN koop/
 ... that Roos a apple and I a banana buy-3SG
 koopt
 buy-1SG
 '... that Roos buys an apple and I buy a banana.'

The structure of these examples is represented in (53):



The steps in the derivation are the same as described in the above for (48). Consider now what the ordering and spellout of (52a) and (52b):

- (54) a. DP DP Co DP DP V[3SG]
 [1SG]
 Roos een appel en ik een banaan **eet**
 b. NP DP Co DP DP V[3SG]
 [1SG]
 Roos een appel en ik een banaan **koop**
koop-t

The verb *eten* has a single form that corresponds to all singular specifications, this is due to the fact that its stem ends on *-t*, rendering the inflectional affix *-t* for 2/3SG unnecessary. By contrast, the verb *kopen* corresponds to different forms for the different values on V. This means that (52b), but not (52a) gives rise to a conflict during spellout: the morphological component cannot insert a single form that corresponds to the values on V. Thus, multidominance derivations of this sort crash

at the point where different forms are associated with the values on the shared material. *Identical Form* can thus be regarded as a morphological condition (or filter) on multidominance structures.

This proposal for RNR is in the same spirit as Citko (2005) for ATB *wh*-movement. Interestingly, Citko (2005:485-7) observes that Polish ATB *wh*-movement is subject to matching effects:

- (55) a. Kogo Jan lubi e a Maria podziwia e?
 who.ACC Jan likes e.ACC and Maria admires e.ACC
 ‘Who does Jan like and Maria admire?’
 b. *Kogo/Komu Jan lubi e a Maria ufa e?
 who.ACC/DAT Jan likes e.ACC and Maria trust e.DAT?
 ‘Who does Jan like and Maria trust?’

As is the case in RNR, ATB *wh*-movement is ungrammatical if the *wh*-element receives different values for Case in the respective conjuncts (55b). However, a Case-mismatch is grammatical if there is a syncretic form available for the two different cases:

- (56) Kogo Jan nienawidzi e a Maria lubi e?
 who.ACC/GEN Jan hates e.GEN and Maria likes e.ACC
 ‘Who does Jan hate and Maria like?’

However, it is argued in Citko (2005) that multidominance structures of ATB *wh*-movement are linearizable because the shared constituent moves (or ‘remerges internally’) to a non-shared position (SpecCP), where it does not give rise to the symmetry and reflexivity violations described in the above. I believe, however, that this reasoning is unnecessarily complicating, and it precludes a generalization about ATB *wh*-movement and RNR constructions. There is an obvious parallel between the two: both involve seemingly parallel conjuncts that have parts in common. I believe that their structures can, and should be analyzed in a similar fashion: the constituent(s) that are associated with both conjuncts are shared. The differences between the two construction types are related to the fact that in ATB *wh*-constructions, the shared material has to move (or: the externally remerged material has to be internally remerged as well). For this reason, ATB *wh*-constructions, but not RNR constructions, are sensitive to known restrictions on movement. ATB *wh*-movement cannot target non-constituents because non-constituents cannot be moved, nor can it target constituents that are trapped inside islands:¹⁰

- (57) a. Ik heb een gerecht MET _ en jij een gerecht
 I have a dish with and you a dish
 ZONder *paddestoelen bereid*.
 without mushrooms prepared
 ‘I prepared a dish with mushrooms and you prepared a dish without mushrooms.’

¹⁰ By contrast, Bachrach & Katzir (2009) argue that ATB *wh*-movement is not sensitive to islands if the extracted constituent is rightperipheral in the respective conjuncts, that is, being right-peripheral (as is obligatory for RNR configurations) lifts island constraints. However, this is based on English examples that do not have grammatical counterparts in Dutch in my judgments.

- b. *Wat_i bereid_j heb ik een gerecht met t_i t_j en jij
 what prepared have I a dish with and you
 een gerecht zonder t_i t_j?
 a dish without
 (*intended*:) ‘What have I prepared a dish with and what have you prepared a dish without?’
- (58) a. Anna bewonderde een VROUW_en Roos een MAN die
 Anna admired a woman and Roos a man who
prachtig cello speelde.
 beautiful cello played.
 ‘Anna admired a woman who played the cello beautifully and Roos admired a man who played the cello beautifully.’
- b. *Welk instrument_i bewonderde Anna een vrouw die t_i
 which instrument admired Anna a woman who
 speelde en Roos een man die t_i speelde?
 played and Roos a man who played?
 ‘Which instrument did the woman play who Anna admired, and which instrument did the man play that Roos admired?’

Thus, ATB *wh*-constructions and RNR, both restricted to identical forms, can be analysed in a similar fashion, and the differences are due to an additional operation of internal remerge that follows external remerge in the case of ATB *wh*-constructions.

In sum, in this section I argued that a multidominance approach to RNR implies multivaluation *on* or *by* the target of RNR. I proposed a morphological filter on multivalued items during Spellout: if the values correspond to different forms, RNR cannot be spelled out. This explains the sensitivity of RNR constructions to *Identical Form*. However, we have seen that violations of this condition are acceptable for some, and more importantly, that there is a systematic preference for the form that associated with the agreement relation in the final conjunct. In the section to come, I suggest that in case of mismatching forms, there is a repair strategy available that ‘chooses’ the form that corresponds of the agreement chain that is *linearly* closest to the shared α . That is, the repair strategy that some speakers in the judgment task have available, is a *proximity* effect.

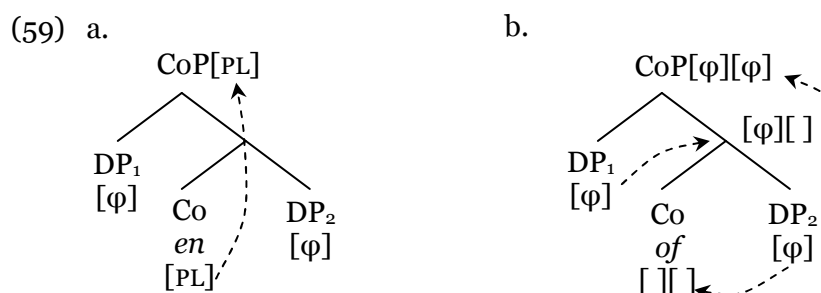
5. Proximity effects in mismatching Right Node Raising

5.1 Proximity effects in mismatching disjunctive coordination

The notion ‘proximity effect’ is more easily understood if we step away from RNR constructions for a moment. This section concerns agreement conflicts in disjunctive coordination, which show parallels with the data discussed in this paper. These particular data involve subject-verb agreement with disjunctively coordinated subjects.

It is a well-known fact that coordinated subjects may trigger plural agreement on the verb, even if the coordinated nouns themselves are singular. However, this depends on the coordinator. In Dutch, *en* (‘and’) triggers plural agreement, but *of* (‘or’) does not. I will call first type ‘conjunctive coordination’, and the second ‘disjunctive coordination’. For simplicity’s sake, let us assume that the plural feature is present on *en*, but not on *of*, i.e. *of* is defective for ϕ -features (for discussion, see De Vries & Heringa to appear and the references therein). When the feature NUM is present on the coordinative head, its value percolates to the CoP. When it is not, it

takes it from its argument DPs in both steps of the derivation of the CoP. As a result, CoP carries either [PL] or the respective values of the coordinated DPs:



If (59a) is a coordinated subject, plural agreement will be triggered on the finite verb, if (59b) is a subject, the verb agrees with the respective coordinated DPs. This is illustrated in (60):

- (60) a. Anna en Roos kochten (samen) / *kocht een huis.
 Anna andRoos bought-PLtogether bought-SG a house.
 ‘Anna and Roos bought a house.’
 b. Anna of Roos kocht/ *kochten (*samen) een huis.
 Anna or Roos bought-SG/ bought-PL together a house
 ‘Anna or Roos bought a house.’

For disjunctive coordinated subjects, the same question can be raised as for RNR that targets the finite verb: what happens if the respective conjuncts have different values for the features that need to be valued on the finite verb? De Vries & Heringa (to appear) discuss the following data in this regard (their judgments, glosses and translation are mine):¹¹

- (61) a. Sneeuwwitje óf de zeven dwergen ?hebben/ ?*heeft de
 snow white or theseven dwarves have-PL have-3SG the
 bal weggemaakt.
 ball lost
 ‘Snow White has lost the ball or the Seven Dwarves have lost the ball.’
 b. De zeven dwergen óf Sneeuwwitje ?heeft/ ??hebben de
 theseven dwarves or snow white have-SG have-PL the
 bal weggemaakt.
 ball lost
 ‘The Seven Dwarves have lost the ball or Snow White has lost the ball.’

These examples show clear parallels with the examples of RNR discussed earlier in this paper, where the subjects of the respective conjuncts have different values for the features PERS or NUM. De Vries & Heringa (to appear) note that neither of the options in examples such as (61) is satisfying, and that disjunctive coordination that triggers this kind of conflict is probably avoided in language use. What is of interest here, though, is that there is a *preference* for agreement with the second conjunct in these cases. The following data show, also cited from De Vries & Heringa (to appear), show that this is in fact a proximity effect, because in case of inversion, the preferred form

¹¹ The emphasizing accents on *of* in these examples are intended to make sure that *of* is read as exclusive *or* (either x or y, not both), as opposed to the inclusive reading (x or y, or both x and y). The construction *of... of* in (63) has the same effect (comparable to *either...or* in English). De Vries & Heringa (to appear) suggest that in case of the latter, plural agreement is possible or at least more acceptable than in case of the inclusive reading of *of*.

agrees with the first conjunct and not with the second (their judgments, glosses and translation mine):

- (62) a. ??Hebben/ ?heeft Sneeuw witje óf de zeven dwergen de
 have-PL have-SG snow white or the seven dwarves the
 bal weggemaakt?
 ball lost
 'Did Snow White lose the ball or did the Seven Dwarves lose the ball?'
 b. ?*Heeft/ ?hebben de zeven dwergen óf Sneeuw witje de
 have-SG have-PL the seven dwarves or snow white the
 bal weggemaakt?
 ball lost
 'Did Snow White lose the ball or did the Seven Dwarves lose the ball?'

The same pattern can be observed for mismatching PERS features in the conjoined subject (63):

- (63) a. (Of) jij of hij ?is/ ?*bent de winnaar.
 either 2SG or 3SG be:3SG be:2SG the winner
 '(Either) you are the winner or he is the winner.'
 b. ?*Is/ ?ben jij of hij de winnaar?
 be:3SG be:2SG 2SG or 3SG the winner?
 'Are you the winner or is he the winner?'

Interestingly, if there is a single form of the verb that corresponds to two mismatching sets of values, the sentence is perfectly acceptable. Thus, also this construction seems sensitive to syncretism in case of mismatching PERS and/or NUM features:

- (64) a. Ik of jij ?*doe/ ?doet de boodschappen.
 1SG or 2SG do-1SG do-2/3SG the groceries
 '(Either) I do the shopping or you do the shopping.'
 b. Ik of jij moet de boodschappen doen.
 1SG or 2SG must-SG the groceries do-INF
 '(Either) I must do the shopping or you must do the shopping.'

Notice that RNR constructions cannot be construed in a fashion that would reveal a proximity effect the way (61) – (63) do for disjunctive coordination: we cannot reorder and still obey the periphery condition that applies to RNR. This means that we lack proper empirical evidence that the relative acceptability of RNR[-m-s2] is related to the linear order. However, if ATB and RNR underlie the same principle, we expect similar contrasts between the different possible forms in mismatching ATB. Reconsider (65) repeated from (55b):

- (65) ? Kogo/?*Komu Jan lubi e a Maria ufa e?
 who.ACC/DAT Jan likes e.ACC and Maria trust e.DAT?
 'Who does Jan like and Maria trust?'

The expected contrast is that the accusative *kogo* is better than the dative *komu*, because of the proximity to the first conjunct in which accusative is required by the verb.¹² I briefly return to ATB in section 6.

¹² The expected contrast between *kogo* and *komu* in (65) is confirmed by Barbara Citko (p.c.), who additionally notes that the preferred *wh*-element *kogo* is better when it is followed by a pause.

The data of disjunctive coordination suggest that if there is no single form that matches the values of the coordinated subject, there is a preference for the form associated with the DP that is linearly closest to the verb. There is surprisingly little literature on subject-verb agreement with disjunctively coordinated subjects. In a psycholinguistic study that concerns agreement in theories about language production, Haskell & MacDonald (2005) describe three experiments that were set up to test the effects of linear order on agreement. The first experiment is a grammaticality-judgment task, where subjects had to choose the verb that fit best in the test item on a scale. Each item had a singular-plural (SP) version (66a) and a plural-singular (PS) version (66b):

- (66) a. Can you ask Brenda if the boy or the girls is/are going to go first?
 b. Can you ask Brenda if the girls or the boy is/are going to go first?

Haskell & MacDonald found a significant preference for agreement with the ‘proximate’ noun, and that this was stronger in the SP condition than in the PS condition. Two elicitation tasks in which participants were triggered to produce disjunctions of the relevant kind. The results of those experiments are consistent with the judgment task with a significant preference for agreement between the verb and the nearest noun.¹³

Thus, it seems that *proximity* could be a general decisive factor in cases where there are conflicting possibilities with respect to agreement or the morphological realization thereof. Unlike Haskell & MacDonald (2005), I consider this a *repair* strategy of otherwise impossible constructions, and not a part of the general mechanism that underlies Agree. Under the assumption that Agree is established in syntax and morphologically realized at Spellout, the proximity principle must be part of Spellout, when the morphological component connects two different forms to a multivalued item in the string.

5.2 The proximity principle as repair strategy for mismatching RNR

Turning back to RNR, recall that 39.3% of the participants in the task described in section 3, were accepting to violations of *Identical Form* that were realized according to the agreement relation in the second conjunct (RNR[-m-s2]). I suggested that this is due to a proximity principle: in case there is no single form available, the form that is preferred corresponds to the agreement relation of the final conjunct. In the multidominance analysis defended in this paper, this is the place where the target of RNR is ordered during linearization. How do we reconcile a proximity principle with a multidominance analysis for RNR?

Let us have a closer look at what happens during the spellout of RNR with mismatching values, and reconsider example (67) repeated from (52):

- (67) a. ... dat Roos een APpel __, en ik een baNAAN eet.
 ... that Roos a apple and 1SG a banana eat-SG
 ‘... that Roos eats an apple and I eat a banana.’
 b. ... dat Roos een APpel __, en ik een baNAAN koop/
 ... that Roos a apple and I a banana buy-3SG
 koopt
 buy-1SG
 ‘... that Roos buys an apple and I buy a banana.’

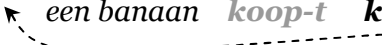
¹³ Similar patterns are observed in Garley (2008), who conducted a grammaticality-judgment task similar to the one in the present paper.

In the multidominance approach I have explored, V_{fin} is multivaluated. I have assumed that lexical insertion takes place post-syntactically, and replaces feature bundles by forms. Based on (54) in the last section, this gives us:

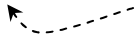
- (68) a. DP DP Co DP [1SG] DP V[3SG][1SG]
Roos een appel en ik een banaan eet
- b. DP DP Co DP [1SG] DP V[3SG] [1SG]
*Roos een appel en ik een banaan *koop-t koop*

To explain how the proximity principle works, we could assume an order in which the values have been assigned to V. Recall, however, that I make no assumptions about the order in which the respective conjuncts are derived. This would be a stipulation, in principle the TPs that are coordinated in the examples I discussed above, are only ordered when they are merged together in CoP. In other words, the set of features on V in (68) is unordered. This is desirable for many reasons, but it also means that we cannot relate proximity to the order in which valuation on the shared material has taken place.

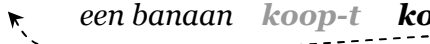
Possibly, the preference for the form corresponding to [1SG] is related to the *recent* spellout of another element with those features:

- (69) DP DP Co DP [1SG] DP V[3SG] [1SG]
Roos een appel en ik een banaan koop-t koop
- 

That is, at the point where the multivalued V is spelled out, an element with same values as one of the values on V has just been spelled out. However, if we have a closer look at the feature bundles Spellout supposedly sees, there is an even more recent spellout of something with the value [3SG], namely the object of the last conjunct:

- (70) DP[3SG] DP[3SG] Co DP [1SG] DP[3SG] V[3SG] [1SG]
Roos een appel en ik een banaan koop-t koop
- 


If the proximity principle would simply look back and choose the form based on the closest feature that matches, we wrongly predict that the form for V[3SG] is preferred. This either implies that this principle cannot *just* operate on the linear order, or that there is more information available in this linear order. I suggest that during spellout, it is not just category and feature information that is accessible for the component that is responsible for lexical insertion. The string rather looks like this:

- (71) SUB₁ [3SG] OBJ₁ [3SG] Co SUB₂ [1SG] OBJ₂ [3SG] V[3SG] [1SG]
Roos een appel en ik een banaan koop-t koop
- 

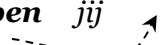
For reasons of space, I left out category information of the DPs here. The sketch in (71) suggests that the presence of two different forms based on the values on V triggers a search to the nearest subject in the string. In other words, Spellout should not only be able to access this kind of information, but also be smart enough to look for it. The working of the proximity principle is again better illustrated in a case of mismatching disjunctive coordination, here repeated from (63):

- (72) a. (Of) jij of hij ?is/ ?*bent de winnaar.
 either 2SG or 3SG be:3SG be:2SG the winner
 ‘(Either) you are the winner or he is the winner.’
 b. ?*Is/ ?ben jij of hij de winnaar?
 be:3SG be:2SG 2SG or 3SG the winner?
 ‘Are you the winner or is he the winner?’

In these cases, the disjunctively coordinated subject carries two values, that are valuated on V_{fin} via Agree. Based on the present proposal, the derivation of (72a) gives rise to (73):

- (73) SUB[2SG] Co SUB[3SG] V[3SG] [2SG] Pred[3SG]
 jij of *hij* **is** *bent* de winnaar
- 

The best form for V here is corresponds to [3SG] because the nearest subject (not the nearest item carrying a PERS and NUM feature) is [3SG]. The reverse holds in case of subject-verb inversion (72b):

- (74) V[3SG][2SG] SUB[2SG] Co SUB[3SG] Pred[3SG]
 is *ben* *jij* of *hij* de winnaar
- 

The cases discussed here all involve subject-verb agreement, but if similar proximity effects were to be found for mismatching Case as in (65) above, Spellout should also be able to look for the first V that assigned a certain case value on the shared *wh*-element. A similar reasoning would then apply to mismatching, non-syncretic ATB.

The way I have described *Identical Form* as morphological filter on RNR, and proximity as a rescue strategy, touches a more fundamental issue about the tasks of the respective modules in constraining agreement in RNR. If Spellout can access this kind of information, we can ask ourselves why it should be the syntactic component that is responsible for the relation Agree. The reasoning above could be taken as an argument for Agree as post-syntactic operation (as is argued for in Bobaljik 2008). However, I assume here that the proximity principle is something that is only invoked in case of conflicting forms for a single lexical item. For the present purposes, assuming a somewhat advanced Spellout mechanism seems the most plausible way of explaining the proximity principle that we observed in mismatching RNR.

6. Conclusion and outlook

The empirical part of this study revealed that RNR is restricted by a condition I called *Identical Form*. RNR that violates this condition is unacceptable or degraded for a large number of participants of the study. Participants that do accept violations, only accept those cases of RNR in which the form is realized that corresponds to the agreement relation that is required in the final conjunct.

The implications of this study were discussed in relation to different theories of RNR. I argued that both the movement and the ellipsis theory do not predict RNR to be sensitive to *Identical Form*. The PF-deletion account correctly predicts *Identical Form*, but gives rise to a look-ahead problem that cannot easily be solved. I proposed a multidominance approach to RNR, on a par with Citko (2005) for ATB-constructions. In this proposal, the target of RNR is literally shared by the conjuncts, as the consequence of external remerge of the element(s) that constitute(s) the target. This approach implies *multivaluation*, allowing the RNR target to be a probe and/or

goal for agreement relations in the respective conjuncts simultaneously. *Identical Form* is then a morphological filter on multivalued items: if there is no single form that corresponds to the values present on the lexical item, the derivation crashes when it is spelled out. The empirical study suggests that this crash is not necessarily fatal. I argued that there is a repair strategy that makes use of the linear order of RNR constructions, that chooses the form corresponding to the most proximate subject (the *proximity principle*). Applying the proximity principle to RNR that violates *Identical Form* seems to be subject to speaker variation.

This study gives rise to a couple of new questions that are of interest for further research. First, it is likely that *Identical Form* is a stronger condition if the forms it concerns are phonologically more distinct. Consider the opposition between pairs as *koop/koopt* (buy-1SG/buy-2/3SG) and *koop/kopen* (buy-1SG/buy-PL). Probably, there is more tension between the last pair, where the affix *-en* creates an additional syllable, than between the first pair, where only *-t* is added. The same holds for mismatching RNR that targets verbs with suppletion paradigms and those with regular paradigms. *Identical Form* probably leads to sharper unacceptability judgments in case of pairs such as *ben/is* (be:1SG/be:3SG) and *ben/zijn* (be:1SG/be:PL) than it does in regular inflection paradigms.

In the discussion of multidominance and multivaluation by and on V_{fin} in Dutch RNR, I ignored the issue of double θ -assignment by V. Recall that RNR may just as easily target objects and indirect objects (as long as they are right peripheral). If an argument is shared by two conjuncts that each have a verb that selects that argument, this implies that both verbs assign a θ -role on the shared argument, which in conflict with traditional assumptions about θ -assignment. The same question arises for ATB.

Furthermore, the claim that mismatching RNR is subject to proximity effects that render one form more acceptable than the other needs more empirical evidence. For the cases of disjunctive coordination, it was easy to see that it was indeed linear order that mattered in case of mismatching. Unfortunately, it is impossible to show this based on RNR examples, in which we cannot easily change the word order that would reveal such an effect. However, I analysed RNR on a par with ATB, and the latter could be investigated for a mirrored proximity effect. That is, based on the multidominance proposal, we expect that the preferred form in mismatching ATB corresponds to the *first* conjunct, and not to the second. This can be investigated in languages with overt Case marking such as Polish and German. Notice that the latter brings up another question, namely if Case and ϕ -features behave the same in ATB and RNR constructions.

Finally, in this paper I assumed a more or less standard model of grammar, in which agreement relations are established in syntax. The account of the proximity principle in this paper suggests that Spellout is able to access more than just feature bundles. How this should be seen in a more general model of grammar, is topic for future discussion.

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Appendix: Test items (mis)matching RNR

This appendix is a list of the test items as they were presented to the participants, here accompanied with glosses and translation. Note that only the relevant features are glossed. Under each example, the following information is added: VAR [-/+] for the variables in the example, and the mean rating that was given by the participants.

- (1) Henk beWONdert, maar Peter verACHT de nieuwe voorzitter.
Henk admires but Peter despises the new chairperson
'Henk admires the new chairperson, but Peter despises the new chairperson.'
RNR [+m] 4.5
- (2) Anne wil naar Canada verhuizen, en jij naar
Anne want-SG to Canada move and 2SG to
FRANKrijk.
France
'Anne wants to move to Canada, and you want to move to France.'
GAP [-m+s] 4.5
- (3) Joke zei dat WIJ, maar Pieter dacht dat JIJ de deur
Joke said that 1PL but Pieter thought that 2SG the door
open hadden laten staan.
open had-pl let stand
'Joke said that we left the door open, but Pieter thought that you left the door open.'
RNR [-m-s1] 2.0
- (4) Maurits heeft een HUIS, en Johan een SCHUUR
Maurits has a house:NTR and Johan a barn:NNTR
die onverzekerd is voor brand.
rel:NNTR not.insured be-3SG for fire
'Maurits has a house that is not insured for fire and Johan has a barn that is not insured for fire.'
RNR [-m-s2] 3.6
- (5) Jij zei dat de jongens de GLazen, en de meisjes
You said that the boy-PL the glasses and the girl-PL
de BORDen kapot hadden gemaakt.
the plates broken have-PAST-PL made
'You said that the boys had broken the glasses and that the girls had broken the plates.'
RNR [+m] 4.3
- (6) Ik ga naar HUIS, en jij naar SCHOOL.
1SGgo-1SG to house and 2SG to school
'I go home and you go to school.'
GAP [-m-s] 4.1

- (7) Joke is overtuigd dat WIJ, maar Rosa weet zeker dat onze
 Joke is convinced that 1PL but Rosa knows sure that our
 PARTners voor de bruiloft uitgenodigd zijn.
 partner-PL for the wedding invited be-PL
 'Joke is convinced that we are invited to the wedding, but Rosa is sure that our
 partners are invited to the wedding.'
RNR [-m+s] 3.3
- (8) Maarten vindt dat KATten, maar ik denk juist dat HONden
 Maarten thinks that cat-PL but I think in.fact that dog-PL
 erg kunnen stinken.
 very can stink
 'Maarten thinks that cats can be very smelly, but I in fact think that dogs can
 be very smelly.'
RNR [+m] 3.4
- (9) Anna houdt van MANnen, en Pieter van een VROUW die
 Anna holds of man-PL and Pieter of a woman-SG who
 lang haar heeft.
 long hair have-3SG
 'Anna loves men who have long hair and Pieter loves a woman who has long
 hair.'
RNR [-m-s2] 2.4
- (10) Het verbaast me dat jij een BOEK, en hij een
 It surprises me that 2SG a book and 3SG a
 TIJDSchrift heeft gelezen.
 magazine have-3SG read
 'It surprises me that you have read a book and he has read a magazine.'
RNR [-m-s2] 3.6
- (11) Charlotte houdt van PASTa, en Edwin van RIJST.
 Charlotte hold-3SG of pasta and Edwin of rice
 'Charlotte loves pasta and Edwin loves rice.'
GAP [+m] 4.2
- (12) Mijn vrienden drinken graag THEE, maar ik liever KOFFie.
 My friend-PL drink gladly tea but 1SG more.gladly coffee
 'My friends like to drink tea, but I like to drink coffee better.'
GAP [-m-s] 4.0
- (13) Rosa houdt van ROKken, en Joke van een BROEK die
 Rosa holds of skirt-PL and Joke of a pantalon-SG that
 een brede zoom hebben.
 a large hem have-PL
 'Rosa likes skirts with a large hem and Joke likes a pantalon with a large hem.'
RNR [-m-s1] 1.5
- (14) Het verbaast me dat Els van KATten maar Bert van
 it surprises me that Els of cats but Bert of
 HONden houdt.
 dogs hold-3SG
 'It surprises me that Els loves cats and Bert loves dogs.'
RNR [+m] 3.6

- (15) Pieter denkt dat ALbert, maar Rita vindt dat JIJ de
 Pieter thinks that Albert but Rita thinks that 2SG the
 mooiste van de klas is.
 most.beautiful of the class be-3SG
 ‘Pieter thinks that Albert is the most beautiful of the class, but Rita thinks that
 you are the most beautiful of the class.’
RNR [-m-s1] 1.5
- (16) Bert dacht dat JULlie, maar het blijkt dat WIJ op dat
 Bert thought that 2PL but it seems that 1PL on that
 kerstdiner worden verwacht.
 christmas.dinner be-PL expected
 ‘Bert thought that you were expected on that christmas dinner, but it seems
 that we are expected on that christmas dinner.’
RNR [-m+s] 3.1
- (17) Jullie doen aan toNEEL, en ik aan muZIEK.
 2PL do-PL to theatre and 1SG to music
 ‘You play theatre and I play music.’
GAP [-m-s] 4.1
- (18) We spreken dus af dat jullie DRIE, en ik TWEE
 We speak so off that 2PL three and 1SG two
 kadootjes kopen.
 presents buy-PL
 ‘So, we agree that you buy three presents and I buy three presents.’
RNR [-m-s1] 2.6
- (19) Anna beweerde dat WIJ, maar Steven zei dat JIJ het gas
 Anna claimed that 1PL but Steven said that 2SG the gas
 aan had laten staan.
 on have-SG let stand
 ‘Anna claimed that we left the gas open, but Steven said that you left the gas
 open.’
RNR [-m-s2] 3.5
- (20) Jan leest een BOEK, en zijn ouders een
 Jan read-2/3SG a book and his parents a
 TIJDSchrift.
 magazine
 ‘Jan reads a book and his parents read a magazine.’
GAP [-m-s] 4.0
- (21) Steven valt op een MEISje _ en Rosa op een JONGen
 Steven falls on a girl-DIM.NTR and Rosa on a boy.NNTR
 dat lang haar heeft.
 REL.NTR.SG long hair have-3SG
 ‘Steven fancies a girl who has long hair, and Rosa a guy who has long hair.’
RNR [-m-s1] 1.8

- (22) Albert zei dat PIETer _ maar ik vind dat JIJ de
 Albert said that Pieter but I think that 2SG the
 beste voetballer van het team bent.
 best football.player of the team be-2SG
 ‘Albert said that Pieter was the best football player of the team, but I think you
 are the best football player of the team.’
RNR [-m-s2] 2.9
- (23) Wespreken dus af dat Pieter het BOEK en jij het
 Wespeak-PL so off that Pieter the book and 2SG the
 arTikel meeneemt naar college.
 article with.take-2/3SG to class
 ‘So, we agree that Peter takes the book to class, and you take the article to
 class.’
RNR [-m+s] 4.6
- (24) Maria heeft een ROK, en René heeft een SJAAL gekocht
 Maria has a skirt and René has a scarve bought
 op de markt.
 on the market
 ‘Maria has bought a skirt on the market and René has bought a scarve on the
 market.’
RNR [+m] 4.4
- (25) Toni houdt van een BOEK, maar Johan van een
 Toni holds of a book:NTR but Johan of a
 TIJDschrift dat een rode kaft heeft.
 magazine:NTR REL.NTR.SG a red cover have-3SG
 ‘Toni likes a book that has a red cover, but Johan likes a magazine that has a
 red cover.’
RNR [+m] 3.2
- (26) Drie boeken gingen over de EERste wereldoorlog, de andere
 Three books go-PL about the first world.war the other-PL
 over de TWEEde.
 about the second
 ‘Three books were about the first world war, the others were about the second
 world war.’
GAP [+m] 4.4
- (27) Maurits zei dat JIJ, maar Johan beweerde dat je
 Maurits said that you but Johan claimed that your
 VRIEND morgen een nieuw huis gaat kopen.
 friend tomorrow a new house go-2/3SG buy
 ‘Maurits said that you are going to buy a new house tomorrow, but Johan
 claimed that your friend is going to buy a new house tomorrow.’
RNR [-m+s] 4.0
- (28) Wij sloegen RECHTSaf bij dat kruispunt, maar jullie
 1PL turn-PL right.of at that crossing but 2PL
 LINKSaf.
 left.of
 ‘We turned right at that crossing, but you turned left at that crossing.’
GAP [-m+s] 4.7